Employee Incentive Programs:
Do Individual Differences and Trust in Management
Influence their Effectiveness?

Allan Francis Bull
BA (Psych) Hons

A thesis submitted in partial fulfilment of the requirements for the degree of
Doctor of Philosophy

Division of Linguistics and Psychology
Macquarie University
June 2003
I hereby declare that this submission is my own work and that to the best of my knowledge it contains no material previously published or written by another person, nor material which has been accepted for the award of another degree or diploma at a university or institute of higher learning, except where due acknowledgement is made in the text.

Allan F. Bull
Acknowledgments

Without the encouragement, suggestions and support of many people too numerous to mention here, it would not have been possible for me to complete this thesis. However, I would like to acknowledge the late Associate Professor John Antill, my first supervisor, friend and supporter, who encouraged me to start down the path toward undertaking my PhD program. Then, to the supervisor who took John’s place, after his untimely death, Dr Julie Fitness, and my founding supervisor, Associate Professor Graeme Russell, simply saying thank you is not enough to compensate for their generous gifts of time and cooperation at all stages of my research and for their prompt and vital feedback to my various drafts.

Thanks also go to Dr Alan Taylor and Dr David Cairns for their much valued support with my statistics.

Finally I would not be at the finishing line were it not for my loving wife, Janice, who gave me moral support during the inevitable times of frustration, generously lent her time and skills to much needed proofreading and acted as a sounding board for many of my less than clear trains of thought.
Table of Contents

Abstract ................................................................................................................................. viii

Chapter 1: Introduction and Overview of the Thesis ............................................................ 1

Outline of the Thesis Chapters ........................................................................................ 7

Introduction to the Literature Review ............................................................................. 10

Chapter 2: The History and Theory of Labour and Capital Relations, Remuneration Systems and Flexible Work Practices ......................................................... 12

Chapter 3: The Role of Individual Differences and Contextual Factors in Employee Responses to Rewards .......................................................... 38

Chapter 4: The Methodology Employed to Measure Employee Motivation and Self-Assessed Performance ............................................................... 54

Chapter 5: Study One: Personality and Work Motivation: A Replication and Extension of Furnham, Forde and Ferrari (1999) .............................................. 70

Method ............................................................................................................................... 76

Results ............................................................................................................................... 81

Discussion ......................................................................................................................... 92

Chapter 6: Study Two: Incentives and the Circumstances Under which they are Rewarding to Employees ................................................................. 97

Method ............................................................................................................................. 110

Results ............................................................................................................................. 115

Discussion ....................................................................................................................... 129

Chapter 7: Study Three: Going the extra mile: The role of Trust in Management .......... 134

Method ............................................................................................................................. 147

Results ............................................................................................................................. 153

Discussion ....................................................................................................................... 157

Chapter 8: Study Four: How do I trust thee, let me count the ways: A test of the multidimensionality of trust ................................................................. 162

Method ............................................................................................................................. 166

Results ............................................................................................................................. 170

Discussion ....................................................................................................................... 177

Chapter 9: Study Five: Are the Effects of Incentive Rewards on Self-Assessed Performance Mediated by Trust in Management and Management Style? ...... 180

Method ............................................................................................................................. 190

Results ............................................................................................................................. 197
List of tables

Table 1 Means Modes and Standard Deviations of Continuous Demographic Variables ..........77
Table 2 Frequencies and Percentages of Demographic Variables...........................................77
Table 3 18 Items Selected by Furnham et al (1999) to Represent Herzberg’s Two Factors .......79
Table 4 Range, Means and Standard Deviations of Study Variables ........................................81
Table 5 Zero Order Correlations (Pearson, Two-Tailed) .....................................................81
Table 6 Correlation Coefficients Between Personality Dimensions and Herzberg’s Factors ......82
Table 7 Regression Analyses with Herzberg’s Two Factors as DVs and the Big-Five Personality
Factors as IVs ................................................................................................................85
Table 8 Factor Analysis of 18 WVQ Questions, with Loadings ............................................87
Table 9 Factors with Eigen Values Greater than One .................................................................88
Table 10 A Two Factor Forced Solution ..................................................................................89
Table 11 Correlation Coefficients between the Big-Five Personality Dimensions and Intrinsic and
Extrinsic Motivation ...........................................................................................................90
Table 12 Regression Analyses with Amabile’s Intrinsic and Extrinsic Motivation as DVs .......92
Table 13 Means, Medians, Modes and Standard Deviations of Continuous Demographic
Variables ......................................................................................................................110
Table 14 Frequencies and Percentages of Demographic Variables .........................................111
Table 15 Range, Means and Standard Deviations and Cronbach Alphas of Study Variables ....115
Table 16 Zero Order Correlations (Pearson, Two-Tailed) .....................................................116
Table 17 Average Estimated Mean Ratings of Incentive Type (within subject factor) by Between-
Subject Factors .............................................................................................................118
Table 18 Summary of Between-Subject Effects .....................................................................128
Table 19 Summary of Hypotheses for Chapter 7 .................................................................147
Table 20 Frequencies and Percentages of Demographic Variables .........................................148
Table 21 Range, Means and Standard Deviations of Study Variables .....................................154
Table 22 Zero Order Correlations (Pearson, Two-Tailed) .....................................................154
Table 23 Summary of Nine hypotheses Tested in this Study ..................................................157
Table 24 Means, Medians, Modes and Standard Deviations of Continuous Demographic
Variables ......................................................................................................................167
Table 25 Frequencies and Percentages of Demographic Variables .........................................168
Table 26 Range, Means and Standard Deviations of Study Variables .....................................170
Table 27 Zero Order Correlations (Pearson, Two-Tailed) .....................................................170
Table 28 Two Factor Varimax Rotated Solution for Trust and Distrust ....................................172
Table 29 Summary of Regression Analyses for Variables Predicting Motivation .....................174
Table 30 Summary of Regression Analyses for Performance Indicators (SAP, OCB and DWE) 174
Table 31 Summary of Regression Analyses for Variables Performance Indicators (job satisfaction,
intent to leave and affective commitment) ....................................................................176
Table 32 Means, Medians, Modes and Standard Deviations of Continuous Demographic
Variables ......................................................................................................................191
Table 33 Frequencies and Percentages of Demographic Variables .........................................191
Table 34 Range, Means and Standard Deviations of Study Variables .....................................197
Table 35 Zero Order Correlations (Pearson, Two-Tailed) .....................................................199
Table 36 Hypothesis 1, Test Results for the Mediating Effect of Trust in Management between
Incentives and Performance Indicators ........................................................................204
Table 37 Hypothesis 2, Test Results for the Mediating Effect of Distrust in Management between Incentives and Performance Indicators ................................................................. 205

Table 38 Hypothesis 3, Test Results for the Mediating Effect of Transactional Management Style between Incentives and Performance Indicators .................................................. 206

Table 39 Hypothesis 4, Test Results for the Mediating Effect of Transformational Management Style between Incentives and Performance Indicators ................................................ 207
List of figures

Figure 1 Organisational Performance Model.................................................................11
Figure 2 Location of DWE within the Domain of OCB.....................................................68
Figure 3 Estimated Marginal Mean Ratings of Incentives by Age Group.......................120
Figure 4 Estimated Marginal Mean Ratings of Incentives by Extraversion.......................121
Figure 5 Estimated Marginal Mean Ratings of Incentives by Intellectual Openness ..........123
Figure 6 Estimated Marginal Mean Ratings of Incentives by Self-Efficacy.......................124
Figure 7 Estimated Marginal Mean Ratings of Incentives by Management Level ..........126
Figure 8 Proposed mediating model.............................................................................187
Figure 9 Generic Model Used to Test the Mediating Effect on Trust in Management and Management Style .................................................................200
Abstract

Researchers into the effectiveness of incentive programs continue to report mixed results in employee performance following the implementation of these reward systems (Jenkins, Mitra, Gupta, & Shaw, 1998). In an endeavour to account for this range of outcomes, the studies in this thesis examine relationships between incentive rewards, employee individual differences and contextual influences, such as trust in management, as possible sources of additional variance.

The thesis begins with a review of labour and capital relationships and the history and theory of compensation systems. The background of incentive and benefit systems and their theorised roles as employee motivators and productivity enhancers are then discussed. It is argued that despite their almost universal acceptance in industry as productivity enhancers, there is conflicting evidence as to the practical usefulness of incentive systems. Many researchers report inconsistent results regarding their performance with some finding they increase employee performance and others finding that they have the opposite effect. The basic argument of this thesis is that much of the variance observed following the implementation of incentive programs is a function of employee individual differences and contextual factors, which together either augment or detract from the effectiveness of incentive programs.

The first study reported is a replication and extension of Furnham, Forde and Ferrari’s (1999) work which hypothesised that people with different personality traits will react differently to different workplace motivators. A large sample of 942 supervisors, managers and professionals completed measures based on Herzberg’s two factor theory (i.e., motivator and hygiene), intrinsic and extrinsic motivation
orientations (the theorised equivalents of Herzberg’s two factors), and the Big-Five personality dimensions. Results supported Furnham et al’s (1999) hypothesis that personality does influence motivation orientation and thus lent support to my hypothesis that individual differences affect the way incentives operate.

The second study builds on the findings that individual differences (personality traits) influence employee preferences for rewards and analyses the preference of employees with different personality traits, working within a number of contextual settings and from a number of backgrounds, for the most commonly used incentive programs employed in industry. Results from this second study support the notion that a portion of the variance in the efficacy of an incentive programs, observed by researchers and practitioners alike, is due to employee individual differences and contextual influences. It also lends support to the concept of abandoning a ‘one size fits all’ approach when implementing incentive programs.

Theoretically, incentives are designed to improve employee productivity; the assumption being that the consequential behaviour will be increased performance. Based on a reading of recent literature, it is hypothesised that trust in management might mediate the effects of incentive rewards. Before testing this hypothesis a third study was conducted to examine the direct effect of trust in management on self-assessed performance. The main hypothesis of this study was that low trust in management would negatively affect self-assessed performance. The results confirmed the hypothesis and supported the work of other researchers who have demonstrated trust effects on employee performance and job satisfaction (Costa, Roe, & Taillieu, 2001; Dirks, 1999, 2000; Rich, 1997).
The objective of the fourth study was to further explore the concept of trust and test the hypothesis that trust is a two dimensional construct, comprising two distinct factors: trust and distrust, (Lewicki, McAllister, & Bies, 1998), rather than a single construct ranging from low to high trust. Lewicki et al (1998) have argued that distrust has a signature which includes scepticism, cynicism and vigilance: characteristics suggested by some researchers as implicit in the reduction of reward effectiveness (Kohn, 1993). Correlational, factor and regression analyses were conducted in order to test the multidimensionality of Lewicki et al’s (1999) constructs. The results of this study confirmed that under certain circumstances Lewicki et al’s (1998) two dimensions of trust (i.e., trust and distrust) do behave as orthogonal variables.

The fifth and final study tested the hypotheses that trust in management and management style (specifically transformational and transactional management styles), mediate the effect of an incentive reward. The hypotheses were tested using 1,230 employees from a wide range of industries in Sydney, Australia. The study’s hypotheses were strongly supported, indicating that the effectiveness of an incentive reward system is mediated by trust in management and transformational management style, but not by transactional management style or distrust in management.

The first chapter presents a thesis overview and includes a summary of the topics covered in each chapter together with a justification for the research conducted in this thesis.
Chapter 1:

Introduction and Overview of the Thesis

A few fortunate people love their work so much that they can hardly wait to start each day’s exciting activities, while at the other end of the spectrum some find work to be a drudgery, or worse. Despite the variability of workers’ attitudes to their jobs, researchers suggest that most people find work fulfils an important need in their lives. This has been recently confirmed by Blanchflower and Oswald (1999) who, when reporting the results of their survey of 50,000 employees from 18 countries, found that “the great majority of workers in the industrialised democracies appear to be remarkably content with their jobs” (p. 1). This does not mean, however, that workers are equally motivated to work productively, nor to work any harder than they strictly need to.

Responsibilities of For-Profit Organisations

In public companies, one of the major responsibilities and fiduciary duties that challenge management is the process of maximising financial returns to investors. This task, although apparently straightforward, entails many complex facets; e.g., the maintenance of competitiveness with business cohorts, regulating expenditure and investment, controlling costs, setting short-term and long-term goals and achieving the highest possible productivity from all available assets (including an organisation’s employees). This can be a demanding task when dealing with relatively unmotivated employees; thus managers, ever mindful of the twin pressures of competition and shareholder expectations, are always searching for methods to improve employee productivity. One such method is the employee incentive program which typically includes bonus payments, profit sharing, non-cash benefits and Employee Stock
Ownership Plans (ESOPs). The rationale underpinning the use of such incentive programs is that offering benefits and incentives to employees, beyond simple pay-for-work remuneration, will increase motivation and job satisfaction (Igalens & Roussel, 1999; Murray & Gerhart, 1998; Pierce, Rubenfeld, & Morgan, 1991; Welbourne, Johnson, & Erez, 1998). It is also thought that effectively sharing with employees what would otherwise be shareholder profits will align employee interests with those of the shareholders, this outcome being predicted by agency theory (Wright, Mukherji, & Kroll, 2001). Moreover, incentives are theorised to increase not only motivation and employee performance but also citizenship behaviour, or the willingness to ‘go the extra mile’ for their employers (Bonner & Sprinkle, 2002).

The main commonsense assumptions ascribed to incentive programs are that employees will increase work effort if rewards are at stake. Although there is high face validity to support the motivating effect of incentive programs, evidence showing that incentive programs actually act to increase work motivation, and hence employee performance, is thin at best and confounding at worst. On the positive side of the ledger there is evidence that incentive programs do add incrementally to employee performance. For example, in a comprehensive meta-analytic study, Jenkins, Mitra, Gupta and Shaw (1998), when analysing the results of 39 separate studies on the efficacy of incentive programs, found an average corrected correlation of .34 between incentive programs and performance, i.e., 10% of the explained variance. However, the same study found no significant increase in performance quality. Moreover, Drago (1988) found that the effective life of an incentive program in terms of increased employee performance was relatively short-lived with levels falling back to near pre-incentive levels soon after their adoption. Davidson and Worrell (1994), who investigated the performance of 48 firms who had adopted employee share
option plans (ESOPs), detected a short term improvement in the firms’ share price after adopting the program; however, in the longer term there were no changes in operating performance. This result is somewhat disappointing given the generous tax concessions provided by the US government for employee stock ownership plans. Similarly, in their review of the effectiveness of incentive plans Kaufman and Russell (1995) reported that gain-sharing and profit-sharing programs do increase productivity but the effect is inconsistent, ranging from between 3% to 6%.

*Employee Individual Differences are Seldom Acknowledged*

One common characteristic of incentive programs is that they are seldom designed to take into account employee individual differences, or to make adjustments for individuals’ specific requirements. Rather, they are more commonly implemented universally, company-wide, or within a whole section or division of an organisation (McClune & Tyson, 1995; McClure, 1995; Welbourne & Cable, 1995).

Such uniform implementation designed to motivate workers to be more productive may have unintended consequences or be inappropriate for some individuals included in the program. For example, employees at different stages of their career might have different needs for money. In particular, younger employees, who are in the process of establishing their lives and acquiring assets such as cars, apartments and houses, may be more motivated by cash rewards than by being given equity in their companies. In contrast, older more established employees with no immediate cash needs might be more motivated by share ownership. Moreover, employees with different personality traits might react differently to contingent rewards. For example, employees high on the personality trait of conscientiousness, or who are strongly intrinsically motivated, might be influenced less by incentives of
any kind than less conscientious extrinsically motivated staff. It could be a poor investment option to offer conscientious or self motivated employees incentives designed to improve motivation. There could also be contextual circumstances that interact with contingent rewards, or indeed substitute for rewards, such as job satisfaction, management style and the level of trust held in management.

The inconsistent results observed following the implementation of incentive programs suggest that employee individual differences and contextual issues might explain some of the variability in incentive effectiveness. In this thesis it is hypothesised that these inconsistent outcomes may derive, in part, from employee individual differences such as motivational orientation and personality, and contextual variables such as vocation choice and the level of trust an employee has in management. Essentially, it is argued that a “one size fits all’ model of incentive program implementation may be counterproductive and be less than a prudent investment.

The overall aim of this thesis is to investigate the influence that different types of incentive programs have on employee work motivation and performance, when employee individual differences, contextual settings, trust in management and management style are taken into account. The following section provides a more detailed justification for performing this research.

**Justification for the Research**

Within the corporate consulting field there is a burgeoning industry advising clients how to implement employee remuneration and reward systems. These programs differ substantially from traditional systems of compensation and are known as ‘non-traditional’. They include compensation which is based on performance
rather than on seniority and promote broader levels of management than a traditional system, which typically comprises many levels with small ranges of pay at each level. (This latter system is termed broad-banding; Agarwal, 1998). Non-traditional systems also include flexible human resource policies and innovative work practices such as flexible work hours, job sharing, and working from home/telecommuting (Bonner & Sprinkle, 2002; Flannery, Hofrichter, & Platten, 1996; Standen, Daniels, & Lamond, 1999). Within the performance enhancement domain of these non-traditional systems, the practice of selling and implementing various employee incentive and benefit programs is aggressively promoted by consultants. Proponents of employee incentive programs claim that such programs increase productivity, lower absenteeism, increase loyalty and improve output quality (Letourneau, 1996).

The rise in popularity of such programs results from the sense of disenchantedment with traditional compensation systems, which are increasingly considered to lack the flexibility required to sustain the motivation of contemporary employees (Higgins, 1999a, 1999b; Mock, 2000; Weinberg & Pierce, 1999; Wilson, 2001). This is particularly true in the so called ‘sunrise industries’ which include information, telecommunications and biotechnology. It is in these domains where new skills are evolving that experienced employees are a scarce resource. As a consequence, organisations are forced to compete for a commodity in short supply within an environment where employee mobility is rising and loyalty has been weakened by the breaking of the social contract. The social contract held that employees would give loyal service to their companies in exchange for stable employment tenure (Rousseau, 1989; Turnley & Feldman, 2000).
Inter-company competition, globalisation, and skill shortages in critical industry segments have produced a difficult and competitive environment for employers; one in which new methods to increase productivity are incessantly sought (Hutson, 2000). It is here that the message of the ‘quick-fix’ incentive system becomes attractive to management. However, while there is ample evidence to show that incentive programs are being vigorously promoted and universally employed there is modest evidence regarding their efficiency as instruments that would yield an appropriate return on investment. To the contrary, researchers such as Kaufman and Russell (1995), Kohn (1993) and Drago (1988) have demonstrated that incentive programs can be counterproductive, with performance in some instances decreasing following their implementation.

These observations are in stark contrast to the promises propagated by the incentive consulting industry. An example of this optimism is expressed by Letourneau (1996), a speaker, trainer and author with more than 25 years’ experience in marketing and customer service consulting, who writes “of course your employees want to do the right thing for your bank (read organisation). Now imagine if you fanned the fire in their bellies (by offering incentives)” (p. 29). He continues by giving a practical description of how incentive programs can be implemented, but nowhere are references to any research cited in support of the efficacy of incentive programs; rather, he simply appeals to the reader’s common sense. This seems to be a characteristic mode of operation for many within the incentive consulting industry.

The cost of Incentives and Benefits to Industry

Employee incentives and benefits programs cost industry a great deal of money. Stolovitch, Clark and Condly (2002) report that “organisations in the United States
expend, annually, an estimated US$117 billion on work related incentive programs” (p. 1) and Blakely (1998) reports that “employee benefits account for approximately 42% of total payroll costs in the USA’’ (p. 40), representing well over one trillion US dollars per annum. This thesis represents a modest attempt to advance our understanding of how employee incentive programs operate when used as motivators to increase employee performance. In particular, the aim is to examine the circumstances that might contribute to the effectiveness of incentive programs or reduce their utility.

When investigating the effectiveness of incentive programs, many studies, particularly those conducted by economists, ignore individual differences (Ittner & Larcker, 2002). In such studies the design of the incentive program is described and the results are reported, with limited reference to the employee participants. In contrast, this thesis investigates incentive programs in association with a number of employee individual differences, such as personality traits, motivation orientation, vocation experience and the context in which their programs operate; for example, the level of trust employees have in their management, and management style.

OUTLINE OF THE THESIS CHAPTERS

Chapter 1.

Chapter 1 comprises a general introduction and rationale for the thesis and a description of the main problem being addressed in the thesis.

Chapter 2.

Chapter 2 is the first of three chapters which comprise the literature review. Chapter 2 commences with a brief history of labour and capital relations and the development of traditional compensation systems and flexible work practices.
Chapter 3.

Chapter 3 is the second chapter of the literature review. It covers motivation, employee individual differences, personality traits, trust in management, job satisfaction and the relationship of these variables to employee rewards and productivity.

Chapter 4.

This is the final chapter of the literature review. It discusses the methodology used in this thesis to improve the validity of self assessed performance. It explains how the perennial difficulty of positive bias, associated with self assessment, was handled in this thesis.

Chapter 5: Study 1

Study 1 is a replication and extension of Furnham, Forde and Ferrari’s (1999) study which analysed the relationship between the personality and work motivation factors of 92 job applicants. Study 1 also introduces the constructs of intrinsic and extrinsic motivation and discusses their importance within incentive theory.
Chapter 6: Study 2

Study 2 develops the argument that incentives have differential effects depending on employees’ personalities. Specifically, it explores the preference for a number of different incentive types by employees with different personality traits who are working in different contextual settings and who come from different backgrounds.

Chapter 7: Study 3

Study 3 details an experiment investigating the effect of trust in management on a range of self assessed performance indicators, including self-assessed performance (SAP), organisational citizenship behaviour (OCB) and discretionary work effort (DWE). The term ‘discretionary work effort’ (DWE), as used in this thesis, refers to that component of OCB labelled ‘individual initiative’ by Podsakoff, MacKenzie, Paine and Bachrach (2000) or its functional equivalent, ‘personal industry’ (Moorman & Blakely, 1995).

Chapter 8: Study 4

Study 4 is a test of the dimensionality of trust. It explores the theory developed by Lewicki, McAllister and Bies (1998) that trust is not unidimensional but instead is composed of two orthogonal factors they label ‘trust’ and ‘distrust’.

Chapter 9: Study 5

Study 5 explores the hypothesis that the contextual variables of trust in management and management style mediate the effects of an incentive reward.
Chapter 10.

This final chapter is a general summary of the thesis. It provides conclusions resulting from the various studies and makes some suggestions for the practical implementation of the thesis findings.

INTRODUCTION TO THE LITERATURE REVIEW

This thesis considers employee performance and how it is affected by incentive rewards, when employee individual differences and contextual settings are taken into account. Figure 1 (p. 11) is included as a guide to the main topics explored in this thesis and represents many of the variables known to contribute to organisational performance. This thesis is directly concerned with those sections of this model that are unshaded. Unshaded areas show the incentive types which are investigated, the individual differences and demographic variables analysed, the motivation orientations used in the thesis studies and the measures that were used to gauge employee self assessed performance. Figure 1 also shows the hypothesised mediating effect of trust in management and management style on incentive efficacy.

The next three chapters comprise what would normally be one literature review chapter. The first of these chapters (Chapter 2) covers employee labour and capital relations and the history and theory of remuneration and incentives from an employer’s perspective, i.e., employers’ efforts to improve employee productivity. Chapter 3 takes the employees’ perspective and investigates how individual differences, including personality, job satisfaction, motivation and trust in management affect employee’ responses to rewards. Chapter 4 covers the methodology used in this thesis to assess employee motivation and self assessed performance.
Figure 1
Organisational Performance Model
Chapter 2:

The History and Theory of Labour and Capital Relations, Remuneration Systems and Flexible Work Practices

This chapter provides a literature review and theoretical discussion of the key issues associated with the incessant struggle between labour and capital in their pursuit of independent self interest.

As this thesis relates to the use of incentives as motivators and as components of employee remuneration, this chapter commences with a brief history and overview of the relationship between labour, management and capital and the development of what are known as traditional compensation systems. It then moves on to give details of contemporary, or so called ‘flexible work practices’, which have become an integral part of the battery of tools employed by management to recruit, retain and motivate employees.

Labour and Capital Relations

In order to survive, people have always worked, either for themselves or for others (Peach & Wren, 1992). When people work for others they usually expect compensation for the time they give, the effort they expend and the skills they bring to their job. Arrangements between providers of labour (employees) and suppliers of the opportunity to work (employers, or capital) have almost always resulted in a state of tension. This tension is created when employees seek to maximise a return on expended time and effort and capital endeavours to minimise the cost of employing labour (Gomez-Mejia & Balkin, 1992). This thesis is an investigation into one of the mechanisms employed by industry to ease this tension, i.e., the offer (in addition to
reasonable and fair compensation for labour) of incentives designed to motivate employees to work harder than they might normally work. However, before discussing incentives, motivation, performance and issues that relate to the studies in this thesis it is thought to be relevant to give a brief history of labour and capital relations, compensation systems and work arrangements from the European industrial revolution until present times.

The Industrial Revolution

Prior to the industrial revolution European and British industry was cottage-based with small relatively unorganised individual enterprises producing goods, mainly for local consumption (Fleischman & Parker, 1991). Under this system productivity was low and the cost of goods relatively high (Humphries, 1999). In Europe, this time honoured state of affairs was irrevocably changed by the industrial revolution which covered the period between 1712 and 1905. The industrial revolution usually refers to that time when developments transformed Europe and Great Britain from a largely agrarian based society to one that was town-centred and increasingly engaged in the manufacture of products in factories. Two distinct phases of the revolution have been identified by historians. The first was between 1712 and 1830 and is associated with mechanised textile manufacture and the use of water and steam for power generation. The second, which spanned the years between 1875 and 1905, was characterised by the development of electricity, electronic communications, the use of chemical reactions in industrial processes and the invention of the internal combustion engine (Voth, 2000).

Labour to fuel the burgeoning industries of the industrial revolution was primarily rural sourced. People in search of work were attracted into cities and towns
ill equipped to support the flood of new arrivals. Town and city living was much like the workplaces of the day: dangerous, dirty and unhealthy. Nevertheless, the lure of wages for work was irresistible (Voth, 2000). This scene has its analogies in the present day People’s Republic of China where millions of its rural population are flowing into its major cities seeking non-agrarian work (Shen, 2000).

During most of the industrial revolution labour was unorganised, naive and above all, unskilled. This suited industry’s requirements as at that stage in the revolution, factories did not need workers with any particular pre-existing skills. This was because work was mainly repetitive and simple. In such an environment, with a seemingly endless supply of willing labourers, management was not challenged to consider their employees’ welfare (Voth, 2000). In modern parlance the system was ‘burn and churn’, that is, use the human resource and replace it with fresh supplies when needed.

The parlous plight of most workers during the industrial revolution was largely ignored until those with humanitarian motives and a sense of responsibility for the social and moral character of workers started campaigning for improved working conditions. Amongst these early activists, Robert Owen, an industrialist himself, is credited as the first to develop the concept of industrial welfare. He raised his workers’ pay, improved working conditions and would not employ children younger than 11 years of age. He built a school within his mill complex and in 1814 mandated that the children of his workers must attend school up to the age of 10. As a stark comparison between current times and the mentality of the 19th century, Donkin (2001) reports that rather than welcoming this reform, some parents actually lamented the loss of the extra income that their underage children had previously earned. It
should be noted, however, that Owen’s concept of industrial welfare bears little resemblance to modern concepts of workplace reform. Rather, it stemmed more from his goal of reforming the morals and character of his workers than of improving their living standards (Belanger, Edwards, & Haiven, 1994; Chu, 1996). Notwithstanding the sporadic interventions from reformers such as Owen, throughout the first hundred years of the industrial revolution capital steadfastly opposed any change in a system where conditions were not far removed from serfdom (Evans, 1999).

In an effort to improve working conditions labour eventually organised itself and began an incessant campaign with the objective of pressuring capital into labour reform. The result was to be a lengthy and sometimes bitter conflict between labour and capital which continues to this day. However, the end result in most industrialised countries was the passing into law of regulations for minimum work benefits, stipulated rates of pay, working hours and safety conditions (Sass, 1999).

During the course of the nineteenth century the majority of work remained relatively simple. However, throughout the twentieth century jobs rapidly became more complex, requiring employees to have and acquire ever-increasing workplace skills. Skilled employees are more difficult to source and replace than the unskilled; hence, as the demand for experienced employees rose, competition between organisations for proficient workers increased. However, through the late nineteenth century and first half of the twentieth, although there was an increased need for skilled employees there were inevitable regional and worldwide booms and busts as industries moved from ‘green field’ start-up phase to maturity and sometimes on to the ‘rust belt stage’ (Williams, 1998). Also during this period, external pressures including world wars, economic depressions, recessions and periods of extraordinary
growth were a source of friction between capital and labour (Fenna, 1996). Such forces repeatedly tipped the balance first one way then the other in either labour or capital’s favour. However, the overall trend was an increase in the bargaining power by skilled employees due to the relative scarcity of the skilled and the diminished influence of the unskilled and from those employees from older traditional industries which were in decline, such as the steel industry (Fenna, 1996).

**From Capitalist to Manager**

Early in the rise of industrialisation it was common for the owner of a business to also be the manager and the prime investor (Peach & Wren, 1992). However, as companies grew ever larger, the trend was for capital to retreat from its day-to-day hands on management and to rely more on professional management to look after its interests and to take in capital from external sources. This trend led to an expansion in the number and influence of professional managers, who tended to side with capital. As work became more complex labour separated into hierarchical sub-groups including: the unskilled, semi-skilled, skilled, supervisors (foremen) management, executives and professionals (Childs, 1990). The consequence for industry of this hierarchical progression was a legacy of inflexible levels of labour with demarcated responsibilities that resulted in complex and expensive remuneration systems. During the same period that job structures were growing in complexity there were profound changes to the nature of work. As jobs became more complex employees needed to acquire greater skills and as a consequence the education system was forced to expand into areas of vocational training which were once the purview of the guild and apprenticeship system (Webster, Dockery, Bainger, & Kelly, 2001). In addition, as work became more complex it became more difficult and expensive to source, train and replace employees.
Contemporary Times

During the late 1980s and into the 1990s, the cost of maintaining a work force increased rapidly, particularly for the ‘new-economy’ industries such as finance and telecommunications and computing (Hansen, 1999). Increases in cost, in conjunction with the emergence of economic rationalism and the competition inherent in globalisation, have placed mounting pressure on organisations’ profits and consequently have prompted a powerful push by capital to increase productivity in a quest to maintain profit levels. In search of a cure-all to improve employee productivity and effectiveness, industry has adopted the employee incentive program as one of its key tools. Proponents of incentive plans promise they can solve the competition problem by improving employee motivation, performance and retention levels (Letourneau, 1996). One of the aims of this thesis is to explore whether industry’s faith in this remedy has been justified.

In this section I have summarised the changes which occurred in the relationship between labour and capital since the time of the European and British industrial revolution. During the main period of this revolution, between 1760 and 1830, labour was cheap and unorganised. Jobs for the masses were predominately uncomplicated requiring only low skill levels. In this environment, when additional or replacement labour could be quickly and cheaply obtained, power tended to lie with capital. With the rise in the complexity of work, and the advent of organised labour, power shifted toward labour. There have been ebbs and flows in this balance, punctuated by recessions and boom times, however, the trend has been a shift in power away from capital towards labour, especially in high technology and the financial industries (Wisman, 1992). The next two sections of this review will briefly cover the topic of
compensation, or pay-for-work, and describe how current compensation systems can be categorised as either ‘traditional’ and ‘non traditional’.

The cost of labour

Capital and senior management are often heard to say that employees are a company’s most important asset (Libert, 2001; Panchak, 2002). Notwithstanding this positive portrayal of workers, in for-profit organisations capital continues to invest in ways and means to mechanise work in order to make production more reliable, cost effective and to minimise reliance on people (Boal, 1994).

The central rationale for engaging in a business enterprise is to earn a return on invested capital. There is an orthodox point of view that it is the solemn fiduciary duty of corporations’ officers to maximise the value of shareholders’ investments. This concept is called the "shareholder primacy norm" (Smith, 1999) and is the predominant position taken by legislators, lawyers and economists. It should be pointed out, however, that over the last decade or so the shareholder primacy concept, which states that shareholders’ interests should take precedence over other corporate stakeholders, has been challenged by legal thinkers, especially in the USA. Critics of the shareholder primacy norm dispute its key assumption, that shareholder wealth will naturally spread to the wider community, and argue that other stakeholders should have more access to corporate wealth (Leung, 1997; Smith, 1999; Wade, 1999). However, taking the orthodox view of shareholder primacy, which is still the prevailing position, management’s responsibility is to make the most productive use of the resources at its disposal, includes its employees. Employees comprise a considerable percentage of the operating costs of business. As discussed, there has always been a tension between labour and capital regarding the cost of labour.
Capital, operating on the shareholder primacy norm, seeks to minimise costs, including cost of labour, and maximise profits whereas labour seeks to maximise take-home pay. In most industrialised countries this tension has been somewhat alleviated through legislation which sets basic pay-for-work rates. The resultant bureaucratisation has resulted in relatively inflexible remuneration and compensation systems which have become known as ‘traditional compensation systems’ (LeBlanc, 1994). The characteristics of traditional systems will be discussed in more detail in the next section.

**Traditional and Non-Traditional Compensation**

Traditional compensation systems are exemplified by the dictum, “a fair day’s pay for a fair day’s work” (LeBlanc, 1994) (p. 5). Traditional compensation is characterised by relatively inflexible hierarchies of employment with titles defining the various levels and each level having a narrow band of pay. It also relies to large degree on seniority as the basis of promotion (Gomez-Mejia & Balkin, 1992). Within the various levels there are more often than not escalating privileges, including higher pay. Under traditional compensation systems the rate of pay is usually determined by four factors: the characteristics of the job, the need to uphold pay equity, the requirement to maintain competitiveness within similar industries and the foundation of minimum legislatively prescribed pay levels.

Traditional compensation structures are based on the concept that successive levels within an organisation have greater responsibility, require more authority and should therefore be compensated accordingly. Further, it is assumed that seniority, or time in the job, is a prerequisite for holding positions of authority. Consequently, one of the main features of the traditional compensation system is compensation based on
seniority rather than competence. In summary, traditional systems have the character of inflexibility: they are regulated, prescriptive and hierarchical in nature (Despres & Hiltrop, 1995) and also contain anomalies, not the least of which is the institutionalised disparity between the pay of men and women, present in both Australia and America up until the 1970s, an oddity that developed from the mid twentieth century notion that wages were for the maintenance of the family (Paci, Joshi, Makepeace, & Dolton, 1995; Pocock, 1999).

From Relative Stability to Instability

Almost a century of industrial conflict culminated in the 1960s with a relatively stable industrial environment that was achieved through a combination of rapid economic growth, low unemployment, mollifying government legislation and the relative success of the traditional compensation system. However, compensation instability re-emerged in the 1970s and 80s as capital came under pressure to maintain profits following the 1973 and 1979 oil shocks (Hooker, 2002) and increasing international competition wrought by mounting market deregulation. Deregulation was stimulated by the General Agreement on Tariffs and Trade (GATT), particularly the eighth round which opened in Uruguay in 1986 which had the aim of encouraging free trade (Deng, 1998). Productivity became the catchword, which meant taking full advantage of technology and extracting maximum productivity from assets, including employees. This pressure impinged on prevailing pay structures as capital attempted to maintain profits in the face of increased competition (Hutson, 2000) and labour reacted in an effort to maintain its take-home pay. Simultaneously, the nature of work changed rapidly to be more knowledge based and technologically centric, requiring new competencies from both capital and labour. However, according to Appelbaum
and Batt (1994) and Hutson (2000) such skills were, and still remain, in short supply (Appelbaum & Batt, 1994; Hutson, 2000).

One response to the pressures for increased employee productivity was a renewed interest in innovative work practices which broadly speaking refers to variable and contingent compensation, novel benefit systems and flexible work practices. Innovative work practices are discussed in more detail in a later section, however, prior to that review, the relationship of compensation theory to three other theories (i.e., neoclassical labour market theory, agency theory and equity theory) is discussed.

**Compensation Theory**

According to Gomez-Mejia and Balkin (1992) the theoretical roots of the traditional compensation model originate from two theories: equity theory (drawn from social psychology) and agency and neoclassical labour market theory (based on economic theory). The basis of equity theory lies in exchange theory (Gouldner, 1960) and cognitive dissonance theory (Festinger, 1964) while agency theory has its origins in information economics and neoclassical labour market theory, which in turn derive from the theory of supply-and-demand. These theories and how they apply to compensation are now discussed.

**Equity Theory**

Equity theory, applied to a work setting, states that people make cognitive comparisons about what they bring to their work and the rewards they receive for their efforts. For example, employees bring their skills, qualifications and work experiences to their job and provide their time and effort. In return, they receive wages, status, satisfaction from the work itself, social and familial recognition and
pleasurable social interaction. That which is brought to the job is defined as ‘an input’ and that which is derived in return, for the various inputs, is defined as ‘an output’ (Adams, 1963, 1965; Janssen, 2001; Mowday, 1991).

Equity theory maintains that employees cognitively assess their inputs and outputs and compare these with their work group cohort, both within and external to the organisation in which they work. If an employee perceives that his/her inputs and outputs are out of balance with reference groups then, particularly if there is a perceived deficit, cognitive dissonance will occur. According to the theory, this perceived imbalance in an effort by the employee to re-establish a state of equilibrium by altering the inputs or attempting to have outputs modified. If there is no final resolution of the imbalance the employee may leave his or her organisation (Muchinsky, 2000).

Agency Theory

Agency theory is rooted in economic utilitarianism (Ross, 1973), a theory originated by Jeremy Bentham, an 18th century British philosopher who wrote on law, public policy, and economics. Agency theory seeks to explain the relationships that govern the behaviour of individuals engaging in economic exchange. In a business setting it posits that there are two main stakeholders: principals and agents. Principals supply the capital for business ventures and vest authority with agents who act on their behalf. In this relationship the welfare of the principals is directly affected by the decisions that are made by the agents (Wright et al., 2001).

In public companies, principals are represented by shareholders and agents by management. Shareholders (principals) vest authority and responsibility in their organisation’s managers. It is not unusual for agents and principals to have interests,
needs and goals which are at variance with one another. Both the finance and strategic management literatures have many documented instances of conflicts between agents and principals which have arisen from the inherent separation between an organisation’s management and its ownership (Jensen & Meckling, 1976b; Wright, Ferris, Sarin, & Awasthi, 1996). For example, principals are primarily interested in gaining a return on their investment (ROI) whereas agents, although they may also be interested in ROI, can also be interested in a range of other outcomes including status derived from the job, enjoyment of work in its own right as well as monetary gain (Jensen & Meckling, 1976a, 1976b; Wright et al., 1996). In summary, principals pay a price when they use agents; called the agency cost (Welbourne & Cyr, 1999). The lowest cost exists when a principal manages and owns 100% of an organisation, the highest cost occurs when principals are simply arms length investors. Certain classes of incentives are predicted to align the interests of principals and agents, these include sharing in equity and profits; this concept is discussed below.

Agency theory predicts that by giving employees (agents) rewards which are normally the province of principals, the interests of the agents and principals will be aligned. The theory also predicts that a state of harmony should be the consequence of such an alignment. The class of rewards that are theorised to most strongly influence this alignment are stock ownership and the sharing of company profits. These types of reward have become commonplace in recent decades, however, until quite recently recipients have been managers and senior executives, not workers in general. The practice of restricting the offer of shares, share options and profit share to management led to a feeling of inequality in the minds of many employees and also the general public who feel aggrieved at not being included in such largesse. The media has made persistent comment on the perceived inequity and excessive
generosity of such rewards; this is exemplified in an Australian Financial Review article entitled “Share-based remuneration the root of all corporate evil”. It states that “Ironically, the addiction to share-based payment has arguably achieved exactly the opposite effect to that intended: instead of aligning the interests of shareholders and managers, it made them diverge” (Kohler, 2002) (p. 72). Here we see a direct example of equity theory in action, as discussed above, where perceived remuneration inequality causes feelings of injustice.

Neoclassical Labour Market Theory

Neoclassical labour market theory derives from the economic theory of supply and demand (Marshall, Briggs, & King, 1984), in this case the supply and demand of labour. According to Gomez-Mejia and Balkin (1992), “the wage rate of a given occupation is set at a point where the labour supply and demand curves cross” (p. 8). If there is a shortage of labour then the cost of labour will increase until equilibrium or over-supply is reached. A good example of the demand for scarce labour comes from the electronics industry where there was an almost continual shortage of skilled employees for the entire 20th century. This led to employees in this field gaining above average wages compared to employees with comparable qualifications (Barron, 1999; Boles, 1997; Gingras & Roy, 2000). During every new wave of innovation there is a corresponding shortage of skilled personnel. In the electronics industry the first wave occurred at the end of the 19th century with the advent of telegraphic communication. Following this, at the turn of the 20th century, was the advent of electric power for lighting and electric motors for industry. This was followed by the golden era of radio and TV from the 1920s until the 1970s, then arguably the most influential innovation ever to be developed, the electronic computer exemplified by the personal computer and Internet communications. However, as
each industry matures, loses its mystique and adequate numbers of people become available due to training programs power reverts back to capital and wages tend to stabilise. This can be observed in the current contrast between the relatively normal pay structures of electricians, TV technicians and computer workers, who were once well paid in relation to other industries (Krishnadas, 2001; Stellin, 2002).

If an organisation in any field wants to attract and retain a willing workforce, and remain competitive, it will be subject to the pressures predicted by equity, agency and neoclassical labour market theory. McClure (1995) argued that correctly balanced these theories predict equilibrium whereby suitably qualified and skilled employees are attracted and retained. However, since the 1980s, this balance has increasingly relied on a range of methodologies other than traditional compensation (Ost, 1990). The following sections outline some of the techniques which have been employed in an effort to solve problems inherent with traditional compensation systems, which are now considered lacking in their ability to motivate employees to be more productive (Bates, 2003).

**Benefits, Flexible Work Practices, and Employee Incentives**

*Employee Work Benefits*

To be minimally disruptive, employee rewards need to be applied uniformly to a working population so that the imbalances predicted by equity theory do not come into play. One of the most evenly implemented forms of reward is the employee benefit. Work benefits such as holidays, sick leave, child care and medical insurance payments are so ubiquitously distributed among employees in Western industrialised countries that they are more often considered entitlements rather than hard won benefits (Federico & Goldsmith, 1998). According to Gerhart and Milkovich (1993)
37% of the total cost of employing US workers is comprised of work benefits. These include: paid sick, accident and holiday leave, health insurance, retirement benefits, over award payments, leave loading on holiday pay, uniforms, free or subsidised canteen services, child care facilities, discounted goods, tuition fees and many more. One can understand the motives of organised labour when it supports the introduction of such benefits, as unions have a responsibility to improve the working environment of their members. However, the motives of capital in supporting employee benefits are more complex. According to Bergmann, Bergmann and Grahn (1994), there are three main reasons for such support. Firstly; most employee benefits are subject to generous tax concessions. These send a strong message to industry that government supports the concept of employee benefits and that they are expected to be a component of commercial reality. Secondly, as management shares in employee benefits, which are typically applied across the board, management tends to endorse their implementation. Thirdly, since the industrial revolution, humanitarian philosophy and a Judeo Christian Western culture has been influential in improving the lot of people in general, and employees in particular (Judge, 1978). However, during the 20th century it was the influence of social psychologists, arguing needs-based/content theories and advocating the motivating benefits of employee job satisfaction, which has been the prime influence for industry’s expenditure on employee benefits (Berl, Williamson, & Powell, 1984; Buhler, 1988; Drenth, 1998).

Benefits are theorised to increase employee satisfaction, and hence loyalty, motivation and performance (Eskildsen & Nussler, 2000; Evans & Lindsay, 1999). This argument has considerable face validity and has resulted in multi-billion dollar costs to industry over the years (Blakely, 1998). The basic principle underlying the benefits movement is the ‘happy worker is a productive worker hypothesis’ (Staw,
1986; Wright & Cropanzano, 2000) which will be discussed in the following ‘job satisfaction’ section. One problem with employee benefits is that far from being the motivators industry often expects them to be, in the minds of recipients benefits quickly become established as entitlements (Federico & Goldsmith, 1998; Kohn, 1993). This is the position that Herzberg (1967) took when he places benefits into a category labelled ‘hygiene factors’ rather than what he calls ‘motivator factors’. This position has been confirmed by Igalens and Roussel (1999) who found that employee benefits neither motivate nor increase job satisfaction. Whereas benefits have been found to provide limited increases in productivity, other factors, such as innovative and flexible work environments have been shown to increase motivation. The following section describes some of these innovative systems, which also include incentive programs.

Innovative and Flexible Work Practices

Innovative and flexible work practices, including non-traditional compensation and incentive programs are categorised by Huselid (1995) as “systems of high performance” (p. 38) and by Herzberg (1967) as motivator factors. Included in this field are comprehensive employee recruitment and selection procedures, training programs, extensive employee involvement and both contingent and non contingent incentive programs. It is non-traditional compensation and incentive programs with which this thesis is concerned.

According to Gomez-Mejia and Balkin (1992), non-traditional compensation systems emerged during the 1980s as a reaction to the dissatisfaction with traditional methods and to the ever-increasing complexity and competitive demands being faced by industry. Traditional compensation had been criticised for its lack of flexibility in
solving inter-organisational competitiveness and employee recruitment issues. Organisations have difficulty maintaining competitiveness when they are restricted by traditional seniority-based pay systems from paying new entrants competitive industry rates (Hutson, 2000). As the workplace became more complex during the 1980s it became increasingly difficult for organisations to collect and collate the information needed to adjust and maintain balanced compensation regimes; that is, compensation systems perceived as equitable by employees and which permitted the maintenance of competitiveness. Many companies striving to attract skilled employees broke long established rules in an attempt to maintain competitiveness in an environment strained by a rapidly changing economy resulting from increased foreign competition, free trade agreements and volatile deregulated financial markets. The end result, especially in contemporary industries, was a compensation system that deviated to various degrees from traditional systems. Nowhere was this more evident than with executive compensation which in many cases consisted of packages that were large multiples of the salaries of equivalent employees who remained within the traditional compensation system. A recent report by the Labour Council of NSW, Australia, reports that the average remuneration of the 50 highest paid CEOs in Australia rose from 22 times average full-time earnings in 1992 to 74 times in 2002 and in the USA the ratio of average CEO pay in 2002 to average blue collar pay was 200 to one (Shields, O'Donnell, & O'Brien, 2003). Such real and perceived discrepancies have resulted in strong negative equity judgments being made between workers’ and executives’ remuneration (Banham, 2001; Knight, 2002; Nichols & Subramaniam, 2001).

Although traditional systems are still prevalent in most large established industries and government organisations they are no longer as widespread as they
once were. New models of compensation and work practices are being adopted by many organisations, founded on industry’s needs to recruit, retain and motivate employees (Buchele, 1995; Ichniowski, Kochan, Levine, Olson, & Strauss, 1996) and the rationale that they will improve employee satisfaction, motivation and hence productivity (Logue, 1999; Tomer, 2001). The next section discusses the particular use of employee incentives which form a major component of contemporary remuneration systems.

**Employee Incentives Designed to Improve Productivity**

Peak employee performance is one of the prime interests of business enterprises and employee incentives are increasingly being offered in an endeavour to achieve such a result. This section describes in detail the characteristics of the major incentive systems employed in industry and presents available evidence as to their effectiveness in improving employee motivation and performance.

The Macquarie dictionary (1981), defines an incentive as “of or pertaining to extra money, benefits, etc., given to employees, to encourage greater output, or output of higher quality”. This is a succinct definition that covers all the basic elements of employee incentive programs. In business parlance, an incentive is some reward given to an employee to encourage the employee to perform behaviour that exceeds the established norm and to produce voluntary behaviour that goes beyond the employee’s official core responsibilities.

Incentives fall into three main categories: non-monetary, monetary and shares or options. Non-monetary incentives include employee benefits, recognition awards, such as plaques and trophies; paid holidays, company products, status symbols, such as larger office space and titles; and other items that are valued by employees.
Monetary incentives are cash based and are administered in a variety of ways and forms, however, they can be mainly categorised into contingent and non-contingent classes. Contingent monetary incentives are given on the basis of some predetermined rule. For example, a salesperson may receive a percentage of the value of the sale that is made. Contingent reinforcement stems from the work of B.F. Skinner’s reinforcement theory, which in turn was built on classical Pavlovian conditioning experiments. Skinner called his theory of reinforcement, ‘operant conditioning’ or ‘reinforcement theory’. The basic concept was to motivate or shape an organism’s behaviour by applying contingent rewards which were delivered at fixed or variable intervals on fixed or variable interval ratios (Muchinsky, 2000). Non-contingent monetary incentives are usually bestowed as gratuitous cash bonuses given without prejudice to all employees at the end of a significant period such as at the completion of a project or the end of financial or calendar year (Lippman, 2000).

The third class of incentive rewards are shares or share options which are given at no cost, or sold at a discount to their issue or current price, to employees on a contingent or non-contingent basis. It is sometimes difficult to distinguish between shares and cash as shares can usually be converted into money at some point in time. However, because of their philosophical origins, complex vesting rules (when they can be sold), their tax and accounting treatment, their potential to increase or decrease in value over time and their ability to affect motivation differently from cash based incentives, they are afforded a separate status in this thesis (Shanney-Saborsky, 2000). Because of the pervasive use of ESOPs as performance enhancing incentives, the controversy associated with their use, their philosophical origins and the paucity of evidence related to their ability to increase performance; shares and share option programs will be discussed in a separate section later in this review.
Finally, incentives and benefits can be awarded either on an individual or group basis, that is, on the basis of an individual’s personal effort or resulting from the combined efforts of a team. The following section describes in more detail the characteristics of monetary incentives, as distinct from incentives that involve recognition, awards and non-cash prizes.

Monetary Incentives

Incentives that rely on cash include: bonuses, gain-sharing, profit sharing, individual performance rewards, commission systems and Employee Stock Option Programs (ESOPs) (Flannery et al., 1996; McClune & Tyson, 1995; Wilson, 1997). Increasingly, in non-traditional work environments, incentives are considered to be part of an employees’ total remuneration and in many cases incentives form a substantial at-risk portion of an employee’s total compensation (Flannery et al., 1996; Hutson, 2000).

Monetary incentives were originally given in the form of bonuses and were not designed to be part of an employee’s remuneration package; rather they were seen as discretionary payments based on some subjective or objective management criteria (Peach & Wren, 1992). The Macquarie Dictionary (1981) describes a bonus as “something given or paid over and above what is due”. ‘What is due’, in most instances, is an employee’s basic pay. Although bonuses and incentives have the same genesis, that is, as a tool to modify some behaviour or enhance a desired outcome, the way they are deployed differs markedly. Incentives are most often used as contingent rewards, given when employees achieve a specific outcome or goal whereas bonuses are usually associated with gratuitous non-contingent rewards such as a payment at the end of some auspicious period such as the end of a financial or
calendar year, at Christmas or to celebrate the completion of a special project. Bonuses usually have the rationale of encouraging employees to be more satisfied and hence more productive. More specifically, management gives bonuses on the basis of an unwritten reciprocal contract, i.e., we will give you a bonus in return for your increased job satisfaction, motivation and productivity. However, this contract is seldom clearly explained and therefore is not usually well understood by the beneficiaries. When there is an imprecise understanding for the reason that a reward is given the reward is said to lack ‘line-of-sight’, that is, there is only a vague understanding of the intended connection between the desired behaviour and the reward (Gomez-Mejia & Balkin, 1992; Wood, Atkins, & Bright, 1999). A bonus program where the rationale is not well explained and that lacks ‘line-of-sight’ rapidly changes in the mind of the recipient from being a reciprocal repayment, with attached obligations, into an entitlement. When transformed into an entitlement an expected or recurrent bonus, once withheld even for just reasons such as poor organisational performance will cause considerable employee angst, reduced job satisfaction and defeat the original purpose of increasing employee productivity (Agarwal, 1998).

One type of monetary incentive that industry believes should be clearly appreciated by employees is the Employee Stock Option plans (ESOP) (Welbourne & Cyr, 1999). The values of an organisation’s shares rise and fall on its fortunes and a component of an organisation’s fortune, and hence its share value, is dependent in part on the personal effort of its employees.

Employee Stock Option plans (ESOP)

There has been much criticism of late in the media about the apparent misuse of ESOP programs. For example, the Sydney Morning Herald (9th September, 2002)
reported shareholder anger after it was proposed that News Corp executives be given additional share options, even after there had been poor corporate performance. The headline read, “News Corp plans to offer another 2.5 million options to its top five executives on top of the $US31 million (AUS$57 million) of remuneration already paid for the year in which the company racked up the largest loss in Australian corporate history: $11.96 billion”. Such criticism follows the corporate collapses of ENRON and WorldCom in the USA (Petrick & Quinn, 2002) and FAI insurance in Australia, where executives in positions of influence were found to have fraudulently manipulated financial indices in order to inflate the value of their stock options.

Notwithstanding these financial losses and the opprobrium associated with executive share ownership, ESOPs are still strongly promoted as performance enhancing devices and are offered by a large number of organisations in many countries (Iqbal & Hamid, 2000; Kaufman & Russell, 1995).

ESOPs were developed purposely to align the interests of principals with those of agents and were also meant to have a polito-economic effect whereby agents would become enamoured with capitalism (Howitt & Rozek, 1982). Their performance enhancing effect, while assumed and important, was a secondary consideration (Dun & Bradstreet, 1994). An ESOP is a system whereby employees are offered the opportunity to participate in the ownership of their company by receiving either shares or options to buy shares at some time in the future at a predetermined price. These programs are very common in most industrialised countries (Davidson & Worrell, 1994; Gamble, 1998). The rationale for their use is simple, compelling and has high face validity, i.e., employees holding equity in their organisation will be inclined to act as principals rather than mere servants (agents) and hence will work toward advantaging their organisation. As part owners, they should be more
motivated and hence more productive; both entities will want to maximise profits in order to generate dividends and raise the value of the company’s shares. These are the basic assumptions used by many proponents, consultants and advocates of ESOP. There are, however, problems with this argument: one is that ESOPs have a philosophical origin not directly associated with improving employee motivation, and, there is a dearth of empirical evidence supporting the assumption that employees’ performance will improve following the introduction of an ESOP.

Louis Kelso (1913-1991) a successful lawyer and banker, invented ESOPs (Howitt & Rozek, 1982). They were based on a capitalist philosophy that he and Mortimer Adler expounded in their 1958 best seller, "The Capitalist Manifesto." Kelso was concerned for post World War II capitalism, in an environment where he argued labour would soon be replaced by mechanised industry, leading to mass unemployment and a subsequent shift to the left. He believed the solution was to provide labour with the opportunity to receive a second source of income, through dividend earnings and equity ownership. In addition, based on agency theory, he believed ESOPs would align the interest of labour with capital. Paradoxically, Kelso received criticism from both the right and left of the political spectrum: the left because he denied that labour was the source of all wealth and for his assertion that capital is under appreciated; the right because he believed that an unequal distribution of capital was the key to most economic ills. Kelso’s argument was that, if a substantial number of employees were to participate in share ownership the capitalist system would be preserved and strengthened (Sloan, 1981).

Kelso was a charismatic champion of his ideas and in the 1970s persuaded Russell Long, then Chairman of the US Senate Finance Committee, to introduce his
theories into legislation. Congress enacted the first of a series of tax measures designed to encourage employee stock ownership in 1974 (Rosen & Quarrey, 1987). During the period between 1980 and 1987, Long drafted, and had legislated, the current ESOP system (McBride & Balian, 1995). The US Department of Labour has reported that by 1995 there were 9,232 ESOP programs in the USA holding more than US$262 billion in assets and involving over 13 million employees (Burzawa, 1999).

Despite the usage of ESOPs as incentive programs in the US, it has not been theories of motivation that have caused their widespread use, nor capitalist philosophies; rather, it has been a combination of tax concessions, the new economy and defensive forestalling of hostile takeovers (Gamble, 1998). Tax concessions totalling many billions of dollars a year are granted in the USA to those who implement ESOP. Companies get tax credits on money that is used to finance employee share program and banks get a 50% tax concession on the interest they receive from loans they provide to fund ESOPs (Rosenberg, 1987).

Use of ESOPs as Remuneration

ESOPs have been heavily used in the new economy to effectively boost compensation packages of highly sought after employees. Many start-up companies who need skilled people, but cannot afford to pay the going rate, use shares or options as part of their compensation packages. The principle is ‘less now but more later’, i.e., less salary now but a potential windfall when the company lists on a stock exchange (Mano & Deppe, 1994). Increasingly, ESOPs are being used as compensation package components and incorporated into performance-based incentive programs. In a study involving the US Fortune 1,000 companies, Ledford, Lawler and Mohrman (1995) found that 715 of these companies used ESOP plans and
85% used stock options. They also found that in these corporations ESOP plans tended to cover all employees or none.

ESOPs are curious instruments. They had their origin in capitalist philosophy and are supported by generous tax concessions in many countries, particularly in the U.S.A., yet they are now commonly believed to be mechanisms for improving motivation and hence employee performance (Burzawa, 1999; Davidson & Worrell, 1994; Flannery et al., 1996; Howitt & Rozek, 1982). Consultants who sell and install ESOPs promise improved employee and organisational performance, however, evidence for this relationship is mixed. Extant evidence relies mostly on simple correlation studies between companies who use ESOPs with those that do not (Hawk, McAdams, & O'Dell, 1994; Kumbhakar & Dunbar, 1993). Researchers have found improvements in the performance of companies which adopt ESOPs; however, the effect is often short lived and attracts methodological criticism. It could be, for instance, that higher performing organisations may be better managed, be more naturally progressive and might have had superior performance even without the ESOP (Conte & Tannenbaum, 1978; Drago, 1988; Rosen & Klein, 1983; Rosen & Quarrey, 1987). Other studies have reported no relationship between employee ownership and financial performance at all (Kaufman & Russell, 1995; Welbourne & Cyr, 1999).

Livingston and Henry (1980) compared the performance of 51 ESOPs against a matched sample of 51 non-ESOP firms on a number of financial variables including profitability and liquidity ratios. The authors found no significant differences in the two groups on many financial performance ratios. In a study of 48 ESOPs, Davidson and Worrell (1994) found that ‘industry adjusted financial performance’ decreased
from the year prior to the ESOP implementation to the following year. The authors also found a decrease in firm performance from the year prior to the implementation of an ESOP to the second year after the implementation of the ESOP.

Such results are at variance with the predictions of agency theory which anticipates that employees sharing in their company’s equity will be motivated to improve the financial performance of their organisation. One reason could be that employee individual differences contribute to this variability.

**Summary of Capital and Labour Relations**

In summary, from at least the period in history which has been labelled the European industrial revolution when large scale industrial employment first became a phenomenon, there has been a tension between those who require labour (capital) and those who provide labour. Capital strives to maximise profits by paying the least amount possible and labour strives to maximise compensation. This chapter has given an overview of this struggle and outlined some of the mechanisms that have been used to ease the tension while keeping both parties in relative harmony.

The next chapter reviews the role of individual differences and contextual factors in what employees find rewarding.
Chapter 3:
The Role of Individual Differences and Contextual Factors in Employee Responses to Rewards

What do Employees Want?

Employees seldom have the same levels of motivation, ambition or interests in their work. Furthermore, individuals exhibit many different characteristics and display varied demographic and idiosyncratic features. Thus it is reasonable to believe that employee individual differences might affect the way incentives are perceived and operate. For example, an employee’s age, gender, vocational choice and relationship with management could affect the perception of an offered reward. Younger employees might value incentives which translate directly into cash, such as cash bonuses and profit sharing, more highly, whereas older, more financially established, employees might appreciate incentives that reap rewards over a longer timeframe. It is also possible that an employee’s personality could influence the way in which an incentive reward is perceived or operates. For instance, Costa and McCrae (1992) suggested that extraverts are overly represented in sales positions and salespeople are common recipients of contingent incentive programs. It could also be the case that conscientious employees do not need or want extra incentives to produce optimum performance.

Some of the most fundamental individual differences, such as gender and age have been implicated in different levels of performance (Czaja & Sharit, 1998; Salthouse, Hambrick, Lukas, & Dell, 1996; Wiegers & Frieze, 1977). The following
section presents research findings which relate to personality factors and their association with performance.

**Personality and Performance**

Early research into the effect of personality traits on organisational variables, such as individual and group job performance, found only weak associations (Guion & Gottier, 1965; Schmitt, Gooding, Noe, & Kirsch, 1984). As a consequence, during the latter half of the twentieth century, interest in personality factors and work behaviour waned. However, there was a resurgence of interest in the topic during the 1990s, mainly due to the development of the Big-Five model of human personality (Digman, 1990; McCrae & Costa, 1991). Although the Big-Five personality factors are strongly associated with Costa and McCrae it is Tupes and Christal (1961) who are credited with the early development of the five factor model. They detected five personality factors in their research with military personnel and named them: surgency, agreeableness, dependability, emotional stability, and culture. The five factor model has simplified the hitherto broad domain of personality traits hypothesised to account for the variability in human behaviour. The Five Factors are currently labelled: extroversion/introversion, agreeableness, conscientiousness, openness to experience, and emotional stability (Costa & McCrae, 1991).

Since the development of the Big-Five model several studies have found a significant relationship between the five personality factors and measures of organisational behaviour. A meta-analysis conducted by Barrick and Mount (1991) found a significant relationship between Big-Five personality dimensions and performance indicators. For example, ‘openness to experience’ and extraversion were found to be predictors of training proficiency and extraversion, a significant predictor
of performance in the context of occupations involving social interaction. In addition, studies by Barrick, Stewart, Neubert and Mount (1998) found that extraversion and ‘emotional stability’ predicted team performance, and positive relationships were found between agreeableness, conscientiousness and organisational citizenship behaviours (McNeely & Meglino, 1994). In another meta-analysis, Tett, Jackson and Rothstein (1991) found a true criterion-related validity coefficient between performance proficiency and extraversion ($r = .16$) and agreeableness ($r = .33$). In a recent effort to determine the true status of these relationships, Hurtz and Donovan (2000), in a thorough meta-analytic review concluded that the Big-Five personality factors are correlated with performance as follows: conscientiousness $r = .22$, emotional stability $r = .14$, agreeableness $r = .13$, extroversion $r = .10$, and openness to experience $r = .07$.

Along with personality, another important individual difference factor concerns employees’ motivation to work. The next section discusses how motivation theories have influenced incentive theory and examines the role of intrinsic and extrinsic motivation in reward programs.

**Motivation**

Those who believe that basic research in psychology has little practical effect might be surprised at the level of interest that industry has taken in the theories of work motivation. Motivation theories have been instrumental in the development of the benefits and incentive programs adopted by industry in all industrialised countries. One reason that industry supports benefit and incentive systems is the assumption, based on psychological theory, that they will increase motivation, job satisfaction, discretionary effort and hence will enhance employee productivity. However,
surprisingly little is known about their actual effectiveness and less still is known about the circumstances or context under which these programs might be optimised.

Motivation has been a perennial topic of interest to psychologists investigating antecedents of human behaviour (Kanfer, 1990). However, industrial and organisational psychologists have mainly been interested in more specific issues, such as what motivates employee performance, why employees stay in their jobs or leave, and what produces voluntary behaviour (Buhler, 1988).

The theories most closely linked to the study and practices of motivation in the workplace are the content and process theories of motivation. Content theories include the need theories of Maslow, Alderfer, Herzberg and McClelland. These theories posit that behaviour is driven by innate needs such as Maslow’s physiological, safety, belongingness, esteem and self-actualization needs (Wahba & Bridwell, 1976), Alderfer’s ERG theory of existence, relatedness and growth needs (Wanous & Zwany, 1977), Herzberg’s two factor theory, that is, hygiene and motivator factors (King, 1970) and McClelland’s learned needs for affiliation, power and achievement (McClelland & Boyatzis, 1982).

In a work setting, content theories attempt to explain motivation in terms of employee needs that do not require cognitive processing by the individual (Alderfer, 1969; Herzberg, 1967; Maslow, 1945; McClelland, 1961; Vroom, 1964). In contrast, process theories are cognitive based theories that assume employees actively process information, which, in turn gives rise to purposeful behaviour. Process theories include Vroom and Lawler’s expectancy theory (Campbell, Dunnette, Lawler, & Weick, 1970; Vroom, 1964), Adams’ equity theory (Adams, 1963, 1965), Locke’s goal setting theory (Lock, 1990; Mento, Steel, & Karren, 1987) and Deci’s
intrinsic/extrinsic motivation theory (Deci, 1975; Deci & Ryan, 1985; Ryan & Deci, 2000). Intrinsic and extrinsic motivation orientations are of considerable interest to organisational practitioners seeking to improve employee productivity, intrinsic motivation because it is employee driven whereby workers enthusiastically self-motivate themselves, with no external management influence required. Interest in extrinsic motivation derives from its close association with incentive theory, i.e., being externally motivated by the provision of a reward such as incentives, in order to change some behaviour. The following section discusses intrinsic and extrinsic motivation in more detail.

**Intrinsic and Extrinsic Motivation**

High on the list of management goals is a desire to increase the willingness of their employees to direct energy toward advantaging the organisation, or put simply, to have employees work harder than they normally would be disposed to work. According to intrinsic/extrinsic motivation theory, there are two forms of motivation that assist in achieving this aim. The first is to offer exogenous enticements or rewards contingent on increased effort, to induce employees to improve their performance. Deci (1975) called such rewards extrinsic motivators because the motivating influence is external to the self.

When motivation is not influenced by an external source, but rather is derived endogenously, motivation is said to be intrinsic (Deci, 1975). A person is said to be intrinsically motivated if he or she performs some behaviour for the inherent pleasure that is derived from the behaviour itself. One practical problem associated with assessing intrinsic motivation is that it is more difficult to engineer a system that will stimulate intrinsic motivation than it is to construct a system designed to produce
extrinsic motivation. In an organisational setting, establishing an environment in
which intrinsic motivation is enhanced requires the employment of techniques
identified as job enrichment and participative management. Deci, Connell and Ryan
(1989) describe ‘participative management’ as one where employees are encouraged
to seek meaning, and a sense of accomplishment in their work, and to become self-
motivated by their work per se. Deci (1975) Lepper, Greene and Nisbett (1975) and
Kohn (1993) posit that intrinsic motivation is the key to improved discretionary effort
and hence work performance. These theorists argue that using extrinsic motivators
can actually reduce performance because employees regard external incentives as
bribery.

In summary, personality factors and motivation orientation, particularly intrinsic
motivation, have been shown to influence performance. It is also possible that
contextual factors affect the way an incentive reward is perceived and operates. One
of the more pervasive contextual issues in an organisation is the relationship that
employees have with their managers. The following section discusses the nature and
definition of trust in management and how it might influence the effects of an
incentive program.

Trust

When the concept of trust is reflected upon it is almost always in the context of
a relationship between two or more entities. Even in the special case of an individual,
who might say “I can trust myself”, there are still two entities involved, the central ‘I’
and the nominal ‘myself’. Psychological research into trust within relationships is
founded on social exchange theory (Thibaut & Kelley, 1959). Social exchange theory
posits that interactions or relationships between people are governed by the principle
that whenever two or more entities interact, each will strive to maximise all available
gains and minimise losses. In other words, people are motivated by self interest.
Further, when an entity gains more return on an invested resource, such as in time and
effort, than is expended a feeling of trust is evoked (Blau, 1964). This theory
translates well to an organisational setting where entities interact in an environment
based on the exchange of services for money, status and intrinsic gratification.

According to Werner (1994), in order to maintain stability in a work setting two
kinds of contracts need to be established. These are: a formal agreement describing
work conditions, remuneration and job responsibilities between the employee and
employer (Werner, 1994) and a less concrete construct: the psychological or social
contract. The psychological contract has been described as an employee’s belief that
if he/she provides loyal and diligent service the employer will in turn provide stable
tenure and prospects for advancement (Rousseau, 1989). According to Turnley and
Feldman (2000), over the last one or two decades the second of these contracts, the
psychological contract, has been broken by incessant layoffs, restructuring,
downsizing, rightsizing, reorganisations and by the elimination of a large section of
middle-management. Employees have a “feeling of less job security, display less
organisational loyalty, and place less faith in their employers’ promises and
commitments to them” (Turnley & Feldman, 2000) (p. 25). A more succinct way of
saying this is that there has been a substantial loss of trust in management. More
recently, loss of trust has moved beyond corporate boundaries and now impinges on
corporate stakeholders, other than employees. This is exemplified by the massive
collapses of WorldCom and Enron in the US and HIH Insurance in Australia with its
attendant breaches of fiduciary trust at senior management levels.
Interpersonal trust has been theorised to derive from three main sources: a dispositional, or generalised personality trait that pre-disposes a person to trust others (Farris, Senner, & Butterfield, 1973; Wrighteman, 1991), affect-based trust, or trust that involves an emotional investment in a relationship (Lewis & Weigert, 1985) and cognitive based trust, i.e., trust based on the evaluation of cognitive cues and the assessment of prior knowledge. Cognitive based trust is founded on good rational reasons which present evidence of trustworthiness (McAllister, 1995).

**Definition of Trust**

Rotter (1980) defined trust as “a generalised expectancy held by an individual or group that the word, promise, verbal, or written statement of another individual or group can be relied on” (p. 1). McKnight, Cummings and Chervany (1998) defined trust’ as "that one believes in, and is willing to depend on, another party” (p. 474). Mayer, Davis and Schoorman (1995) defined trust as “a willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that party” (p. 712). Husted (1989), following an exhaustive review of the literature involved in defining trust, concludes with this definition of trust; “trust is the reliance by one person, group, or firm upon a voluntarily accepted duty on the part of another person, group, or firm to recognise and protect the rights and interests of all others engaged in a joint endeavour or economic exchange” (p. 393).

These definitions assume that trust is uni-dimensional, that is, trust as a construct is a continuum with low trust at one end of the scale and high trust at the other (Rempel & Holmes, 1989; Rempel, Ross, & Holmes, 2001). If low trust is
indicated then the state is said to be that of distrust, and at the high trust end the state is that of trusting. In marked contrast, Lewicki, McAllister and Bies (1998) believe that “trust and distrust are separate but linked dimensions” (p. 439). They draw their conclusions from Luhmann’s (1979) argument that trust and distrust are distinct constructs that coexist as a mechanism for managing complexity. They also draw on research from social psychology that highlights the separate, but coexisting nature of positive-valent and negative-valent attitudes (Cacioppo & Berntson, 1994) and also work by Nacci, Stapleton and Tedeschi (1973) demonstrating that twin expectations of benefit and harm can exist in the same entity. As an example of the coexistence of trust and distrust in an entity, a person might trust the professionalism and competence of an employee to analyse a work situation and summarise the results in a written report. However, that same employee might not be trusted with the control of corporate expenditure.

Lewicki et al (1998) defined trust as “confident positive expectations regarding another's conduct”, and distrust as “confident negative expectations regarding another's conduct” (p. 439). "Another's conduct" is meant to encompass another's words, actions, and by "confident positive expectations," they mean “a belief in, a propensity to attribute virtuous intentions to, and a willingness to act on the basis of another's conduct”. Conversely, by ‘confident negative expectations’, they mean “a fear of, a propensity to attribute sinister intentions to, and a desire to buffer oneself from the effects of another's conduct” (p. 439).

**Trust and Performance**

Across disciplines, including psychology, sociology, economics and political science there is a commonly held belief that trust has a positive effect on relationships
Similarly, Podsakoff, MacKenzie, Moorman and Fetter (1990) have claimed that trust is likely to play an important role in the context of supervisor/employee relationships. As for specific organisational behaviours, studies by Bhattacharya, Devinney and Pillutla (1998) Costigan, Ilter and Berman (1998), McAllister (1995) and Oldham and Cummings (1996) have implicated high trust in management as an important work motivator. As well as improving task performance Costa, Roe and Taillieu (2001) found that high trust is positively related to team satisfaction and relationship commitment, and negatively related with stress. Cunningham and MacGregor (2000) found that high trust in management positively affects absenteeism, intention to quit, job satisfaction and performance and in a study of trust between college basketball teams and their leaders, Dirks (2000) found that high trust was both a product and a determinant of team performance. Researchers have also found positive relationships between trust and aspects of organisational citizenship behaviour (OCB), itself implicated in employee and organisational performance. For example, Liou (1995) found evidence that trust in one’s supervisor or organisation is predictive of organisational commitment and the development of OCB.

In the context of incentive programs, I hypothesise that trust represents an influence that has potential to interfere with the simple reward/performance relationship. Another important contextual factor, closely associated with trust, is management style. The following section reviews the two major management styles that have been proposed as constituting the majority of management behaviour.
**Management Style**

Researchers have studied the leader/subordinate relationship in organisations from many perspectives. One approach has been through leader-member exchange theory which was formally described as ‘vertical dyad linkage theory’ (Dansereau, Graen, & Haga, 1975). According to leader-member exchange theory, subordinates enjoying high quality relationships with their managers derive special benefits such as promotions, status and positive performance appraisal. In return managers receive committed and conscientious subordinates. In contrast, subordinates in low quality relationships receive standard treatment from their managers and in return give standard in-role behaviour. However, a more recent approach to management subordinate research has been to pay less attention to the exchanges between subordinates and managers and to directly study the techniques that managers employ in their day-to-day behaviour. Two fundamental management modes have been identified, they are: transactional and transformational management styles (Avolio, Bass, & Jung, 1999). Bass and Steidlmeyer (1999) define transactional style as one in which managers motivate their subordinates with promises, praise and rewards and correct by negative feedback, reproofs and disciplinary action. They tend to rely on scientific management tools such as contingent based rewards and punishment, human resource policies and management techniques such as ‘management by objectives’ and ‘the balanced scorecard’ method of performance measurement (Dinesh & Palmer, 1998). In contrast, transformational leaders affect influence through dint of their personal charisma and motivate their employees by creating a strategic vision of what their organisation can achieve. They also engender an atmosphere of trust between themselves and their subordinates and create an environment of intellectual stimulation, thus fostering OCB behaviour (Liou, 1995; Podsakoff et al., 1990).
Management style is being investigated in this thesis because of its association with trust in management. Another factor that also has a close association with trust and management style is job satisfaction, which has also played an influential role in the development of the benefits and incentives programs of the latter part of the 20th century. The following section reviews this variable in relation to incentive rewards.

**Job Satisfaction**

Few topics in organisational psychology have been researched more than job satisfaction. As long ago as 1976, Locke (1976) estimated that more than 3,000 papers had been written on the subject. Notwithstanding the attention that job satisfaction has attracted over the years the topic is still being vigorously researched to this day. PsycINFO cites 58 journal articles for the first six months of 2003. This continued interest is somewhat surprising as researchers in the 1950s and 1960s cast significant doubt on the relationship between job satisfaction and performance (Brayfield & Crockett, 1955; Vroom, 1964). Findings of a weak relationship between job satisfaction and performance are at variance with the commonsense notion that satisfied employees are more productive. Ledford (1999) traces the origin of ‘the satisfied worker hypothesis’ to the beginning of the industrial revolution and particularly in the USA to the ‘industrial betterment movement’ which gained prominence in the late nineteenth century when liberal ideas of social justice and employee betterment were promulgated. According to Ledford (1999), management has persisted with the belief partly because of an enlightened self interest. Because of its influence, the happy worker hypothesis has led directly, and indirectly, to the massive employee benefits tradition in the USA which costs industry over one trillion US dollars per annum (Blakely, 1998).
One line of research into job satisfaction has been an investigation to determine whether this construct is contextually or dispositionally based. In a review of the evidence Judge and Larsen (2001) point out that dispositional characteristics of job satisfaction have been suggested since the 1930s, however, over the past fifteen years particular attention has been paid to dispositional foundations of job satisfaction. It has now been resolved that job satisfaction does have dispositional components (Judge & Larsen, 2001). Evidence of the dispositional nature of job satisfaction is found in studies that link job satisfaction with genetic inheritance. Arvey, Bouchard, Segal and Abraham (1989) report that approximately 30% of the observed variance in general job satisfaction derives from a genetic source, and Ganzach (1998) found a link between intelligence and job satisfaction. If job satisfaction is dispositional in nature then the considerable investment made by industry to improve job satisfaction through the provision of work benefits, may be a fruitless investment. The following section reviews the evidence associating performance with job satisfaction.

**Job Satisfaction and Performance**

Researchers have endeavoured to determine the strength of the connection between job satisfaction and performance with varying results. Vroom (1964) observed a small correlation of \( r = .14 \) between these two variables. However, Vroom’s study employed a limited range of job satisfaction facets, mostly confined to satisfaction with remuneration, work colleagues and the opportunity for advancement. In contrast, other researchers have investigated ‘overall job satisfaction’ and reported higher correlations. For example Petty, McGee and Cavender (1984) found a correlation of \( r = .31 \) between a measure of overall job satisfaction and performance. A meta-analysis by Iaffaldano and Muchinsky (1985) found the best estimate of the true population correlation between satisfaction and performance was a low \( r = 0.17, \)
representing 3% of the available variance. In a later meta-analysis Organ and Ryan (1995) reported an average corrected correlation of $r = .28$, between job satisfaction and behaviours comprising contextual performance, and in a more recent review of the relationship Judge, Thoresen, Bono and Patton (2001) reported the mean true correlation between overall job satisfaction and job performance at $r = .3$. Although there has been increased refinement in methodology yielding slightly higher correlation coefficients, no results appear to yield magnitudes that merit the large expense currently employed by industry in making employees satisfied with their work environments.

Although the link between job satisfaction and performance is weak, job satisfaction, or more accurately, job dissatisfaction, has been implicated in other important workplace behaviours. For example, whereas job satisfaction does not seem to overly improve employee performance it has been found to reduce absenteeism, aid in staff retention and enhance organisational citizenship behaviour (Hom, Caranikas-Walker, Prussia, & Griffeth, 1992; Igalens & Roussel, 1999; Lum, Kervin, Clark, Reid, & Sirola, 1998; Muchinsky, 1993; Organ, 1988). In a review of the evidence Muchinsky (1993) reports that the correlation between absenteeism and job satisfaction is typically found to be about $r = -.35$ and that the correlation between job satisfaction and turnover is normally found to be about $r = -0.4$. Lum et al (1998) state that “job dissatisfaction has been repeatedly identified as the single most important reason why nurses leave their jobs” (p. 308). Given the perennial difficulty in attracting and retaining key employees, as exemplified by the phrase ‘war for talent’ (Pfeffer, 2001; Trank, Rynes, & Bretz, 2001), it behoves employers to employ any means at their disposal to maintain competitiveness in terms of employee
resources. In this respect, the ‘happy employee hypothesis’, and the attendant cost of benefit programs can be somewhat justified.

**Facets of Job Satisfaction**

Although job satisfaction is commonly discussed as a single or global construct, many generalised facets of satisfaction with work and life have been described by researchers. For instance, Hackman and Oldham (1976) identified five characteristics of the work environment that relate to, and tend to enhance, the level of job satisfaction. They are: skill variety, task identity, task significance, work autonomy and feedback to employees regarding their status, progress, performance and quality of work. In addition, contextual issues such as pay level, benefits provided, support from supervisors, relationships with work colleagues, procedural and distributive justice and satisfaction with work/family issues have been investigated, (Agho, Mueller, & Price, 1993; Bedeian, Burke, & Moffett, 1988). It would appear that job satisfaction is multidimensional; even so a debate is still being conducted regarding the necessity of researching job satisfaction facets or simply relying on a global measure (Highhouse & Becker, 1993; Jackson & Corr, 2002). Given the prominence of job satisfaction in the organisational psychology literature, it would seem remiss not to include the construct as one of the workplace performance indicators for this thesis.

In summary, this chapter has reviewed some of the theories, variables and constructs that researchers have associated with employee performance. Some, such as job satisfaction and motivation theory, led to the 20th century benefits and incentives programs which have been enthusiastically adopted, sometimes uncritically, by industry.
The next chapter discusses one of the key problems associated with using contingent based incentive programs. It is the difficulty of accurately measuring employee performance which is particularly acute when job performance is subjective in nature, as it is in many contemporary office jobs.

Researchers not only share with practitioners the inherent problems associated with subjective performance measures, they also face difficulties gaining access to any performance measure: subjective or objective. In such circumstances, researchers commonly rely on self assessed measures, which have been found to suffer from inflationary bias. The following section covers the methodology that was adopted in an attempt to increase the validity of self-assessed performance.
Chapter 4:
The Methodology Employed to Measure Employee Motivation and Self-Assessed Performance

Employee Performance

Campbell, McCoy, Oppler and Sager (1993), in an article discussing the theory of performance, state that “individual performance on a task, virtually any task that a culture views as having value, is one of the most important dependent variables in psychology, basic or applied” (p. 35). Similarly, in the non-academic realm, performance is also a major preoccupation, be it financial, academic or athletic (Campbell et al., 1993; Gomez-Mejia & Balkin, 1992; Higgins, 1999a). Within business organisations, careers are made and lost depending on financial performance for which employees are seen to be responsible.

The overall success of an organisation is considered to be dependent in large measure, on the performance of its employees. As such, extracting peak performance from the workforce is a perennial preoccupation of management (Murray & Gerhart, 1998). Before performance can be recognised, however, it must first be measured or assessed. To this end, organisations engage in regular performance measurements and reviews of their employees, work groups, divisions and organisations as a whole. Except in certain well-defined circumstances, such as measuring the number of items produced or sold, the assessment of individual performance in a work setting is not an easy matter (Scullen, Mount, & Goff, 2000).
In an effort to understand what constitutes employee performance and how it can be enhanced, researchers have categorised performance into two broad areas of behaviour: in-role and extra-role behaviours (Mackenzie, Podsakoff, & Ahearne, 1998; Van Dyne, Cummings, & Parks, 1995). In-role behaviour is defined as those behaviours or ‘task activities’ which are expected by the employer, that is they are behaviours integral to an employee’s job description/role and are considered fulfilled when all expected obligations are met (Coleman & Borman, 2000; Katz, 1964). Unfortunately for organisations, even scrupulous adherence to prescribed in-role behaviour is not sufficient to achieve optimum performance, no matter how well the job description is followed (Williams & Anderson, 1991). That in-role behaviour is not sufficient for peak performance is demonstrated when during industrial disputes employees reduce productivity by ‘working-to-rules’ instead of going on withdrawing their labour entirely. Keeping to the literal letter of the law, associated with an employee’s job description, debilitates the efficient operating performance of an organisation. Following such action the point is often made that work effort above and beyond the legal job definition is required to ensure the efficient running of an organisation. This ‘extra effort’ is defined as extra-role behaviour and in recent years has been acknowledged as an important component of employee performance (Mackenzie et al., 1998).

When employees fulfil their expected in-role behaviour (which can be tested by observing the match between behaviour and job description), employees can expect to be rewarded by keeping their jobs and sharing in the normal compensation and benefits that accrue to employees in their organisation. On the other hand, contravention is usually met with disapproval, counselling, punishment and possible expulsion from the organisation (Van Dyne & LePine, 1998). Although the above
would seem clear cut, researchers have found that the boundaries between in-role and extra-role behaviour are blurred and that employees and managers have difficulty in accurately categorising these two behaviours (Mackenzie et al., 1998; Werner, 1994). Over the past 10 to 15 years researchers have attempted to draw a clearer distinction between these two behaviours and in particular to define extra-role behaviour. Extra-role behaviour is now commonly given the global label of Organisational Citizenship Behaviour (OCB). OCB is discussed in more detail later in this chapter.

The next section introduces some of the methodological difficulties associated with performance assessment and how they are they are handled in this thesis.

Performance Assessment

Most organisations are required to report their performance or progress to other entities on a regular basis. This is particularly so in for-profit organisations who have mandatory duties to report to their board of directors, their shareholders, the general public and to tax authorities. An important behaviour that is almost always reported by an organisation is its financial performance which can be viewed as a distillation of the performance of the entire organisation’s membership.

Performance is usually linked to temporal references, such as comparing the performance from a previous period to the performance for a time frame such as a financial year and is most commonly expressed as some aggregate financial measure. These measures include: gross profit, profit after tax, earnings before interest tax and amortisation (EBITA) to name a few of the more prominent measures, and also as various financial ratios such as earnings per share, price earnings ratio (P/E) and the actual share price, if an entity is listed on a stock exchange.
Assessment of individual performance is more difficult than the measurement of an organisation’s aggregated financial performance. It is a simple task to measure employee performance when direct metrics are available such as counting the number of items produced or products sold. Measurement difficulty increases when assessment is associated with job attributes that have no easily measured outputs. These include decision making, problem solving, planning, organising, and various back office administrative jobs (Borman & Motowidlo, 1993). Such activities are common in management and administrative jobs, service industries, call centre operations, teaching vocations, scientific endeavours and back office work of all kinds. Complex solutions have been developed for the measurement of performance in these more difficult areas. These include subjective assessment by self, managers, peers, and clients (defined as 360 degree feedback methodologies) and quasi-objective measures such as the Balanced Score Card system (Mount, Judge, Scullen, Sytsma, & Hezletee, 1998). The Balanced Score Card system is a good example of assessment in difficult to measure environments. This system uses a mixture of objective and subjective measures, both financial and non-financial, which relate to the job under assessment. An aggregated assessment score is derived after the chosen measures have been weighted and summed (Kaplan & Norton, 1996).

Problems of accuracy and validity are often problematic when work behaviour lacks tangible output or any clear objective measure. In such instances reports by assessors can lack accuracy as much of the information they contain is subjective in nature (Scullen et al., 2000). Even when performance data are available its source is commonly derived from assessment that is subjective rather than objective (Scullen et al., 2000). Problems associated with subjective assessment include halo effect, leniency and central tendency error and are well documented (Jackson & Furnham,
Researchers investigating employee performance in work settings are faced with these biases as well as validity and reliability problems, if they use non-objectively assessed data (Lindeman, Sundvik, & Rouhiainen, 1995; Scullen et al., 2000).

This is an unsatisfactory situation for any researcher and one that Campbell et al (1993) attempted to redress by developing a functional definition of performance which they believe allows performance to be more accurately defined and hence assessed. They assert that the word ‘performance’ is widely misused as a construct because of the large range of behaviours it is used to describe and that, even though the construct is ubiquitously used in psychology, there is virtually no theory available to guide the researcher as to how this construct should be defined. Their suggested solution is embodied in a model that defines performance (PC) as a function of declarative knowledge (DK), procedural knowledge and skills (PKS) and motivation (M). They derive a function, written as: \( PC = f [DK \times PKS \times M] \). If any term in this functional definition of performance is zero it will cause performance to be zero. Declarative knowledge is knowledge about facts and things related to understanding a given task, or knowing what to do. Procedural knowledge and skills are knowing how to perform a task (Anderson, 1985; Kanfer & Ackerman, 1989).

In psychological terms this definition is useful because it relies on motivation, a construct that, in contrast to performance, has many decades of research and theory supporting it (Kanfer, 1990). Campbell et al (1993) believe that motivation is a direct defining factor of performance. Assuming that DK and PKS are present, which, if correct selection procedures have been adopted should be the case, then it could be argued that motivation can be equated with performance. In this thesis performance is
measured, following the line of reasoning suggested by Campbell et al (1993), i.e., measuring performance indirectly by measuring employee motivation and other performance indicators.

Researchers’ Difficulties in Measuring Employee Performance

Regardless of the performance measures selected there are still methodological issues to contend with when assessing performance in a work situation, as opposed to a controlled laboratory setting. When testing for some effect on employee performance a researcher would ideally use an experimental and a control group. The research would be conducted within one company or industry and rely on objective performance measures. According to Ichniowski et al (1996) a major reason that such designs are seldom used is that the methodological problems associated with the implementation of such well-crafted experiments are almost overwhelming. For example, experimentally testing the hypothesis that employee incentives are effective would require a random assignment of an incentive intervention to half the employees of a company and ideally a number of companies within a specific industry. Such an experiment would raise difficult ethical and political issues. As a result, studies investigating the efficacy of innovative practices on employee performance have usually been restricted, in methodology, to making comparisons between companies that have implemented such innovations with those that have not. They have also used pre and post intervention studies as indicators of the effectiveness of particular interventions, (Ducy, Iqbal, & Akhigbe, 1997; Flannery et al., 1996; Hawk et al., 1994).

One solution to the problem of gathering data is to use anonymous cross sectional surveys. However, there are problems associated with self-assessment of
performance, be they anonymous or open reports. The following section discusses the problems associated with self-assessment and how such problems might be reduced.

**Cross Sectional Research Design and the Current Research**

The current research focuses on the effect that incentives have on employee performance, mediated by trust in management and management style, and affected by individual differences, and therefore it required measures of the participants’ performance. A cross-sectional research design was chosen for this study to gather data from a large anonymous population of employees. Although the data were gathered under strict guarantees of anonymity there undoubtedly were inaccuracies associated with the self-assessment issues discussed above. In an attempt to improve validity a number of measures that have been identified as performance indicators were employed, instead of a single measure. These were: Fox and Feldman’s (1988) self-assessed performance (SAP) scale; Jordan’s, (2001) adaptation of Konovsky and Organ’s (1996) OCB scale; Lloyd’s (2001) discretionary work effort scale (DWE), Walsh, Ashford and Hill’s (1985) intent to leave scale, Russell’s (1995) adaptation of Gallie and White’s (1995) job satisfaction scale, Allen and Meyer’s (1990) affective commitment scales, Williams and Anderson’s (1991) in-role behaviour scale and Harackiewicz, Barron, Tauer, Carter and Elliot’s (2000) goal mastery scale.

All these variables have been implicated with employee performance, and by measuring and using them all, from within one population, it is argued that some of the uncertainty associated with self-assessment may be reduced.

**Problems with Self-Assessment**

In the 1920s researchers such as Hoffman (1923) and Thorndike (1920) were warning that there were problems associated with self-assessed data. Since that time a
A considerable body of research has consistently indicated that self-ratings, self-assessments and self-appraisals exhibit inflating biases, are poorly correlated with ratings made by others (such as supervisors and peers) and as such have poor validity (Harris & Schaubroeck, 1988; Landy & Farr, 1980; Mabe & West, 1982; Podsakoff & Organ, 1986). Despite these shortcomings, self-assessment continues to be a substantial source of data within the social sciences with the majority of personality assessments and many psychological diagnostics measures being acquired by self-assessed ratings (Furnham, 1994). In addition, within the domain of psychological research, self-assessment is widely employed when data are gathered from cross-sectional surveys and remains an important (and sometimes the only) source of data.

The key concern, immediately apparent in the area of self-assessed performance, relates to the general finding of leniency bias in self-ratings. This concern has led some researchers to discount the value of self-assessment. For example Jenkins, Gupta, Mitra and Shaw (1998) in their meta-analysis of financial performance and how it relates to incentive inducements, rejected studies that used self-assessed performance on the basis that such data are not reliable enough. Similarly Dirks (1999), in a study into the effect that trust has on work group performance discounted self-assessment stating that most studies using self-reported data have potentially inflated correlations.

Much effort has been expended in an attempt to discover the conditions under which self-assessment might be more or less valid and reliable. Mabe and West (1982) conducted a meta-analysis that included 55 studies in which self-evaluation of ability was compared with other measurement criteria. These researchers set a high standard when including studies in their review including that the study must be
associated with the assessment of a specific performance skill or ability that studies must have been reporting comparisons between self-assessed measures of ability/performance and other performance measures and that the study was published and hence had been peer reviewed. They found a mean validity coefficient of $r = .29$ and high variability ($SD = .25$). They found that much of the variability could be ascribed to the level of experience the candidate had in self-evaluation, individual differences including general intelligence, achievement status, locus of control and the way the data were gathered (for example whether anonymity was a factor or not). Their review led to the conclusion that under certain conditions some candidates will accurately report their abilities and performance and they conclude by saying that “general conclusions about the validity of self-evaluation of ability are not easily made because of the large standard deviation on the correlations” (p. 285).

Other studies investigating the causes of self-assessment variability have implicated additional factors such as gender, self esteem and age. For example, male self-assessment is more positively biased than female, those with high self esteem inflate their assessments and older people are no more accurate in self assessing their performance than younger people (Lindeman et al., 1995).

This section has discussed the difficulties associated with self-assessment and the attendant problems when using self-assessed reports in research data. It was considered important to discuss the shortcomings of self-report data as the majority of data used in this thesis was from that source.

The solution adopted in this thesis, while not addressing the core problems associated with self-assessment, are thought to provide some increase in validity and reliability. These include: the use of large data samples (approximately 1,000
employees in each study), measuring a performance with a number of self assessed performance indicators and guaranteeing total anonymity.

The following sections describe the self-assessed performance indicators measures that are used here.

**Self-Assessed Performance (SAP)**

Employees exhibit a wide range of behaviours in work settings. Some of these are directly related to their assigned role and some not directly related to their core job responsibilities. However, it is behaviour directed specifically toward business outcomes that has traditionally interested management. Such behaviour is variously described as ‘in-role behaviour’ (Katz, 1964), ‘core behaviour’ (Tompson & Werner, 1997), and ‘task performance’ (Borman & Motowidlo, 1993). In-role behaviour is work behaviour specified in an employees’ job description and may be used, in an abbreviated form, to describe a job to be advertised.

As discussed above, in order to increase the validity of self assessed performance measurement, several self-assessed measures of performance were employed. One of these is Fox and Feldman’s (1988) self-assessed performance (SAP) scale. This scale invites respondees to rate themselves on 10 commonly designated in-role behaviours such as, work quality and quantity, initiative, efficiency and general competence. Williams and Anderson’s (1991) in-role behaviour scale, which measures behaviours specific to an employee’s job responsibilities as described in his or her job specification, was also chosen.

The following section discusses organisational citizenship behaviour (OCB), a construct that has been found to improve performance indirectly through general
helping behaviours. In contrast to the in-role behaviours discussed in this section, OCB are defined as extra-role behaviours. They are performance indicators in that when exhibited by employees, they are theorised to advantage the overall performance of an organisation through a range of facilitating activities.

**Organisational Citizenship Behaviour (OCB)**

Smith, Organ and Near (1983) used the term ‘organisational citizenship behaviour’ (OCB) to define employee behaviour that goes beyond the call of duty; behaviour that is not prescribed and is not directly rewarded within the context of the organisation. In this sense, OCB, or extra-role behaviour, has also been labelled ‘contextual performance’, or behaviour not directly related to an employee’s main work tasks (Borman & Motowidlo, 1993). However, when discretionary or extra-role behaviours are currently discussed in the literature the constructs variously discussed above are most commonly labelled OCB.

OCB research is a relatively new area of investigation and as such it has some of the problems commonly associated with a new concept. Two of these are finding a reliable definition for the construct and developing measures with robust construct validity for researchers to use. In a review of the literature, Podsakoff et al (2000) identified approximately 30 different varieties of OCB with much overlap between these variants. These reviewers performed a service for OCB researchers by categorising the many facets and forms of OCB into seven factors and defining each factor as a construct. These are: 1) helping behaviour, 2) sportsmanship, i.e., not complaining when inconvenienced, 3) organisational loyalty, 4) organisational compliance, (5) individual initiative, i.e., engaging in task-related behaviour at a level
that is beyond minimally required or expected levels and has a voluntary flavour, (6) civic virtue and (7) self development.

One motive for studying OCB is to determine whether it directly advantages organisations through increasing performance. There is certainly high face validity for believing that OCB increases performance. It seems like good common sense to ascribe increased performance to ‘general helping behaviours’, ‘organisational loyalty’ and increased ‘civic virtue’ (Borman & Motowidlo, 1993; Podsakoff, Ahearne, & MacKenzie, 1997). However, despite the high face validity there is surprisingly little confirmatory evidence supporting the proposition. Borman and Motowidlo (1993) say that “arguments for a link between organisational effectiveness and performance in the contextual domains are typically logical and conceptual rather than empirical” (p. 88). Nevertheless, links have been found. Sales unit performance has been found to be increased by OCB (Podsakoff & MacKenzie, 1994) and elements of OCB, including altruism and civic virtue, have been found to enhance performance in insurance companies (MacKenzie, Podsakoff, & Fetter, 1991). Further, OCB has been found to improve supervisors’ evaluation of staff performance (Werner, 1994) and the quantity and quality of work group performance (Podsakoff et al., 1997).

Selection of OCB Factors to be used as Performance Indicators

One of the problems researchers have encountered, when attempting to make the connection between OCB and performance, is deciding on the OCB domains/facets that should be used. Coleman and Borman (2000) point out that there is continuing effort in defining the domains of OCB which may be associated with performance and that this is one reason for the limited empirical evidence linking
OCB to individual performance. Podsakoff et al (2000) report finding only five studies that attempt to test the relationship between OCBs and performance and found that OCBs accounted for 19% of the variance in organisational quantity, 18% in quality, 25% in financial efficiency and 35% in customer service performance. Coleman and Borman (2000), Organ (1997) and Podsakoff et al (2000) all agree that OCB is multi-dimensional and that definitions are still being resolved, with no firm consensus on a final set. In support of the multi-dimensionality of OCB, researchers have found that performance can actually decrease when employees engage in some OCBs (Podsakoff & MacKenzie, 1994). In fact Werner (2000) argues that separate dimensions of OCB should not be used when assessing performance but that a global measure of OCB is most appropriate in an age when jobs are no longer defined in narrow terms of performance but are in themselves multidimensional.

OCB is one of the performance indicators used in this thesis and I have taken Werner’s (2000) advice and used a global measure of OCB. Nevertheless, there is one specific facet of OCB that is specifically related to performance. It is labelled discretionary work effort by Lloyd (2001) and is discussed below.

**Discretionary Work Effort (DWE)**

Employees’ work behaviour varies depending on a number of factors including: the resources at their disposal, their level of skill and how motivated they are at any given instance (Mohr & Bitner, 1995). To promote motivation, management use pay-for-work remuneration, the offer of contingent based incentives, the promise of special rewards and also makes contingent based threats for poor performance (Bailey, 1993). According to Bailey (1993), “after the totality of external intervention designed to coax employees into working harder than they normally would, there
remains some effort that workers only contribute at their discretion” (p. 3).

Discretionary effort or ‘going the extra mile’ is behaviour that managers strive to extract from their employees, in order to inspire superior productivity. Katz (1964) argued that in order for organisations to function efficiently they need employees to be innovative and to engage in spontaneous activity that goes beyond their job specifications. Such behaviour is not uniformly defined or discussed in the literature. However, Bailey (1993) names such behaviour ‘discretionary effort’. It has also been called ‘soldier effectiveness’ (Bateman & Organ, 1983; Organ, 1988), ‘prosocial organisational behaviour’, (Brief & Motowidlo, 1986); ‘organisational spontaneity’ (George & Brief, 1992; Motowidlo & Van Scotter, 1994); ‘citizenship performance’ (Borman & Motowidlo, 1997) and ‘extra-role behaviour’, (Van Dyne et al., 1995).

DWE was identified as that dimension of OCB classified by Podsakoff et al (2000) as ‘individual initiative’ and specifically its second order construct, defined by Moorman and Blakely (1995) as ‘personal industry’. Figure 2 is a pictorial description which shows the location of personal industry within the OCB domain.
Organisational Citizenship Behaviour (OCB), (Podsakoff, et al, 2000)

1) Helping behaviour
2) Sportsmanship
3) Organisational loyalty
4) Organisational compliance
5) Individual initiative
6) Civic virtue
7) Self development

'DISCRETIONARY WORK EFFORT'
Personal Industry (Moorman & Blakely, 1995)
Working hard with extra effort
or
working harder than considered normal

Figure 2
Location of DWE within the Domain of OCB

Personal industry is that segment of the global construct of OCB which is directly associated with working hard, or performance. Descriptions within this specific domain include “the performance of specific tasks above and beyond the call of duty” (Moorman & Blakely, 1995), (p. 130), “persisting with enthusiasm on the job” (Borman & Motowidlo, 1993; Borman, White, & Dorsey, 1995; Brief & Motowidlo, 1986; Karambayya, 1990), ‘putting forth extra effort on the job’ and ‘working hard with extra effort’ (Brief & Motowidlo, 1986; Karambayya, 1990; Katz & Kahn, 1978; Smith et al., 1983). This second-order construct of OCB, that is, behaviour related to working harder than required as defined in an employee’s job specification or harder than is considered normal is labelled, ‘discretionary work effort’ (DWE) and is measured in this thesis by a scale developed by Lloyd (2001).
Chapter summary

In summary, there are at least three basic issues that both engage and concern researchers of incentive theory. The first is performance, which as stated by Campbell et al (1993), “is one of the most important dependent variables in psychology, basic or applied” (p. 35). The second is that even though there are well documented problems of validity with data derived form self-assessed ratings (Harris & Schaubroeck, 1988; Landy & Farr, 1980; Mabe & West, 1982; Podsakoff & Organ, 1986) this source of data continues to be used as a major foundation for research (Furnham, 1994). The third issue is that data are commonly gathered using cross-sectional surveys which “Typically aim to understand causal processes that occur over time, yet their conclusions are based on observations made at only one time” (Babbie, 1983) (p. 83). As the studies in this thesis employed all three of these features, methods to ameliorate their associated shortcomings were sought to be employed. This included the use of a wide range of self-assessed performance indicators allowing comparisons between each to be made whenever a study called for a measure of employee performance.
Chapter 5:


It is my overall hypothesis that the way most incentives programs are implemented within industry is, on the whole, unsound. They are generally offered to employees as a quick fix solution to improve productivity, with scant regard to individual differences or contextual influences. They are offered on the basis that they will be valued by employees and hence be a motivating influence on employee behaviour. However, do all employees value every reward equally? It is hypothesised here that employees with different dispositional characteristics and working under different contextual settings will respond differentially to rewards. The study reported in this chapter commences an exploration of this hypothesis by replicating and extending Furnham, Forde and Ferrari’s (1999) work in which they analysed the relationships between employee personality and various motivational work factors and rewards.

Throughout the history of psychological research, one prominent class of dispositional variables which have been studied is the personality trait. Although interest in personality waned in the 1960s, due to the questioning of trait stability within and over different contextual settings (Mischel, 1969), there has been a resurgence in personality research over the last decade or so due to the status given to the Five Factor model that includes: extraversion, agreeableness, conscientiousness, emotional stability and intellectual openness (McCrae & Costa, 1991).
Given research reviewed earlier, for instance that conscientious and agreeable employees may not respond to rewards as positively as extraverts (Costa & McCrae, 1992), it might be expected that people with different personality orientations will respond differently to any reward or indeed to different types of rewards. Herzberg (1966) classified factors that are commonly used as employee incentive rewards, such as money, benefits and promotion opportunities, into two groups. He called these groups ‘motivator factors’ and ‘hygiene factors’. Furnham et al (1999) examined how employees with different personality traits respond to these two factors. The replication and extension of Furnham et al’s (1999) study is employed here to commence the exploration of the hypothesis that not all incentive rewards will be equally preferred and that employee individual differences will account for some of the variance detected following the introduction of an incentive program.

_Furnham, Ford and Ferrari’s Study_

The study conducted by Furnham et al (1999), employing correlational and regresional analyses and involving 92 job applicants who were applying for middle management positions, a significant relationship between personality and work motivation was uncovered. Specifically, using Herzberg’s two factors of ‘hygiene’ and ‘motivators’, these researchers found that extraverts were positively influenced by Herzberg’s motivator factor, and that those high on the personality dimension of neuroticism rated hygiene factors as more important than the motivator factors.

These results have implications for the incentive and benefits industry and also support the major hypothesis of my thesis, which is that employee individual differences will influence the effectiveness of an incentive program. My rationale was that, as indicated by Furnham et al’s (1999) work, and proposed by my thesis,
employees with different personality traits react differentially to different reward systems then it might be more efficient if incentive and benefit programs were specifically designed to match employee characteristics, rather than applying them broadly without taking account of individual preferences.

**Job Satisfaction and Herzberg’s Motivator Theory**

Benefit programs are deployed on the assumption that their use will increase job satisfaction or reduce job dissatisfaction, (Federico & Goldsmith, 1998). Upon becoming satisfied, an employee’s motivation is expected to increase (which in turn is assumed to result in higher productivity). Although the connection between job satisfaction and productivity has high face validity, empirical evidence for this link is not robust (Iaffaldano & Muchinsky, 1985).

Herzberg researched job satisfaction and motivation directly in the field and came to the conclusion that for employees to be satisfied in their jobs certain environmental irritants needed to be extinguished (Herzberg, 1966). He labelled these aspects of work ‘hygiene’ factors. Examples include poor work benefits, unsatisfactory remuneration levels and inadequate job security. Herzberg believed that once hygiene factors are set to favourable levels employees become satisfied. However, he did not find that hygiene factors actually motivated employees to work harder; they merely triggered dissatisfaction or brought about satisfaction. It was Herzberg’s second group of work factors, which he labelled ‘motivators’, which he believed were involved in performance behaviour. Motivator factors include the opportunity to achieve at work, being given greater responsibility and the inherent interest in work per se.
Herzberg’s two factor theory has been very influential in industry (Muchinsky, 2000). Industry enthusiastically adopted Herzberg’s two factor theory by initiating programs designed to enrich employees’ jobs such as increasing employee autonomy, raising employee levels of responsibility, initiating job rotation, encouraging job enlargement and giving appropriate feedback of performance behaviour to employees (Herzberg, 1966). Notwithstanding the influence that Herzberg’s theory has had, and is still having, his two factor theory has been dealt with harshly by many researchers (McCormick & Ilgen, 1980; Waters & Waters, 1972). Muchinsky (2000) summarises this criticism into two broad categories. The first relates to the way in which Herzberg gathered his data which, according to critics, led to selective bias and defensive behaviour, specifically, when respondees do not accurately recall instances of positive and negative experiences. The second is that, of the many studies which attempted to replicate Herzberg’s findings, very few have been successful. This criticism has led to the perception that Herzberg’s measures have poor validity. For example, replication studies have found that both ‘motivator’ and ‘hygiene’ factors contribute to job satisfaction and also increase employee motivation (Maidani, 1991).

**Herzberg’s Two Factors v Intrinsic and Extrinsic Motivation**

Herzberg, Mausner and Snyderman (1959) created a nomenclature that placed workplace aspects such as rewards, environmental characteristics and relationships with management and peers, into two categories depending on their capacity to motivate employees or to make them dissatisfied with their job. Motivating factors they simply titled ‘motivators’ and features that had the potential to cause dissatisfaction they called ‘hygiene’ factors. Their research, which involved surveying employees in work environments, led them to classify motivators as including rewards such as recognition awards, increased status and opportunities for
training and promotion. They allocated work aspects such as pay, monetary incentives, benefits, supervisor’s behaviour and general working conditions into their hygiene factor.

Herzberg’s theory attained such status that it became known simply as the Two Factor Theory. However, as well as achieving considerable status and influence it also generated much controversy, culminating in criticism that led to its being less influential in psychological research (Muchinsky, 2000). As a consequence of this uncertain status, Herzberg’s motivator/hygiene theory was not used in later studies in this thesis. Rather Amabile et al’s (1994) theoretically-equivalent intrinsic and extrinsic motivator factors, derived from their Work Preference Inventory (WPI), (Amabile, Hill, Hennessey, & Tighe, 1994) were employed. In the current study, however, Herzberg’s two factors were used in order to comp the results with those obtained using Amabile et al’s (1994) intrinsic and extrinsic motivation orientations.

Eysenck’s Personality Traits v the Big-Five Personality Factors

Eysenck's three Factor model dominated the field of personality assessment for decades in the latter half of the 20th century and although his work and in particular, his trait taxonomy has not been criticised it has nevertheless been overtaken by the Big-Five personality factor model (Zuckerman, Kuhlman, Joireman, Teta, & Kraft, 1993).

Furnham et al (1999) assessed their subjects’ personality profiles using the Eysenck Personality Profiler (EPP). The EPP extracts 21 primary and three ‘super-traits’. The three super-traits are ‘extraversion’, ‘neuroticism’ and ‘high psychoticism’, however, only two of these traits, extraversion and neuroticism correspond directly with the Big-Five personality model. In this current study, instead
of using Eysenck’s EPP traits, McCrae and Costa’s (1991) Big-Five personality factors were employed. This current study extends Furnham et al’s (1999) work by employing a measure of the Big-Five personality inventory which allowed the analysis of the remaining three factors, i.e., agreeableness, conscientiousness and intellectual openness. Both agreeableness and conscientiousness have been implicated in employee motivation and performance and therefore have a place in any analysis associated with workplace motivation (Barrick & Mount, 1991; Kleven & Jenssen, 2001; Tett et al., 1991).

**Summary of Objectives**

In summary, the present study had three main objectives: The first and principal objective was to investigate the association between different types of rewards, motivation orientation and personality. This aligns with the central theme of my thesis, which is that the effectiveness of a workplace reward will be influenced by the context in which a reward is offered and by individual differences, including personality as investigated by Furnham, Forde and Ferrari (1999).

The second objective of this study was to test the compatibility between Herzberg’s two factors of motivators and hygiene with Amabile et al’s (1994) theoretically equivalent factors of intrinsic and extrinsic motivation orientation. Intrinsic and extrinsic motivation orientations are fundamentally associated with the theory of incentive and benefit programs (Harackiewicz & Sansone, 2000; Kohn, 1993).

The third objective was to extend Furnham et al’s (1999) study by substituting the Eysenckian traits with McCrae and Costa’s (1991) Big-Five personality factors.
These measures of personality are prominently employed in my thesis and are currently regarded as the most functional model describing a person’s personality.

METHOD

Participants:

Participants were 942 supervisors, managers, professionals and self employed people selected to have the following characteristics:

- 21 years or older (as younger employees were less likely to be managers).
- In full time employment (i.e., at least 30 hours per week).
- Supervisors, managers, administrators or executives, responsible for managing a number of people (in order to match the participants of Furnham et al’s study).
- From private organisations (that is, they did not work for the government, quasi government organisations or not-for-profit organisations).

The rationale for the selection of managers from private organisations was that such employees would be more likely to have experience of incentives programs.

Of the 1,042 respondees 100 were rejected as not having the required characteristics as described above, leaving a total of 942 valid completed surveys.

Participant Characteristics

Respondees participated in a large-scale cross-sectional survey which measured various aspects of organisational behaviour in Australia. No particular industry was selected: the participants worked in a wide range of industries. The data reported here
were collected from participants selected at random from a large number of organizations in Sydney, Australia. The 942 participants who were accepted for analysis collectively had the profile shown in Table 1 and Table 2:

### Table 1
**Means Modes and Standard Deviations of Continuous Demographic Variables**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Mode</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>39.25</td>
<td>26.00</td>
<td>10.16</td>
</tr>
<tr>
<td>Number of people in Company</td>
<td>3153.73</td>
<td>1,000.00</td>
<td>12,660.00</td>
</tr>
<tr>
<td>Regular Scheduled hours of work</td>
<td>41.91</td>
<td>40.00</td>
<td>7.86</td>
</tr>
<tr>
<td>Time in current job (years)</td>
<td>16.20</td>
<td>1.00</td>
<td>26.61</td>
</tr>
</tbody>
</table>

At 25.8 years, the mean age of participants in the Furnham et al study was lower than for this sample.

### Table 2
**Frequencies and Percentages of Demographic Variables**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>354</td>
<td>37.9</td>
</tr>
<tr>
<td>Male</td>
<td>579</td>
<td>62.1</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School Certificate</td>
<td>76</td>
<td>8.1</td>
</tr>
<tr>
<td>Higher School Certificate</td>
<td>128</td>
<td>13.6</td>
</tr>
<tr>
<td>TAFE Certificate</td>
<td>207</td>
<td>22.0</td>
</tr>
<tr>
<td>University Degree</td>
<td>449</td>
<td>47.8</td>
</tr>
</tbody>
</table>

The ratio of male to female participants in Furnham et al’s study was approximately 50/50 (52% female and 48% male) which differs from this sample which was approximately 40% females and 60% males.
Measures

The measures used in this study are described below, including range, mean, standard deviation and Cronbach alpha, where applicable. All the questions used to develop each scale are listed in Appendix A.

Personality Measures

Furnham et al (1999) used Eysenck’s EPP rather than McCrae and Costa’s (1991) NEO Personality Inventory. The EPP extracts two of the Big-Five factors, namely, extraversion and neuroticism (emotional stability in Big-Five parlance), whereas the Big-Five yields the five basic factors now thought to define human personality (John & Srivastava, 1999), i.e., extraversion, conscientiousness, agreeableness, emotional stability and intellectual openness.

The Big-Five Personality Dimensions

The Big-Five personality dimensions were measured using a 40 adjective checklist developed by Saucier (1994) known as the ‘mini-markers’. The ‘mini-markers’ checklist is an abbreviated form of Goldberg’s 100 unipolar Big-Five factor adjective markers (Goldberg, 1992). It is frequently used in large-scale studies when a shorter version of the Goldberg instrument is required.

Each of the five factors is measured by eight adjectives. Each adjective is accompanied by a 7 point Likert response scale with end points of (1) ‘very inaccurate’ and (7) ‘very accurate’. The five factors and examples of the adjectives used to develop each scale follow: Extraversion: ‘talkative’, ‘bold’ and ‘energetic’; Agreeableness: ‘co-operative’, ‘kind’ and sympathetic’; Conscientiousness: ‘systematic’, ‘organised’ and ‘practical’. Emotional stability: ‘relaxed’, ‘moody’ (reverse coded) and ‘envious’ (reverse coded) and Intellect or openness: ‘creative’,
‘imaginative’ and ‘philosophical’. The reliabilitys for the five scales in the current study were satisfactory, and ranged from .73 for intellectual openness to .82 for agreeableness. This compares well with the coefficient alphas achieved by Saucier (1994) which ranged from .72 for intellectual openness to .83 for agreeableness.

**Herzberg’s Motivator and Hygiene Factors**

Furnham et al (1999) used 18 of Mantech’s (1980) 24 question Work Values Questionnaire (WVQ) and sorted these into two categories most readily classifiable as Herzberg, Mausner and Snyderman’s (1959) two factors. This process was replicated in this study. Table 3 lists these 18 questions, as sorted by Furnham et al (1999) into Herzberg’s two factors. Participants are asked to rate the 18 questions on a six point Likert scale with end points of (1) ‘very unimportant’ to (6) ‘very important’. Alpha reliabilities for the derived ‘hygiene’ and ‘motivator’ factors in this study were .76 and .82 respectively which compare well with the coefficient alphas achieved by Furnham et al (1999), which were .70 for the ‘hygiene’ and .76 for the motivator factor.

<table>
<thead>
<tr>
<th>Table 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>18 Items Selected by Furnham et al (1999) to Represent Herzberg’s Two Factors</strong></td>
</tr>
<tr>
<td><strong>Hygiene factors</strong></td>
</tr>
<tr>
<td>1 Job security</td>
</tr>
<tr>
<td>3 Considerate supervisor</td>
</tr>
<tr>
<td>5 Convenient work hours</td>
</tr>
<tr>
<td>7 Job status</td>
</tr>
<tr>
<td>9 Opportunity to interact with people</td>
</tr>
<tr>
<td>11 Benefits</td>
</tr>
<tr>
<td>13 Pleasent co-workers</td>
</tr>
<tr>
<td>15 Pay</td>
</tr>
<tr>
<td>17 Comfortable work conditions</td>
</tr>
</tbody>
</table>

Note: Numbers represent the question numbers used in this study.
Intrinsic and Extrinsic Motivation

Intrinsic and extrinsic motivation orientations were measured using the Work Preference Inventory (WPI), developed by Amabile et al. (1994). The WPI comprises 30 questions, 15 for each construct. Sample items used in the WPI to measure intrinsic motivation are; ‘What matters most to me is enjoying what I do’ and ‘I enjoy doing work that is so absorbing that I forget about everything else’. Sample items used to measure extrinsic motivation are; ‘I am strongly motivated by the money I can earn’ and ‘I’m less concerned with what work I do than what I get for it’. Each question is accompanied by a four point Likert scale with end points of (1) ‘never or almost never true of me’ to (4) ‘always or almost always true of me’. Five questions are reverse-scored. The reliability of the two scales in the current study was satisfactory, with a standardised item alpha reliability of .77 for intrinsic motivation and .72 for extrinsic motivation. This compares with the alphas obtained by Amabile et al. (1994), i.e., a Cronbach alpha of .79 for intrinsic motivation and .78 for extrinsic motivation.

Procedure

How the Data were Obtained

As part of their course requirements in 2000, 200 students enrolled in a second semester, unit of the Bachelor of Business Administration participated in collecting the data. Each student received 5% of the unit assessment for collecting five completed surveys (a component of the unit being the theory and practice of scientific data collection). Each respondent was given a letter of introduction from the Course Chair outlining the reason for which the data were being collected, introducing the student, inviting the subjects to participate, guaranteeing anonymity and assuring the participants that they could discontinue their involvement at any time. Respondents
were then given a blank questionnaire and an envelope in which to seal the completed questionnaire for returning to University staff for processing.

RESULTS

Table 4 gives the possible range, means, standard deviations and Cronbach alpha reliability for each scale used in this study.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Possible range</th>
<th>M</th>
<th>SD</th>
<th>Cronbach alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Herzberg ‘motivator’ factor</td>
<td>1-6</td>
<td>4.88</td>
<td>.60</td>
<td>.82</td>
</tr>
<tr>
<td>Herzberg ‘hygiene’ factor</td>
<td>1-6</td>
<td>5.12</td>
<td>.58</td>
<td>.76</td>
</tr>
<tr>
<td>Intrinsic motivation</td>
<td>1-4</td>
<td>3.01</td>
<td>.41</td>
<td>.77</td>
</tr>
<tr>
<td>Extrinsic motivation</td>
<td>1-4</td>
<td>2.59</td>
<td>.44</td>
<td>.72</td>
</tr>
<tr>
<td>Extraversion</td>
<td>1-7</td>
<td>4.71</td>
<td>.99</td>
<td>.78</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>1-7</td>
<td>5.85</td>
<td>.81</td>
<td>.83</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>1-7</td>
<td>5.65</td>
<td>.89</td>
<td>.82</td>
</tr>
<tr>
<td>Emotional stability</td>
<td>1-7</td>
<td>4.79</td>
<td>.96</td>
<td>.73</td>
</tr>
<tr>
<td>Intellectual openness</td>
<td>1-7</td>
<td>4.97</td>
<td>.84</td>
<td>.72</td>
</tr>
</tbody>
</table>

Table 5 shows the Pearson, two-tailed zero order correlations for all scales used in the study. There was a moderate correlation coefficient of .41 between Herzberg’s ‘motivator’ factor and its theoretically equivalent Amabile et al (1994) intrinsic motivation orientation and a significant, although moderate to low, correlation of .38, between Herzberg’s ‘hygiene’ factor and Amabile et al’s (1994) extrinsic motivation. There was also an unexpectedly high correlation of .6 between the two Herzberg factors indicating low orthogonality. In contrast, there was no relationship between Amabile et al’s (1994) intrinsic and extrinsic motivation orientations of=r= .05.

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Page 81
1. Herzberg ‘motivator’ factor

2. Herzberg ‘hygiene’ factor .61†

3. Intrinsic motivation .41† .12†

4. Extrinsic motivation .18† .38† .05

5. Extraversion .20† .10† .26† .05

6. Agreeableness .27† .24† .16† -.09† .18†

7. Conscientiousness .26† .18† .21† -.03 .17† .41†

8. Emotional stability .01 -.08* .11† -.28† .14† .36† .25†

9. Intellectual openness .25† .06* .41† -.03 .18† .23† .28† -.02

* Significance at p <0.05.
† Significance at p <0.01.

Correlational testing for equivalence of Eysenck’s EPP traits of extraversion and neuroticism with their equivalent Big-Five personality factors of extraversion and emotional stability

Table 6 reports the results of the correlations obtained in this study (unshaded cells) and, for comparison, the correlation coefficients from the Furnham et al study (1999) (shaded cells), where Eysenck personality traits were used.

<table>
<thead>
<tr>
<th>Personality Factor</th>
<th>Herzberg’s Motivator</th>
<th>Herzberg’s Hygiene</th>
</tr>
</thead>
<tbody>
<tr>
<td>Big-Five Extraversion</td>
<td>.20† (cell 1)</td>
<td>.10† (cell 3)</td>
</tr>
<tr>
<td>Eysenck Introversion</td>
<td>-.34 (cell 2)</td>
<td>-.12 (cell 4)</td>
</tr>
<tr>
<td>Big-Five Emotional stability</td>
<td>.02 (cell 5)</td>
<td>-.08* (cell 7)</td>
</tr>
<tr>
<td>Eysenck Stability</td>
<td>-.07 (cell 6)</td>
<td>-.47† (cell 8)</td>
</tr>
<tr>
<td>Big-Five Agreeableness</td>
<td>.27†</td>
<td>.24†</td>
</tr>
<tr>
<td>Big-Five Conscientiousness</td>
<td>.26†</td>
<td>.18†</td>
</tr>
<tr>
<td>Big-Five Intellectual openness</td>
<td>.25† (cell 9)</td>
<td>.07* (cell 10)</td>
</tr>
</tbody>
</table>

* Significance at p <0.05.
† Significance at p <0.01.

There was reasonable agreement between the current study and Furnham et al’s (1999) when correlations between Herzberg’s factors and the two measures of extraversion were compared (i.e., the Big-Five measure of extraversion and Eysenck’s introversion; see cells 1 and 2 and 3 and 4 in Table 6. In addition, for Herzberg’s
motivator factor there was agreement between the two studies on the two measures of emotional stability; see cells 5 and 6 in Table 6. However, there was no agreement between Eysenck’s stability and the Big-Five equivalent of emotional stability when correlated with Herzberg’s hygiene factor; see cells 7 and 8 in Table 6. (i.e., correlations of -.08 and -.47 respectively).

Finally, there were comparable correlations for both of Herzberg’s factors and agreeableness and conscientiousness; however, there was a marked distinction between the motivator and hygiene factors when correlated with intellectual openness; see cells 9 and 10 in Table 6.

Regression analysis, testing the equivalence of Eysenck’s EPP traits of extraversion and neuroticism to the Big-Five personality factors of extraversion and emotional stability

Following Furnham et al (1999), regression analyses were performed using Herzberg’s two factors as dependent variables and the Big-Five personality factors as independent variables. There were four analyses in all. Two of these were confined to using the two Eysenck Big-Five equivalents of extraversion and emotional stability and two used all five factors.
Table 7 shows the results of these four analyses.
Table 7
Regression Analyses with Herzberg’s Two Factors as DVs and the Big-Five Personality Factors as IVs

<table>
<thead>
<tr>
<th>Predictor Variable</th>
<th>Two Factor Personality Model</th>
<th>Five Factor Personality Model</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Herzberg’s Motivator Factor</td>
<td>Herzberg’s Hygiene Factor</td>
</tr>
<tr>
<td>Extraversion</td>
<td>$\beta = .21$</td>
<td>$\beta = .11$</td>
</tr>
<tr>
<td></td>
<td>$p &lt; .0001$</td>
<td>$p = .0007$</td>
</tr>
<tr>
<td>Emotional stability</td>
<td>$\beta = -.01$</td>
<td>$\beta = -.09$</td>
</tr>
<tr>
<td></td>
<td>$p = .6646$</td>
<td>$p = .0038$</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>$\beta = .20$</td>
<td>$\beta = .26$</td>
</tr>
<tr>
<td></td>
<td>$p &lt; .0001$</td>
<td>$p &lt; .0001$</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>$\beta = .14$</td>
<td>$\beta = .13$</td>
</tr>
<tr>
<td></td>
<td>$p &lt; .0001$</td>
<td>$p = .0003$</td>
</tr>
<tr>
<td>Intellectual openness</td>
<td>$\beta = .14$</td>
<td>$\beta = .05$</td>
</tr>
<tr>
<td></td>
<td>$p &lt; .0001$</td>
<td>$p = .1789$</td>
</tr>
</tbody>
</table>

$R^2$                      | .04                         | .0002                         |

$F$                        | 20.24                       | 8.82                          |

Sign $F$                   | $< .0001$                   | $= .0002$                     |

$Df$                       | (2,940)                     | (2,940)                       |

The Two Factor Personality Model

The results of Furnham et al’s (1999) study were supported when Herzberg’s motivator factor was used as the dependent variable and the Eysenck traits replaced with their equivalent Big-Five factors (i.e., extraversion and emotional stability). That is, as hypothesised by Furnham et al’s (1999) “extraverts stressed the importance of motivation factors” (p. 1035). However, when hygiene was used as the dependent variable, extraversion and emotional stability contributed approximately equal amounts of variance to the regression equation (i.e., $\beta = .11$ and $\beta = -.09$).

The Five Factor Personality Model

With Herzberg’s motivator factor used as the dependent variable and all Big-Five factors used as independent variables, each personality factor contributed approximately the same amount of variance to the regression equation. This result
contradicts Furnham et al (1999) hypothesis as it shows that, when controlling for agreeableness, conscientiousness and intellectual openness, both extraversion and emotional stability contribute equally to Herzberg’s motivator factor.

When Herzberg’s hygiene factor was used as the dependent variable, and all five Big-Five factors used as the independent variables, the most significant variable was agreeableness, followed by emotional stability and conscientiousness (see
Table 7), extraversion being non-significant. This result, when extraversion is controlled for by the other four personality factors, confirms Furnham et al’s (1999) result, i.e., that those high on emotional stability are affected by hygiene factors whereas extraverts are not.

Factor analysis assessing the appropriateness of the question chosen by Furnham et al (1999) to represent Herzberg’s two factors

Furnham et al (1999) selected 18 questions thought to correspond to Herzberg’s two factor nomenclature, each factor comprising nine questions from the WVQ. In this current study factor analysis was employed to determine whether the two factors chosen by Furnham et al (1999) were represented in the current data sample. Table 8 gives the results of the factor analysis, following Varimax rotation and listwise exclusion, for Eigen values greater than one.

<table>
<thead>
<tr>
<th>Question Number</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>(.74) Meaningful work</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>(.72) Achievement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>(.69) Interesting work</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>(.62) Use own knowledge</td>
<td>(.77) Job status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>(.58) Interact with others</td>
<td>(.65) Influential</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td>(.64) Benefits</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
<td></td>
<td>(.55) Responsibility</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
<td></td>
<td>(.54) Pay</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td>(.48) Recognition</td>
<td>(.75) Convenient hrs</td>
</tr>
<tr>
<td>15</td>
<td></td>
<td></td>
<td>(.67) Pleasant co-workers</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td>(.62) Comfortable conditions</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>(13) (.67) Pleasant co-workers</td>
<td></td>
<td>(.52) Considerate supervisor</td>
</tr>
<tr>
<td>17</td>
<td></td>
<td>(17) (.62) Comfortable conditions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td>(17) (.52) Considerate supervisor</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td>(16) (.68) Growth Opportunity</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td>(16) (.67) Job security</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td></td>
<td></td>
<td>(16) (.59) Advancement</td>
<td></td>
</tr>
</tbody>
</table>
Table 9 shows the Eigen Values, percentage variance and cumulative variance for the four factors in Table 8.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Eigen Value</th>
<th>% of Variance</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5.62</td>
<td>31.2</td>
<td>31.2</td>
</tr>
<tr>
<td>2</td>
<td>1.90</td>
<td>10.5</td>
<td>41.7</td>
</tr>
<tr>
<td>3</td>
<td>1.56</td>
<td>8.6</td>
<td>50.4</td>
</tr>
<tr>
<td>4</td>
<td>1.032</td>
<td>5.7</td>
<td>56.1</td>
</tr>
</tbody>
</table>

Factor analysis shown in Table 8 reveals four factors in the current data set, not two as reported by Furnham et al (1999). The questions comprising these four factors form plausible clusters which, upon inspection, could reasonably labelled as follows: Factor 1, meaningful work; Factor 2, status; Factor 3, working conditions; and Factor 4, personal growth. This unforced factor analysis, yielding four natural factors, is at variance with the assumption made by Furnham et al (1999) that there were only be the two Herzberg factors represented in the 18 questions.

**Two Factor Forced Solution**

The 18 questions chosen by Furnham et al (1999) were then subjected to a two factor forced Varimax rotated solution. Table 10 gives the result of this solution, together with the loading for each question.

Also reported in Table 10 (in the shaded columns) are the questions that were selected by Furnham et al (1999) to represent Herzberg’s two factors.
Table 10 indicates that in this forced solution, three of the questions chosen by Furnham et al (1999), namely questions 6, 9 and 16 (in red) have wandered into the opposite factor (indicated by an arrow). This calls into question the validity of this scale and its ability, particularly considering the large sample size used in this study. Maidani (1991) also found such deviations and reports that Herzberg defined responses sometimes appear in the opposite factor.

<table>
<thead>
<tr>
<th>Question Number</th>
<th>Factor 1, forced</th>
<th>Herzberg Motivator Question</th>
<th>Factor 2, force</th>
<th>Herzberg Hygiene Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>.78</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>.73</td>
<td>18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>.66</td>
<td>14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>.64</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>.63</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td>→</td>
<td>.58</td>
<td>9</td>
</tr>
<tr>
<td>2</td>
<td>.56</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>.55</td>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
<td></td>
<td>.73</td>
<td>15</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td>.66</td>
<td>5</td>
</tr>
<tr>
<td>11</td>
<td></td>
<td></td>
<td>.64</td>
<td>11</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td>.59</td>
<td>7</td>
</tr>
<tr>
<td>17</td>
<td></td>
<td></td>
<td>.57</td>
<td>17</td>
</tr>
<tr>
<td>6</td>
<td>.54</td>
<td>6</td>
<td>←</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>.51</td>
<td>16</td>
<td>←</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td>.48</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td>.46</td>
<td>3</td>
</tr>
<tr>
<td>13</td>
<td></td>
<td></td>
<td>.43</td>
<td>13</td>
</tr>
</tbody>
</table>
Correlational and regression analysis studies when Herzberg’s motivator and hygiene factors are replaced with Amabile’s intrinsic and extrinsic motivation orientations

Correlational Study

Herzberg’s motivator factor is commonly equated with intrinsic motivation and his hygiene factor with extrinsic motivation (Knoop, 1994). In this study both sets of constructs were measured so they could be compared.

Table 11 displays the correlation coefficients between the Big-Five personality factors and intrinsic and extrinsic motivation, and between the Big-Five personality factors and Herzberg’s two factors. For comparison, Furnham et al’s (1999) results, employing Eysenck’s traits, are duplicated in the table, shaded to aid comparison.

<table>
<thead>
<tr>
<th>Personality Factor</th>
<th>Intrinsic Motivation</th>
<th>Herzberg’s Motivator Factor</th>
<th>Extrinsic Motivation</th>
<th>Herzberg’s Hygiene Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Big-Five Extraversion</td>
<td>.26† (cell 1)</td>
<td>.20†(cell 2)</td>
<td>.05 (cell 3)</td>
<td>.10† (cell 4)</td>
</tr>
<tr>
<td>Eysenck Introversion</td>
<td>-.34 (cell 5)</td>
<td>-.12 (cell 6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Big-Five Emotional stability</td>
<td>.11† (cell 7)</td>
<td>.02 (cell 8)</td>
<td>-.28† (cell 9)</td>
<td>-.08*(cell 10)</td>
</tr>
<tr>
<td>Eysenck Stability</td>
<td>-.07 (cell 11)</td>
<td>-.47 (cell 12)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Big-Five Agreeableness</td>
<td>.16† (cell 13)</td>
<td>.27†(cell 14)</td>
<td>-.09† (cell 15)</td>
<td>.24†(cell 16)</td>
</tr>
<tr>
<td>Big-Five Conscientiousness</td>
<td>.21† (cell 17)</td>
<td>.26†(cell 18)</td>
<td>-.03 (cell 19)</td>
<td>.18†(cell 20)</td>
</tr>
<tr>
<td>Big-Five Intellectual openness</td>
<td>.41† (cell 21)</td>
<td>.25†(cell 22)</td>
<td>-.03 (cell 23)</td>
<td>.07 (cell 24)</td>
</tr>
</tbody>
</table>

* Significance at p <0.05.
† Significance at p <0.01.

Correlational results indicate that those high on the trait of extraversion are more likely to be influenced by intrinsic motivation $r = .26$ (cell 1), than by extrinsic motivation $r = .05$ (cell 3). If intrinsic motivation is equivalent to Herzberg’s motivator factor, then this result supports Furnham et al’s (1999) hypothesis as can be
seen by comparing cells 1 and 2. However, there is no apparent correspondence between intrinsic motivation and Herzberg’s motivator factor when the Big-Five personality dimensions of emotional stability are analysed (See cells 7 and 8 in Table 11), whereas for agreeableness (cells 13 and 14 in Table 11), conscientiousness (cells 17 and 18 in Table 11 and intellectual openness (cells 21 and 22 in Table 11) there were approximate similarities in coefficients.

When comparing extrinsic motivation with Herzberg’s hygiene factor there are confounding results. This is particularly so when these two constructs are correlated with the Big-Five dimensions of emotional stability; see cells 9 and 10 in Table 11 and agreeableness; see cells 15 and 16 in Table 11 where there are marked differences between the correlation coefficients.

Results from this correlational study support Furnham et al’ (1999) hypothesis for both Herzberg’s motivator factor and for intrinsic motivation when it is used in its stead, i.e., extraverts are more influenced by intrinsic motivation than those high on the scale of neuroticism. However, when Herzberg’s ‘hygiene’ factor is analysed there is no support. Whereas Furnham et al (1999) reported a correlation of $r = -0.47$ between hygiene and stability; see cell 12 Table 11, in this study the correlation was $r = -0.08$; see cell 10 in Table 11. However, in this study, extrinsic motivation did perform as expected by Furnham et al (1999) when extrinsic motivation replaced Herzberg’s hygiene factor and was correlated with emotional stability; see cell 9.

Regression Analysis

Table 12 shows the results of the replication of Furnham et al’s (1999) regression analyses when Herzberg’s two factors are replaced with intrinsic and
extrinsic motivation orientations. To aid comparison, Furnham et al’s (1999) results are presented within square brackets.

### Table 12
Regression Analyses with Amabile’s Intrinsic and Extrinsic Motivation as DVs

<table>
<thead>
<tr>
<th>Predictor Variable</th>
<th>Two Factor Personality Model</th>
<th>Five Factor Personality Model</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Amabile’s Intrinsic Motivation</td>
<td>Amabile’s Extrinsic Motivation</td>
</tr>
<tr>
<td>Extraversion</td>
<td>$\beta = .25 [-.39]$</td>
<td>$\beta = .09 [-.08]$</td>
</tr>
<tr>
<td></td>
<td>$p &lt; .0001$</td>
<td>$p = .007$</td>
</tr>
<tr>
<td>Emotional stability</td>
<td>$\beta = .07 [.00]$</td>
<td>$\beta = -.29 [-.48]$</td>
</tr>
<tr>
<td></td>
<td>$p = .0223$</td>
<td>$p &lt; .0001$</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>$\beta = -.01$</td>
<td>$\beta = .00$</td>
</tr>
<tr>
<td></td>
<td>$p = .7299$</td>
<td>$p = .9277$</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>$\beta = .07$</td>
<td>$\beta = .05$</td>
</tr>
<tr>
<td></td>
<td>$p = .0383$</td>
<td>$p = .1843$</td>
</tr>
<tr>
<td>Intellectual openness</td>
<td>$\beta = .36$</td>
<td>$\beta = -.06$</td>
</tr>
<tr>
<td></td>
<td>$p &lt; .0001$</td>
<td>$p &lt; .0001$</td>
</tr>
<tr>
<td>$R^2$</td>
<td>.07 [.20]</td>
<td>.09 [.30]</td>
</tr>
<tr>
<td>$F$</td>
<td>37.79</td>
<td>43.53</td>
</tr>
<tr>
<td>Sign $F$</td>
<td>&lt; .0001</td>
<td>&lt; .0001</td>
</tr>
<tr>
<td>$Df$</td>
<td>(2,940)</td>
<td>(2,940)</td>
</tr>
</tbody>
</table>

Both the two and five factor personality models, employing intrinsic and extrinsic motivation, produce results which closely correspond to Furnham et al’s (1999) model (see the bracketed figures in Table 12) and thus support their hypothesis of an association between those high on the trait of extraversion and intrinsic/motivator factors and little association between extraversion and extrinsic/hygiene factors, and that the reverse is true for emotional stability/neuroticism.

### DISCUSSION

This introductory study was conducted to examine the theory that employees with different personality traits are motivated by different work related rewards. The
two broad classes of rewards investigated were represented by the theoretically equivalent Herzberg motivator factor and intrinsic motivation, and Herzberg hygiene factor and its equivalent: extrinsic motivation.

Rewards associated with Herzberg’s motivator factors and intrinsic motivation include recognition, opportunities for personal growth and meaningful work. Those typically associated with Herzberg’s hygiene factors, and extrinsic motivation are job security, work benefits, pay and monetary incentives.

Broadly speaking, Furnham et al’s (1999) hypothesis was that extraverts would be more attracted to Herzberg’s motivation factors than neurotics and that neurotics would be more attracted to Herzberg’s hygiene factors than extraverts. Furnham et al’s (1999) hypothesis was confirmed in their study and in this current research, with some qualifications. If the current research had relied on the 18 WVQ questions chosen by Furnham et al (1999) to represent Herzberg’s two factors there would only have been partial support. However, when the Herzberg factors were replaced with intrinsic and extrinsic motivation there was full agreement, and consequential encouragement for my research into differential reward preference based on personality.

This study allowed critical comparisons to be made between Herzberg’s factors and intrinsic and extrinsic motivation. An unforced factor analysis of the 18 questions chosen to represent Herzberg’s two factors yielded four, not two factors (see Table 8). These results cast doubt on the orthogonality of the Herzberg’s factors, as measured by the WVQ, particularly as the correlation between them was high. Unfortunately, Furnham et al (1999) did not report their descriptive statistics so the present correlational results cannot be directly compared to theirs. In comparison, Amabile et
al’s (1994) extrinsic and extrinsic scales performed as hypothesised and were strongly orthogonal in nature.

These observations add to concerns that have been expressed by others (King, 1970; Maidani, 1991; McCormick & Ilgen, 1980; Muchinsky, 2000) and supports the use of intrinsic and extrinsic motivation orientation in this thesis, rather than Herzberg’s factors.

Furnham et al’s (1999) work was also extended in this study by replacing two Eysenckian traits with their Big-Five equivalents and including the additional three Big-Five factors in analyses. Results supported the equivalence of the Eysenckian trait of extraversion and the Big-Five factor of extraversion. However, Eysenck’s neuroticism produced different results from that of its hypothesised Big-Five equivalent, emotional stability. As this study used the same questions to derive Herzberg’s two factors as Furnham et al (1999) either Eysenck’s neuroticism factor is not equivalent to its Big-Five counterpart or there is some difference between the samples used in the two studies. As other researchers have concluded that the Big-Five factor of emotional stability is equivalent to Eysenck’s neuroticism (Zuckerman et al., 1993) it is more likely that the Herzberg’s factors are the reason for the different results.

One explanation for the differences that are evident between the two studies could be that the data collection environments might have influenced participants’ responses. It could be argued that intrinsic motivation factors such as pursuing high achievement levels at work, being interested in one’s work, seeking opportunities for personal growth and taking responsibility have positive social connotations. If so then such values can be readily disclosed by participants without attracting social
opprobrium and may even be amplified in a population of job seeking managers, such as in Furnham et al’s (1999) study. On the other hand, hygiene factors such as seeking job security, wanting job status, looking for convenient working hours and indicating to a prospective employer that items such as pay and work benefits are important, might tend to be hidden in a recruitment environment. This could account for the similar results in the two studies when Herzberg’s motivator factor and intrinsic motivation were used as equivalent constructs and the different results when hygiene and extrinsic motivation were investigated. In summary, it may be that in Furnham et al’s (1999) job application environment responses were biased, favouring motivation factors over hygiene factors. In comparison, the relatively neutral and anonymous environment in which the current data were collected could have produced a more honest response to both factors.

Further research could be conducted to test this hypothesis by measuring Herzberg’s two factors and Amabile’s motivation orientations, each from two samples; one collected anonymously and the other in a job application environment. If the results showed contextual based bias, such as are suggested in this study, then there are attendant and important implications for the collection of self-assessed data under such conditions.

Concluding Remarks

Intrinsic and extrinsic motivation theories are integral to incentive and benefit theories, extrinsic motivators being the theoretical counterpart of practical incentives and benefits programs, both of which are used in industry to substitute for intrinsic motivation.
This study has confirmed that employees with different personality orientations react differentially to a range of workplace rewards. The following study builds on this finding. It assesses the preference for a range of incentive rewards by employees with various individual differences, working in a number of different contexts and from differing backgrounds.
Chapter 6:

Study Two: Incentives and the Circumstances Under which they are Rewarding to Employees

The previous study confirmed that employees’ personality characteristics affect the way rewards are received. The aim of the current study is to extend this investigation by introducing additional dispositional variables, along with contextual and background variables. Specifically, this study tests employees’ preference for a number of commonly used incentive programs, based on a range of individual differences and contextual factors.

From a psychologist’s perspective, one of the most promising places to start looking for an answer to what employees find rewarding would be motivation theory. Psychologists and social scientists have developed many theories which claim to explain what motivates people and what they find rewarding. Theorists have categorised these many hypotheses into two broad groups, i.e., content theories and process theories (Kanfer, 1990). Content theories are founded on the assumption that people have innate needs or drives. Need satiation (both physiological and psychological) are said to drive much of human behaviour.

The most familiar content theory is Maslow’s need hierarchy theory (Maslow, 1945). Maslow’s theory suggests that an individual’s behaviour is driven by an ascending hierarchy of needs commencing with basic physiological requirements and culminating in self-actualisation, a state where a person’s full potential is reached. Other influential content theories include Alderfer’s Growth Relatedness and Existence (ERG) Need Theory (Wanous & Zwany, 1977) and McClelland’s learned
Need for Achievement, Power and Affiliation (McClelland & Boyatzis, 1982). These latter two attempt to explain why people strive to achieve certain positions of status and relatedness in their lives and attempt to explain motivation as a rewarding experience.

Content theories are based on the assumption that certain human characteristics are innate and are expressed with minimum cognitive processing. In contrast, process based motivational theories rely on the notion that people actively pre-plan their behaviour in order to achieve desired outcomes and that they monitor their progress and make considered adjustments over time. The most prominent of the process theories are Vroom’s expectancy theory (1964) which posits that people will be motivated to pursue an action if they believe: 1) that effort expended will result in success, 2) that success will yield rewards and, 3) that the rewards are valued. From an incentive theory perspective, expectancy theory is attractive as incentives can provide the rewards to account for the associated motivation.

Other prominent process theories include equity theory (Adams, 1963, 1965) (which seeks to explain what people are motivated to do if they feel they have been treated inequitably) and goal setting theory. Goal setting theory, proposed by Locke, Bryan and Kendall Locke and Latham (1990), is a procedural based theory that suggests people are motivated by having their work tasks clarified and are set appropriate and challenging objectives.

The motivational construct most closely associated with incentive theory is extrinsic motivation, i.e., the offer of exogenous rewards to persuade people to change some behaviour (Deci, 1975). Within organisations the behaviour that is most commonly sought is improved performance. Extrinsic motivation’s antithesis is
intrinsic motivation or endogenously motivated behaviour (Deci, 1975). A person is said to be intrinsically motivated if he or she performs some behaviour for the inherent pleasure that is derived from the behaviour itself. Intrinsic motivation is highly valued by management as it improves productivity at no cost to the organisation. Extrinsic motivators, such as benefits and incentive rewards are provided to substitute for intrinsic motivation.

These various motivation theories can be summarised very succinctly. People are motivated by what makes them feel good, or what they are rewarded by. From an organisational point of view, where the assumption is that a motivated and rewarded employee is more productive than a person who is not, the more interesting question is; what do employees find rewarding? This current study builds on the previous study where preference for reward was found to be related to personality. It endeavours to discover if employees with a range of dispositional traits, working in different environments and from different backgrounds, find incentive rewards equally rewarding.

Incentives Implemented with Scant Regard to Individual Differences

Industry’s use of incentive programs appears to be increasing; a trend that departs from the traditional pay-for-work compensation system that dominated much of the 20th century (Karr, 1999; LeBlanc, 1994). However, this enthusiastic adoption does not seem to be matched by similar ardour in the pursuit of theoretical or practical knowledge regarding how incentives might best be used or whether they constitute a cost effective improvement in performance. Consultants, who are the main advocates of incentive program effectiveness, seldom consider employee individual differences or contextual circumstances when they plan a new program (Letourneau, 1996).
Instead it is more common to implement a program universally across an organisation, without reference to employee individual differences (Bonner & Sprinkle, 2002; Flannery et al., 1996). If people are motivated by what rewards them and people have a range of individual differences then it follows that they might have differential preferences for reward systems. Thus, the central research question of this current study is an investigation into whether dispositional and contextual factors affect employees’ preferences for different incentive programs, or, whether a one-size-fits-all approach to incentive implementation is warranted.

**Different Types of Incentives**

The incentive types investigated in this study are those most commonly used in industry (Bonner & Sprinkle, 2002; IOMA, 2001; Kaufman & Russell, 1995; Luthans & Stajkovic, 1999; O'Bannon & Pearce, 1999; Stajkovic & Luthans, 2001). They include: profit sharing, shares or share options, cash bonuses, recognition awards, promotion opportunities and non-cash prizes. The number of preference combinations and permutations for these six different incentive types, based on employee individual preferences, would be too numerous to contemplate. There may be, however, some group differences, the knowledge of which could be beneficial to practitioners and also useful to theorists searching for the variations in incentive program effectiveness. For example, younger employees may value the immediacy of cash based incentives more highly than well-established older employees and senior management who might favour longer term incentives such as company shares. It could be that extraverts favour socially oriented recognition awards more than introverts and those high on the personality traits of conscientiousness and agreeableness may not need the motivating effect of incentive rewards as much as who are than less conscientious or agreeable.
It is generally assumed that the majority of employees find incentive programs rewarding. How else can an investment of over US117 billion each year in the U.S.A. alone be explained? (Stolovitch et al., 2002). This sum is spread over a range of programs and the end result is the expectation that there will be improved employee work motivation and productivity. However, the evidence for incentive effectiveness is mixed (Drago & Garvey, 1998; Jenkins et al., 1998; Kaufman & Russell, 1995).

Some studies have examined the reactions of employees to variable pay plans (Kuhn & Yockey, 2003), ESOP programs (Iqbal & Hamid, 2000), recognition awards (Khojasteh, 1993) and profit sharing (O'Bannon & Pearce, 1999). However, there is limited comparative research investigating multiple incentive programs in one study.

**Individual Differences and Contextual Factors**

In the context of organisational performance, a number of individual differences and contextual influences have been identified and researched. In the current study the following factors were chosen which have been theorised to have the potential to affect the way incentive programs are perceived by employees: gender; age; the Big-Five personality factors of extraversion, agreeableness, conscientiousness, intellectual openness and emotional stability; self efficacy; education level; work tenure; industry category; work category; management status; and union membership. The rationale for examining each of these factors is discussed below.

**Age and Gender**

Two of the most fundamental individual differences are age and gender. There is a commonly held belief that employee productivity increases with age as people acquire skills and maturity. However, McEvoy and Cascio (1989), after reviewing 22 years of articles published in behavioural science journals and conducting a meta-
analysis employing 96 studies, found that with few exceptions there was no evidence that performance or productivity changed significantly with age. Furthermore, recent research has also indicated that there are few gender differences in organisational performance, especially for employees in sales related positions (Moncrief, Babakus, Cravens, & Johnston, 2000; Schul & Wren, 1992). In recent gender-related research Mooney (1996) found in the USA that although gender differences may affect the choice of occupation, there are currently no gender differences in the importance that male and female employees place on extrinsic rewards, “Whereas young men previously valued extrinsic rewards and influence more than did young women, both sexes now equally value them” (Marini et al., 1996) (p. 49).

Moreover, although productivity may not change markedly with age and gender may not affect performance, life roles do change with age and there are still different types of pressures on men and women. For example, women have been found to experience a higher level of work and family conflict than men when children are involved in the relationship (Burley, 1994; Cinamon & Rich, 2002).

It is also likely that young employees with relatively few responsibilities (except to their career) will have different views of life to those of a person responsible for a family or an employee nearing retirement. At different stages of a person’s career there will also be different financial demands. For example, younger people with a need for disposable income to maintain social activities or to establish their lives by purchasing large items such as motor vehicles and dwelling might favour incentives with immediate gratification, such as cash, rather than shares in their organisation.

Participants in this study were placed into three age groups, thought to be representative of three major employee career stages, as suggested by Allen and
Meyer (1993), i.e., less than 31 years old (the ‘trial stage’ where an employee identifies his/her interests and capabilities), 31 to 44 years old (the ‘stabilisation stage’ where an employee is concerned with career advancement) and 45 years and older (the ‘maintenance stage’ where employees work at maintaining their status and position).

**Personality and Incentives**

It is proposed that employees with different personality traits might be differentially motivated by different types of incentives. Since the validation of the Big-Five personality factors by Costa and McCrae (1991) much work has been conducted on the associations between personality and performance (Barrick & Mount, 1991; Hurtz & Donovan, 2000; Judge & Ilies, 2002; Kleven & Jenssen, 2001; Salgado, 1997; Tett et al., 1991). The first major assessment of personality and performance was a meta-analysis conducted by Barrick and Mount (1991). A decade later Hurtz and Donovan (2000) reviewed the field and concluded that Barrick and Mount’s (1991) results were valid. They, like Barrack and Mount (1991), found the highest correlation between performance and conscientiousness, which had an estimated true-score correlation of .22 and a true validity of .20.

Although there has been much work relating personality and performance, little research has been conducted regarding the association between personality and reactions to incentives. Apart from the work by Furnham et al (1999), reviewed in the previous chapter, one notable exception is Stewart (1996) who investigated the relationship between rewards and two types of sales performance: new sales and customer retention. He found that extraverted salespeople performed either function at a higher level than introverts but only if they were rewarded for these behaviours.
In contrast, he also found that conscientious salespeople were not overly influenced by extrinsic reward programs. This finding accords with Costa and McCrae’s (1992) assertion that conscientious individuals have a predisposition to achieve that is mainly independent of external reward (Costa & McCrae, 1992).

The current study extends Stewart’s (1996) work by analysing all Big-Five personality dimensions and their relationships to a number of incentive program types. As indicated by Stewart (1996), it is expected that the preference for all types of incentive rewards will be lower for those high on the Big-Five dimensions of conscientiousness and agreeableness, in comparison to those high on the remaining three personality dimensions.

Self-Efficacy and Individual Effort

Self efficacy theory derives from social cognitive theory which itself had its origins in social learning theory (Bandura, 1977a, 1977b). It posits that behaviour is driven by a combination of a person’s cognitive processes, contextual environments and past behavioural experiences. Bandura (1986) defined self efficacy as “people’s judgments of their capabilities to organise and execute courses of action required to obtain designated types of performances. It is concerned not with the skills one has but the judgments on what one can do with whatever skills one possesses” (p. 391). Essentially, self efficacy is a person’s self confidence that a desired volitional behaviour can be realised.

Self efficacy has been shown to be significantly correlated with performance in a number of areas of behaviour. Hopper, Daniels, Falvy and James (1994) demonstrated that skill acquisition was greater in those with higher self efficacy and Wood, Bandura and Bailey (1990) found that managerial performance was higher in
those with high self efficacy. Stajkovic and Luthans (1998), in a meta-analysis of 109 studies examining the relationship between self-efficacy and work-related performance, found a weighted average correlation between self-efficacy and work-related performance of .38 while Judge and Bono (2001), in a recent meta-analysis, found a more conservative relationship between job performance and generalised self-efficacy of .23. In addition, self efficacy has been implicated in behaviour related to the persistence of task-related performance, or the length of time and effort that will be sustained on a particular behaviour, even when there is evidence at variance with the probability of success in completing a given behaviour (Bandura, 1977a, 1977b, 1986; Bouffard-Bouchard, Parent, & Larivee, 1991).

The relevance of self efficacy in this current study derives from its strong association with performance and work motivation and in particular associations between self efficacy and belief in the ability to carry out an action. Those high on self efficacy have high self confidence. In the context of contingent incentive programs it is expected that those employees with high levels of self efficacy will rate incentives as more likely to raise their work effort as they should have the self confidence to meet incentive contingent guidelines.

Work Tenure

Casual, or non-full time work, is on the increase in Australia. The Australian Bureau of Statistics estimates that casual workers represent 27% of the Australian workforce (up from 13% in 1982). Casual work, also known as contingent or flexible work, refers to employment arrangements where there is no full-time contract in place or where the number of hours worked is below a normal full-time workload. With casual workers comprising such a large segment of the workforce and becoming an
entrenched feature of the industrial landscape, it will be important for employers to know if rewards valued by permanent staff are also valued by casual employees.

*Industry and Work Category*

Lay people tend to believe that certain vocations are populated by people with similar personality traits (Decker, 1986). For example, there are many vocational stereotypes such as the absent minded scientist, the boring accountant and the extroverted salesperson. Although such stereotypes inevitably buckle under rigorous analysis, there may be broad truths in some of these type castings (Decker, 1986). Indeed, psychologists have reflected on this issue and have implicated different personalities with specific vocations. For example, Costa and McCrae (1992) suggest that “Salespeople represent the prototypical extraverts in our culture” (p. 15).

There are at least three reasons people settle into a particular vocation: by chance of circumstance, by being specifically trained for that vocation or by interested self-selection (Ryan, Sacco, McFarland, & Kriska, 2000). In an environment where unemployment is relatively low, as it currently is in Sydney Australia, where data were gathered for this study, it can be argued that interested self selection would be a common mode of vocation selection. People with different vocational interests, who are attracted to particular occupations, might share some common characteristics. If so they may be differentially affected by different forms of incentives. For example, people working in media/advertising industries may be more interested in recognition awards than those in manufacturing and construction, hence, the inclusion of different industry and work categories in this analysis.
Management Status

Traditionally, it has been management and executive levels in an organisation which have been rewarded with ESOPs and profit sharing incentive programs (Davidson & Worrell, 1994; Kaufman & Russell, 1995). Incentive programs are now quite commonly employed at all levels of an organisation (Karr, 1999). In this study participants were categorised into three levels of management, i.e., staff member, supervisor and senior management, in order to assess the preferences of these three groups for incentive programs.

Education Level

One of the more basic employee individual differences is education level. The Australian Bureau of Statistics (2003) reports that as of 2002, Australians aged between 25 and 64 years had the following education levels: 41% below secondary, 30% with secondary education and 29% with tertiary qualifications (including technical college education). Employers manage employees with varying levels of education. This study explores whether education level influences the preference employees have for different incentive rewards.

Union Membership

As of August 2000 the Australian Bureau of Statistics (2002) determined that 25% of employees aged 15 years and over were trade union members. This is a reduction from 31% participation as at August 1996 and 46% as at August 1988. Despite this downward trend, organised labour still represents an important segment of the workforce for many industries in Australia, particularly in more traditional industries such as manufacturing and mining.
There is a common perception that managers and union members do not trust one another. Robinson and Friedman (1995) found that in the U.S.A. that union representatives were generally suspicious of management’s motives and intentions toward workers and that managers perceived union members as unreasonable. If there is general mistrust between union members and management, there may also be different reactions to incentive rewards between members and non-members. This study investigates whether there is any preference for incentives based on union membership.

**Research Questions**

The basic research question of this study is whether employees with different dispositional traits, working in various contextual settings and from diverse backgrounds, find incentive programs equally rewarding. Specifically, research question one asks whether there are any differential preferences for incentive rewards based on the basic individual differences of gender and age, the dispositional traits of personality, and self efficacy.

1) **Do male and female employees of different age and with different personality traits, as indicated by the Big-Five personality factors of extraversion, agreeableness, conscientiousness, intellectual openness and emotional stability and with different levels of self efficacy, have preferences for any of the following six incentive rewards types: 1) a share in their company’s profits, 2) shares or share options, 3) a cash bonus, 4) a special merit award, 5) a promotion opportunity and 6) a non-cash reward.**
Research question two asks whether employees have preferences for different incentives, based on their work context, including work tenure, function and management level.

2) Do employees with different tenure status (i.e., full time or casual), working in different industries, who fulfil different functions (i.e., clerical, professional, or sales and marketing) and who are at different management levels (i.e., staff, supervisor and senior management) have preferences for any of the six incentive rewards types mentioned above?

Research question three asks whether employees have preferences for different incentive types based on their background, including variables such as education level and union membership.

3) Do employees with different education levels and with union or non-union membership have preferences for any of the six incentive rewards types mentioned above?
METHOD

Participants

Participants were 1,360 employees from a large number of organisations within Sydney, Australia. They were selected to have the following characteristics:

- 21 years or older (as younger employees generally have less experience with incentive programs).
- Working at least 30 hours per week.
- People who were not self employed, and who had a manager, supervisor, or administrator who was responsible for directing their work (as the self employed generally do not have managers or participate in incentive programs).
- The industry that participants worked in was not mandated, however, they were selected from private organisations (that is, they did not work for the government, quasi government organisations or not-for-profit organisations as private organisations are more likely to use employee incentive programs).

Of the 1,360 respondees 1,230 were selected who had valid completed surveys and the required characteristics as described above. Table 13 and Table 14 give a summary of the participants’ profile.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
<th>S D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>33.5</td>
<td>29.0</td>
<td>21.0</td>
<td>11.3</td>
</tr>
<tr>
<td>Years in current job</td>
<td>4.7</td>
<td>3.0</td>
<td>1.0</td>
<td>5.5</td>
</tr>
<tr>
<td>Regular Scheduled hours of work</td>
<td>38.8</td>
<td>38.0</td>
<td>40.0</td>
<td>6.2</td>
</tr>
<tr>
<td></td>
<td>Frequency</td>
<td>Valid Percentage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-----------</td>
<td>------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>581</td>
<td>47.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>649</td>
<td>52.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Age-group</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below 31 years</td>
<td>752</td>
<td>61.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between 31 and 44 years</td>
<td>207</td>
<td>17.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Above 44 years</td>
<td>262</td>
<td>21.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School Certificate</td>
<td>101</td>
<td>8.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Higher School Certificate</td>
<td>256</td>
<td>20.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TAFE Certificate</td>
<td>317</td>
<td>25.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University Degree</td>
<td>550</td>
<td>44.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Work description</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clerical/office work</td>
<td>323</td>
<td>26.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical/trades</td>
<td>198</td>
<td>16.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional</td>
<td>340</td>
<td>27.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales or marketing</td>
<td>333</td>
<td>27.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Management status</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff member</td>
<td>816</td>
<td>66.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervisor</td>
<td>212</td>
<td>17.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior manager</td>
<td>187</td>
<td>15.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Union Member</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>199</td>
<td>16.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>1,021</td>
<td>83.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Industry</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wholesale</td>
<td>50</td>
<td>4.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retail</td>
<td>238</td>
<td>19.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturing/construction</td>
<td>188</td>
<td>15.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospitality/service/tourism</td>
<td>231</td>
<td>18.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial services</td>
<td>219</td>
<td>17.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Media/advertising</td>
<td>45</td>
<td>3.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IT&amp;T</td>
<td>140</td>
<td>11.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>71</td>
<td>8.2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 14  
Continued. Frequencies and Percentages of Demographic Variables

<table>
<thead>
<tr>
<th>Work tenure</th>
<th>1,0421</th>
<th>84.9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time</td>
<td>1,0421</td>
<td>84.9</td>
</tr>
<tr>
<td>Part-time</td>
<td>141</td>
<td>11.5</td>
</tr>
<tr>
<td>Casual/on-call</td>
<td>44</td>
<td>3.6</td>
</tr>
</tbody>
</table>

Materials and Procedure

Cross-sectional survey data were collected by students at Macquarie University using a questionnaire specifically designed to include scales and demographics pertinent to the hypotheses being investigated.

As part of their course requirements, 281 students enrolled in the second semester of 2002 ‘Bachelor of Business Administration’ participated in collecting the data. Each student received 5% of their course assessment for collecting five completed surveys (a component of the course being the theory and practice of scientific data collection). 272 students chose to participate in this component of the course.

Each respondent was given a letter of introduction from the Course Chair outlining the reason the data were being collected, introducing the student to the participant, inviting the participant to take part in the survey, guaranteeing anonymity and assuring the respondents that they could discontinue completing the questionnaire at any time. They were then given a blank questionnaire and an envelope in which to seal their completed questionnaire for returning to University staff for processing.

Measures

The measures used in this study are described below, including range, mean, standard deviation and Cronbach alpha, where applicable. All the questions used in each scale are shown in Appendix A.
Preference for Incentive Type

Participants were asked whether they would work harder than normally expected if offered any one of six different incentive rewards, i.e., 1) a share in their company’s profits, 2) shares or share options in their company, 3) a cash bonus at the end of the year, 4) a special merit award, 5) a promotion opportunity and 6) a non-cash reward.

Responses to each of these six incentive inducements were obtained using a six point Likert scale with end points of (1) ‘strongly disagree’ and (6) ‘strongly agree’. Examples of these single items questions were; “I would increase my overall work effort if as a direct result my manager offered me the opportunity to share in my company’s profits” and “I would increase my overall work effort if as a direct result my manager would give me promotion opportunities”.

The Big-Five Personality Dimensions

The Big-Five personality dimensions were measured using 50 questions from Goldberg’s public domain ‘Big-Five Factor Marker’. Goldberg published his 50 Big-Five Factor Marker questions in the public domain (see www site: http://ipip.ori.org/ipip/) where it is specifically stated that there is no need to ask permission for the scales to be used in research.

Each of the Big-Five personality factors were obtained from a 10 question set and employ a 6 point Likert response scale with end points of (1) ‘strongly disagree’ and (6) ‘strongly agree’. The five factors and examples of the questions used to develop the five factors are extraversion; ‘I am the life of the party’, agreeableness; ‘I take time out for others’, conscientiousness; ‘I pay attention to detail’, emotional stability; ‘I worry about things (reverse coded)’ and intellectual openness; ‘I am quick
to understand things’. The reliabilities for the five extracted scales in the current study were satisfactory, and ranged from .73 for intellectual openness to .82 for agreeableness.

**Self-efficacy**

Self-efficacy was measured using the Jerusalem and Schwarzer (1992) 10 question self-efficacy scale. Sample items included: ‘I can always manage to solve difficult problems if I try hard enough’ and ‘I and certain that I can accomplish my goals’. Each question was accompanied by a five point Likert scale with end points of (1) ‘never or almost never true of me’ to (5) ‘always or almost always true of me’. The reliability of the scale in the current study was good with a standardised item alpha reliability of .86.

**Design and Analysis**

To test the differential effects of incentive rewards on a number of dispositional and contextual variables, a number of multivariate analyses using the SPSS GLM software package were conducted. Although the sample sizes of the sub-groups analysed were reasonably large, multivariate analyses were conducted in preference to separating out subgroups and analysing them independently in order to reduce type I error, as suggested by Huberty (1989).
RESULTS

Descriptive statistics for all variables used in this study are shown in Table 15.

Table 15
Range, Means, Standard Deviations and Cronbach Alphas of Study Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Possible range</th>
<th>M</th>
<th>SD</th>
<th>Cronbach alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share of profits</td>
<td>1-6</td>
<td>4.46</td>
<td>1.32</td>
<td>Single item</td>
</tr>
<tr>
<td>Shares or options</td>
<td>1-6</td>
<td>4.30</td>
<td>1.34</td>
<td>Single item</td>
</tr>
<tr>
<td>Cash bonus</td>
<td>1-6</td>
<td>4.80</td>
<td>1.23</td>
<td>Single item</td>
</tr>
<tr>
<td>Recognition award</td>
<td>1-6</td>
<td>3.73</td>
<td>1.35</td>
<td>Single item</td>
</tr>
<tr>
<td>Promotion opportunity</td>
<td>1-6</td>
<td>4.57</td>
<td>1.25</td>
<td>Single item</td>
</tr>
<tr>
<td>Non-cash reward</td>
<td>1-6</td>
<td>4.54</td>
<td>1.26</td>
<td>Single item</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>1-7</td>
<td>5.24</td>
<td>.80</td>
<td>.79</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>1-7</td>
<td>4.94</td>
<td>.86</td>
<td>.80</td>
</tr>
<tr>
<td>Intellectual openness</td>
<td>1-7</td>
<td>4.74</td>
<td>.75</td>
<td>.74</td>
</tr>
<tr>
<td>Emotional stability</td>
<td>1-7</td>
<td>4.44</td>
<td>.99</td>
<td>.82</td>
</tr>
<tr>
<td>Self efficacy</td>
<td>1-5</td>
<td>3.87</td>
<td>.57</td>
<td>.86</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>1-7</td>
<td>5.24</td>
<td>.80</td>
<td>.79</td>
</tr>
</tbody>
</table>

To explore the relationship between the study variables, Pearson correlation coefficients were conducted, the results of which are shown in Table 16.
<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Profit Sharing</td>
<td>.78†</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Shares or Options</td>
<td>.71†</td>
<td>.68†</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Cash Bonus</td>
<td>.37†</td>
<td>.41†</td>
<td>.41†</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Recognition Awards</td>
<td>.51†</td>
<td>.49†</td>
<td>.57†</td>
<td>.52†</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Promotion opportunity</td>
<td>.58†</td>
<td>.54†</td>
<td>.65†</td>
<td>.39†</td>
<td>.54†</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Non-cash Awards</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Gender</td>
<td>-.05</td>
<td>-.05</td>
<td>.05</td>
<td>.07*</td>
<td>.01</td>
<td>.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Age</td>
<td>-.13†</td>
<td>-.08†</td>
<td>-.16†</td>
<td>-.12†</td>
<td>-.23†</td>
<td>-.20†</td>
<td>-.02</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Extraversion</td>
<td>.08†</td>
<td>.07*</td>
<td>.06*</td>
<td>.09†</td>
<td>.12†</td>
<td>.05</td>
<td>-.16†</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Agreeableness</td>
<td>.02</td>
<td>-.01</td>
<td>.04</td>
<td>.05</td>
<td>.04</td>
<td>.07†</td>
<td>.23†</td>
<td>.05</td>
<td>.34†</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Conscientiousness</td>
<td>.04</td>
<td>.05</td>
<td>.03</td>
<td>.05</td>
<td>.04</td>
<td>-.01</td>
<td>.16†</td>
<td>.23†</td>
<td>-.04</td>
<td>.29†</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Intellectual openness</td>
<td>.09†</td>
<td>.07*</td>
<td>.09†</td>
<td>.00</td>
<td>.15†</td>
<td>.14†</td>
<td>-.07*</td>
<td>-.10†</td>
<td>.28†</td>
<td>.28†</td>
<td>.17†</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Emotional stability</td>
<td>.01</td>
<td>.01</td>
<td>-.04</td>
<td>-.02</td>
<td>-.00</td>
<td>-.04</td>
<td>-.14†</td>
<td>.11†</td>
<td>.23†</td>
<td>.25†</td>
<td>.15†</td>
<td>.09†</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Self efficacy</td>
<td>.14†</td>
<td>.07*</td>
<td>.04</td>
<td>.06</td>
<td>.08†</td>
<td>.10†</td>
<td>-.08†</td>
<td>.05</td>
<td>.25†</td>
<td>.28†</td>
<td>.27†</td>
<td>.42†</td>
<td>.26†</td>
<td></td>
</tr>
<tr>
<td>15. Union membership</td>
<td>.04</td>
<td>.01</td>
<td>.02</td>
<td>.03</td>
<td>.02</td>
<td>.03</td>
<td>.05</td>
<td>-.01</td>
<td>.00</td>
<td>-.01</td>
<td>-.02</td>
<td>-.06*</td>
<td>-.04</td>
<td>-.05</td>
</tr>
</tbody>
</table>

* Significance at p <0.05.
† Significance at p <0.01 (highlighted in yellow).
**Correlational Analysis**

The zero-order correlations in Table 16 indicate a weak association between the preference for incentives and the variables under investigation. For example, there is a low, though significant, association between all incentive types and extraversion and no association at all between incentive preference and conscientiousness and agreeableness. This accords with the work of Stewart (1996) who found that extraverted salespeople performed at a higher level but only if they were rewarded for that behaviour. In contrast he also found that conscientious salespeople were not overly influenced by incentive rewards. Correlations are also consistent with Costa and McCrae’s (1992) comment that conscientious individuals have a predisposition to achieve, mainly independent of external reward (see rows 9, 10 and 11 and columns 1 to 6). Neither is there any association between emotional stability and any of the incentive preferences, however, there is an almost identical association between the response between intellectual openness and extraversion.

Self efficacy is moderately associated with profit sharing, promotion opportunity and non-cash awards but not with shares or options, cash bonuses and recognition awards. Self efficacy is also significantly correlated with the Big-Five personality dimensions, especially with intellectual openness.

There is a consistent and significant negative association between age and all incentive preferences indicating that as age increases people appear to be less interested in incentive rewards.
Multivariate Analysis Tests

Fourteen multivariate analysis tests were conducted, each with the same six within subject factors, i.e., 1) a share in their company’s profits, 2) shares or share options, 3) a cash bonus at the end of the year, 4) a special merit award, 5) a promotion opportunity and 6) a non-cash reward. Every within subject test was significant indicating that there were differences in the preferences for incentive type for all the between-subject sub-groups. Furthermore, these preferences were consistent across all fourteen tests. The estimated mean average rating for the fourteen tests are shown in Table 17 which have been ranked by the overall mean for each incentive type. Table 17 indicates that recognition awards are the least preferred and cash bonus the most preferred.

<table>
<thead>
<tr>
<th>Table 17</th>
<th>Average Estimated Mean Ratings of Incentive Type (within subject factor) by Between-Subject Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Recognition award</td>
</tr>
<tr>
<td>Gender</td>
<td>3.73</td>
</tr>
<tr>
<td>Age</td>
<td>3.70</td>
</tr>
<tr>
<td>Extraversion</td>
<td>3.73</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>3.73</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>3.73</td>
</tr>
<tr>
<td>Intellectual openness</td>
<td>3.73</td>
</tr>
<tr>
<td>Emotional stability</td>
<td>3.72</td>
</tr>
<tr>
<td>Self efficacy</td>
<td>3.73</td>
</tr>
<tr>
<td>Work tenure</td>
<td>3.70</td>
</tr>
<tr>
<td>Industry</td>
<td>3.73</td>
</tr>
<tr>
<td>Work category</td>
<td>3.73</td>
</tr>
<tr>
<td>Management level</td>
<td>3.70</td>
</tr>
<tr>
<td>Education</td>
<td>3.72</td>
</tr>
<tr>
<td>Union membership</td>
<td>3.77</td>
</tr>
<tr>
<td>Estimated mean of all ratings</td>
<td>3.73</td>
</tr>
</tbody>
</table>
Details of these 14 multivariate tests are shown below. In those instances where the between subject tests were significant, a graphical representation is included.

**Multivariate Analysis: Preference for Incentive Rewards by gender, age, Personality and, Self-Efficacy**

This section explores preferences for different incentives according to gender, age, personality and self-efficacy.

To test preferences for incentive types based on gender and age, two multivariate analyses, using the SPSS GLM software package, were conducted. Each contained six incentive program types as within subject factors, i.e., 1) a share of company profits, 2) the offer of shares or share options, 3) a cash bonus at the end of the year, 4) a recognition reward, 5) a non-cash award and 6) a promotion opportunity. The first analysis included gender as a between-subject factor with two levels, i.e., male and female, and the second used age as the between-subject factor with three levels as suggested by Allen and Meyer (1993), i.e., < 31 years, 31 to 44 years and > 44 years.

**Gender**

The overall multivariate test effect was significant (Wilks Lambda = .59, $F(5,1183) = 162.14, p < .0001$) indicating that a significant difference in mean ratings of preference for the six incentive types. However, there was no significant between-subject gender effect (i.e., Type III sum of squares = .137, $F(1,1187) = .022, p = .882$). Thus men and women did not differ in their preference for any incentive type.
**Age Group**

For the three age groups of < 31 years, 31 to 44 years and > 44 years, the overall multivariate test effect was significant (Wilks Lambda = .68, $F(5,1173) = 108.97, p < .0001$) indicating a significant difference in the mean responses for the six incentive types. The strongest response was for cash bonuses with an average mean for the three age groups of 4.68 and the weakest was for recognition awards, $M = 3.65$.

There was also a strong and significant between-subject effect for the three age groups (Type III sum of squares = 235.61, $F(2,1177) = 19.68, p < .0001$). Figure 3 shows this effect to be consistent across incentive types, i.e., for all incentive types younger employees maintained they would work harder for an incentive than older employees.

![Figure 3: Estimated Marginal Mean Ratings of Incentives by Age Group](image)

**Personality and Self-Efficacy**

To test preferences for different incentive programs based on personality traits and self-efficacy, six analyses were conducted, one for each of the Big-Five personality dimensions, i.e. extraversion, agreeableness, conscientiousness,
intellectual openness and emotional stability (which were used as between-subject factors) and one for self-efficacy. Each measure was converted into levels, allowing assessment at three levels of each personality dimension and self-efficacy (i.e., low, medium and high).

**Extraversion**

For extraversion, the overall multivariate test effect was significant (Wilks Lambda = .59, $F(5,1182) = 163.27, p < .0001$) indicating a significant difference in the mean responses for the six incentive types, based on extraversion. The strongest response was for cash bonuses, $M = 4.78$ and the weakest for recognition awards, $M = 3.73$.

There was also a significant between-subject effect for the three levels of extraversion (Type III sum of squares = 72.92, $F(2,1186) = 5.96, p = .0003$). Figure 4 shows this effect to be most pronounced for non-cash awards where those with high levels of extraversion rated this reward more favourably than those with low levels of extraversion. In contrast, there was no difference between the extraversion levels for recognition awards.

![Figure 4](image.png)

**Figure 4**

Estimated Marginal Mean Ratings of Incentives by Extraversion
Agreeableness

When agreeableness was set as the between-subject factor, the overall within-factor multivariate test effect was significant (Wilks Lambda = .60, $F(5,1182) = 161.24, p < .0001$). Unexpectedly, this within-factor result was almost identical to that for extraversion. However, unlike the extraversion result, there was no significant between-subject effect for the three levels of agreeableness (Type III sum of squares = 1.42, $F(2,1186) = .71, p = .891$).

Conscientiousness

For conscientiousness, as with extraversion and agreeableness, the overall multivariate test effect was significant (Wilks Lambda = .59, $F(5,1182) = 161.64, p < .0001$) indicating a significant difference in the mean responses to the six incentive types. As with agreeableness, there was no significant between-subject effect for the three levels of conscientiousness (Type III sum of squares = 10.82, $F(2,1186) = .88, p = .416$).

Intellectual Openness

For intellectual openness, the overall multivariate test effect was once again significant (Wilks Lambda = .59, $F(5,1182) = 161.69, p < .0001$) indicating a significant difference in the mean responses from the six incentive types. There was also a significant between-subject effect for the three levels of intellectual openness (Type III sum of squares = 84.19, $F(2,1184) = 6.90, p = .001$). Figure 5 shows this effect to be strongest for profit sharing, promotion opportunity and non-cash awards. In contrast there is no difference between intellectual openness levels for recognition awards.
Incentive Type

Non-cash Promotion Recognition Bonus Shares Profit

Estimated Mean Rating of Incentives

5.0 | 4.8 | 4.6 | 4.4 | 4.2 | 4.0 | 3.8 | 3.6

Figure 5
Estimated Marginal Mean Ratings of Incentives by Intellectual Openness

Emotional Stability

As with the other four Big-Five personality dimensions, the overall multivariate test effect for emotional stability was significant (Wilks Lambda = .59, \( F(5,1182) = 161.27, p < .0001 \)) indicating a significant difference in the mean responses for the six incentive types. This result was almost identical to the other four tests indicating that although there are different preferences for specific incentive programs these preferences are common to all personality traits. Recognition awards are rated lowest by all personality traits and cash bonuses are rated highest.

There was no significant between-subject effect for the three tertile levels of emotional stability (Type III sum of squares = 10.82, \( F(2,1184) = .88, p = .416 \)).

Self-Efficacy

For self efficacy, the overall multivariate test effect was significant (Wilks Lambda = .59, \( F(5,1181) = 161.26, p < .0001 \)). The strongest response was for cash bonuses, \( M = 4.79 \) and the weakest for recognition awards, \( M = 3.73 \).

There was also a significant between-subject effect for the three levels of self efficacy (Type III sum of squares = 140.39, \( F(2,1185) = 11.57, p < .0001 \)). Figure 6
shows this effect to be most pronounced for profit sharing, shares or options and non-cash awards; however the effect is only noticeable at low levels of self efficacy with medium and high levels results merging.

![Figure 6: Estimated Marginal Mean Ratings of Incentives by Self-Efficacy](image-url)

**Employee Work Context and Preference for Incentive Rewards**

The next research question explores the effect of offers of incentive rewards depending on an employee’s work context, i.e., either full time or casual employment (work tenure), the industry worked in (industry), an employee’s job role (work category) and management status (management level).

Four multivariate analyses using the SPSS GLM software package were conducted, each containing the six incentive program types as within subject factors (as described above). The four analyses employed the following between-subject variables: work tenure (three levels: full-time, part-time and casual), industry (seven categories: wholesale, retail, manufacturing, hospitality/service, financial services, media/advertising and IT&T); work category (five categories: clerical, technical,
professional, sales/marketing and manual) and management level (three levels: staff, supervisor and senior management).

**Work Tenure**

For work tenure, the overall multivariate test effect was significant (Wilks Lambda = .85, \( F(5,1180) = 41.87, p < .0001 \)) indicating a significant difference in the mean responses to the six incentive types. However, there was no significant between-subject effect for the three categories of work tenure (Type III sum of squares = 7.26, \( F(2,1184) = 1.18 p = .307 \)) indicating no significant preference difference between the three categories of full-time, part-time or casual employees for incentive type.

**Industry**

When industry type was used as the between-subject factor, the overall multivariate within-factor test effect was significant (Wilks Lambda = .70, \( F(5,1066) = 92.40, p < .0001 \)). However, as with work tenure, there was no significant between-subject effect for the different industry categories (Type III sum of squares = 1.95, \( F(6,1070) = .32 p = .928 \)).

**Work Category**

The overall multivariate test effect for work category was significant (Wilks Lambda = .59, \( F(5,1145) = 153.91, p < .0001 \)). However, as with industry category, there was no significant between-subject effect (Type III sum of squares = 36.57, \( F(3,1149) = 1.99 p = .114 \)) indicating no significant difference between the five work categories of clerical, technical, professional, sales/marketing and manual work for any incentive program.
Management Level

The overall within-factor multivariate effect for management level was significant (Wilks Lambda = .68, $F(5,1168) = 108.20, p < .0001$). However, as with work tenure, industry category and work category, there was no significant between-subject effect for management level (Type III sum of squares = 31.79, $F(2,1172) = 2.59, p = .075$). However, as indicated by the significance level of .075, which is approaching an acceptable .05, there were some differences for profit share, cash bonus, non-cash awards and promotion opportunity. For these incentive types, senior management indicated a lower preference than did staff or supervisors, see Figure 7.

![Figure 7: Estimated Marginal Mean Ratings of Incentives by Management Level](image_url)
Employee Background and Preference for Incentive Rewards

The final research question explored the effect of incentive rewards depending on an employee’s background, i.e., born in Australia, their education level, and union membership.

To test the preference for different incentive programs based on an employee background, three multivariate analyses using the SPSS GLM software package were conducted, each containing six incentive program types, as within subject factors. The two analyses used the following between-subject variables: education (four levels, i.e., school certificate, higher school certificate, TAFE, university) and union membership (two categories, i.e., union member or not).

Education Level

The overall multivariate test for education level was significant (Wilks Lambda = .67, $F(5,1175) = 115.67, p < .0001$). However, there was no significant between-subject effect (Type III sum of squares = 10.68, $F(3,1179) = .577 p = .630$) indicating no significant difference in preference for incentive types by education levels.
**Union Membership**

The overall multivariate test for union membership was significant (Wilks Lambda = .73, $F(5,1173) = 85.33$, $p < .0001$). However, there was no significant between-subject effect for union membership (Type III sum of squares = 8.12, $F(1,1177) = 1.31$, $p = .252$).

Table 18 is a summary of the between-subject factor tests indicating whether there was a significant difference in levels of the between-participants.

**Table 18**

<table>
<thead>
<tr>
<th>Between-subject factor</th>
<th>Between-subject effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>$F(2,1177) = 19.68$, $p &lt; .0001$</td>
</tr>
<tr>
<td>Gender</td>
<td>not significant</td>
</tr>
<tr>
<td>Extraversion</td>
<td>$F(2,1186) = 5.96$, $p = .0003$</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>not significant</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>not significant</td>
</tr>
<tr>
<td>Intellectual openness</td>
<td>$F(2,1184) = 6.90$, $p = .001t$</td>
</tr>
<tr>
<td>Emotional stability</td>
<td>not significant</td>
</tr>
<tr>
<td>Self efficacy</td>
<td>$F(2,1185) = 11.57$, $P &lt; .0001$</td>
</tr>
<tr>
<td>Work tenure</td>
<td>not significant</td>
</tr>
<tr>
<td>Industry</td>
<td>not significant</td>
</tr>
<tr>
<td>Work category</td>
<td>not significant</td>
</tr>
<tr>
<td>Management level</td>
<td>not significant</td>
</tr>
<tr>
<td>Education</td>
<td>not significant</td>
</tr>
<tr>
<td>Union membership</td>
<td>not significant</td>
</tr>
</tbody>
</table>

**Summary of Hypotheses**

In summary, results shown in Table 17 showed clear differences in the preference for the six most commonly used industry incentive programs. Promotion opportunity and cash bonuses were rated those that would promote the most discretionary effort, and recognition awards and shares or share options were the least preferred as promoters of extra work effort.
As shown in Table 18, when the various dispositional, contextual and background variables were tested for their differential effect on the six incentive types, only age, extraversion, intellectual openness and self efficacy showed any significant effects.

**DISCUSSION**

Managers and practitioners have limited access to concrete guidelines when implementing an incentive program and as a result are reliant in large measure on the advice of consultants and remuneration specialists (Kuhn & Yockey, 2003). This current study provides some independent insight into the preferences that employees have for different incentive programs, according to a range of dispositional and contextual factors. It sheds some light on the differential way incentives are perceived, under different conditions.

**Main Findings**

A main finding of this study is that there was a consistently high preference for cash bonuses and a low preference for recognition awards. These preferences were consistent for all sub-groups. The preference for cash bonuses was not expected as most bonuses are non-contingent in nature and lack line of sight, i.e., the weak association between the desired behaviour (increased performance) and the reward (Boswell & Boudreau, 2001). The preference in this study for cash bonuses could be one of comparative attractiveness. That is, faced with a selection of potential incentive rewards participants may simply have chosen cash bonuses on the basis of their immediate attractiveness without considering their common nature, which is usually a reward delayed until the end of a significant period. It could also be an issue of laziness, such as desiring a reward free from contingent behaviour. This is an
important question for future research where the important question of differential performance can be investigated, rather than preferences for different incentives.

One surprising finding was that managerial level made no difference to the participants’ preferences for shares or share options. Equity theory predicts that the offer of shares in one’s organisation should align the interest of management with those of shareholders. As it is mostly senior managers who participate in ESOPs it was supposed that senior management would show a stronger preference for shares as incentives, than staff or supervisors (see Figure 7). However, although there was a distinct difference in the preference for non-cash awards, with senior management preferring the cash, there was no difference at all in the preference for shares or options.

Although certain classes of employee benefits are routinely lobbied for by working women, such as child-care facilities and flexible work hours, in order to synchronise with school hours, results of this study confirm Mooney’s (1996) finding that in Australia, for the current sample, women have identical preferences for all six types of incentive reward. However, in this study no measure was available in the data to test for family context such as the number of dependent children. In future research this aspect could be investigated.

There may not be any large changes in performance or productivity with age (Czaja & Sharit, 1998; Salthouse et al., 1996; Wiegers & Frieze, 1977), however, results from this study confirmed an expected difference in the preference for an incentive reward according to age group. What was not expected was that there would be an overall difference in the responses to all six types of incentives. Specifically, it was expected that younger employees would prefer cash-related
incentives such as bonuses and profit sharing. This was not the case. There was a uniform decrease in the preference for any incentive with age. This knowledge could be useful for employers, particularly those who have groups of employees where the ages cluster within a narrow range, such as in the call centre industry.

There was a predictable result when levels of extraversion were used as between-subject factors. With the exception of recognition awards, those high on the trait of extraversion rated all incentive types more highly than those low on this trait. This result accords with Stewart (1996) who also demonstrated that extraverts respond positively to incentive rewards. However, given that extraversion is considered to be a sociable and gregarious trait (Costa & McCrae, 1992; Satava, 1997) it was expected that extraverts would have a higher preference for the social exposure that attaches to recognition awards. What was surprising is that both extraversion and intellectual openness yielded almost identical profiles to the different incentive types, including a zero difference between levels for recognition awards (see Figure 4 and Figure 5). This indicates that employees at the three corresponding levels of extraverts and intellectual openness have similar preferences for an incentive reward. A search of the literature did not reveal any research to indicate such an association between these two personality factors and reward. Further research to investigate this equivalence would seem warranted.

Conscientiousness and agreeableness did not affect incentive preferences. This is an indication that conscientious and agreeable employees are relatively unaffected by incentive rewards, as shown by Stewart (1996). However, this does not mean that employees with these traits have no preference for incentive programs. They
responded in a similar way to being asked whether they would increase their work effort if offered an incentive reward to the other sub-groups.

The results also indicate that incentives are more effective for employees who have high levels of self efficacy. Self efficacy is the belief that a person can achieve a desired outcome as defined by Bandura and Lock (2003), i.e., “Whatever other factors serve as guides and motivators, they are rooted in the core belief that one has the power to produce desired effects; otherwise one has little incentive to act or to persevere in the face of difficulties” (p.87). In relation to incentive theory, it would seem that self efficacy should be more prominently associated with contingent based incentives where effort is required, rather than non-contingent rewards. This is the observation that can be made from the results shown in Figure 6, i.e., those with high self efficacy rate incentives (such as profit share and shares or options) higher than non-contingent end of year bonuses.

Limitations with this study

A major problem associated with this current study is that subjective measures of incentive preference were used rather than objective measures which relate to the actual effect of different incentive types. The problems associated with self assessment have been covered in previous chapters. Suffice to say that results would be more valid if objective measures were available, rather than self assessed preferences.

Nevertheless, the results of this study do indicate that an organisation can expect to achieve different productivity outcomes depending on the type of incentive employed. A strong and consistent finding was that recognition awards are least favoured and that for all sub categories the message seems to be ‘show me the
money’. Perhaps the motivating effect of recognition awards (Hansen, Smith, & Hansen, 2002; Koning, 1993; O'Neal, 1992) has been overrated. Or it could be that in Sydney, Australia, where the data were gathered that because of the recent and overwhelming increase in property values that the need for money to finance the ‘Australian dream’ of home ownership (Garnaut, 2003) is reflected in this result. However, because of the prominent use of recognition rewards the result indicating low preference for this class of incentive warrants further research.

Management can be confident that there will be little difference in the effect of an incentive reward based on an employees’ gender, management level or union membership. However, an incentive program will differentially affect employees within different age groups and those high on the traits of extraversion, intellectual openness and self efficacy will be affected more by an incentive that those low on these traits.

This study has revealed a possible reason for some of the variability that has been observed in incentive effectiveness. It has shown that different sub groups of employees have differential preferences for incentive types and that not all incentive types are equally favoured. The next chapter reports a preliminary investigation into another potentially important factor influencing reactions to incentives: trust in management.
Chapter 7:

Study Three: Going the extra mile: The role of Trust in Management

Why would an employee go the extra mile for his/her employer? Well, he/she might be a workaholic, might be inordinately conscientious, might simply like the employer or could be motivated by job insecurity or the promise of some reward. Going the extra mile, or putting in effort above and beyond that which is considered a normal part of an employee’s job, seems to be valued by employers as exemplified by the US$117 billion invested each year on incentive rewards, expressly designed to coax employees into producing such extra effort (Stolovitch et al., 2002).

Incentive reward programs are primarily intended to increase employee motivation, and hence productivity. However, experimental and empirical evidence supporting their effectiveness varies widely. For example, after reviewing 39 laboratory, field, and experimental simulation studies, which included a total of 47 financial incentive regimes designed to improve performance, Jenkins, Mitra, Gupta and Shaw (1998) concluded that the effect of financial incentives on “performance quantity ranged from .24 to .56” (p. 783), i.e., approximately 6% to 31% of the explained variance. This is a wide range, part of which might be explained by the findings in the previous two studies of this thesis, that employees with different personality traits have a preference for different types of rewards, that employees favour cash bonuses as incentives in preference to recognition awards, and that other individual differences such as an employee’s age and self efficacy also affect the level
of interest in incentive programs. However, individual differences alone do not seem to have sufficient power to explain the observed variation in incentive effectiveness. This leads to the next question to be addressed in this thesis: does trust in management influence the effect of incentive rewards on employee performance? Before directly investigating the relationship between trust and incentives, in this and the next chapter the nature of trust and its direct effect on motivation and self-assessed performance is explored.

**Incentives, Trust and Performance**

Over the past decade or two, one variable which has been strongly implicated in employee performance behaviours is trust in management (Costa et al., 2001; Cunningham & MacGregor, 2000; Dirks, 1999, 2000; Rich, 1997; Rosenbaum et al., 1980). With trust in management positively and directly implicated in employee performance, and incentive programs being used as employee performance enhancers, it was considered possible that trust in management might be implicated in the mechanism of incentive efficacy. For example, the trusting relationship between employee and manager may, for some people, be negatively affected should the manager offer a reward to an employee to work harder than he or she normally would. In this instance the employee may be offended, having considered that he/she was already working at an optimum level for the esteemed manager. This is an argument adopted by Kohn (1993), who asserts that incentive rewards are perceived by some employees as bald bribes. Deci (1975) supported this view when he found that offering extrinsic motivators can reduce the level of intrinsic motivation.

On the other hand Eisenberger, Rhoades and Cameron (1999) have argued that offering rewards for performance increases employees’ self-determination and
perceptions of being in control of their work, which, in turn, promotes trust in management and therefore does not necessarily damage intrinsic motivation. Clearly, both of these positions cannot be right all the time. It is more likely that there are individual differences involved, with some people responding negatively to the offer of an incentive and others reacting positively. Two individual differences which are closely associated with incentives are intrinsic and extrinsic motivation orientation. Amabile, Hill, Hennessey and Tighe (1994) believe that these two forms of motivation are dispositional, i.e., trait-like individual differences, essentially unaffected by contextual variables. Intrinsic motivation is valued by employers as it is a form of motivation that is individual-centric and results in sustained performance whereas extrinsic motivation needs to be evoked externally through the provision of some external reward.

**Intrinsic and Extrinsic Motivation and Trust in Management**

**Intrinsic Motivation**

Broadly speaking, intrinsic motivation refers to behaviour which is performed because of the inherent interest in the behaviour, per se. Thus people are said to be motivated intrinsically if they engage in behaviours they enjoy. In work settings, when there is a correspondence between an employee’s intrinsic interests and their work there is seldom any need for a manager’s motivating influence. Social exchange theory (Thibaut & Kelley, 1959) states that there are other inducements in a relationship that can improve intrinsic motivation, including the establishment of mutual trust. There is support for this from a number of researchers who have found that positive feedback from management builds trust and increases intrinsic motivation, whereas negative feedback has the opposite effect (Cameron, 2001; Cameron & Pierce, 1994; Deci, 1975; Eisenberger et al., 1999; Harackiewicz, 1979).
Yet, as discussed above, Amabile et al (1994) state that intrinsic and extrinsic motivation orientations are trait-like individual difference, i.e., “… intrinsic and extrinsic motivational orientations can, indeed, be considered as stable, enduring individual-difference characteristics” (p. 959). In the context of motivation and incentive theory, it would be useful to know whether those with an intrinsic motivation orientation can be influenced by trust in management. However, following Amabile et al’s (1994) theory that intrinsic motivation is a trait-like dispositional characteristic it is hypothesised that:

Hypothesis 1. Low trust in management will not reduce levels of intrinsic motivation, as measured by Amabile et al’s (1994) Intrinsic Motivation orientation scale.

Extrinsic Motivation

Whereas people generally seem to enjoy their overall work experience (Blanchflower & Oswald, 1999), not all work is intrinsically interesting. Many jobs are repetitious and tedious in nature and lack the variety to generate intrinsic motivation. In such environments, management often use extrinsic rewards, such as incentives, as a substitute for intrinsic motivation. However extrinsic motivation is also considered by Amabile et al (1994) to be a stable trait-like dispositional characteristic, unaffected by contextual issues such as trust in management, therefore:
Hypothesis 2. Low trust in management will not reduce the level of extrinsic motivation, as measured by Amabile et al’s (1994) extrinsic motivation scale.

Modes of Extrinsic Motivation

According to Ryan and Deci (2000), in their paper on extrinsic and intrinsic motivation theory, extrinsic motivation lies on a continuum of control and can be categorised into four distinct modes. At the lower end of the continuum extrinsic motivation is labelled ‘external regulation’. The characteristics of this mode are low self-control and being under the influence of external forces, in this case the value of the extrinsic reward. At the high end of the continuum is a mode of extrinsic motivation that Ryan and Deci (2000) label ‘integration’. In this mode people feel they have more control and accept rewards if they endorse the reasons for the offered rewards. Between these two end point modes are two intermediate states labelled ‘introjection’ and ‘identification’. In these two states extrinsic motivation is based on both the value of the reward and the seeking of the reward give’s approval.

After analysing the measures of extrinsic motivation that Amabile et al (1994) employed, it appeared that their scale most closely related to Ryan and Deci’s (2000) two mid modes, i.e., ‘introjection’ and ‘identification’. Thus, in the current study, in addition to the theoretically based measure of extrinsic motivation that was developed by Amabile et al (1994), a measure of extrinsic motivation which related specifically to the tangible rewards commonly offered as incentive rewards was required. A scale was developed which included conspicuous tangible rewards such as: money, shares and share options, profit sharing, cash bonuses and prizes with monetary value. Such rewards are conspicuously tangible in contrast to the less tangible rewards of recognition awards and offers of promotion. The scale was labelled ‘tangible
extrinsic motivation’ (TEM). A description of this scale is given in the ‘measures’ section of this chapter.

Ryan and Deci’s (2000) ‘external regulation’ category of extrinsic motivation (as measured in this study by TEM) is theorised to engender a state of dependence in those willing to accept the associated extrinsic rewards. Therefore, employees with elevated levels of TEM, being in a state of dependence, should be influenced by significant others, in this instance their managers, who are most likely to be the arbiters of how rewards are dispensed. Therefore, even though people with elevated levels of TEM should be interested in the offer of incentives, if they are offered incentives by managers in whom they hold low levels of trust they may feel less certain of receiving any promised rewards. Thus it was hypothesised that:

**Hypothesis 3. Low level of trust in management will reduce TEM.**

Incentives are offered with the expectation that they will substitute for intrinsic motivation and thus increase employee discretionary effort and performance. However, there could be factors other than exogenous rewards that contribute to employee performance; one such candidate being trust in management. The following section examines the hypotheses that trust in management directly influences employee self-assessed performance, without the need to resort to extrinsic rewards. When testing these hypotheses it was decided to use a number of independent, but related, self-assessed performance indicators in an endeavour to overcome some of the validity issues associated with single scale self-assessed performance research.
**Trust in Management and Self-Assessed Performance**

Dirks (2000), in a study investigating the performance of basketball players, concluded that trust in management increases team performance. Costa, Roe and Taillieu (2001) tested a model which confirmed trust in management to be positively related to performance, commitment to work relationships and job satisfaction; and Rich (1997) found a significant positive relationship between trust in one’s sales manager and sales performance. Eisenberger et al (1986) summarised the effects of trust in management and how it translates to performance by arguing that employees who believed they were receiving high levels of organizational support and trust were more likely to feel an obligation to repay their organisation through enhanced work performance. Hence:

**Hypothesis 4. Levels of self-assessed performance will be significantly lowered in a low-trust environment.**

**Trust and Organisational Citizenship Behaviour (OCB)**

OCBs are seen as voluntary and are defined by Cappelli and Rogovsky (1998) as “individual discretionary behaviours that promote the organization and are not explicitly rewarded” (p. 633). The value of voluntary behaviour as a productivity enhancer is evident when, for example, during industrial disputes, employees withdraw their voluntary behaviour and work to rules, thus causing disruption to efficient operations. Werner (2000) vigorously argues this point when he presents the case for including OCB as a central element in the domain of individual performance. Similarly, Podsakoff and MacKenzie (1994) confirmed the value of OCB experimentally when they showed OCB to be a productivity enhancer in sales unit performance and effectiveness.
OCB appears to promote employee performance and therefore can be counted as a performance indicator, but what is the foundation of OCB? One source is suggested by Podsakoff et al (1990) who report finding that trust in management significantly increases OCB. This has been confirmed by Deluga (1995) who found trust in one’s superior was positively associated with OCB, and Meyer et al (2002) who also reported trust to be positively correlated with OCB. If trust increases OCB then low trust should diminish it. Hence:

**Hypothesis 5. Levels of OCB will be significantly lower in a low-trust environment compared with a moderate trust environment**

**Trust and Discretionary Work Effort (DWE)**

DWE is discussed in detail in the earlier literature review (p. 76). However, in summary, DWE refers to that component of OCB labelled ‘individual initiative’ by Podsakoff, MacKenzie, Paine and Bachrach (2000) and its functional equivalent, ‘personal industry’ (Moorman & Blakely, 1995). DWE is the facet of OCB which is most closely associated with work performance (i.e., performance of a discretionary nature which exceeds the scope of a person’s official job specification). The DWE scale used in this study was developed by Lloyd (2001) in her investigation into the antecedents of workplace performance.

In a work setting, one antecedent of the voluntary behaviour associated with DWE might be trust in management. To understand how trust could lead to voluntary work behaviour, it is useful to refer to the work of Lewis and Weigert (1985) and McAllister (1995). These researchers maintained that trust has two primary components, i.e., affective and cognitive based trust. They posited that the result of affective trust is the formation of emotional bonds between those in a trusting
relationship. A condition is created where emotional investment is typically expended. Following significant emotional expenditure an environment is created in which the practical outcome is voluntary performance.

Lewis and Weigert (1985) and Podsakoff, MacKenzie, Scott, Moorman and Fetter (1990) confirmed this effect in their investigations into leadership behaviours. They found that trust in one’s leader promotes satisfaction and produces performance behaviours. However, McAllister (1995) argued that as a precursor to reaching the affective state of trust, practical experience of participating in a trusting relationship is required, i.e., the cognitive component of trust is an essential prerequisite for reaching affective based trust. It follows that if employees experience untrustworthiness in relation to management then affective based trust should be diminished. If affective based trust is diminished so too should performance behaviours such as DWE. Thus:

**Hypothesis 6. Willingness to engage in DWE will be significantly lower in a low-trust environment than in a moderate trust environment.**

**Trust and Job Satisfaction**

Job satisfaction has been an abiding interest for psychologists, and has resulted in many practical manifestations in industry. For example, the promotion of benefit programs (Blakely, 1998) and job enrichment programs (Locke, Sirota, & Wolfson, 1976) are seen as direct consequences of job satisfaction theory.

One reason for the continuing interest in job satisfaction theory is the high face validity that job satisfaction has with employee productivity, exemplified in the dictum “a happy worker is a productive worker” (Staw, 1993). The belief in this association persists, despite research findings that only modest relationships between job satisfaction and performance exist (Brayfield & Crockett, 1955;
Iaffaldano & Muchinsky, 1985; Judge et al., 2001; Vroom, 1964). There has, however, been research indicating a robust association between job satisfaction and trust in management. Thoms, Dose, and Kimberly (2002) found that the best overall predictor of job satisfaction was trust in one’s organisation and Rich (1997), when studying the effects of trust, job satisfaction and performance in salespeople, concluded that trust in a sales manager enhances job satisfaction and overall performance. Thus:

_Hypothesis 7. Levels of job satisfaction will be significantly lower in a low-trust environment than in a moderate trust environment._

**Trust and Intention to Leave**

The cost of voluntary employee turnover by valued employees is high both in replacement costs and work disruption. Pinkovitz (1997) estimates the annual employee turnover rate for all US organisations to be 12% and, in a survey he conducted in Wisconsin, found that 75% of new employees were hired to replace those who had left an organisation. In some industries, such as call centres, the turnover rate is considerably higher (Gilmore, 2000). It could therefore be argued that intention to leave is a performance indicator, as premature exit by a valued employee reduces organisational performance.

The causes of employees leaving their organisation are manifold. Jablin (1987) proposed a theory to explain intent to leave which involves employee affective responses to poor worker/management communication and low levels of trust. In support of this theory Costigan, Ilter and Berman (1998) found institutional trust to be negatively related to an employee's intention to leave. However, despite this support for Jablin’s (1987) theory, and its strong face validity, Lance (1991) found that trust in
one’s leader was not directly related to voluntary intent to leave. As a consequence of this disagreement, and because it can be argued that intent to leave is a performance indicator, it was decided to test the effect of trust in management on intent to leave. Therefore:

**Hypothesis 8. Levels of intent to leave will be significantly higher in a low-trust environment than in a moderate trust environment.**

**Trust and Commitment to One’s Organisation**

Three related, but separate, factors that have been negatively associated with intent to leave are affective, normative and continuance commitment (Allen & Meyer, 1996). Affective commitment refers to an employee’s emotional attachment to, identification with and involvement in an organisation while normative commitment refers to an employee’s feeling of obligation to remain with an organisation. Continuous commitment refers to commitment based on an employee’s recognition that the cost of leaving an organisation is higher than that of staying in the job. A person with strong continuance commitment may have few choices but to stay. A person may feel too old, not skilled enough or that the job market is too weak for him/her to leave the job (even if given another choice). All three forms of commitment are negatively associated with intent to leave. However, it may only be affective commitment that is valued by an organisation as a performance indicator, i.e., employees who feel obliged to stay (normative commitment) or do not have any alternative but to remain (continuance commitment) may not perform as well as those with affective commitment.

Ten Brink, den Hartog, Koopman en Jaap, and van Muijen (1999) have shown that trust in management, and trust associated with a fulfilled psychological contract,
are positively associated with affective commitment. Meyer, Stanley, Herscovitch and Topolnytsky (2002), in a meta-analysis designed to identify the antecedents of affective, continuance, and normative commitment to an organisation, found that affective commitment has the strongest and most favourable correlation with organisation performance and is positively associated with trust in management.

Affective commitment is usually associated with a significant other. If that significant other were an employee’s manager then it could be argued that low trust in ones manager would reduce the level of affective commitment. Therefore:

**Hypothesis 9. Levels of affective commitment would be significantly lower in a low-trust environment than in a moderate trust environment.**

In summary, the overall hypothesis of this study is that when employees experience low trust in their management they will be less inclined to perform at their optimum level. This hypothesis is tested using a number of variables that have been shown to be associated with employee performance.
Table 19 gives a list of the nine individual hypotheses that were developed to test the general hypothesis.
Table 19
Summary of Hypotheses for Chapter 7

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Low trust in management will not reduce levels of intrinsic motivation.</td>
</tr>
<tr>
<td>2.</td>
<td>Low trust in management will not reduce levels of extrinsic motivation, as measured by Amabile et al’s (1994) extrinsic motivation scale.</td>
</tr>
<tr>
<td>3.</td>
<td>Low level of trust in management will reduce tangible extrinsic motivation (TEM).</td>
</tr>
<tr>
<td>4.</td>
<td>Levels of self-assessed performance will be significantly lowered in a low-trust environment than in a moderate trust environment.</td>
</tr>
<tr>
<td>5.</td>
<td>Levels of OCB will be significantly lower in a low-trust environment compared with a moderate trust environment.</td>
</tr>
<tr>
<td>6.</td>
<td>Willingness to engage in DWE will be significantly lower in a low-trust environment than in a moderate trust environment.</td>
</tr>
<tr>
<td>7.</td>
<td>Levels of job satisfaction will be significantly lower in a low-trust environment than in a moderate trust environment.</td>
</tr>
<tr>
<td>8.</td>
<td>Levels of intent to leave will be significantly higher in a low-trust environment than in a moderate trust environment.</td>
</tr>
<tr>
<td>9.</td>
<td>Levels of affective commitment will be significantly lower in a low-trust environment than in a moderate trust environment.</td>
</tr>
</tbody>
</table>

METHOD

Participants:

Participants were 281 students enrolled in an undergraduate course at Macquarie University in the second semester, 2001. The course was the Bachelor of Business Administration, ‘Organisational Behaviour’ (BBA111). This unit provides an overview of the major topics in organisational behaviour, including theories of organisations, their structure and function. It also includes a segment devoted to the understanding of the scientific method including data gathering and analysis.
Of the 281 students enrolled in the course 249 agreed to participate in the current experiment. The average age of the students was 19.86 years; SD 3.14, the youngest was 17 years and the oldest 44 years. Table 20 presents a summary of the demographic variables, for those who participated in the experiment.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Valid Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>146</td>
<td>59.4</td>
</tr>
<tr>
<td>Male</td>
<td>95</td>
<td>38.2</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School Certificate</td>
<td>11</td>
<td>4.6</td>
</tr>
<tr>
<td>Higher School Certificate</td>
<td>158</td>
<td>66.1</td>
</tr>
<tr>
<td>TAFE Certificate</td>
<td>4</td>
<td>1.7</td>
</tr>
<tr>
<td>University Degree</td>
<td>66</td>
<td>27.6</td>
</tr>
</tbody>
</table>

**Materials**

A segment of the BBA111 course involves teaching students to gather field data via a cross-sectional survey. Each student was asked to approach participants who were working in industry and have them complete the survey. In order to familiarise the students with the survey questionnaire and to have them empathise with their potential participants, the students also completed the survey in a tutorial setting. For this tutorial session, the students’ questionnaire was modified to include two scripts: one script in half of the questionnaires and the second in the other half. The first script (the moderate trust group) described a theoretically normal work environment in which trust relationships between management and staff were characterised by moderate levels of trust. In the second script the relationship between management and staff was one of low trust.

Both scripts were positioned at the beginning of the questionnaire and story-line reminders were placed strategically throughout the survey, e.g., “Remember, before
answering the following questions, you are to imagine you work for the company that was described in the script on page 5”. The two scripts used in this experiment are reproduced below:

**Moderate Trust Script:**

Before you answer the questions in the rest of this survey, please read the following script and imagine that you work for the company that the script describes.

Imagine you work for a large computer company as a middle level manager in the finance department. Your pay and working conditions are average for this industry and the type of job you hold.

The senior management of this company has a reputation for managing its employees in the following ways:

The senior management team is competent and manages employees fairly and in an unbiased way. Management’s directives are clear and can be used as the basis for making work related decisions.

Senior management keeps its employees informed on things that concern them. When employees undertake any work related task they are sure to gain support from senior management.

In summary, the company’s senior management team can be trusted to do the right thing by the company and its employees.

**Low Trust Script:**

Before you answer the questions in the rest of this survey, please read the following script and imagine that you work for the company that the script describes.

Imagine you work for a large computer company as a middle level manager in the finance department. Your pay and working conditions are average for this industry and the type of job you hold.

The senior management of this company has a reputation for managing its employees in the following ways:

Whenever the senior management team appears to act generously, employees look for hidden agendas because, whatever else happens, the senior management team aims to protect its own interests.
Some employees even believe that senior management enjoys making its workers’ lives miserable. This may be an exaggeration, however, the longer people work for this company, the more cautious they become about management’s motives. It is certainly not a trusting environment to work in.

**Measures**

The measures used in this study are described below, including range, mean, standard deviation and Cronbach alpha, where applicable. Appendix A lists the questions used to develop each scale.

Intrinsic and extrinsic motivation orientations were described in a previous chapter (See Chapter 5).

**Tangible Extrinsic Motivation (TEM)**

TEM was measured using four items which were designed to include tangible incentive rewards, i.e., a share of profits, a cash bonus, shares or options and tangible prizes. For example ‘If people were offered the opportunity to share in their company’s profits they would work harder than they normally do’. A six point Likert scale was employed with responses ranging from ‘strongly disagree’ (1) to ‘strongly agree’ (6). An acceptable coefficient alpha of .76 was achieved for the current data set.

**Self-Assessed Performance**

Self-assessed performance (SAP) was measured using a nine question scale developed by Fox and Feldman (1988). Respondees are required to rate a number of performance characteristics on a 10 point Likert scale. For example, “On a scale of very weak to excellent, how would you honestly rate yourself on the following aspects of work: work quantity, motivation, work quality, and general competence?” The scale’s standardised item alpha reliability was .79.
Fifteen items were used to measure OCB. These questions were selected by Jordan (2001) from a larger set developed by Konovsky and Organ (1996) which in turn was derived from a scale developed by Podsakoff, MacKenzie, Moorman and Fetter (1990) and MacKenzie, Podsakoff and Fetter (1991). Jordan (2001) selected and tested this 15 item subset to give researchers a more manageable instrument for measuring the five dimensions of OCB, as defined by Podsakoff, MacKenzie et al (1990). These dimensions are Altruism, Courtesy, Sportmanship, Conscientiousness and Civic Virtue.

In this study, an aggregate measure of OCB was derived by using the full set of 15 questions, rather than using the five discrete OCB dimensions. Examples of the questions in this scale are: ‘I help others who have heavy workloads’ (Altruism); ‘I consider the effects of my actions on co-workers’ (Courtesy); ‘I complain a lot about trivial matters’ (reverse coded) (Sportmanship); ‘I always treat company property with care’ (Conscientiousness); and ‘I offer suggestions for ways to improve operations’ (Civic Virtue).

The questions employ a five point Likert scale with end points of (1) ‘strongly disagree’ to (5) ‘strongly agree’. The 15 question scale yielded a coefficient alpha of .87.

Discretionary Work Effort

The DWE scale used in this study was developed by Lloyd (2001) in her investigation of the antecedents of workplace performance. The scale consists of seven items, for example: ‘I work harder than expected to help my organisation to be successful’ and ‘I put in extra effort whenever I find it necessary’. A five point Likert
scale was used to rate responses from (1) ‘never’ to (5) ‘always or nearly always’. A coefficient alpha of .88 was achieved for the current data set which is equal to that achieved by Lloyd (2001) in her study.

Job Satisfaction

Satisfaction was measured using 17 items adapted by Russell (1995) from Gallie and White (1995) and included four items related to satisfaction with management developed following a series of focus groups conducted by Lloyd (2001), with staff from the Hilton Hotel in Sydney, Australia. Sample items for these scales are ‘how satisfied are you with your level of pay?’ and, ‘how satisfied are you with the relationship you have with your work supervisor?’ Each question was accompanied by a six point Likert scale with end points of (1) ‘Very dissatisfied’ to (4) ‘Very satisfied’. For this study a single 17 item scale was employed which produced a standardised item alpha reliability of .96.

Intention to Leave

Intention to leave was measured using a four question scale adapted by Carstairs (19nn) from Walsh, Ashford and Hill (1985). Each question was accompanied by a 6 point Likert response scale with end points of ‘1’ (strongly disagree) and ‘6’ (strongly agree). Question examples include: ‘I am starting to ask friends and contacts about other job possibilities’ and ‘I often look to see if other suitable jobs are available’. The scale’s standardised item alpha reliability was .93.
Commitment

Affective commitment was measured using a scale developed by Allen and Meyer (1990). Five questions using a six point Likert comprise the scale, each with end points of (1) ‘strongly disagree’ to (5) ‘strongly agree’. Affective commitment refers to an employee’s emotional attachment to, identification with and involvement in an organisation. Thus employees with strong affective commitment remain with the organisation because they want to (Allen & Meyer, 1996) (p.253). Question examples include: ‘I feel a strong sense of belonging to my organisation’ and ‘I really feel as if this organisation’s problems are my own’. The five question scale yielded a coefficient alpha of .89.

Procedure

Two versions of the questionnaire used in the experiment were produced, one for the moderate trust group and the second for the low trust group, each having a different script. The two versions were randomly distributed to the students in such a way that there were equal numbers of each version used. The students were told that the questionnaire was an example of the questionnaire they would be using for their data gathering assignment and that they were being asked to complete the survey as part of becoming familiar with questionnaire administration and to gain empathy with their potential participants. They were instructed that the questionnaires were to be completed anonymously. They were not told about the different scripts until they had completed the exercise. Following a debriefing, 249 of the 281 students agreed to have their questionnaires included as experimental data for this study.

RESULTS

Descriptive statistics for all variables used in this study are shown in Table 21.
Table 21
Range, Means and Standard Deviations of Study Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Possible range</th>
<th>M</th>
<th>SD</th>
<th>Cronbach alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intrinsic motivation</td>
<td>1-5</td>
<td>3.34</td>
<td>0.54</td>
<td>.79</td>
</tr>
<tr>
<td>Extrinsic motivation</td>
<td>1-5</td>
<td>3.43</td>
<td>0.47</td>
<td>.68</td>
</tr>
<tr>
<td>TEM</td>
<td>1-6</td>
<td>4.41</td>
<td>0.45</td>
<td>.70</td>
</tr>
<tr>
<td>SAP</td>
<td>1-10</td>
<td>6.44</td>
<td>1.28</td>
<td>.79</td>
</tr>
<tr>
<td>OCB</td>
<td>1-6</td>
<td>4.07</td>
<td>0.62</td>
<td>.88</td>
</tr>
<tr>
<td>DWE</td>
<td>1-6</td>
<td>3.58</td>
<td>.81</td>
<td>.87</td>
</tr>
<tr>
<td>Job satisfaction</td>
<td>1-6</td>
<td>3.82</td>
<td>1.07</td>
<td>.97</td>
</tr>
<tr>
<td>Intent to leave</td>
<td>1-6</td>
<td>3.59</td>
<td>1.30</td>
<td>.93</td>
</tr>
<tr>
<td>Affective commitment</td>
<td>1-6</td>
<td>3.32</td>
<td>1.12</td>
<td>.86</td>
</tr>
</tbody>
</table>

Zero Order Correlations are set out in Table 22.

Note: TEM = Tangible Extrinsic Motivation, SAP = Self-assessed Performance, OCB = Organisational Citizenship Behaviour and DEW = Discretionary Work Effort.

Table 22
Zero Order Correlations (Pearson, Two-Tailed)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Intrinsic motivation</td>
<td>- .08</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Extrinsic motivation</td>
<td></td>
<td></td>
<td>.26†</td>
<td>.17†</td>
<td>.27†</td>
<td>.08</td>
<td>.05</td>
<td></td>
</tr>
<tr>
<td>3. TEM</td>
<td>.17†</td>
<td></td>
<td>.26†</td>
<td>.10</td>
<td>.42†</td>
<td>.06</td>
<td>.10</td>
<td>.52†</td>
</tr>
<tr>
<td>4. SAP</td>
<td>.27†</td>
<td>-.08</td>
<td>.05</td>
<td></td>
<td>.49†</td>
<td>.65†</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. OCB</td>
<td>.42†</td>
<td>-.10</td>
<td>.12</td>
<td>.52†</td>
<td>.45†</td>
<td>.69†</td>
<td>.65†</td>
<td></td>
</tr>
<tr>
<td>6. Discretionary Work Effort</td>
<td>.45†</td>
<td>.06</td>
<td>.10</td>
<td>.49†</td>
<td>.65†</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Job satisfaction</td>
<td>.38†</td>
<td>-.07</td>
<td>.17†</td>
<td>.52†</td>
<td>.73†</td>
<td>.56†</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Intention to leave</td>
<td>-.24†</td>
<td>.11</td>
<td>-.07</td>
<td>-.40†</td>
<td>-.62†</td>
<td>-.43†</td>
<td>-.74†</td>
<td></td>
</tr>
<tr>
<td>9. Affective commitment</td>
<td>.37†</td>
<td>-.02</td>
<td>.17†</td>
<td>.42†</td>
<td>.67†</td>
<td>.57†</td>
<td>.82†</td>
<td>-.73†</td>
</tr>
</tbody>
</table>

* Significance at $p < 0.05$.  † Significance at $p < 0.01$.

Note: TEM = Tangible Extrinsic Motivation, SAP = Self-assessed Performance, OCB = Organisational Citizenship Behaviour and DEW = Discretionary Work Effort.

Amongst the performance indicators chosen for this study, i.e., SAP, OCB, DWE, job satisfaction, intent to leave and affective commitment, there were high and significant intercorrelations. This was particularly so between job satisfaction and the other performance indicators which ranged from $r = .56$ to $r = .82$. There were also
high and significant, but negative, correlations between intent to leave and the other performance indicators.

There was a robust and significant correlation of $r = .65$ between OCB and DWE, supporting the notion that OCB and DWE are closely related. There was a significant, but low, correlation between TEM and extrinsic motivation, indicating that these two scales are measuring different aspects of extrinsic motivation.

**Statistical method Employed**

In this study the data set was split equally and randomly into two subsets. One subset included data collected via the moderate trust script and the second included data from the low trust work environment. Appropriate tests were a non-parametric Mann Whitney and a Student t-test to test the null hypothesis that the means were equal between the moderate and low trust groups. Both the non-parametric and the t-tests yielded the same results, therefore, it was considered that the assumptions for the parametric test were satisfied and that it was appropriate to report the t-test results.

**Hypothesis Testing**

Hypothesis 1 predicted that low trust in management would not reduce levels of intrinsic motivation. This hypothesis was NOT supported. The intrinsic motivation mean for the low trust group ($M = 3.17, SD = .56$) was significantly lower than the mean for the moderate trust group ($M = 3.49, SD = .47$), $t (247) = 4.96, p < .0001$.

Hypothesis 2 predicted that low trust in management would not reduce the level of extrinsic motivation. The hypothesis was supported. The mean for extrinsic motivation in the low trust group ($M = 3.45, SD = .45$) was not significantly different
Hypothesis 3 predicted that low trust in management would reduce ‘tangible extrinsic motivation’ (TEM). The hypothesis was supported. The TEM mean for the low trust group (\(M = 4.85, SD = .65\)) was significantly lower than the mean for the moderate trust group (\(M = 5.13, SD = .54\)), \(t (247) = 3.82, p < .0001\).

Hypothesis 4 predicted that low trust in management would decrease the level of self-assessed performance (SAP). The hypothesis was supported, with the mean for the low trust group (\(M = 5.98, SD = 1.338\)) being significantly lower than the mean for the moderate trust group (\(M = 6.88, SD = 1.07\)), \(t (246) = 5.85, p < .0001\).

Hypothesis 5 predicted that low trust in management would decrease the level of OCB. The hypothesis was supported, with the mean for the low trust group (\(M = 3.78, SD = .57\)) being significantly lower than the mean for the moderate trust group (\(M = 4.35, SD = .52\)), \(t (247) = 8.32, p < .0001\).

Hypothesis 6 predicted that the willingness of employees to engage in DWE would be lower in a low trust environment than a moderate trust environment. The hypothesis was supported, with the DWE mean for the low trust group (\(M = 3.21, SD = .79\)) being significantly lower than the mean for the moderate trust group (\(M = 3.93, SD = .67\)), \(t (247) = 7.74, p < .0001\).

Hypothesis 7 predicted that low trust in management would decrease levels of job satisfaction. The hypothesis was supported with the mean for the low trust group (\(M = 3.05, SD = .83\)) being significantly lower than the mean for the moderate trust group (\(M = 4.56, SD = .59\)), \(t (246) = 16.54, p < .0001\).
Hypothesis 8 predicted that low trust in management would increase the propensity to leave the field. The hypothesis was supported with the mean for the low trust group ($M = 4.39$, $SD = .98$) being significantly higher than the mean for the moderate trust group ($M = 2.84$, $SD = 1.09$), $t (246) = 11.75$, $p < .0001$.

Hypothesis 9 predicted that low trust in management would decrease levels of affective commitment. The hypothesis was supported with the affective commitment mean for the low trust group ($M = 2.58$, $SD = .91$) being significantly lower than the mean for the moderate trust group ($M = 4.03$, $SD = .80$), $t (246) = 13.37$, $p < .0001$.

**Summary of Hypothesis Testing**

Table 23 provides a summary of the 11 hypotheses tested in this study.

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Hypothesis Supported or not Supported</th>
<th>t-test results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low trust in management will.....</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 NOT reduce level of intrinsic motivation</td>
<td>Not Supported</td>
<td>$t (247) = 4.96$, $p &lt; .0001$</td>
</tr>
<tr>
<td>2 NOT reduce level of extrinsic motivation</td>
<td>Supported</td>
<td>$t (247) = 0.72$, $p = .472$</td>
</tr>
<tr>
<td>3 reduce TEM</td>
<td>Supported</td>
<td>$t (247) = 2.43$, $p &lt; .0001$</td>
</tr>
<tr>
<td>4 reduce self-assessed performance (SAP)</td>
<td>Supported</td>
<td>$t (246) = 5.85$, $p &lt; .0001$</td>
</tr>
<tr>
<td>5 reduce willingness to engage in OCB</td>
<td>Supported</td>
<td>$t (247) = 8.32$, $p &lt; .0001$</td>
</tr>
<tr>
<td>6 reduce willingness to engage in DWE</td>
<td>Supported</td>
<td>$t (247) = 7.74$, $p &lt; 0001$</td>
</tr>
<tr>
<td>7 reduce the level of job satisfaction</td>
<td>Supported</td>
<td>$t (246) = 16.54$, $p &lt; .0001$</td>
</tr>
<tr>
<td>8 increase the propensity to leave</td>
<td>Supported</td>
<td>$t (246) = 11.75$, $p &lt; .0001$</td>
</tr>
<tr>
<td>9 reduce levels of affective commitment</td>
<td>Supported</td>
<td>$t (246) = 13.37$, $p &lt; .0001$</td>
</tr>
</tbody>
</table>

Note: TEM = Tangible Extrinsic Motivation, SAP = Self-assessed Performance, OCB = Organisational Citizenship Behaviour and DEW = Discretionary Work Effort.

**DISCUSSION**

This study examined the effect of trust in management on a number of self-assessed work performance indicators and motivational orientations. The overriding prediction was that having a low level of trust in management will negatively affect
performance indicators but will not affect extrinsic or extrinsic motivation, these latter constructs theorised by Amabile et al (1994) to be dispositional in nature. When the performance indicators were tested the predicted outcome was supported, i.e., low trust in management reduced the level of these measures. However, results for the test of the hypothesis that intrinsic and extrinsic motivation will not be reduced by low trust in management were less clear.

**Performance Indicators**

As predicted, the performance indicators of SAP, DWE, OCB, job satisfaction, intent to leave and affective commitment were all reduced in an atmosphere where employees did not trust their managers. These results accord with other researchers working with these variables and indicate that trust in its own right has a direct effect on employee performance, independent of an incentive reward. For example, Dirks (2000) found that trust in management was both a determinant and product of team-based performance and Rich (1997) found that trust in management related positively to the overall performance and job satisfaction of salespeople. In addition, Costa et al (2001), in a study investigating trust within teams, reported that trust was positively related to perceived task performance and team satisfaction.

**Intrinsic and Extrinsic Motivation**

The hypothesis that levels of intrinsic motivation would not be reduced in an environment where management was not trusted was not supported. This is not consistent with Amabile et al’s (1994) theory that intrinsic motivation is a stable, enduring, predispositional, trait-like individual difference which should not be significantly influenced by a contextual stimulus such as trust in management. As Amabile et al (1994) clearly state, “intrinsic and extrinsic motivational orientations
can, indeed, be considered as stable, enduring individual-difference characteristics” (p 959). Notwithstanding Amabile et al’s (1994) stated position that intrinsic motivation is dispositional; there is face validity for the result found in this study. It would seem reasonable that the natural enthusiasm for work, engendered by self-motivated intrinsic motivation, would be negatively influenced by low trust in one’s manager. This proposition is supported by the findings of other researchers who have found that negative feedback from significant others decreases intrinsic motivation (Cameron, 2001; Cameron & Pierce, 1994; Deci, 1975; Eisenberger et al., 1999; Harackiewicz, 1979). This result also supports the notion that the self-motivating influence of intrinsic motivation can be reduced in an atmosphere of low trust. This result, although interesting, is not as central to this thesis as the findings associated with exogenous rewards (extrinsic motivation) and their interface with individual differences and contextual influences such as trust.

Two measures of extrinsic motivation were employed in this study. They were the theoretically based measure of extrinsic motivation, developed by Amabile et al (1994), and a measure developed expressly for this study which was labelled ‘tangible extrinsic motivation’ (TEM). Based on the theories of extrinsic motivation, proposed by Amabile et al (1994) and Ryan and Deci (2000), it was hypothesised that these two measures of extrinsic motivation would behave differently, i.e., that Amabile et al’s (1994) measure, being theoretically dispositional, would not be affected by low trust in management and that TEM, being designed to equate with Ryan and Deci’s (2000) most basic mode of extrinsic motivation, ‘external’, where the reward process is under the external control of the reward giver, would be negatively influenced by low trust. Both hypotheses were supported, i.e., Amabile et al’s (1994) extrinsic motivation
scale was not affected by low trust in management whereas TEM was reduced in an environment of low trust.

Far from causing confusion, the different results obtained from these two measures of extrinsic motivation lend support to the clarifying theory proposed by Ryan and Deci (2000) that extrinsic motivation is multi-modal in nature. These results then become a function of the way the two scales are constructed. It should be noted that the results obtained for TEM, that trust influences this mode of extrinsic motivation, is supported by Tyagi (1985) who reported a contrary finding to Amabile et al’s (1994) that trust in one’s leader has the effect of increasing extrinsic motivation.

It is argued here that TEM measures the most common form of extrinsic motivation associated with incentive rewards as it is closely aligned to the type of practical incentives that are offered in industry. The finding in this study is that this mode of extrinsic motivation is not dispositional and is influenced by the contextual factors of trust in management. This finding has implications for theory and research as it supports Ryan and Deci’s (2000) multi-modal model of extrinsic motivation. It also provides a possible explanation for the source of some of the variance in incentive program performance. Trust in management is not a constant in all organisations, nor within divisions or sections of individual organisations; trust is a function of the complex relationships that exist between managers and their employees, and many other factors (Hosmer, 1995; Kramer, 1999). This current result indicates that trust in management can influence extrinsic motivation (as measured by TEM), an issues further explored in Chapter 8 and 9. However, one possible reason that employees might reduce their level of extrinsic motivation in a
low trust environment is that they might believe that a promised reward was less likely to be given by a manager who was not trusted.

In conclusion, this study investigated the effect of trust in management on a number of performance indicators and motivation variables. The overall finding was that the contextual influence of ‘low trust in management’ reduces the strength of self-assessed performance. However, the more important result, from the point of view of the subject of this thesis, is that trust in management affects tangible extrinsic motivation (TEM) which is argued to be closely aligned with Ryan and Deci’s (2000) ‘external’ mode of extrinsic motivation and with practical incentive rewards.

In this chapter, trust is conceptualised as a uni-dimensional construct, lying on a continuum with low trust at one end and high trust at the other. The following study tests the conceptual framework, proposed by Lewicki et al (1998), that trust has two orthogonal dimensions each having separate and distinct characteristics. These are labelled by Lewicki et al (1999) as trust and distrust.
Chapter 8:

Study Four: How do I trust thee, let me count the ways: A test of the multidimensionality of trust.

In the previous chapter it was demonstrated that trust in management has a direct affect on self-assessed performance, performance indicators and levels of motivation, independent of any reward. In the final study of this thesis it is hypothesised that, in addition to having a direct influence on self-assessed performance trust in management along with management style actually mediates the effect of an incentive reward. However, prior to conducting that study it was considered important to examine in more detail the complexities of trust in relationships between employees and their managers. Specifically, the aim of this current study is to examine the claim of Lewicki et al (1998) that trust is not unidimensional but is instead bi-dimensional.

Lewicki et al (1998) have present a well argued case that trust comprises two independent dimensions, which they label ‘trust’ and ‘distrust’. They conclude their argument with an appeal to consider their bi-dimensional theory of trust as a tool to further understand the complexities of this construct “We call for a richer understanding of the dynamics of trust and distrust relations; one which makes specific provision for conditions of ambivalence” (p. 454). Considering the importance of trust in management, as a contextual variable with the potential to explain a portion of the variance associated with incentive efficacy, it was considered important to explore additional facets of trust, including Lewicki et al’s (1998) bi-dimensional attributes. However, Lewicki et al’s (1998) did not test their theory empirically, relying instead on theoretical evidence. The current study was conducted...
to test the orthogonality of Lewicki et al’s (1998) two dimensions of trust, prior to
their use in the next and final chapter, as potential mediators of incentive rewards.

There is an Italian proverb that says “to trust is good (but) not to trust is better”
(Fidarsi è bene, non fidarsi è meglio). If the phrase ‘not to trust’ was replaced by the
words ‘to distrust’, then the saying would read ‘to trust is good (but) to distrust is
better’. The Macquarie Dictionary (1982) defines distrust as ‘to regard with
suspicion’, therefore, with some licence, this venerable Italian proverb would read: to
trust an entity is good, but to regard it with suspicion is better.

This saying emphasises the complex nature of one of the most important aspects
of human relationships, i.e., trust, which Lewis and Weigert (1985) suggest
“functions as a deep assumption underwriting social order” (p. 967).

Trust is a commonly used word and a construct used in all walks of life, be it in
personal relationships, corporation associations, legal arrangements or government
and society at large. But what is the meaning of trust? Although used ubiquitously, a
clear definition of trust is not easy to find. Hosmer (1995) encapsulates this problem
when he writes "there appears to be widespread agreement on the importance of trust
in human conduct, but unfortunately there also appears to be an equally widespread
lack of agreement on a suitable definition of the construct" (1995: p, 380).

**Trust: Unidimensional or a Two-Dimensional Construct?**

The majority position taken by researchers and theorists is that trust is uni-
dimensional, with low trust at one end of a continuum and high trust at the opposite
end (Mayer et al., 1995; McKnight et al., 1998; Rotter, 1980). According to this
model, the low end of a trust scale equates to distrust and the high end to simply high
trust (for more details relating to the theory of trust please refer to Chapter 3 of the literature review in this thesis). However, Lewicki, McAllister and Bies (1998) believe that trust comprises two distinct dimensions, i.e., trust and distrust. Their ‘trust’ dimension lies on a continuum ranging from low trust to high trust and their ‘distrust’ dimension is a construct extending from low distrust to high distrust.

Lewicki et al’s (1998) thesis is based on the work of Luhmann (1979), who first proposed the two dimensions of trust. It also draws from social psychological research which highlights the separate but coexisting nature of positive and negative attitudes (Cacioppo & Berntson, 1994) and owes some lineage to the work of Nacci, Stapleton and Tedeschi (1973) who argued that a person’s expectations of benefit and harm were able to coexist in a single entity.

To explain Lewicki et al’s (1998) two dimensions of trust theory, it might be useful to return to the Italian proverb, ‘to trust is good (but) to distrust is better’ (licence permitting). If there is truth in this saying then on what grounds could distrust be perceived as beneficial, as apparently suggested by the accumulated wisdom distilled in this proverb? Normally, theorists view trust as good and distrust as bad (Lewicki et al., 1998), however, the Italian saying implies that distrust is distinct from trust and can be good. Lewicki et al (1998) follow this line when they attribute a different set of characteristics to each of their two dimensions of trust. They argue that even at the lowest point of their trust scale (low trust) some trust is being perceived, not distrust. Likewise, even at the lowest point of their distrust scale (low distrust) distrust is still being sensed, not trust. They characterise distrust as placing the distruster in various states of fear, scepticism, cynicism, wariness and vigilance, and the truster as being at different levels of hope, faith, confidence assurance and initiative (p 445). It follows from Lewicki et al’s (1998) definition of
distrust that the value of distrust could be attributed to its ability to evoking a healthy scepticism, cynicism and a state of astute watchfulness of the intentions of others. Put simply, Lewicki et al’s (1999) distrust is a state in which an entity takes prudent action to protect itself and trust is a state in which, to varying degrees, an entity disregards danger and expects benefits.

**Trust and Distrust and Incentive Theory**

How does this dual theory of trust relate to incentive theory? For organisations to function efficiently a minimum level of trust is necessary. According to Lewicki et al (1998), employees will experience various levels of both trust and distrust, sometimes directed at the one manager, with each facet of trust producing its own characteristic emotional response in the employee. The fundamental difference between Lewicki et al’s (1998) bi-dimensional model of trust and the conventional model, which has trust at one end of a spectrum and distrust at the other, is one of demarcation. In the conventional model there must be some point on the spectrum where distrust changes to trust. In Lewicki et al’s (1998) model each dimension of trust retains its full characteristic as the strength of the dimension changes. In the case of a promised incentive reward, when an employee trusts his/her manager then, based on Lewicki et al’s (1998) model, that employee will experience a level of faith and confidence that the reward will be forthcoming. When applying Lewicki et al’s (1998) model to a distrusting employee, the prediction is that that employee will not believe that a promised reward will eventuate. In this instance the employee will rely instead on the sanctions that come into play when the rules established for the distribution of rewards are contravened (March, 1994).
The overall aim of this current study was to test the orthogonality of Lewicki et al.’s (1998) trust and distrust scales, in order to have confidence in using their two scales in the final study of this thesis, where the hypothesis that trust mediates the effect of an incentive reward is tested. Hence:

*It is hypothesised that Lewicki et al’s (1998) trust scales, purporting to measure two distinct dimensions of trust, i.e., trust and distrust, are orthogonal.*

**METHOD**

**Participants**

Participants were 1,636 supervisors, supervisors, managers, administrators or executives. They were selected to have the following characteristics:

- 25 years or older (as younger employees will generally have less experience with management).
- In full time employment, i.e., at least 30 hours per week (as casual employees generally have less opportunity to experience the complex relationships that full-time employees do).
- People who were foremen, supervisors, managers, administrators or executives, responsible for managing a number of people (as employees in supervisory positions not only have an ultimate manager but also have the experience of being a manager).
- The industry in which participants worked was not mandated, however, they were selected from private organisations (that is, they did not work for the government, quasi government organisations or not-for-profit organisations as employees in private industry are more used to incentive programs).
Of the 1,636 respondees 1,122 were selected with valid completed surveys and had the required characteristics as described above.

*Participants Characteristics*

Respondees participated in a large-scale cross-sectional survey which measured various aspects of organisational behaviour in Australia. No particular industry was selected; the participants worked in a wide range of industries. The data were collected from participants who were selected from a large number of organisations in Sydney, Australia. The 1,122 participants accepted for analysis had the aggregate profile shown in Table 24 and Table 25.

### Table 24
**Means, Medians, Modes and Standard Deviations of Continuous Demographic Variables**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
<th>S D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>40.19</td>
<td>41.20</td>
<td>25.00</td>
<td>10.02</td>
</tr>
<tr>
<td>Years in current job</td>
<td>8.00</td>
<td>5.00</td>
<td>2.00</td>
<td>7.80</td>
</tr>
<tr>
<td>Regular Scheduled hours of work</td>
<td>41.61</td>
<td>40.00</td>
<td>40.00</td>
<td>8.90</td>
</tr>
</tbody>
</table>
Table 25
Frequencies and Percentages of Demographic Variables

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Valid Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>393</td>
<td>35.0</td>
</tr>
<tr>
<td>Male</td>
<td>729</td>
<td>65.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Education</th>
<th>Frequency</th>
<th>Valid Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>School Certificate</td>
<td>122</td>
<td>10.9</td>
</tr>
<tr>
<td>Higher School Certificate</td>
<td>177</td>
<td>15.8</td>
</tr>
<tr>
<td>TAFE Certificate</td>
<td>224</td>
<td>20.0</td>
</tr>
<tr>
<td>University Degree</td>
<td>565</td>
<td>50.4</td>
</tr>
</tbody>
</table>

**Procedure**

*How the Data were Obtained*

As part of their course requirements, 276 students enrolled in the second semester 2001 course of the Bachelor of Business Administration (BBA111) at Macquarie University, Sydney Australia, participated in collecting the data. Each student received 5% of their course assessment for collecting five completed surveys (a component of their course being the theory and practice of scientific data collection). Each respondent was given a letter of introduction from the Course Chair, outlining the reason the data were being collected, introducing the student to the participant, inviting the participant to take part in the survey, guaranteeing anonymity and assuring the respondents that they could discontinue completing the questionnaire at any time. They were then given a blank questionnaire and an envelope in which to seal the completed questionnaire for returning to University staff for processing.

**Measures**

With the exception of Lewicki et al’s (1998) trust and distrust scales, the measures used in this study are the same as those for the experimental study described
in Chapter 7. Appendix A lists the questions used to develop Lewicki et al’s (1999) two scales of trust and distrust.

**Trust and Distrust**

Trust and distrust in management were measured using an instrument developed by Dan McAllister, Georgetown University and Roy Lewicki, The Ohio State University and is used here with their kind permission, (Lewicki et al., 1998).

Examples of the trust scale include items such as ‘I can use my senior management’s word as the basis for my decisions’ and ‘Senior management keeps me informed of things that concern me’. Each item was accompanied by a 6 point Likert scale with end points of (1) ‘strongly disagree’ and (6) ‘strongly agree’. A standardised item alpha of .91 was obtained for the trust scale.

Examples of the distrust scale include items such as ‘If my senior management thought they could get away with it they would take advantage of their employees’, and ‘I try to protect myself and my interests from senior management’. Each item was accompanied by a 6 point Likert scale with end points of (1) ‘strongly disagree’ and (6) ‘strongly agree’. A standardised item alpha of .79 was obtained for the distrust scale.
RESULTS

Descriptive statistics for all variables used in this study are shown in Table 26.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Possible range</th>
<th>M</th>
<th>SD</th>
<th>Cronbach alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust</td>
<td>1-6</td>
<td>4.11</td>
<td>0.87</td>
<td>0.91</td>
</tr>
<tr>
<td>Distrust</td>
<td>1-6</td>
<td>3.30</td>
<td>0.80</td>
<td>0.79</td>
</tr>
<tr>
<td>Intrinsic motivation</td>
<td>1-5</td>
<td>3.58</td>
<td>0.49</td>
<td>0.74</td>
</tr>
<tr>
<td>Extrinsic motivation</td>
<td>1-5</td>
<td>3.12</td>
<td>0.48</td>
<td>0.70</td>
</tr>
<tr>
<td>TEM</td>
<td>1-6</td>
<td>4.82</td>
<td>0.77</td>
<td>0.82</td>
</tr>
<tr>
<td>SAP</td>
<td>1-10</td>
<td>4.67</td>
<td>0.48</td>
<td>0.89</td>
</tr>
<tr>
<td>OCB</td>
<td>1-6</td>
<td>4.25</td>
<td>0.62</td>
<td>0.81</td>
</tr>
<tr>
<td>DWE</td>
<td>1-6</td>
<td>4.48</td>
<td>0.73</td>
<td>0.87</td>
</tr>
<tr>
<td>Job satisfaction</td>
<td>1-6</td>
<td>2.49</td>
<td>1.26</td>
<td>0.93</td>
</tr>
<tr>
<td>Intent to leave</td>
<td>1-6</td>
<td>4.10</td>
<td>0.99</td>
<td>0.91</td>
</tr>
<tr>
<td>Affective</td>
<td></td>
<td>4.11</td>
<td>0.87</td>
<td>0.86</td>
</tr>
</tbody>
</table>

Note: TEM = Tangible Extrinsic Motivation, SAP = Self-assessed Performance, OCB = Organisational Citizenship Behaviour and DEW = Discretionary Work Effort.

Overall zero order correlation results are set out in Table 27.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Possible range</th>
<th>M</th>
<th>SD</th>
<th>Cronbach alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust</td>
<td>1-6</td>
<td>4.11</td>
<td>0.87</td>
<td>0.91</td>
</tr>
<tr>
<td>Distrust</td>
<td>1-6</td>
<td>3.30</td>
<td>0.80</td>
<td>0.79</td>
</tr>
<tr>
<td>Intrinsic motivation</td>
<td>1-5</td>
<td>3.58</td>
<td>0.49</td>
<td>0.74</td>
</tr>
<tr>
<td>Extrinsic motivation</td>
<td>1-5</td>
<td>3.12</td>
<td>0.48</td>
<td>0.70</td>
</tr>
<tr>
<td>TEM</td>
<td>1-6</td>
<td>4.82</td>
<td>0.77</td>
<td>0.82</td>
</tr>
<tr>
<td>SAP</td>
<td>1-10</td>
<td>4.67</td>
<td>0.48</td>
<td>0.89</td>
</tr>
<tr>
<td>OCB</td>
<td>1-6</td>
<td>4.25</td>
<td>0.62</td>
<td>0.81</td>
</tr>
<tr>
<td>DWE</td>
<td>1-6</td>
<td>4.48</td>
<td>0.73</td>
<td>0.87</td>
</tr>
<tr>
<td>Job satisfaction</td>
<td>1-6</td>
<td>2.49</td>
<td>1.26</td>
<td>0.93</td>
</tr>
<tr>
<td>Intent to leave</td>
<td>1-6</td>
<td>4.10</td>
<td>0.99</td>
<td>0.91</td>
</tr>
<tr>
<td>Affective</td>
<td></td>
<td>4.11</td>
<td>0.87</td>
<td>0.86</td>
</tr>
</tbody>
</table>

Note: TEM = Tangible Extrinsic Motivation, SAP = Self-assessed Performance, OCB = Organisational Citizenship Behaviour and DEW = Discretionary Work Effort.

Table 27
Zero Order Correlations (Pearson, Two-Tailed)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distrust</td>
<td>-.59†</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intrinsic motivation</td>
<td>.07*</td>
<td>.02</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extrinsic motivation</td>
<td>-.04</td>
<td>.25†</td>
<td>.12†</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TEM</td>
<td>.01</td>
<td>.13†</td>
<td>.11†</td>
<td>.26†</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAP</td>
<td>.26†</td>
<td>-.18†</td>
<td>.30†</td>
<td>-.02</td>
<td>.14†</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OCB</td>
<td>.45†</td>
<td>-.40†</td>
<td>.28†</td>
<td>-.12†</td>
<td>.16†</td>
<td>.52†</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DWE</td>
<td>.21†</td>
<td>-.13†</td>
<td>.37†</td>
<td>.02</td>
<td>.13†</td>
<td>.45†</td>
<td>.40†</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job satisfaction</td>
<td>.70†</td>
<td>-.46†</td>
<td>.10†</td>
<td>-.07*</td>
<td>-.01</td>
<td>.34†</td>
<td>.45†</td>
<td>.22†</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intent to leave</td>
<td>-.51†</td>
<td>.47†</td>
<td>.02</td>
<td>.15†</td>
<td>.07*</td>
<td>-.24†</td>
<td>-.34†</td>
<td>-.15†</td>
<td>-.61†</td>
<td></td>
</tr>
<tr>
<td>Affective commitment</td>
<td>.56†</td>
<td>-.39†</td>
<td>.14†</td>
<td>-.02</td>
<td>-.01</td>
<td>.33†</td>
<td>.43†</td>
<td>.27†</td>
<td>.67†</td>
<td>-.56†</td>
</tr>
</tbody>
</table>

* Significance at p <0.05.
† Significance at p <0.01.
Trust and distrust were quite strongly correlated at $r = -0.59$ indicating considerable shared variance and raising the question regarding the orthogonality of these two constructs. Trust and distrust had approximately similar, but reverse signed, correlations with the performance indicator variables of SAP, OCB, DWE, job satisfaction, intent to leave and affective commitment trust and distrust indicating that they are behaving in a comparable but mirror image mode.

_Hypothesis Testing_

The method used to test the hypothesis that Lewicki et al’s (1998) two dimensions of trust are orthogonal was three fold. First the correlation between the two dimensions was calculated, then a Varimax rotated orthogonal factor analysis was conducted and finally regression analyses were performed. Regression analyses were first calculated with trust as a single predictor variable on the nine dependent variables in this study including three motivation (intrinsic, extrinsic and TEM) and six performance indicators (SAP, OCB, DWE, job satisfaction and affective commitment). In a second step distrust was then added to these regression equations.

*Testing Orthogonality Using Correlation Analysis*

The two dimensions of trust were quite highly correlated, i.e., $r = 0.59$ (see Table 27). However, to determine whether these two variables are separate dimensions required further testing. Factor analysis was conducted to test whether the two proposed dimensions of trust could be found in the questions developed by Lewicki et al (1999).

*Testing Orthogonality using Factor Analysis*

Each of Lewicki et al’s (1998) trust dimensions comprises eight questions. The 16 questions were subjected to a Varimax rotated orthogonal factor analysis, with
factor selection set at Eigen values greater than one and using listwise case selection.

Table 28 shows the result of this analysis with ‘trust’ questions displayed in italic bold.

The Eigen vale for the trust factor was 6.98 and for distrust was 1.63.

<table>
<thead>
<tr>
<th>Question Number</th>
<th>Trust</th>
<th>Distrust</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>.81</td>
<td>-.19</td>
</tr>
<tr>
<td>7</td>
<td>.79</td>
<td>-.27</td>
</tr>
<tr>
<td>1</td>
<td>.78</td>
<td>-.21</td>
</tr>
<tr>
<td>5</td>
<td>.78</td>
<td>-.27</td>
</tr>
<tr>
<td>10</td>
<td>.75</td>
<td>-.13</td>
</tr>
<tr>
<td>3</td>
<td>.75</td>
<td>-.06</td>
</tr>
<tr>
<td>13</td>
<td>.72</td>
<td>-.21</td>
</tr>
<tr>
<td>15</td>
<td>.65</td>
<td>-.18</td>
</tr>
<tr>
<td>8</td>
<td>-.43</td>
<td>.68</td>
</tr>
<tr>
<td>16</td>
<td>-.43</td>
<td>.67</td>
</tr>
<tr>
<td>11</td>
<td>-.04</td>
<td>.67</td>
</tr>
<tr>
<td>2</td>
<td>-.31</td>
<td>.65</td>
</tr>
<tr>
<td>4</td>
<td>-.48</td>
<td>.62</td>
</tr>
<tr>
<td>6</td>
<td>-.37</td>
<td>.54</td>
</tr>
<tr>
<td>14</td>
<td>-.09</td>
<td>.50</td>
</tr>
<tr>
<td>9</td>
<td>.25</td>
<td>.36</td>
</tr>
</tbody>
</table>

Two distinct factors were revealed. However, some questions loaded quite highly on each factor; e.g., questions 2, 4, 5, 6, 7, 8 and 16 all loaded between -.27 and -.48 on the opposite factor. Although the questions developed by Lewicki et al (1999) formed two distinct factors, as with the correlational analysis, doubt is cast on the orthogonality of these two constructs due to the high loading on the opposite factor by some questions.
Testing orthogonality using regression analysis

Nine regression analysis models were tested each with both of Lewicki et al’s (1998) dimensions of trust as predictor variables. The nine dependent variables used were intrinsic motivation, extrinsic motivation, TEM, SAP, OCB, DWE, job satisfaction and affective commitment. The rationale for these tests was to observe if, when controlled for each other, these two dimensions of trust contributed equal amounts of explained variance. If these dimensions of trust contributed approximately the same variance, but with opposite polarities, then it could be argued they were simply measuring the same construct and hence were not orthogonal. Nine dependent variables were used in order to test this effect over a wide range of motivational and performance indicator variables.

Table 29 gives the results for the three motivation variables. Table 30 and
Table 29
Summary of Regression Analyses for Variables Predicting Motivation

<table>
<thead>
<tr>
<th>Predictor Variable</th>
<th>Intrinsic motivation</th>
<th>Extrinsic motivation</th>
<th>TEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust</td>
<td>$\beta = .12$</td>
<td>$\beta = .17$</td>
<td>$\beta = .15$</td>
</tr>
<tr>
<td></td>
<td>$p = .002$</td>
<td>$p &lt; .0001$</td>
<td>$p = .0001$</td>
</tr>
<tr>
<td>Distrust</td>
<td>$\beta = .08$</td>
<td>$\beta = .35$</td>
<td>$\beta = .21$</td>
</tr>
<tr>
<td></td>
<td>$p = .029$</td>
<td>$p &lt; .0001$</td>
<td>$p &lt; .0001$</td>
</tr>
</tbody>
</table>

$R^2$ % | 1.0% | 8.0% | 3.0% |
$F$    | 4.99 | 45.56 | 15.76 |
Sign $F$ | .007 | < .0001 | < .0001 |
$Df$   | (2,1067) | (2,1067) | (2,1064) |

For intrinsic motivation neither the trust nor distrust dimensions had a strong effect. However, for both Amabile et al’s (1999) extrinsic motivation and the ‘tangible extrinsic motivation’ (TEM) scale developed for this study, trust contributed positively to the available variance. Surprisingly, distrust’s contribution was also positive.

Table 30
Summary of Regression Analyses for Performance Indicators (SAP, OCB and DWE)

<table>
<thead>
<tr>
<th>Predictor Variable</th>
<th>SAP</th>
<th>OCB</th>
<th>DWE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust</td>
<td>$\beta = .23$</td>
<td>$\beta = .34$</td>
<td>$\beta = .20$</td>
</tr>
<tr>
<td></td>
<td>$p &lt; .0001$</td>
<td>$p &lt; .0001$</td>
<td>$p &lt; .0001$</td>
</tr>
<tr>
<td>Distrust</td>
<td>$\beta = -.04$</td>
<td>$\beta = -.18$</td>
<td>$\beta = -.01$</td>
</tr>
<tr>
<td></td>
<td>$p = .247$</td>
<td>$p &lt; .0001$</td>
<td>$p = .695$</td>
</tr>
</tbody>
</table>

$R^2$ % | 7.0% | 22.0% | 4.0% |
$F$    | 37.42 | 149.80 | 23.20 |
Sign $F$ | < .0001 | < .0001 | < .0001 |
$Df$   | (2,1064) | (2,1063) | (2,1064) |
For the three performance indicators of SAP, OCB and DWE, trust had a large and significant effect, explaining the majority of the variance. However, except in the model where OCB was the dependent variable, distrust was not a significant contributor. With OCB as the dependent variable the polarity of distrust was in the expected direction (negative) however it did not add significant variance to the equation.
Table 31
Summary of Regression Analyses for Variables Performance Indicators (job satisfaction, intent to leave and affective commitment)

<table>
<thead>
<tr>
<th>Predictor Variable</th>
<th>Job satisfaction</th>
<th>Intent to leave</th>
<th>Affective commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust</td>
<td>$\beta = .66$</td>
<td>$\beta = -.34$</td>
<td>$\beta = .50$</td>
</tr>
<tr>
<td></td>
<td>$p &lt; .0001$</td>
<td>$p &lt; .0001$</td>
<td>$p &lt; .0001$</td>
</tr>
<tr>
<td>Distrust</td>
<td>$\beta = -.07$</td>
<td>$\beta = .27$</td>
<td>$\beta = -.1$</td>
</tr>
<tr>
<td></td>
<td>$p = .008$</td>
<td>$p &lt; .0001$</td>
<td>$p = .0023$</td>
</tr>
</tbody>
</table>

$R^2 \%$ | 49.0% | 30.0% | 32.0%
$F$ | 513.26 | 228.38 | 250.99
Sign $F$ | < .0001 | < .0001 | < .0001
$Df$ | (2,1074) | (2,1062) | (2,1063)

As with the previous three performance indicators, when job satisfaction, intent to leave and affective commitment were used as dependent variables, trust made a large and significant contribution. In all three models distrust was significant; however, it was only in the model where intent to leave was used as the dependent variable that both trust and distrust contributed equal amounts of variance. For Job satisfaction and affective commitment, when used as dependent variables, distrust, although significant and having the expected polarity, contributed negligible amounts to the explained variance.

**Summary of Hypothesis Testing**

The correlational and factor analyses tests for orthogonality were unconvincing. Correlation analysis showed trust and distrust to be correlated at approximately $r = .6$, indicating non-orthogonality (true orthogonality being represented by a zero intercorrelation). This result was supported by the factor analysis which showed many questions loading significantly on the opposite factor. Nevertheless, regression analyses indicated that the two dimensions of trust did behave differently, especially
when the dependent variables were extrinsic motivation and TEM (the two variables most closely associated with incentive rewards). Strictly speaking, the hypothesis of orthogonality cannot be supported as the two dimensions of trust and distrust share considerable variance. However, they also appear to behave independently under some circumstances, as indicated in the regression analyses.

**DISCUSSION**

The results of this study indicate that trust is positively associated with a number of the performance. This adds support to the work of other researchers who have reported that trust in management has a direct and positive effect on team based performance (Dirks, 2000), is positively related to the overall performance and job satisfaction of salespeople (Rich, 1997), and is positively associated with OCB (Deluga, 1995; Meyer et al., 2002), intention to stay (Costigan et al., 1998) and affective commitment (Korsgaard, Schweiger, & Sapienza, 1995; Meyer et al., 2002; ten Brink et al., 1999). In contrast, in this study the association of distrust in management with these performance indicators was negative but not always as strong as for trust.

Although the orthogonality of Lewicki et al’s (1998) trust dimensions could not be supported (and it should be noted that although Lewicki et al argued for the orthogonality of their dimensions of trust based on theoretical considerations, they did not provide statistical evidence to support their hypothesis), there were sufficient differences in the behaviour of these two dimensions of trust to support their inclusion in the next and final study. Specifically, the behaviour of trust and distrust changed depending on the orthogonal test being conducted. For instance, the correlational analysis revealed a mirror image whereby trust would be positively associated with a
performance indicator and distrust negatively correlated, as would be expected if they were operating non-orthogonally. However, when the regression analysis results are examined, distrust is found to add negligible amounts of variance to the equations containing both trust and distrust. If these two dimensions were strictly non-orthogonal it would be expected that distrust would add equal but negative amounts to the variance.

One explanation for this result could be multicollinearity (Norusis, 1991), i.e., when, as in this case, in a regression equation the predictor variables are not independent. However, when the motivation variables of extrinsic motivation (Amabile et al., 1994) and TEM were used as dependent variables and both trust and distrust placed as predictor variables, there was an unexpected positive beta for distrust in the regression equation. This positive association was also confirmed through correlational analysis. Positive association between distrust and extrinsic motivation provided the support needed to include distrust, in addition to trust, in the analyses in the next and final study, even though strict orthogonality between the two dimensions could not be supported.

It is difficult to understand why distrust would have a positive association with extrinsic motivation. It could be, as suggested by Lewicki et al (1998), that distrust is uniquely associated with cynicism and scepticism and that the pragmatic response to such emotions might cause employees to be more mercenary. Alternatively, it could be that those with a propensity to be influenced by extrinsic rewards for their efforts tend to distrust their managers. This question needs more analysis and is one aspect on investigation in the following study.
In summary, notwithstanding these contradictory results, strictly speaking, the hypothesis that Lewicki et al.’s (1998) two dimensions of trust are orthogonal constructs could not be supported. However, there was strong evidence that trust and distrust did function differently under some test conditions. This was prominently demonstrated in the regression analyses when the dependent variables used were extrinsic motivation and TEM and the two dimensions of trust were used as predictors. In these two cases there were unexpected results with distrust contributing significant and positive amounts of the explained variance, also evident in the correlation analysis where there were significant positive correlations between extrinsic motivation, TEM and distrust.

In conclusion, even though the hypothesis for orthogonality was not supported, it is believed that the results associated with trust and distrust in this study, particularly those related to extrinsic motivation, warrant the inclusion of Lewicki et al.’s (1998) two dimensions in the following study when the mediating effect of trust in management, on incentive rewards, is investigated.
In Study 1 and 2, it was hypothesised that some of the variability observed in the effectiveness of an incentive program would be associated with employee individual differences. This hypothesis was supported. A number of employee individual differences were found to be associated with variations in the preference for different incentives including personality and age. These findings made some contribution to the debate relating to missing variance in incentive performance, however, the effects of these individual differences were not overwhelming.

In this current study the aim is to investigate other potentially more powerful contributors to the variance observed in incentive performance. Specifically, the aim was to test the hypothesis that incentive rewards are mediated both by trust in management and by the management style that is most closely associated with trust, transformational management. The rationale for this study is discussed below.

The prime role of a manager in a for-profit organisation

Managers of for-profit organisations, especially managers of listed entities, have a complicated job. Their day to day activities typically include planning, making and communicating decisions, instigating and conducting meetings and representing their organisation in many ways. However, their prime directive is to make a return on the investment that has been made by the shareholders of their organisation. This prime directive is named the ‘shareholder primacy norm’ (Smith, 1999) and encapsulates the
most important fiduciary duty owed by managers, executives and board members to
the shareholders, who originally supplied the funds to found the organisation.

For managers to achieve an optimum return on investment they need to
prudently manage, and extract the most from all the resources at their disposal. These
include time, money, material stock and employees. To maximise the employee
resource, a not inconsiderable cost to an organisation’s operation, managers strive to
motivate employees so they will work as productively as possible. One tool used to
achieve this outcome is the employee incentive program. However, as has been
discussed in previous chapters, incentives are often used uncritically. There is ample
evidence that they are used ubiquitously and uncritically in the Western industrialised
world (Karr, 1999) despite the large cost involved (Stolovitch et al., 2002) and their
uncertain and variable efficacy (Drago & Garvey, 1998; Jenkins et al., 1998;

The aim of this study is to examine two possible sources for some of the
variability that has been observed by researchers and practitioners alike following the
implementation of an incentive programs. This is an important pursuit as even small
increments in productivity can have large impacts on an entire economy. For
example, in the U.S. alone, the U.S. Department of Commerce report that the second
quarter 2003 annualised gross domestic product (GDP) was US$10,777 billion
(2003). It can be appreciated that even small increments in productivity can have a
large effect on such a large scale. Jenkins et al (1998) have shown the variation in the
effectiveness of an incentive program ranges from between 6% and 31%. If the
reasons for this variability could be better understood and the associated effect of an
incentive program on employee productivity improved, then large economic benefits would ensue.

_A Possible Candidate for the Missing Variance in Incentive Program Performance_

One candidate for the variability observed in the incentive effect is the level of trust that employees have in management. In Studies 3 and 4 it was demonstrated that low trust reduces self-assessed performance and that trust is positively and directly associated with increased self-assessed performance. In this study the potential of trust in management and management style to diminish or enhance the effect of an incentive reward is investigated.

_Trust in Organisations_

From an organisational perspective, there are benefits associated with having trusting relationships between employees and managers. Behaviours found to positively benefit from trust include improved work motivation (Bhattacharya et al., 1998; Costigan et al., 1998; McAllister, 1995), task performance and team satisfaction (Costa et al., 2001; Dirks, 2000) and lowered absenteeism and intention to leave (Dirks, 2000).

_Sources of Trust_

When explaining the aetiology of trust, researchers cite three main sources. These are: innate dispositional based trust, cognitive based trust and trust founded on affective emotions. Dispositional trust refers to the generalised personality trait that pre-disposes a person to trust or not trust others (Farris et al., 1973; Wrighteman, 1991; Wrightsman, 1991). Cognitive based trust is built upon a person’s experience and knowledge of, and cognitive cues about, the trustworthiness of another person or entity. It is a trust founded on good rational reasoning and the prior evidence of
trustworthiness (McAllister, 1995). Affective trust is emotionally based and is fostered through a strong mutual commitment and usually denotes a considerable investment in an interpersonal relationship (Lewis & Weigert, 1985).

In an informative paper on trust and distrust in organisations, Kramer (1999) discussed a number of different aspects of trust which derive from the three basic forms reviewed above. These three forms are rule-based trust, history or knowledge based trust and affective based trust. Rule based trust is based on the existence of formal and informal rules, regulations and systems that are clearly and widely publicised in an organisation. In essence, rule based trust relies upon the assurance that prescribed behaviour will result in guaranteed outcomes based on established rules (March, 1994). In the context of an incentive reward program, this would translate into the sure knowledge that certain prescribed behaviours will result in the receipt of certain rewards. This certitude is often missing within organisations where, for instance, a reward is non-contingent, such as the bestowing of an annual gratuitous bonus where there is poor line-of-sight between behaviour and reward (Boswell & Boudreau, 2001) and when the level of a reward is at a manager’s discretion.

History or knowledge based trust is grounded in the longitudinal experience and observations of the past actions of a trusted or untrustworthy entity (Kramer, 1999; Lindskold, 1978). From an incentive perspective, knowledge based trust could produce two main outcomes in relation to the effect that a promised reward has on behaviour. Results would depend on an employee’s experience of the distributive behaviour of management, which could be either consistent and fair or unjust and unpredictable. Specifically, an employee should have a confidence level ranging from low to high in the expectation that he/she will receive a promised reward. There
may also be further effects depending on whether the reward regime is contingent or non-contingent based. Non-contingent rewards, such as annual bonuses, are mostly bestowed at the discretion of management. Paradoxically, in many instances contingent based reward allocation is also based on the discretion of management as much work lacks the measures that would enable objective assessment of performance to be made. In both cases the trustworthiness of the manager should play a key role in the confidence level that a reward will be fairly distributed or even received at all.

Affective based trust is a special case that involves a close emotional bond between parties. This type of trust can and does occur in organisations, however, it is less common than rule or knowledge based trust (Lewis & Weigert, 1985). From an incentive perspective, an employee in an affective-based trust relationship with an employer should be confident that a promised reward will materialise. However, this will only be so if the trusting relationship is maintained. Therefore, an employee in such a relationship, being the more vulnerable party, needs to be vigilant lest the relationship deteriorates, consequently threatening the level of confidence that a reward will be fairly bestowed.

In summary, the level of trust between employee and manager derives from an employee’s dispositional trust, an organisation’s established rules, observations of, and experience with, management and the quality and depth of the affective relationship between the employee and his/her manager. Apart from dispositional trust, the perception of a manager’s trustworthiness derives from verbal and nonverbal cues detected by employees (Zuckerman, Koestner, & Colella, 1985). According to Pillai, Schriesheim and Williams (1999) trust cues can be encapsulated in a manager’s
management style. These authors also suggest that there is a direct relationship between management style and trust. Therefore, management style is included in this study, in addition to trust in management, as a potential mediator of the effect of an incentive reward on self-assessed performance.

**Management Style**

According to Bass (1985) two major styles of management can be identified as transformational and transactional. Bass and Avolio (1993) later identified a third style which they called laissez-faire, or the doctrine of non-interference which will not be discussed in this chapter.

Transformational leaders are identified as those who transform or change their organisation through dint of their appealing personality. Bass and Steidlmeyer (1999) suggest that transformational leadership derives from the leader’s charisma and ability to inspire, motivate and intellectually stimulate employees. This in turn fosters a climate in which employees are inspired to subordinate their own needs to those of the organisation, thus enabling the transformational effect. Using Kramer’s (1999) categorisation, the types of trust associated with a transformational manager would be knowledge and affective-based trust.

In contrast, transactional leaders clearly outline the responsibilities and tasks that employees must undertake in order to receive prescribed benefits (Bass, 1985). Essentially, transactional leadership is based on the notion of economic exchange where a manager offers rewards in return for an employee’s effort and performance. Transactional leaders play by the rules. You might be motivated, enthused and even inspired by the transformational manager but you know where you stand with the transactional style manager. Transactional management would then seem to be
associated with rule based trust, in contrast to the knowledge and affective based trust associated with transformational management. This is a potentially important distinction as these two styles and their associated types of trust may have different effects on the ways in which an incentive reward operates.

**Study Aims and Hypotheses**

If incentive programs gave consistent results, if they always improved employee motivation and productivity in a reliable way, there would be no controversy regarding their use and little variability resulting from laboratory experiments or practical implementations, regarding their effectiveness. This is not the case, with Kaufman and Russell (1995), and Jenkins et al (1998) reporting variable results and Drago and Garvey (1998) and Kohn (1993) even suggesting that incentives reduce rather than improve motivation. The aim of this study is to assess whether the contextual variables of trust and distrust in management, and management style, account for some of this variability.

Overall, it is hypothesised that the contextual variables of trust in management and management style will mediate the effect of incentive rewards and a number of self-assessed performance indicators. Figure 8 shows the mediation model under consideration, including the predictor (currently participating in an incentive program), potential mediators (trust and distrust in management and transactional and transformational management style) and dependent variables (performance indicators).
Trust in Management

It might seem that if employees trusted their managers that they could be sure that any promised incentive reward would be forthcoming. However, even trusted managers are liable to make subjective judgements of the merits of an employee’s performance, including the magnitude of any reward. People, including managers, can be capricious. While an employee may trust a manager that trust may not always be reciprocated. Therefore, when a reward is at stake it behoves an employee to monitor both his and his manager’s behaviour; particularly a trusted manager where loss of trust in a subjective assessment environment in which the manager has power to arbitrate on a reward, could have negative economic consequences. Hence:

*Hypothesis 1: The effect of an incentive reward will be mediated by trust in management.*
**Distrust in Management**

If an argument for trust in management as a potential mediator of incentives can be made then it would seem that the same could be said for distrust in management. However, it is argued that this is not the case and that distrust in management will not have a mediating effect in an incentive reward program. Managers are in positions of power, never more than when they can influence an economic outcome. This is why it was argued that trust mediates the effect of incentive rewards because employees need to be vigilant lest trust is lost by the powerful and trusted manager. When a manager is trusted there is tension in the relationship as the employee endeavours to maintain the trust of a significant other. However, in the case where a manager is not trusted the tension in the relationship is different and may relate to simple feelings of hostility, and not be directed toward maintenance of the relationship. As far as rewards are concerned, in a relationship where there is inherent mistrust an employee knows where he or she stands. The reward is either forthcoming or it is not and the relationship, being at low ebb, will not make any difference to the outcome. In this instance the employee will rely on rule based trust where sanctions can be applied against an employer if the rules are not followed. This is often the case in a highly unionized environment in which sanctions could include industrial disruption. Hence:

*Hypothesis 2: The effect of an incentive reward will not be mediated by distrust in management.*
**Transactional Management Style**

Under the stringent control of a transactional manager who elicits rule based trust, employees should have confidence that if they perform by the rules, consistent with the requirements associated with an incentive program, they will receive promised rewards as rules will tend to reduce the uncertainty that may be associated with management decision making and therefore reduce the influence of management in the operation of an incentive program. Hence:

*Hypothesis 3: The effect of an incentive reward will not be mediated by a manager’s transactional management style.*

**Transformational Management Style**

Transformational managers are liked by their employees with whom they form emotional ties (Podsakoff et al., 1990). Employees also trust their transformational managers (Pillai et al., 1999). However, does this trust extend to being sure that a charismatic, high performing manager will deliver a promised and coveted incentive reward? As discussed above, in many instances managers make subjective judgments about an employee’s performance, and therefore the magnitude of an associated reward. Thus, although employees might trust a transformational manager in many areas, including affective based trust, when it comes to being subjectively assessed and rewarded they may be less sure of a positive outcome. In part, this could result from being assessed by a superior performer, a transformational manager, whose standards are not easily achieved by most employees. As such, employees will need to constantly monitor their transformational managers, and the relationship they have
with them, in order to maximise the likelihood that they will receive their incentive reward. Therefore:

Hypothesis 4: It is hypothesised that the effect of an incentive reward be mediated by a manager’s transformational management style.

METHOD

Participants

Participants were 1,360 employees from a large number of organisations within Sydney, Australia. They were selected to have the following characteristics:

- 21 years or older (as younger employees will generally have less experience with incentive programs).
- In full time employment (i.e., at least 30 hours per week, as casual employees generally have less opportunity to participate in incentive programs).
- People who were not self employed, and who had a manager, supervisor, or administrator who was responsible for directing their work (as the self employed generally do not have managers or participate in incentive programs).
- The industry that participants worked in was not mandated, however, they were selected from private organisations (that is, they did not work for the government, quasi government organisations or not-for-profit organisations, as private organisations are more likely to use employee incentive programs).

Of the 1,360 respondees 1,230 were selected who had valid completed surveys and the required characteristics as described above.

Table 33 give a summary of the participant’s profile
Table 32
Means, Medians, Modes and Standard Deviations of Continuous Demographic Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
<th>S D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>33.5</td>
<td>29.0</td>
<td>21.0</td>
<td>11.3</td>
</tr>
<tr>
<td>Years in current job</td>
<td>4.7</td>
<td>3.0</td>
<td>1.0</td>
<td>5.5</td>
</tr>
<tr>
<td>Regular Scheduled hours of work</td>
<td>38.8</td>
<td>38.0</td>
<td>40.0</td>
<td>6.2</td>
</tr>
</tbody>
</table>

Table 33
Frequencies and Percentages of Demographic Variables

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Valid Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>581</td>
<td>47.2</td>
</tr>
<tr>
<td>Male</td>
<td>649</td>
<td>52.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Education</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>School Certificate</td>
<td>101</td>
<td>8.3</td>
</tr>
<tr>
<td>Higher School Certificate</td>
<td>256</td>
<td>20.9</td>
</tr>
<tr>
<td>TAFE Certificate</td>
<td>317</td>
<td>25.9</td>
</tr>
<tr>
<td>University Degree</td>
<td>550</td>
<td>44.9</td>
</tr>
</tbody>
</table>

**Materials and Procedure**

Cross-sectional survey data were collected by students at Macquarie University using a questionnaire specifically designed to include scales and demographics pertinent to the hypotheses being investigated.

As part of their course requirements, 281 students enrolled in the second semester of the 2002 ‘Bachelor of Business Administration’ participated in collecting the data. Each student received 5% of their course assessment for collecting five completed surveys (a component of the course being the theory and practice of scientific data collection). 272 students opted to participate in this component of the course.

Each respondent was given a letter of introduction from the Course Chair, outlining the reason the data were being collected, introducing the student to the
participant, inviting the participant to take part in the survey, guaranteeing anonymity and assuring the respondents that they could discontinue completing the questionnaire at any time. They were then given a blank questionnaire and an envelope in which to seal their completed questionnaire for returning to University staff for processing.

**Measures**

The measures used in this study are described below, including range, mean, standard deviation and Cronbach alpha, where applicable. Appendix A lists the questions used to develop each scale.

*Currently Receiving an Incentive*

Participants were asked to report if they received any incentive reward, other than basic pay. Responses were coded zero for no incentive reward and one for any incentive reward.

*Self-Assessed Performance*

Self-assessed performance is not a true facsimile of actual performance. There is much research attesting to the mostly positive biases associated with self assessment (Landy & Farr, 1980). Nevertheless, in social research it is sometimes the only source of performance data available (as it is in this thesis).

Many indicators of performance have been researched. Some of these are direct such as when an employee or manager rates performance on a range of criteria. Others are indirect measures of performance and include indicators of actual performance such as work motivation and job satisfaction. In this current study a number of performance indicators have been used, both direct and indirect, in an effort to reduce the uncertainty associated with self assessment and to compare these
various measures in the presence of incentive rewards. The validity of the results from a single self-assessed performance indicator can be questioned on the basis of the well documented bias associated with self assessment. However, if results from a number of different measures yield consistent outcomes, each approaching assessment from a different perspective, then the overall result should be more credible.

In this current study two direct indicators of self-assessed performance were used; Fox and Feldman's (1988) self-assessed performance inventory and Williams and Anderson’s (1991) in-role behaviour scale. In addition, three indirect indicators: Goal mastery (Harackiewicz et al., 2000), discretionary work effort (Lloyd, 2000) and job satisfaction adapted by Russell (1995) from Gallie and White (1995) were employed. Although job satisfaction has not been found to be a strong indicator of performance it was included in this study because of the persistent and overwhelming lay perception that it is a predictor of performance and because of its significant role in the development of the benefits and incentive industry.

Descriptions of some measures used in this chapter and examples of the items used in the associated scales, have been presented in previous chapters in this thesis. In Chapter 5 the following measures were described; self-assessed performance (SAP), discretionary work effort (DWE), and job satisfaction. In Chapter 6 details of Lewicki et al’s (1999) ‘trust’ and ‘distrust’ scales were reported. Measures used in the current study, i.e., incentive, transformation and transactional management style, in-role behaviour, and goal mastery are now described.

Transformational and Transactional Management Style

Transformational and transactional management styles were measured using the Multifactor Leadership Questionnaire (MLQ) developed by Bass and Avolio (1989)
and reported in a modified form by Den Hartog, Van Muijen and Koopman (1997). MLQ measures a number of management factors including transformational, transactional and laissez faire management styles. MLQ questions, worded by Den Hartog et al (1997), were used to measure transformational and transactional management. Sample items used to measure transformational management style include: “my manager serves as a role model for me” and “my manager mobilises a collective sense of mission”. Sample items used to measure transactional management style include” “My manager works out agreements with me on what I will receive if I do what needs to be done” and “My manager monitors performance for errors needing correction”. Each question was accompanied by a six point Likert scale with end points of (1) ‘strongly disagree’ to (6) ‘strongly agree’. The reliability of the two scales in the current study was satisfactory, with a standardised item alpha reliability of .91 for transformational management style and .73 for transactional management style. This compared well with the alphas obtained by Den Hartog et al (1997), i.e., a Cronbach alpha of .95 for transformational and .81 for transactional management style.

**In-Role Behaviour**

In-role behaviour is defined as those behaviours or ‘task activities’ which employers are expected to carry out, i.e., behaviours integral to an employee’s job description/role and considered fulfilled when all expected obligations are undertaken (Coleman & Borman, 2000; Katz, 1964).

In-role performance was measured using Williams and Anderson’s (1991) in-role performance inventory which comprises seven questions. Sample items used in this scale are: “I adequately complete my assigned duties”, “I perform tasks that are
expected of me” and “I fail to perform essential duties” (reverse coded). Each question is accompanied by a five point Likert scale with end points of (1) ‘never or almost never true of me’ to (4) ‘always or almost always true of me’. The reliability of the scale in the current study was satisfactory with an item alpha reliability of .79.
Mastery Goals

Incentives are provided on the assumption that they will improve motivation and that this will in turn increase performance and improve productivity. Locke, Shaw, Saari, and Latham (1981) verified part of this assumption with their finding that performance is enhanced by positive goal motivation and that goals improve motivation by increasing persistence and focusing attention on the task at hand. It can therefore be argued that an employee’s level of work goal motivation should be an indirect indicator of their performance.

Mastery goals are specific indicators of motivation. According to Dweck and Legget (1988) and Barron and Harackiewiez (2001), mastery goals are indicators of adaptive patterns of achievement. When individuals approach an activity from a mastery goal perspective, they strive to improve and develop their skills in order to achieve their goals. Hence, for those with high levels of mastery goal, “effort is viewed as a key component of success, and individuals should therefore seek out, challenge and persist despite making mistakes or facing difficulty” (Barron & Harackiewicz, 2001) (p 706).

Mastery goals were measured using a six question scale developed by Harackiewicz, Barron, Tauer, Carter and Elliot (2000). Their questions were designed to assess students' self-reported mastery; however, they were adapted to conform to a work situation. Participants were instructed to consider their attitudes toward their organisation and job and to indicate the extent to which they agreed with each question. Questions had end points ranging from (1) ‘strongly disagree’ to (6) “strongly agree”. Items were rewritten to reflect goals consistent with a normal work setting. Question examples include: “in my job, I prefer work that is really
challenging so that I can learn new skills”, and “In my job, I prefer work that arouses my curiosity, even when that work is difficult”. The reliability of the mastery goal scale was a respectable alpha .87.

RESULTS

Descriptive statistics for all variables used in this study are shown in Table 34.

Table 34
Range, Means and Standard Deviations of Study Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Possible range</th>
<th>( M )</th>
<th>( SD )</th>
<th>Cronbach alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Currently receiving an Incentive</td>
<td>Dichotomous</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>SAP</td>
<td>1-10</td>
<td>7.63</td>
<td>1.15</td>
<td>.90</td>
</tr>
<tr>
<td>DWE</td>
<td>1-6</td>
<td>4.05</td>
<td>.74</td>
<td>.86</td>
</tr>
<tr>
<td>In-role Behaviour</td>
<td>1-5</td>
<td>4.20</td>
<td>.55</td>
<td>.79</td>
</tr>
<tr>
<td>Mastery Goals</td>
<td>1-6</td>
<td>4.82</td>
<td>.77</td>
<td>.87</td>
</tr>
<tr>
<td>Job satisfaction</td>
<td>1-6</td>
<td>4.14</td>
<td>.78</td>
<td>.93</td>
</tr>
<tr>
<td>Trust</td>
<td>1-6</td>
<td>4.26</td>
<td>.83</td>
<td>.88</td>
</tr>
<tr>
<td>Distrust</td>
<td>1-6</td>
<td>3.19</td>
<td>.89</td>
<td>.83</td>
</tr>
<tr>
<td>Transformational Mgt.</td>
<td>1-6</td>
<td>3.87</td>
<td>.90</td>
<td>.91</td>
</tr>
<tr>
<td>Transactional Mgt.</td>
<td>1-6</td>
<td>3.38</td>
<td>.72</td>
<td>.73</td>
</tr>
</tbody>
</table>

Note: SAP = Self-assessed Performance and DEW = Discretionary Work Effort

To explore the relationship between the variables in this study a zero-order, Pearson correlation coefficients analyses were calculated, see
Table 35 below.
Table 35
Zero Order Correlations (Pearson, Two-Tailed)

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Incentive</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 SAP</td>
<td>.08†</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 DWE</td>
<td>.16†</td>
<td>.47†</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 In-role</td>
<td>.08†</td>
<td>.48†</td>
<td>.35†</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Mastery Goal</td>
<td>.11†</td>
<td>.48†</td>
<td>.44†</td>
<td>.44†</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Job Satisfaction</td>
<td>.20†</td>
<td>.25†</td>
<td>.17†</td>
<td>.19†</td>
<td>.25†</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Trust</td>
<td>.11†</td>
<td>.14†</td>
<td>.13†</td>
<td>.17†</td>
<td>.18†</td>
<td>.60†</td>
<td>--</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Distrust</td>
<td>-.10†</td>
<td>-.07*</td>
<td>-.08†</td>
<td>-.17†</td>
<td>-.04</td>
<td>-.46†</td>
<td>-.62†</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>9 Transformational</td>
<td>.14†</td>
<td>.14†</td>
<td>.15†</td>
<td>.11†</td>
<td>.20†</td>
<td>.65†</td>
<td>.77†</td>
<td>-.52†</td>
<td>--</td>
</tr>
<tr>
<td>10 Transactional</td>
<td>.22†</td>
<td>-.03</td>
<td>-.02</td>
<td>-.14†</td>
<td>.05</td>
<td>.19†</td>
<td>.17†</td>
<td>.10†</td>
<td>.32†</td>
</tr>
</tbody>
</table>

* Significant at p <0.05.
† Significant at p <0.01.

Note: SAP = Self-assessed Performance and DEW = Discretionary Work Effort

There were significant but low correlations between receiving an incentive and the five performance indicators chosen for this study. The highest correlation was between receiving an incentive and transactional management style at $r = .22$ and there was a very robust correlation of $r = .77$ between trust in management and transformational management style.

The correlation between trust and distrust was high at $r = -.62$ which is close to the correlation between these two variables, i.e., $r = -.59$, observed in the Study 3 in Chapter 8 of this thesis, which used a sample with different characteristics but similar in population size. Paradoxically, there was a significant but negative correlation between transactional management style and in-role behaviour, $r = -.14$, but a positive correlation with job satisfaction, $r = .17$.

**Test of Mediation**

The procedures of Baron and Kenny (1986) were followed to evaluate whether trust in management and management style mediated the effect of an incentive reward.
on self-assessed performance indicators. The general model under test is shown in Figure 9 below.

Figure 9
Generic Model Used to Test the Mediating Effect on Trust in Management and Management Style

Incentive inducement was based on the participants’ experience of receiving a reward in the organisation they currently worked for. They were asked: “Does your company give you incentives or rewards of any kind, other than basic pay?” This variable, ‘currently receiving an incentive’ was the major independent variable used in this study. Potential mediators included trust and distrust in management and transformational and transactional management style. Performance indicators included the direct self-assessed measures of SAP, DEW and in-role behaviour and the indirect measures of goal mastery and job satisfaction.

To test the general hypothesis that trust in management and management style mediates the associations between incentive reward and self-assessed performance indicators, a series of multiple regression analyses were conducted (one set for each of the four potential mediators discussed above). Baron and Kenny (1986) suggest that
mediation is established when several conditions emerge from a series of regression equations assessing links among the independent variable (i.e., the experience of receiving an incentive reward), the potential mediator (trust in management and management style), and the dependent variable (performance indicators).

With reference to Figure 9 these conditions are established when:

- Step 1, path ‘a’, ‘incentive inducement’, as an independent variable, is significantly related to the mediator.
- Step 2, path ‘b’, the ‘mediator’, as an independent variable, is significantly related to ‘performance indicator’ as the dependent variable.
- Step 3, path ‘c’, ‘incentive inducement’, as an independent variable is significantly related to ‘performance indicator’ as the dependent variable.

Full mediation is indicated if the forgoing three steps result in significant outcomes and:

- Step 4, in an equation containing both ‘incentive reward’ and the mediator as predictors, the mediator remains significant but ‘incentive reward’ is no longer significant.

Partial mediation is said to be indicated if in this equation (Step 4) both the independent variable and the mediator remain significant (Baron & Kenny, 1986).

Results of the mediation tests conducted in this study are shown in Table 36, Table 37, Table 39 and Table 38. All tests are set at a significance level of .01, due to the large sample size.
Hypothesis Testing

When trust in management was used as the mediating variable to test Hypothesis 1, there was full mediation when the performance indicators of SAP and in-role behaviour were used as DVs and partial mediation when DWE, goal mastery and job satisfaction were set as the DVs (see Table 36) and the predictor variable was ‘currently receiving an incentive’. Therefore, Hypothesis 1 that trust in management mediates the effect of an incentive reward was supported.

In contrast, when distrust was used as the mediating variable between ‘currently receiving an incentive’ and performance indicators (i.e., Hypothesis 2) the result was non-mediation for SAP, DWE and Goal mastery, partial mediation for job satisfaction and full mediation for in-role behaviour (see Table 37). Even though there were two positive mediation results the weight of evidence was biased toward non-mediation, 3 to 5, therefore it is argued that Hypothesis 2 is supported.

When mediation was tested using transactional management style as the mediator (Hypothesis 3) there was non-mediation with SAP, DWE, and goal mastery as dependent variables and only partial mediation with in-role behaviour and job satisfaction as dependent variables (see Table 38). Therefore, Hypothesis 3 is supported with some qualification (i.e., three non-mediations and two partial mediations).

In contrast to transactional management style, when transformational management style was placed as the mediating variable (Hypothesis 4) there was full or partial mediation for all performance indicators tested (see Table 39). Thus hypothesis 4 was strongly supported.
In summary, trust in management and transformational management style played a significant role in accounting for the association between incentive rewards and self-assessed performance; whereas distrust in management and transactional management style did not. This suggests that most of the links between incentive rewards and self-assessed performance are best understood as indirect and occurring through trust in management and management style. In addition, as trust in management and transformational management style are significantly associated with self-assessed performance, it can be concluded that significant amounts of variance, over and above that contributed by incentive reward alone, can be attributed directly to these mediating variables, whereas this is not the case with distrust or transactional management style.
### Hypothesis 1, Test Results for the Mediating Effect of Trust in Management between Incentives and Performance Indicators

<table>
<thead>
<tr>
<th>Principal Dependent variable (P-DV)</th>
<th>Principal Independent Variable (P-IV)</th>
<th>Step 1 Test of path ‘a’ (P-IV as predictor of mediator, as the DV)</th>
<th>Step 2 Test of path ‘b’ (mediator as IV predicting P-DV)</th>
<th>Step 3 Test of path ‘c’ (P-IV prediction of P-DV)</th>
<th>Step 4 Both P-IV and mediator as IVs predicting P-DV</th>
<th>Mediation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-assessed Performance (SAP)</td>
<td>Receive an Incentive</td>
<td>$F(1,1166) = 14.04, p = 0.0002$</td>
<td>$F(1,1221) = 25.26, p &lt; 0.0001$</td>
<td>$F(1,1159) = 7.86, p = 0.0051$</td>
<td>$F(2,1158) = 14.30, p &lt; 0.0001$ ($p_{-IV}, \beta = 0.07, p = 0.0214$) ($Med, \beta = 0.13, p &lt; 0.0001$)</td>
<td>Full</td>
</tr>
<tr>
<td>Discretionary Work Effort (DWE)</td>
<td>“</td>
<td>$F(1,1166) = 14.04, p = 0.0002$</td>
<td>$F(1,1223) = 22.23, p &lt; 0.0001$</td>
<td>$F(1,1166) = 31.20, p &lt; 0.0001$</td>
<td>$F(2,1165) = 24.66, p &lt; 0.0001$ ($p_{-IV}, \beta = 0.12, p &lt; 0.0001$) ($Med, \beta = 0.15, p &lt; 0.0001$)</td>
<td>Partial</td>
</tr>
<tr>
<td>In-role Behaviour</td>
<td>“</td>
<td>$F(1,1166) = 14.04, p = 0.0002$</td>
<td>$F(1,1223) = 34.67, p &lt; 0.0001$</td>
<td>$F(1,1166) = 7.76, p = 0.0054$</td>
<td>$F(2,1163) = 19.15, p &lt; 0.0001$ ($p_{-IV}, \beta = 0.06, p = 0.028$) ($Med, \beta = 0.16, p &lt; 0.0001$)</td>
<td>Full</td>
</tr>
<tr>
<td>Goal Mastery</td>
<td>“</td>
<td>$F(1,1166) = 14.04, p = 0.0002$</td>
<td>$F(1,1223) = 40.66, p &lt; 0.0001$</td>
<td>$F(1,1164) = 14.00, p = 0.0002$</td>
<td>$F(2,1163) = 23.89, p &lt; 0.0001$ ($p_{-IV}, \beta = 0.09, p = 0.022$) ($Med, \beta = 0.17, p &lt; 0.0001$)</td>
<td>Partial</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>“</td>
<td>$F(1,1166) = 14.04, p = 0.0002$</td>
<td>$F(1,1222) = 678.92, p &lt; 0.0001$</td>
<td>$F(1,1160) = 48.92, p &lt; 0.0001$</td>
<td>$F(2,1159) = 362.70, p &lt; 0.0001$ ($p_{-IV}, \beta = 0.14, p &lt; 0.0001$) ($Med, \beta = 0.58, p &lt; 0.0001$)</td>
<td>Partial</td>
</tr>
</tbody>
</table>
### Table 37
**Hypothesis 2, Test Results for the Mediating Effect of Distrust in Management between Incentives and Performance Indicators**

<table>
<thead>
<tr>
<th>Principal Dependent Variable (P-DV)</th>
<th>Principal Independent Variable (P-IV)</th>
<th>Step 1 Test of path ‘a’ (P-IV as predictor of mediator, as the DV)</th>
<th>Step 2 Test of path ‘b’ (mediator as IV predicting P-DV)</th>
<th>Step 3 Test of path ‘c’ (P-IV prediction of P-DV)</th>
<th>Step 4 Both P-IV and mediator as IVs predicting P-DV</th>
<th>Mediation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-assessed Performance (SAP)</td>
<td>Receive an Incentive</td>
<td>$F(1,1166) = 11.77, p = .0006$</td>
<td>$F(1,1221) = 6.27, p = .0124$</td>
<td>$F(1,1159) = 7.86, p = .0051$</td>
<td>$F(2,1159) = 5.97, p = .0026$</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>($P-IV, \beta = .08, p = .01$)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>($Med, \beta = -.06, p = .0441$)</td>
<td></td>
</tr>
<tr>
<td>Discretionary Work Effort (DWE)</td>
<td>&quot;</td>
<td>$F(1,1166) = 11.77, p = .0006$</td>
<td>$F(1,1228) = 7.05, p = .008$</td>
<td>$F(1,1166) = 31.20, p &lt; .0001$</td>
<td>$F(2,1165) = 17.943, p &lt; .0001$</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>($P-IV, \beta = .07, p = .0214$)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>($Med, \beta = -.06, p = .0325$)</td>
<td></td>
</tr>
<tr>
<td>In-role Behaviour</td>
<td>&quot;</td>
<td>$F(1,1166) = 11.77, p = .0006$</td>
<td>$F(1,1226) = 37.82, p &lt; .0001$</td>
<td>$F(1,1164) = 7.76, p = .0054$</td>
<td>$F(2,1163) = 20.59, p &lt; .0001$</td>
<td>Full</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>($P-IV, \beta = .06, p = .03$)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>($Med, \beta = -.17, p &lt; .0001$)</td>
<td></td>
</tr>
<tr>
<td>Goal Mastery</td>
<td>&quot;</td>
<td>$F(1,1166) = 11.77, p = .0006$</td>
<td>$F(1,1226) = 2.41, p = .121$</td>
<td>$F(1,1164) = 14.00, p = .0002$</td>
<td>$F(2,1163) = 7.75, p = .0005$</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>($P-IV, \beta = .11, p = .0003$)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>($Med, \beta = -.03, p = .2215$)</td>
<td></td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>&quot;</td>
<td>$F(1,1166) = 11.77, p = .0006$</td>
<td>$F(1,1222) = 335.90, p &lt; .0001$</td>
<td>$F(1,1160) = 48.92, p &lt; .0001$</td>
<td>$F(2,1159) = 192.92, p &lt; .0001$</td>
<td>Partial</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>($P-IV, \beta = .16, p &lt; .0001$)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>($Med, \beta = -.46, p &lt; .0001$)</td>
<td></td>
</tr>
</tbody>
</table>
### Table 38
Hypothesis 3, Test Results for the Mediating Effect of Transactional Management Style between Incentives and Performance Indicators

<table>
<thead>
<tr>
<th>Principal Dependent Variable (P-DV)</th>
<th>Principal Independent Variable (P-IV)</th>
<th>Step 1 Test of path ‘a’ (P-IV as predictor of mediator, as the DV)</th>
<th>Step 2 Test of path ‘b’ (mediator as IV predicting P-DV)</th>
<th>Step 3 Test of path ‘c’ (P-IV prediction of P-DV)</th>
<th>Step 4 Both P-IV and mediator as IVs predicting P-DV</th>
<th>Mediation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-assessed Performance (SAP)</td>
<td>Receive an Incentive</td>
<td>$F(1,1166) = 58.74, p &lt; .0001$</td>
<td>$F(1,1219) = 1.05, p = .3$</td>
<td>$F(1,1159) = 7.86, p = .0051$</td>
<td>$F(2,1159) = 5.67, p = .0035$</td>
<td>None</td>
</tr>
<tr>
<td>Discretionary Work Effort (DWE)</td>
<td>“</td>
<td>$F(1,1166) = 58.74, p &lt; .0001$</td>
<td>$F(1,1226) = 0.72, p = .39$</td>
<td>$F(1,1166) = 31.20, p &lt; .0001$</td>
<td>$F(2,1165) = 18.33, p &lt; .0001$</td>
<td>None</td>
</tr>
<tr>
<td>In-role Behaviour</td>
<td>“</td>
<td>$F(1,1166) = 58.74, p &lt; .0001$</td>
<td>$F(1,1224) = 23.98, p &lt; .0001$</td>
<td>$F(1,1164) = 7.76, p = .0054$</td>
<td>$F(2,1163) = 19.86, p &lt; .0001$</td>
<td>Partial</td>
</tr>
<tr>
<td>Goal Mastery</td>
<td>“</td>
<td>$F(1,1166) = 58.74, p &lt; .0001$</td>
<td>$F(1,1224) = 2.78, p = .096$</td>
<td>$F(1,1164) = 14.00, p = .0002$</td>
<td>$F(2,1163) = 7.41, p = .0006$</td>
<td>None</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>“</td>
<td>$F(1,1166) = 58.74, p &lt; .0001$</td>
<td>$F(1,1220) = 47.66, p &lt; .0001$</td>
<td>$F(1,1160) = 48.92, p &lt; .0001$</td>
<td>$F(2,1159) = 38.71, p &lt; .0001$</td>
<td>Partial</td>
</tr>
</tbody>
</table>
### Table 39
Hypothesis 4, Test Results for the Mediating Effect of Transformational Management Style between Incentives and Performance Indicators

<table>
<thead>
<tr>
<th>Principal Dependent variable (P-DV)</th>
<th>Principal Independent Variable (P-IV)</th>
<th>Step 1 Test of path 'a' (P-IV as predictor of mediator, as the DV)</th>
<th>Step 2 Test of path 'b' (mediator as IV predicting P-DV)</th>
<th>Step 3 Test of path 'c' (P-IV prediction of P-DV)</th>
<th>Step 4 Both P-IV and mediator as IVs predicting P-DV</th>
<th>Mediation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-assessed Performance (SAP)</td>
<td>Receive an Incentive</td>
<td>$F(1,1166) 23.30 \ p &lt; .0001$</td>
<td>$F(1,1218) 25.47 \ p &lt; .0001$</td>
<td>$F(1,1159) = 7.86 \ p = .0051$</td>
<td>$F(2,1157) 14.50 \ p &lt; .0001$ ($\beta IV = .06 \ p = .03$) ($\beta Med = .13 \ p &lt; .0001$)</td>
<td>Full</td>
</tr>
<tr>
<td>Discretionary Work Effort (DME)</td>
<td>&quot;</td>
<td>$F(1,1166) 23.30 \ p &lt; .0001$</td>
<td>$F(1,1225) 27.15 \ p &lt; .0001$</td>
<td>$F(1,1166) = 31.20 \ p &lt; .0001$</td>
<td>$F(2,1164) 25.56 \ p &lt; .0001$ ($\beta IV = .14 \ p &lt; .0001$) ($\beta Med = .13 \ p &lt; .0001$)</td>
<td>Partial</td>
</tr>
<tr>
<td>In-role Behaviour</td>
<td>&quot;</td>
<td>$F(1,1166) 23.30 \ p &lt; .0001$</td>
<td>$F(1,1223) 14.59 \ p &lt; .0001$</td>
<td>$F(1,1164) = 7.76 \ p = .0054$</td>
<td>$F(2,1162) 9.84 \ p &lt; .0001$ ($\beta IV = .07 \ p = .024$) ($\beta Med = .10 \ p = .0005$)</td>
<td>Full</td>
</tr>
<tr>
<td>Goal Mastery</td>
<td>&quot;</td>
<td>$F(1,1166) 23.30 \ p &lt; .0001$</td>
<td>$F(1,1223) 52.18 \ p &lt; .0001$</td>
<td>$F(1,1164) = 14.00 \ p = .0002$</td>
<td>$F(2,1162) 28.59 \ p &lt; .0001$ ($\beta IV = .08 \ p = .005$) ($\beta Med = .19 \ p &lt; .0001$)</td>
<td>Partial</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>&quot;</td>
<td>$F(1,1166) 23.30 \ p &lt; .0001$</td>
<td>$F(1,1219) 870.53 \ p &lt; .0001$</td>
<td>$F(1,1160) = 48.92 \ p &lt; .0001$</td>
<td>$F(2,1158) 430.07 \ p &lt; .0001$ ($\beta IV = .11 \ p &lt; .0001$) ($\beta Med = .63 \ p &lt; .0001$)</td>
<td>Partial</td>
</tr>
</tbody>
</table>
DISCUSSION

The purpose of the current study was to test whether trust in management and management style mediate the effect of incentive rewards on self-assessed performance. Results from this study suggest that this indeed is the case, with trust in management and transformational management style acting as robust mediators of incentive rewards. The effect was particularly strong when the direct performance indicators of SAP and in-role behaviour were used in the mediating tests, where full mediation was achieved.

The correlational analyses, see
Table 35, showed that the relationship between receiving an incentive reward and the measures of self-assessed performance employed in this study were not strong, with incentive reward explaining only 1% to 4% of the available variance. This is on the low side of the results that Jenkins, Mitra, Gupta and Shaw (1998) found, following their meta-analytic study into the efficacy of incentive programs. They concluded that there was an average corrected correlation of .34 between an incentive reward and employee performance, accounting for 10% of the explained variance. However, their research use objective measures of performance in contrast to self-assessed performance used here.

The comparable correlations between self-assessed performance (SAP), as measured by Fox and Feldman’s (1988) self-assessed performance inventory, and the other three indicators of performance (i.e., DWE, in-role behaviour and mastery) justify their inclusion in this study and raise the issue of further research into the basis for these relationships (given that theoretically they are distinct constructs).

There were significant but low correlations between incentive reward and the five performance indicators chosen for this study. Interestingly, the highest correlation was between incentive reward and transactional management style. This is in accord with the definition offered by Bass (1985) that transactional management style is essentially about economic exchange.

The very robust correlation between trust in management and transformational management style supports Pillai, Schriesheim and Williams’ (1999) model of a direct relationship between these two constructs and helps justify the choice of these two constructs as potential mediators in this study. These are different but related constructs which both potentially mediate the effect of an incentive reward. However,
whereas transformational management style is thought to be atypical management
behaviour (Avolio et al., 1999; Den Hartog et al., 1997) the level of trust in
management should be independent of management style.

The hypothesis that there would be a mediating effect of trust in management
was based on the assumption that tension can exist between a vulnerable employee
and a trusted, though powerful manager. This assumption is theoretically supported
by Kark, Shamir and Chen (2003) who found that in addition to an empowering effect
resulting from the transformational leadership style, followers of such leaders develop
a state of dependency. Thus trust in management can be seen as a two-way street. On
the one hand employees can feel privileged if they feel they are in a trusting
relationship with management, however, the effort needed to maintain that
relationship may cause them to become dependent.

In contrast to the mediating effect of trust and transformational management
styles, results indicate that in environments where management is not trusted, or
where the management style is transactional in nature, incentives have a direct role to
play in improving self-assessed performance. There are many work settings where
such environments are prevalent; for instance, in those industries where a more
adversarial approach is taken to industrial relations, both from the employer and
employee point of view. In such settings it would seem that incentives can play a role
in improving self-assessed performance, regardless of management behaviour. This
accords with the definition proposed by Bass (1985) describing the transactional
management style as essentially a mercenary exchange agreement.

Results indicate that trust in management and transformational management
style improves self-assessed performance in their own right. This accords with
researchers who have found associations between transformational management style and performance (Barling, Weber, & Kelloway, 1996; Dvir, Eden, Avolio, & Shamir, 2002). Other researchers, have also found evidence that trust in management is associated with individual and team-based performance, both directly and indirectly (Costa et al., 2001; Cunningham & MacGregor, 2000; Dirks, 1999, 2000; Rich, 1997; Rosenbaum et al., 1980).

It would seem to be common sense that if incentives, trust and transformational management style improve employee productivity that these variables should be additive. A surprising result from this study is that, contrary to this perception, trust in management nullifies the effect of an incentive reward, effectively taking its place as an employee motivator. Given the direct and positive effect of trust in management and transformational management style on employee self-assessed performance, it could be argued that it is wasteful to implement costly incentive programs in high trust, transformational management work environments. There are many work situations where such environments exist such as in small self-managed work groups, some professional settings and in family oriented companies; here incentive programs may not be needed to motivate employees. Thus, it would be prudent to assess levels of trust in management, and the management style operating in an organisation, prior to the introduction of an incentive program.

Summary and Conclusions

Although previous studies have shown that both incentives, trust in management and transformational leadership style improve performance, to my knowledge this is the first study to evaluate the role of trust in management and transformational management as mediators of the relationship between incentives and self-assessed
performance. If it is the case that self reported performance approximates actual performance then such mediating effects would have important implications for the incentive industry. Employee incentives are offered, at considerable cost, in an effort to improve productivity. Consequently, it behoves the providers of incentive rewards to maximise their cost effectiveness. Therefore, it should be important to know that under certain conditions incentives will be more or less effective. The results of this study offer some insights which could assist managers in the more efficient use of incentive programs. It has also uncovered possible sources for some of the variability that has been observed following the implementation of an incentive program.

In contrast, the results for distrust and transactional management style
Chapter 10

General Summary and Conclusions

This thesis has explored the roles played by individual differences, ‘trust in management’ and management style, in the effectiveness of incentive rewards as enhancers of motivation and performance. Empirical evidence indicates that incentives have widely varying effects on effort, and in some instances do not improve performance at all (Bonner & Sprinkle, 2002; Jenkins et al., 1998; Kohn, 1993). The overall aim of this thesis was to identify possible sources of variance in addition to those already identified by other researchers (Jenkins et al., 1998; Luthans & Stajkovic, 1999; Stajkovic & Luthans, 1997; Welbourne & Cyr, 1999), to account for the wide variations in performance increases observed following the introduction of incentives programs. Specifically, this thesis focused on employee individual differences, such as personality and motivation orientation; contextual variables (including trust in management and management style) and a number of employee background variables (including gender, age and management level). It was hypothesised that there would be variations in the effectiveness of incentives depending on employee individual differences and reward preferences. It was also hypothesised that, as well as having direct effects on self-assessed performance, trust in management and management style would mediate an incentive’s effectiveness.

Uncovering the sources of variance in the effectiveness of incentive programs has considerable practical and theoretical implications: Practical, as even small increments in employee productivity have large consequences for the competitiveness of individual organisations, and entire economies; and theoretical, as researchers are continually looking to explain variations in human motivation.
This concluding chapter provides a summary of findings from the five studies conducted and links them to the main theoretical topics used in the thesis. Limitations are discussed and directions for future research identified. Also included is a section outlining the contributions made to incentive theory by this research and some practical suggestions for incentive program implementation.

**Summary of Findings**

In the opening study (Chapter 5) the question investigated was whether personality traits could be one possible source of variance in the efficacy of incentives programs. In replicating and extending the work of Furnham et al (1999) this study confirmed that employees with different personality traits have preferences for different rewards. Specifically, extroverts favoured those aspects of work which are broadly defined as motivators by Herzberg (1967), and intrinsic motivators by Amabile et al (1994), and were less influenced by factors described by Herzberg (1967) as being hygiene related, and by Amabile et al (1994) as extrinsic motivators. In contrast, employees low on the Big-Five measure of emotional stability were found to have the opposite preferences. Whereas extroverts favoured responsibility, problem solving and interesting work those low on the trait of emotional stability had a preference for work benefits, pay, promotion opportunities and job security.

The focus in the second study (Chapter 6) was on employee preferences for a number of different incentive reward programs. Preference testing was based on a range of employee individual differences, contextual work factors and demographic backgrounds. Findings from this study indicated that there are indeed different preferences for rewards, with cash bonuses universally the most favoured and recognition awards the least preferred.
The preference for cash bonuses is an interesting finding, in light of the emphasis given to recognition rewards (O'Neal, 1992) which is exemplified by the perennial ‘employee of the month’ award prominently displayed in establishments such as McDonalds restaurants. However, in an article on the meaning of money, Mitchell and Michel (1999) point out that, “Money is probably the most emotionally meaningful object in contemporary life: only food and sex are its close competitors as common carriers of such strong and diverse feelings, significance, and strivings” (p. 569). Perhaps this definition points to the reason that money (cash bonuses) was found to be the most valued incentive class in this study.

Findings from Study 2 also indicate that there were differential preferences for incentives based on employees’ age, extraversion, intellectual openness and self-efficacy. Of particular interest in relation to the problem of the discrepancy of explained variance was the finding that for all incentive types older employees appeared to have less interest in incentive rewards than younger workers. However, there were no differences based on the many other variables that were tested.

It was hypothesised that the way an incentive offer is perceived by an employee, and hence how it might operate, will be influenced by the employee/manager relationship, specifically the level of trust in management. Trust was the major contextual variable examined in this thesis and as such was a focus in two studies. One (Chapter 7) tested the direct effect of trust in management on self-assessed performance and the second (Chapter 8) tested the theory of Lewicki et al (1999) that trust is a bi-dimensional construct comprising two dimensions labelled ‘trust’ and ‘distrust’. Results from Study 3 indicated that trust in management does have a direct
effect on self-assessed performance and Study 4 showed that although Lewicki et al’s (1998) two dimensions of trust are not strictly orthogonal, they do behave differently under some conditions. For example, there was a surprising result from the regression analysis indicating that distrust in management is positively associated with extrinsic motivation. The implication is that those with high levels of extrinsic motivation, and hence an interest in exogenous rewards are more likely to distrust their managers. This finding led to the inclusion of distrust, as well as trust, in the final study (Chapter 9) where it was hypothesised that trust and transformational style would mediate the effect of an incentive reward but that distrust and transactional management style would not. The results of this study provided strong support for the hypothesis that the efficacy of an incentive reward is influenced by the contextual variables of trust in management and management style. They also provided strong support for the theory that a portion of the variability in incentive efficacy is accounted for by the relationship between employees and their managers, and that incentive rewards may not operate simply on the basis of ‘self-interest’, as suggested by economists (Vriend, 1996).

**Relationship to Theory**

Two of the more prominent theories discussed in this thesis, in relation to employee incentives, were extrinsic motivation theory (Amabile et al., 1994; Ryan & Deci, 2000) and agency theory (Ross, 1973). Extrinsic motivation is the theory most closely associated with incentive rewards, incentive rewards being exogenous in nature. Agency theory, which fundamentally states that individuals charged with the responsibility of managing organisations (agents) are motivated by self interest.

*Extrinsic Motivation Theory*
Measures used to assess extrinsic motivation within organisational psychology research have tended to be comprehensive scales, such as Amabile et al’s (1994) extrinsic motivation orientation and Herzberg’s hygiene factor (Furnham et al., 1999). These measures use questions which are theorised to relate to extrinsic motivation. They include questions that specifically relate to incentives used in industry, such as money and prizes with monetary value and also broader extrinsic rewards such as ‘I am strongly motivated by the recognition I can earn from other people’.

One of the contributions made by this thesis was the development of an extrinsic motivation scale that specifically relates to practical incentive reward such as cash bonuses, shares prizes with monetary value and profit sharing. This scale was labelled ‘tangible extrinsic motivation’ TEM and was modelled on Ryan and Deci’s (2000) mode of extrinsic motivation they call ‘external’ extrinsic motivation. The interesting result in Study 3 was that, although Amabile et al’s (1994) more general scale was unaffected by trust in management, thus confirming these researchers’ theory that extrinsic motivation is dispositional in character, the level of the extrinsic motivation scale developed for this thesis, TEM, was significantly reduced in a low trust environment. It follows that, if researchers were to restrict their use of an extrinsic motivation measure to a comprehensive scale such as Amabile et al’s (1994) extrinsic motivation orientation scale they could be overlooking the influence that trust has on basic exogenous incentive rewards. they would then miss the opportunity to fully investigate the role of trust in incentive theory. Further research investigating the different modes of extrinsic motivation, as proposed by Ryan and Deci (2000), is considered warranted.

Agency Theory
As was argued in the introductory chapters, extrinsic motivation theory predicts that people have various levels of interest in receiving rewards whereas agency theory is more robust in its prediction of self-interest, i.e., agency theory posits that “…individuals are presumed to be motivated solely by self-interest, where self-interest is described by a utility function that contains two arguments: wealth and leisure” (Bonner & Sprinkle, 2002) (p.308). Adam Smith (1976), the father of modern economic theory, considered self-interest to be at the core of economic behaviour in a decentralised society, “It is not from the benevolence of the butcher, the brewer or the baker that we expect our dinner, but from their regard to their own interest” (p. 26/27). Smith’s assertion regarding human economic behaviour is still considered the cornerstone of contemporary economic theory, as argued by Vriend (1996) who asserts “…that the fundamental conception of rationality in the economic literature is the pursuance of self-interest” (p. 264). In the context of employee remuneration, incentives and benefits, Smith’s statement, accorded axiom status by Vriend (1996: p.265), could be reworded as follows: ‘it is not from the benevolence of the employee that employers can expect loyalty and diligent work effort, but from the employee’s regard to his/her own interest’ and ‘it is not from the benevolence of the employer that employees expect their rewards, but from the employer’s regard to his/her own interest’. It follows, particularly from Agency theory (Eisenhardt, 1989), that incentive rewards are a simple matter of self-interested economic exchange. However, if this were entirely true, the results from the final study in this thesis should not have produced the strong mediating effects from trust in management, or transformational management style, which were observed. The mediating influence of trust in management and transformational management style indicates that, as well as self interested economic exchange, predicted by of agency theory (Bonner &
Sprinkle, 2002; Eisenhardt, 1989), that the affect of an incentive reward is strongly influenced by the quality of human relationships.

The role that relationships play (exemplified in this study through trust in management and transformational management style) as employee motivators and hence substitutes for extrinsic motivation was given additional support when distrust and transactional management style were examined. When distrust and transactional management style were used as mediating variables the incentive influence remained significant for all five self-assessed performance indicators tested. Thus agency theory is confirmed, but only when there is distrust in management or when management employ mercenary methods to motivate employees.

Trust and Distrust

Lewicki at al’s (1998) theory that trust has two independent dimensions was tested and found to have some complications. Whereas their two dimensions, i.e., ‘trust’ and ‘distrust’, were not found to be strictly orthogonal, they did behave differently and unexpectedly in regression analysis in association with extrinsic motivation and tangible extrinsic motivation (TEM). Distrust, as expected, was negatively associated with self-assessed performance. However, it was positively associated with the two abovementioned measures of extrinsic motivation. As extrinsic motivators are theoretically aligned with incentive rewards, this surprising result would seem to indicate that distrust and incentive rewards are somehow related. Lewicki et al (1998) argue that distrust is characterised by fear, scepticism, cynicism wariness and vigilance. It could be, as suggested by Kohn (1993) Kaufman and Russell (1995) Drago (1988), that people are cynical about extrinsic reward, viewing
then as bribes (Kohn, 1993). However, just because a person has a cynical attitude about the motives for which a reward is offered does not necessarily mean that rewards will not be valued or accepted. The positive association between distrust and extrinsic motivation may simply reflect and acknowledge the cynicism which employees perceive incentive programs.

**Limitations, Implications and Directions for Future Research**

One important avenue of research is suggested by the different results that were produced by the two measures of extrinsic motivation used in this thesis, i.e., Amabile et al’s (1994) general extrinsic motivation orientation and the more incentive based TEM, and their relationship with both trust and distrust. It is considered that such research could employ Ryan and Deci’s (2000) multi-modal model of extrinsic motivation and test each mode in association with trust and distrust in management with the aim of clarifying the effect that each mode has on the effect of an incentive reward.

As with the majority of research in the social sciences, data for this thesis were gathered through cross-sectional surveys (Furnham, 1994). Specifically, employee performance was measured by a number of self-assessed performance indicators. The results from the associated studies would be accorded greater validity if they were to be repeated using objective measures of participant performance. In particular, further research using objective measures of employee performance to verify the mediating effect of trust in management and transformational management style, is warranted. Ideally, such research would involve actual measures of employee performance in a large organisation that employed contingent based incentives.
The second study (in Chapter 6), where the preference for different incentive types was assessed, is illuminating. However, it would be useful to know whether the actual performance of employees depends on different incentive types. Further research assessing the differential efficacy of incentive types (based on the individual differences found in that study to affect preference, such as employee age) would provide useful practical information to industry. Although difficult to design, the ideal research would focus on organisations concurrently employing a number of incentive programs, with objective measurements of performance made for each incentive type. Without such rigorous research the efficacy of any incentive program will continue to rely on simple correlational analyses of pre and post implementation and comparisons between organisations with and without incentive programs.

Given that incentive programs are universally employed in industry, at a very large cost and on the basis that they will yield significant returns on investment, it should interest those investing in incentive programs to ensure they are being used in the most effective way. With an effectiveness range between 6% and 31% (Jenkins et al., 1998) and a U.S. 2003 GDP of US$10,777 billion (2003) even small increments in productivity will have large affects on financial outcomes.

Finally, no indication of incentive magnitude, as a proportion of total remuneration, was recorded by employees participating in these studies. Parco, Rapoport, and Stein (2002) found that when mutual trust is involved, the magnitude of financial incentives can induce a considerable difference in recipients’ behaviour. It may be that both the effect on performance and the dynamics of a trusting relationship are sensitive to incentive magnitude. Further research introducing incentive
magnitude as a moderator of incentive effect, in relation to trust in management, is considered warranted.

**Overall Contribution, Conclusions and Practical Implications**

The major contribution made by this thesis to incentive theory is the detection of additional variance in the performance of incentive programs. It adds to the body of evidence about incentive variability by showing that a portion of the variation relates to employee individual differences and the contextual influence of manager/employee relations.

Results derived from this thesis have important ramifications for managers of organisations interested in maximising the return on any investment made in an incentive program. The main results that such a manager might find useful are:

Firstly, not all employees will respond equally to a particular incentive program. This means that before implementing a program, the characteristics of the organisation and its employees should be assessed. The characteristics to be evaluated are the predominant management style in operation, the relationship between employees and their management, the mean age within various groups and the general level of self-confidence among employees. These factors were found to be important in relation to incentive programs.

Additionally, an employee’s age does influence his or her interest in receiving an incentive reward. For all six incentive types analysed in this thesis the finding was that preference for an incentive reward was greater for younger employees than their older colleagues. This could be useful information for managers of sections, divisions or whole organisations with homogeneous groups of young or more senior employees.
The message is that younger employees will respond more strongly to incentive rewards than older employees.

Another consequence is that the relationship which employees have with management has a significant effect on the way in which an incentive reward operates. Trust in management has a direct positive effect on performance. In such environments, incentives do not seem to be required and hence would be a poor investment option as trust in management and/or transformational management style directly promote performance without the need for incentive rewards. However, within environments where there is distance or distrust between management and employees, as there can be in some unionised workplaces (Robinson & Friedman, 1995) where trust cannot be relied upon to enhance employee performance, incentives do directly increase performance. The message here is twofold: strive to engender an environment of trust between employees and management and if this is not a practical option, offer incentive rewards as a substitute.

Another point is that people high on the individual difference trait of self-efficacy value incentives more highly than those low on this trait. Self-efficacy is the characteristic of being self confident and believing that a desired volitional behaviour can be realised (Bandura, 1986). It is more likely that this characteristic will be found in employees who have or need self confidence to perform competently. One group of such employees are salespeople (Wang & Netemeyer, 2002). The message is that salespeople are more likely to be influenced by incentive rewards. This finding is only confirmatory in nature as it is common practice to include incentive rewards as a major component of salespeople’s remuneration.
It was also revealed that cash bonuses were the most popular form of incentive
reward, whereas recognition awards seem to be the least favoured. This was the
consistent finding across all the sub groups analysed.

Finally, and in summary, an employer should not adopt a ‘one size fits all’
approach across an entire organisation when implementing an incentive program, as
this approach is too simplistic at best and could be wasteful or counterproductive at
worst. If such a process is adopted, an organisation may be condemned to experience
the vagaries of inconsistent results that are commonly observed following the
implementation of a poorly designed reward program.
References


Appendix A

Thesis Scales, Variables and Questions

A list of the scales and items used in Studies 1 to 5 is shown below. Scales are arranged in six categories including: personality measures, self-assessed performance indicators, motivation constructs, mediator variables, single item questions and demographic variables.

Personality Measures

Big-Five personality dimensions
Saucier’s (1994) 40 adjective checklist, known as the ‘mini-markers’

<table>
<thead>
<tr>
<th>Extraversion</th>
<th>Agreeableness</th>
<th>Conscientiousness</th>
<th>Emotional Stability</th>
<th>Intellectual Openness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bashful ®</td>
<td>Cold ®</td>
<td>Careless ®</td>
<td>Envious ®</td>
<td>Complex</td>
</tr>
<tr>
<td>Bold</td>
<td>Co-operative</td>
<td>Disorganised ®</td>
<td>Fretful ®</td>
<td>Creative</td>
</tr>
<tr>
<td>Energetic</td>
<td>Harsh ®</td>
<td>Efficient</td>
<td>Jealous ®</td>
<td>Deep</td>
</tr>
<tr>
<td>Extroverted</td>
<td>Kind</td>
<td>Inefficient ®</td>
<td>Moody ®</td>
<td>Imaginative</td>
</tr>
<tr>
<td>Quiet ®</td>
<td>Rude ®</td>
<td>Organised</td>
<td>Relaxed</td>
<td>Intellectual</td>
</tr>
<tr>
<td>Shy ®</td>
<td>Sympathetic</td>
<td>Practical</td>
<td>Temperamental ®</td>
<td>Philosophical</td>
</tr>
<tr>
<td>Talkative</td>
<td>Unsympathetic</td>
<td>Sloppy ®</td>
<td>Touchy ®</td>
<td>Uncreative ®</td>
</tr>
</tbody>
</table>

Big-Five personality dimensions
(Goldberg, 2001)

Extraversion
- Am the life of the party
- Don't talk a lot ®
- Feel comfortable around people
- Keep in the background ®
- Start conversations
- Have little to say ®
- Talk to a lot of different people at parties
- Don't like to draw attention to myself ®
- Don't mind being the centre of attention
- Am quiet around strangers ®

Agreeableness
- Feel little concern for others ®
- Am interested in people
- Insult people ®
- Sympathize with others' feelings
- Am not interested in other people's
problems ®
  • Have a soft heart
  • Am not really interested in others ®
  • Take time out for others
  • Feel others' emotions
  • Make people feel at ease

Conscientiousness
  • Leave my belongings around ®
  • Am always prepared
  • Pay attention to details
  • Make a mess of things ®
  • Get chores done right away
  • Often forget to put things back in their proper place ®
  • Like order
  • Shirk my duties ®
  • Follow a schedule
  • Am exacting in my work

Intellectual Openness
  • Have a rich vocabulary
  • Have difficulty understanding abstract ideas ®
  • Have a vivid imagination
  • Am not interested in abstract ideas ®
  • Have excellent ideas ®
  • Do not have a good imagination ®
  • Am quick to understand things
  • Use difficult words
  • Spend time reflecting on things
  • Am full of ideas

Emotional Stability
  • Get stressed out easily ®
  • Am relaxed most of the time
  • Worry about things ®
  • Seldom feel blue
  • Am easily disturbed ®
  • Get upset easily ®
  • Change my mood a lot ®
  • Have frequent mood swings ®
  • Get irritated easily ®
  • Often feel blue ®

_Self-Assessed Performance Indicators_
Self-assessed performance
(Fox & Feldman, 1988)
1. Work quantity
2. Work quality
3. Motivation
4. Efficiency
5. Interpersonal relations with colleagues
6. Achievement
7. Initiative
8. Professional knowledge
9. Discipline
10. General Competence

Affective Commitment

(Allen & Meyer, 1990)
1. I would be happy to spend the rest of my career/working life with this organisation.
2. I enjoy discussing my organisation with people outside of it.
3. I really feel as if this organisation’s problems are my own.
4. This organisation has a great deal of personal meaning for me.
5. I feel a strong sense of belonging to my organisation.

Organisational Citizenship Behaviour
(Jordan & Sevastos, 2001)
1. I help others who have heavy workloads.
2. I consider the effects of my actions on co-workers.
3. I complain a lot about trivial matters. ®
4. I never abuse my rights and privileges.
5. I stay informed about developments in my organisation.
6. I help others who have been absent.
7. I consult with other people who might be affected by my actions or decisions.
8. I always find faults with what my organisation is doing. ®
9. I always follow the rules of my organisation and my team.
10. I attend and participate in meetings regarding my organisation.
11. I always do more than I am required to do.
12. I inform others before taking any important actions.
13. I express resentment at any changes introduced by management. ®
15. I offer suggestions for ways to improve operations.

Discretionary Work Effort
(Lloyd, 2001)
1. When I work, I really exert myself to the fullest, beyond that which is expected.
2. I finish a job even if it means sacrificing breaks or lunches.
3. I do more than is expected of me.
4. I voluntarily put in extra hours to achieve a result faster.
5. I persist in overcoming obstacles to complete an important task.
6. I put in extra effort whenever I find it necessary.
7. I work harder than expected to help my organisation to be successful.
Job Satisfaction
(Russell, 1995)
1. The level of challenge your job offers
2. Your pay
3. The benefits provided
4. Job security
5. The trust between employees and management
6. Opportunities for advancement / promotion prospects
7. Opportunities to develop your skills / training prospects
8. Opportunities to participate in decisions
9. Opportunities to take responsibility for your own work
10. Acknowledgment for a job well done
11. Relations with supervisor
12. Relations with immediate manager
13. Relations with senior management
14. Ability and efficiency of management
15. The amount of work involved
16. The hours of work
17. All in all, how satisfied would you say you are with your job?

Intent to Leave
(Walsh et al., 1985)
1. I am starting to ask my friends and contacts about other job possibilities
2. I am thinking about quitting my job.
3. I often look to see if other suitable jobs are available.
4. I intend to leave my job within the next six months.

In-role Behaviour
(Williams & Anderson, 1991)
1. I adequately complete my assigned duties.
2. I fulfil my responsibilities as specified in my job description.
3. I perform tasks that are expected me.
4. I meet the formal performance requirements of my job.
5. I engage in activities that will directly affect my performance evaluations.
6. I neglect aspects of my job that I am obliged to perform ®
7. I fail to perform essential duties ®

Mastery Goals
(Harackiewicz et al., 2000)
1. I want to learn as much as possible about my job
2. In my job, I prefer work that is really challenging so that I can learn new skills
3. The most important thing for me at work is trying to understand my job as thoroughly as possible.
4. Understanding all about the details of my work is important to me.
5. I like it best when something I learn makes me want to find out more.
6. In my job, I prefer work that arouses my curiosity, even when that work is difficult

Motivation Constructs

Herzberg’s Motivator Factor
(Mantech, 1980)
1. The opportunity I have for personal growth at work
2. That I have the ability to use my knowledge at work
3. That I am recognised for doing a good job
4. That I am given responsibility at work
5. That I have the opportunity to achieve at work
6. An opportunity to be influential at work
7. That my work is interesting
8. That I have the chance of advancement/promotion at work
9. That the work I do is meaningful to me

Herzberg’s Hygiene Factor
(Mantech, 1980)
1. My level of job security
2. That I have a fair and considerate supervisor
3. That I have convenient work hours
4. That I have a job with status
5. That I have the opportunity to interact with people
6. The work benefits I receive in addition to my pay
7. That my co-workers are pleasant to work with
8. My pay (the amount of money I get)
9. That my working conditions are comfortable and clean

Intrinsic Motivation orientation
(Amabile et al., 1994)
1. The more difficult the problem, the more I enjoy trying to solve it
2. I want my work to provide me with opportunities for increasing my knowledge and skills
3. I prefer to figure things out for myself
4. No matter what the outcome of a project, I am satisfied if I feel I gained a new experience
5. I enjoy relatively simple, straightforward tasks ®
6. Curiosity is the driving force behind much of what I do
7. I enjoy tackling problems that are completely new to me
8. I prefer work I know I can do well over work that stretches my abilities ®
9. I’m more comfortable when I can set my own goals
10. It is important for me to do what I most enjoy
11. I enjoy doing work that is so absorbing that I forget about everything else
12. I enjoy trying to solve complex problems
13. It is important for me to have an outlet for self-expression
14. I want to find out how good I really can be at my work
15. What matters most to me is enjoying what I do

Extrinsic Motivation Orientation
(Amabile et al., 1994)
1. I am not that concerned about what other people think of my work ®
2. I prefer having someone set clear goals for me in my work
3. I am keenly aware of the income goals I have for myself
4. To me, success means doing better than other people
5. I am keenly aware of the promotion goals I have for myself
6. I’m less concerned with what work I do than what I get for it
7. I’m concerned about how other people are going to react to my ideas
8. I seldom think about salary and promotions
9. I believe there is no point in doing a good job if nobody else knows about it
10. I am strongly motivated by the money I can earn
11. I prefer working on projects with clearly specified procedures
12. As long as I can do what I enjoy, I’m not that concerned about exactly what I’m paid
13. I am strongly motivated by the recognition I can earn from other people
14. I have to feel that I’m earning something for what I do
15. I want other people to find out how good I really can be at my work

Tangible Extrinsic Motivation (TEM)
(Developed for thesis)
I would increase my overall work effort if as a direct result, my manager…
1. offered me the opportunity to share in my company’s profits.
2. offered me shares or share options in the company that I work for.
3. offered me the opportunity of receiving a cash bonus at the end of year.
4. offered me a non-cash rewards, such as a paid holiday.

Self efficacy
(Jerusalem & Schwarzer, 1992)
1. When I am confronted with a problem, I can find several solutions.
2. I can always manage to solve difficult problems if I try hard enough.
3. If somebody opposes me, I can find the ways and means to get what I want.
4. I am certain that I can accomplish my goals.
5. I am confident that I could deal efficiently with unexpected events.
6. Thanks to my resourcefulness, I can handle unforeseen situations.
7. I can solve most problems if I invest the necessary effort.
8. I can remain calm when facing difficulties because I can rely on my coping abilities.
9. If I am in trouble, I can think of a good solution.
10. I can handle whatever comes my way.

Mediator Variables

Trust
(Lewicki et al., 1998)
1. My current manager’s word is his/her bond.
2. I can use my current manager’s word as the basis for my decisions.
3. I can count on my current manager’s word.
4. My current manager can be counted on to come through when needed.
5. My current manager is careful to protect information that we have shared in confidence.
6. My current manager keeps me informed on things that concern me.
7. When I undertake any task, I know that I can count on my current manager for support.
8. I can count on my current manager to respond in a positive manner after receiving criticism from me.
9. My current manager is a “straight-shooter”.

Distrust
(Lewicki et al., 1998)
1. I try to protect myself and my interests from my current manager.
2. If my current manager thought he/she could get away with it, he or she would take advantage of me.
4. With my current manager, I look for hidden agendas when I see acts of kindness.
5. Whatever else happens, I expect my current manager to protect his/her own interests.
6. I see my current manager more as a competitor and an opponent.
7. I don’t expect my current manager to make sacrifices for me.
8. The more I know about my current manager’s motives, the more cautious I become

Transformational Management Style
(Den Hartog et al., 1997)
1. My current manager listens to my concerns.
2. My current manager serves as a role model for me.
3. My current manager makes me back up my opinions with good reasoning.
5. My current manager instils pride in being associated with him/her.
6. My current manager engages in words and deeds which enhance his/her image of competence.
7. My current manager is someone I am ready to trust to overcome any obstacle.
8. My current manager is someone I have complete confidence in.
9. My current manager is a symbol of success and accomplishment, in my mind.
10. My current manager displays extraordinary talent and competence in whatever he/she decides.

Transactional Management Style
Multifactor Leadership Questionnaire (MLQ) developed by Bass and Avolio (1989) and reported in a modified form by Den Hartog, Van Muijen and Koopman (1997).
1. My current manager works out agreements with me on what I will receive if I do what needs to be done.
2. My current manager is alert for failure to meet standards.
3. My current manager talks about special rewards for good work.
4. My current manager focuses attention on irrelevancies, mistakes, exceptions and deviations from what is expected of me.
5. My current manager monitors performance for errors needing correcting.
6. My current manager tells me what to do to be rewarded for my efforts.
7. My current manager points out what I will receive if I do what is required.
8. My current manager keeps careful track of mistakes.

Single Item Questions
(Developed for thesis)
- Preference for a Share of profits
• Preference for Shares or Share Options
• Preference for Cash Bonuses
• Preference for Recognition Awards
• Preference for Promotion Opportunities
• Preference for Non-cash rewards

Demographic Variables

• Age
• Gender
• Education
• Your Education (please circle one)
  • School Certificate or equivalent
  • Higher School Certificate or equivalent
  • TAFE Certificate or equivalent
  • University Degree
• Employment Status
  • Full-time
  • Part-time
• Casual / On-call
• Industry
• Primary Industry
• Wholesale
• Retail
• Manufacturing/Construction/Engineering
• Tourism/Hospitality/Service industry
• Financial services
• Media/Advertising
• IT&T
• Other, please specify
• Work Category
  • Clerical/office work, e.g., bank worker, receptionist, bookkeeping
  • Technical/trades, e.g., builder, electrician, IT&T, manufacturing
  • Professional, e.g., accountant, engineer, medical worker
• Sales or marketing
• Other, please specify
• Management Level
• Staff member
• Supervisor
• Senior Manager
• Were you born in Australia?
• Are you a member of a union?