THE COMPETENCIES USED TO ASSESS THE EFFECTIVENESS OF NEW ZEALAND MANAGERS

A thesis presented in partial fulfilment of the requirements for the degree of Doctor of Philosophy in Psychology at Victoria University

> SHARON MARY RIPPIN 1995

ABSTRACT

Research on the competencies required by effective New Zealand managers is lacking. This thesis addressed this deficiency by identifying the competencies managers use to assess the effectiveness of managers across organisations and industries in New Zealand. The research was carried out in two parts. First, repertory grid interviews were conducted with 225 chief executives and senior managers from 75 organisations. They described the constructs that differentiated their effective and less effective senior managers. Six independent people categorised the interview constructs, which were incorporated in a questionnaire. In the second part of the study, 185 managers from two organisations rated a manager they regarded as effective on the constructs, as well as their overall effectiveness. The questionnaire analysis revealed a six-factor managerial effectiveness model. One main factor (Interpersonal Skills) contributed over 40% of the variance. The five other factors (Conscientious and Organised, Strategic Behaviour, Problem-Solving, Drive and Enthusiasm, and Honest Feedback) contributed between 1.6% and 6% of the variance. The factors were similar to non-New Zealand competency models and the frequently cited Big Five personality factors. The implications of these findings are discussed, as well as issues related to identifying and implementing competencies.

ACKNOWLEDGEMENTS

Help came from many quarters in completing this thesis. I am particularly grateful to Mike Smith for his practical advice and ability to lift the fog on many of the issues I wrestled with during this study. He has the annoying ability to reduce what, at the time, seem complex issues, to logical and simple concepts.

My work colleagues in the Organisational Psychology group deserve a special mention, in particular Dave George, for his wild enthusiasm and unfaltering support throughout the life of the study. Without his encouragement, this thesis would remained just a thread of an idea. I am grateful for the advice and friendship of Vivienne Bull, who always made time to listen and who never fails to make me laugh. Thanks also to Russell McMurray, for taking the time to discuss analysis issues, but more importantly for designing a progress chart with a movable mouse that helped me chart my progress through the interview stage of the study. I am also grateful to Trish Bolger and Neil Satherly, for the time they spent assisting me with the analysis. Thanks also to Sue Hiles for her continual assistance throughout the study.

The support from KPMG, my employer, has also been brilliant. Keith Hindle was one of the strongest advocates of my research and has been unfaltering in his support and concern. A big vote of thanks also goes to the people in KPMG I harangued, cajoled, and pleaded with to put me in contact with chief executives and senior managers. Thanks also to the library staff, in particular Julie Mills, who helped me locate many of my references.

Thanks also to my father, who followed through on all my requests for introductions to chief executives and senior managers. The largest bouquet would have to go to Perry. He was totally supportive of my endeavours throughout the life of the study, even during the times I was short-tempered and challenging to live with.

TABLE OF CONTENTS

ABSTRACT	i
ACKNOWLEDGEMENTS	iii
CHAPTER ONE: AN OVERVIEW	1
CHAPTER TWO: MAKING JUDGEMENTS	4
Performance Assessment	4
Relevant Personality and Social Psychology Theories: Implicit Personality	/
Theory, Personal Construct Theory, and Attributional Theory	8
Rating Processes Research	12
Behavioural Model of Perceiving and Making Judgements About	
Performance	13
Schema Model of Perceiving and Making Judgements About	
Performance	16
Cognitive Structures Used in Perception	20
Cognitive Errors	22
Availability and Salience Bias	23
Anchoring and Adjustment	25
Other Illusions	26
CHAPTER THREE: MANAGERIAL EFFECTIVENESS	32
The Criterion	32
Definition of Managerial Competencies	
Competency Formats	39
Competency Content	12

Threshold and Differentiating Competencies
Motive and Trait Competencies45
Self-Image and Social Role Competencies
Dynamic Competencies
Definition of the Term Manager
The Nature of Managerial Work50
Leaders and Managers52
Effective Managers
Managerial Effectiveness57
CHAPTER FOUR: METHODS USED TO DEVELOP MANAGERIAL
COMPETENCY MODELS
Observation
Work Diaries65
Interviews
Critical Incident Interviews67
Behavioural Event Interviews
Repertory Grid Interviews70
Questionnaires
Analysis of Competency Data
Sources of Job Data
CHAPTER FIVE: MANAGERIAL EFFECTIVENESS MODELS81
Management Competency Models
Ohio State Leadership Model
Mintzberg's Management Model
Kotter's Managerial Skills
The American Management Association (AMA) Competencies
Management Charter Initiative Competencies
Whetten and Cameron's (1991) Model93
Luthans, Hodgetts, and Rosenkrantz's (1988) Management Model

Yukl, Wall, and Lepsinger's (1990) Management Model98
The Spencer and Spencer (1993) Management Models 101
New Zealand Management Competency Models
Comparison of Managerial Competency Models
CHAPTER SIX: THE DERIVATION OF THE COMPETENCIES
Study One: Repertory Grid Interviews
Subjects111
Selection Criteria and Rationale for the Selection of Subjects
Rationale for the Selection of Organisations
Strategies Used to Identify and Obtain the Cooperation of Organisations 114
Repertory Grid Interview
Rationale for the Selection of the Repertory Grid Interview 115
Repertory Grid Interview Instructions
Introduction117
Labelling of Cards
Generating Descriptions of Effective and Less Effective Behaviour 118
Rating Performance on Identified Constructs
Ratings of Construct Importance and Overall Effectiveness
Pilot Testing and Revision of the Interview Procedure
Data Analysis and Results
Interview Constructs
Analysis of Rating Scale Distribution
Analysis of the Constructs That Predict a Manager's Overall
Effectiveness
Discussion of Study One

CHAPTER SEVEN: THE DEVELOPMENT OF A MANAGEMENT
COMPETENCY MODEL
Study Two: The Managerial Effectiveness Questionnaire
Selection Criteria and Rationale for the Selection of Questionnaire
Participants and Organisations
Subjects
Questionnaire Design and Implementation
Questionnaire Rating Scale141
Pilot Testing and Revision of the Questionnaire
Questionnaire Administration
Data Analysis and Results
Factor Analysis145
The Factors That Were Extracted
Interpreting the Factors
Multiple Regression
Discussion of Study Two
A Comparison of the Main Factors With the Big Five Personality Factors 160
Comparison of the Competency Model Developed in This Study With
Non-New Zealand Competency Models
Comparison of the Competency Model Developed in This Study With
New Zealand Competency Models163
The Importance Placed on the Various Managerial Factors
CHAPTER EIGHT: OBSERVATIONS FROM THE REPERTORY GRID
INTERVIEWS
The Elicitation of the Competencies
A Comparison of the Competencies Identified in the Interviews With the
Competencies Developed for the Subject's Organisation
Identification and Discussion About the Organisations' Ineffective
Managers172
The Limited Number of Female Subjects

Comments on the Interview Process and Research Study	
CHAPTER NINE: DISCUSSION	
Summary of Research Findings	
The Identification of Competencies in the Current New Zealand	
Environment	
The Development of New Zealand Management Competencies	
The Relationship Between Management and Psychology Disciplines in	
the Identification and Implementation of Competencies	
Issues Related to the Identification of Management Competencies	
Issues Related to the Implementation of Management Competencies 188	
Limitations of the Research and Possibilities for Future Research	
DEFEDENCE LIGT	
REFERENCE LIST	

APPENDICES

Appendix 1:	Description of the Study That was Sent to Partners to Assist	
	Them Persuade People to Participate in the Study22	28
Appendix 2:	Repertory Grid Form23	30
Appendix 3:	Repertory Grid Interview Construct Categories23	35
Appendix 4:	The 20 Most Frequently Mentioned Constructs in Each of the Eight Industries	18
Appendix 5:	Breakdown of Repertory Grid Interview Constructs That Were Used in the Questionnaire	53
Appendix 6:	Letter from the Commissioner of Police Asking Targeted Staff to Complete the Questionnaire	77
Appendix 7:	Study Two's Questionnaire (KPMG's version)	79
Appendix 8:	The Loadings of Questionnaire Items on the First Six Factors)2
Appendix 9:	The Factors That Contributed one Percent or More of the Variance for the Police and KPMG Data)9
Appendix 10	The Loadings of Questionnaire Items on the Police and KPMG's First Five Factors	12

LIST OF TABLES

Table 3.1:	Grid Relating Competency Inputs and Outputs42
<u>Table 4.1:</u>	The Four Steps Involved in the Administration and Scoring of the Repertory Grid (Dunn and Ginsberg, 1986)
<u>Table 5.1:</u>	AMA Management Competency Model 87
<u>Table 5.2:</u>	MCI Middle Management Competencies
<u>Table 5.3:</u>	Example of a MCI Middle Management Competency91
<u>Table 5.4:</u>	Whetten and Cameron's (1991) Model94
<u>Table 5.5:</u>	Luthans, Hodgetts, and Rosenkrantz's (1998) Management Model
<u>Table 5.6:</u>	Comparison of the Contributions of Each of the Four
	Managerial Activities to Managerial Effectiveness and
	Success
<u>Table 5.7:</u>	Yukl, Wall, and Lepsinger's (1990) Management Model99
	Spencer & Spencer's (1993) Generic Management CompetencyModel
Table 5.9:	Dulewicz's (1989) Management Competencies

Table 6.1:	Organisations Sampled and Number of People Interviewed in
	the Eight Industry Groups113
Table 6.2:	Rating Scale Characteristics
<u>Table 6.3:</u>	Frequency Of Constructs That Were Mentioned by Subjects 127
<u>Table 6.4:</u>	Multiple Regression Summary Table130
<u>Table 7.1:</u>	The Components of Construct (1.01) That Were Included in the Questionnaire
<u>Table 7.2:</u>	Example of a Positive and Negative Construct140
<u>Table 7.3:</u>	Constructs That Were Deleted From the Police Questionnaire 143
<u>Table 7.4:</u>	The 49 Factors That had an Eigenvalue Greater Than one 148
<u>Table 7.5:</u>	Factor One's 20 Highest Loading Questionnaire Items
<u>Table 7.6:</u>	Factor Two's 20 Highest Loading Questionnaire Items
<u>Table 7.7:</u>	Factor Three's 20 Highest Loading Questionnaire Items 152
<u>Table 7.8:</u>	Factor Four's 10 Highest Loading Questionnaire Items 154
<u>Table 7.9:</u>	Factor Five's 10 Highest Loading Questionnaire Items 154
Table 7.10	: Factor Six, Seven, Eight, Nine, Ten, Eleven, and Twelve's Highest Loading Questionnaire Items

DeNisi, Cafferty, & Meglino's (1984) Model of Performance Rating
Campbell, Dunnette, Lawler, & Weick's (1970) Schematic Portrayal of the Determiners of Managerial Behaviour
Example Repertory Grid Form119
Repertory Grid Importance Scale
Repertory Grid Overall Effectiveness Scale 122
Questionnaire Rating Scale141
Managerial Effectiveness Scale

LIST OF FIGURES

CHAPTER ONE AN OVERVIEW

The competencies required by effective managers have been the focus of much research. Models of management competencies has been extensively documented in other countries, notably the United States of America and United Kingdom, but comparable New Zealand research is lacking. The purpose of this study was to identify the competencies New Zealand managers use to assess the effectiveness of their senior managers.

Chapter Two discusses current assessment issues, and the personality and social psychology theories that contribute to our understanding of how decisions are made. Two rating process models are outlined, along with the cognitive structures that assist in simplifying and organising the information we encounter when judging performance. The chapter concludes by examining the cognitive errors and illusions that occur during the evaluation process.

The concept of managerial effectiveness is introduced in Chapter Three. This chapter defines and discusses criterion-related issues, and its relevance to managerial effectiveness. The term "competencies", which has been used in the management literature to describe the criterion, is introduced, and examples of the many, and often confusing, forms it can take are provided. The terms "manager" and "leader" are examined along with the nature of managerial work. This is followed by a discussion of the subjective and objective measures that are used to describe managerial effectiveness.

A wide range of job analysis methods has been used to identify competencies. Chapter Four explores the issues related to competency identification techniques. The advantages and disadvantages associated with commonly used job analysis methods are discussed. Approaches that are used to analyse and group competency information, and the main sources of job information data, are also examined.

The major competency models that have been proposed in the psychological and management literature are discussed in Chapter Five. Many of the models contain similar competencies, although different words have been used to describe the same competency. A description of the limited New Zealand research on management competency models highlighted the need to identify the competencies required by effective managers. To date, no studies have comprehensively identified the criteria managers use to assess the effectiveness of their managers. The current study addressed this research need. It examined the relationship between the competencies that are used to assess managers and determined the importance people placed on the various factors. It also provided an opportunity to compare a New Zealand model of managerial effectiveness with some overseas models.

The two stages of the study are described and discussed in Chapters Six and Seven. Chapter Six outlines the repertory grid interview approach that was used to collect the criteria chief executives and senior managers use to assess the effectiveness of their senior managers. A total of 225 chief executives and senior managers from 75 organisations were interviewed. They described the behaviours and characteristics that differentiated their effective and less effective senior managers.

In the second study, reported in Chapter Seven, the managerial behaviours and characteristics identified in the first study were incorporated in a questionnaire. Questionnaire respondents rated a manager they regarded

as effective on the various constructs and rated his or her overall effectiveness. The questionnaire was completed by managers in two organisations. The analysis identified the relationship between the competencies and determined the importance people place on the various managerial factors. The results were compared with other management competency models as well as the frequently cited "Big Five" personality factors.

Chapter Eight is a discussion of the observations that were made during the interviews with the chief executives and senior managers in the first study. It provides additional insight into the problems and issues managers encounter when assessing managers.

Chapter Nine is a general discussion about the issues surrounding the identification of competencies and the development of generic New Zealand management competencies. The lack of shared knowledge between the two disciplines, psychology and management, who are interested in the competency area is highlighted. Observations regarding the implementation and identification of competencies are made, as well as suggestions for future research.

CHAPTER TWO MAKING JUDGEMENTS

In the course of our interactions we constantly make judgements about people. While the nature of these judgements can cover any aspect of human functioning, one of the most important concerns effectiveness in the work place. These judgements are made in an informal way, often unconsciously, on a day to day basis, and formally when staff performance is evaluated (Jones, Steffy, and Bray, 1991; Landy, 1989).

Performance Assessment

Throughout history psychologists have adopted a strong interest in the process of measuring and making judgements about people's performance (Brodt, 1990). Historically, researchers' attentions have focused on the appraisal device, or form, in pursuit of a seemingly elusive "ideal instrument" or technique. When problems were found in the quality of ratings (e.g., halo effect), the tendency was to fault the instrument. Researchers experimented with various methods in an attempt to develop a "better" scale. The ongoing process created what has been described as "a quagmire of methodology" (Landy, Zedeck, and Cleveland, 1983), which dominated performance appraisal research from 1930 to 1970 (DeNisi and Williams, 1988). At that time it focused on the measurement scale or technique (Latham and Wexley, 1994); hence, studies of appraisal were studies of psychometrics and scaling.

In the early 1980s researchers' interests changed dramatically, as a result of the cognitive revolution and limitations associated with instrument-centred

approaches to performance evaluation (Austin and Villanova, 1992; Feldman, 1986). Landy and Farr (1980), in their widely cited review of performance ratings, shifted the focus of performance appraisal research from scales and rater training to understanding the rater as a decision-maker who processes social cues (Ilgen, Barnes-Farrell, and McKellin, 1993). Landy and Farr viewed the performance appraisal context as a specific instance of person perception, where implicit personality views were thought to play a large role. Many cognitive models of the rater have been proposed (Borman, 1978; Landy and Farr, 1980, 1983; Feldman, 1981; Ilgen and Feldman, 1983; Motowidlo, 1986) in an attempt to understand the dynamic psychological process of evaluation. The research has attempted to "get beyond" manipulating rating formats and other psychometric concerns with ratings, to study in detail the entire sequence that people follow in making performance judgements and decisions (Borman, 1991). The focus has moved from examining the instrument to looking at the rater's cognitive processes.

Many personality and social theories, such as personal construct theory and implicit personality theory, are now accepted as an integral part of the process of performance appraisal (Borman, 1991). Industrial and organisational psychologists and cognitive social psychologists are beginning to share their knowledge about the process of person perception and interpersonal evaluation. The individual decision-maker's cognitive processes have become a focus of attention, which has set the stage for recent psychological research on the role of heuristics, or "rules of thumb", in judgement and decision-making.

Research on decision-making has experienced a revolution, or more aptly, a counter-revolution, that emphasises inferential shortcomings and the vagaries of human judgement and decision-making (Brodt, 1990; Wyer and Srull, 1986). When we better understand how people process and evaluate

information, we can begin to look at improving human resource management processes.

Over the last 20 years industrial and organisational psychology has placed a strong emphasis on understanding how people make judgements and decisions in the work environment (Austin and Villanova, 1992; Borman, 1991). Researchers have acknowledged the comprehensive role of cognitive activity in work-related behaviour (DeNisi, Cafferty, and Meglino, 1984; DeNisi and Williams, 1988). The renewed interest in cognitive factors in the work environment has had a profound effect on research in human resource management by emphasising decision-making (Motowidlo, 1986). For example, personnel selection, traditionally a procedural and administrative task, has evolved into a highly complex, decision-theoretic discipline focusing on judgement, prediction, choice, evaluation, and assessment (Zedeck and Cascio, 1984).

Research that focuses on how people make decisions has spanned many work environments. The range of research is impressive. It includes research on clinical judgement and medical decision-making (Christensen-Szalanski and Northcraft, 1985; Sisson, Schoomaker, and Ross, 1988), risk perception and social policy decision-making (Slovic, Fischhoff, and Lichtenstein, 1982; Thaler, 1988), legal judgement and decision-making (Saks and Hastie, 1988; Saks and Kidd, 1988; Terpstra and Baker, 1992), banking (Guttentag and Herring, 1984; Rodgers and Housel, 1987), strategic planning (Barnes, 1984; Schwenk, 1988) and a large amount of research on auditing and accounting decision-making (Bailey, 1986; Beach and Frederickson, 1989; Buchman, 1985; Shanteau, 1989).

One of the interesting areas of this research is the assessment of factors that influence judicial decisions. Studies of this kind generally use a sample of legal cases for which judicial opinions are available. The judicial opinions

are content-analysed and coded using a limited set of factors. They are then typically regressed on the set of factor values produced by the content analysis and coding process. The resulting regression coefficients are indicators of the influence of the respective factors in the decision process. A number of these studies have shown that judges lack insight into the factors that influence their decisions, and they tend to overestimate the number of factors they consider when sentencing people (Roehling, 1993).

Decision-making is also of immense interest to organisations from the point of view of understanding how people make decisions about the effectiveness of their work colleagues, particularly their managers. While there have been numerous books written about the skills required by effective managers, very few studies have been conducted on how managers make decisions about the effectiveness of their managers (Lord and Maher, 1989). This might include the question of how much weight or importance people attach to the various managerial skills when deciding about their manager's effectiveness. There seems to be a largely unchallenged assumption that once the skills required by a manager are defined, people religiously use these skills to make judgements about managerial effectiveness. Once we can more fully understand how people make decisions we are then better able to intervene to reduce rater errors, biases, and inaccuracies (Hedge and Kavanagh, 1988).

To assist in understanding how people make decisions about the effectiveness of people, we need to examine some of the fundamental issues about how we process information and judge performance. The remainder of this chapter will overview some of the personality theories that have contributed to understanding how we make decisions, discuss two of the main models that have been developed to explain the rating process, and overview some of the cognitive illusions that occur when people are evaluated.

Relevant Personality and Social Psychology Theories: Implicit Personality Theory, Personal Construct Theory, and Attributional Theory

Understanding how people perceive information has been useful in contributing to the understanding of how they make judgements about people's performance. The contribution of personality and social psychology theories has started to be integrated into the performance judgement process (Borman, 1991). This has resulted in the realisation that focusing on the scales used in an appraisal tool or its format will not fully explain the performance judgement process. Implicit Personality Theory (IPT), Personal Construct Theory (PCT), and Attribution Theory have provided alternative frameworks from which to view the evaluation of performance. They help explain how raters simplify and organise the complex information they encounter. These theories need to be integrated when conceptualising and studying the performance rating process (Feldman, 1981; Ilgen and Feldman, 1983).

The essence of implicit personality theory is the idea that the perceiver, without realising it, has a theory about what other people are like and that this theory influences the judgements he or she makes about them (Baldwin, 1992; Schneider, 1973). This may be shown by some people having a rather optimistic view of life and judging people as being high in honesty, sincerity, and responsibility, compared with how other people may judge them. Other biases are evident when a person perceives that certain personality characteristics are always found together. For example, friendliness is perceived by some people as signalling intelligence. A person with such a bias, who perceives a person as friendly, may also perceive him or her as intelligent, even though there is no evidence of the link between these characteristics.

Studies of implicit personality theory have demonstrated that people's implicit schemata or theories lead them to notice some types of information rather than others, and to interpret ambiguous or incomplete information in a way that is consistent with their expectations. These schemata also lead perceivers to preferentially recall information that is consistent with, or highly relevant to, their view of the world (Baldwin, 1992). For example, in one study subjects read lists of adjectives that described certain types of people (e.g., extroverts) and then later completed a recognition test. Subjects falsely recognised words that were not on the original list. The words they falsely recognised were highly consistent with the category of person that was described. This result demonstrated the organising influence of people's implicit schemata (Cantor and Mischel, 1977).

Personal Construct Theory explains how we organise and simplify information (Adams-Weber, 1979; Kelly, 1955). Kelly (1955) observed that individuals develop personal construct systems to judge events (or the activities of other people) and to make predictions about future events. These construct systems operate as interpersonal filters which influence observations and judgements about other people. They provide frames of reference or sets that make receivers look for selected kinds of interpersonal information and interpret this information according to their own constructs (Duck, 1982).

The model of man (sic) which Kelly proposes in Personal Construct Theory is that of "man as a scientist". This means that individuals try to understand, to make sense of, and to predict the world they inhabit. Individuals do this by identifying recurrent themes in their experiences of the world, so that the events they encounter are seen in relation to similar events. Individuals develop personal construct systems to help them construe the people, objects, and events they encounter in their life experiences. Kelly (1955) defined a construct as a way in which two things are alike and thereby

different from a third or more things. It is the personal construct system that guides individuals in their attempts to anticipate and understand future life events (Bannister and Fransella, 1986). Personal constructs are very similar to schemata, which in turn are synonymous with categories: they all refer to reference points used by raters to help them make judgements about people (Cantor and Mischel, 1977; Werner, 1994; Wyer and Srull, 1986).

The social cognition literature (e.g., Ostrom, Pryor, and Simpson, 1981; Wyer and Srull, 1986) is compelling in arguing for the existence of these knowledge structures, schemata, implicit personality theories, or personal constructs. However, the question might be asked, "How do these categories function in the performance evaluation setting?". How can these heuristic notions discussed in the literature be put into practice to determine more clearly the importance of these notions for influencing performance judgements at work?

One possibility is to consider what might be referred to as "folk theories" of job performance (Borman, 1983). Folk theories are performance constructs used by people familiar with a job to describe its performance requirements and to differentiate between effective and ineffective performance. An example of this would be a sales manager reporting that a critical factor to successful performance of sales people is "having a high level of resilience, being able to take the knocks, and bounce back after encountering a setback". These firm opinions about job performance requirements, or folk theories, may be examples of categories or schemata that influence the way an organisation's members view and interpret individual work behaviour. It is also likely that a person's categories or schemata could affect the evaluations of their subordinates, peers and superiors.

The personal construct domain shows schemata significantly affect performance evaluation, although the exact nature of this impact is unclear. For example, do raters with different schemata regarding the performance requirements for a job tend to disagree in their performance ratings? Also, are these categories and their structure stable over time and in different work contexts? Are categories difficult to change? Can raters be trained to rate people against "valid" categories from a job analysis?

Attribution theory is also relevant to the performance rating process.

Attribution refers to observers or raters assigning causes to behaviour, often erroneously (Kelley and Michela, 1989). Specifically, the fundamental attribution error (Ross, 1977) occurs when individuals interpret their own behaviour as being caused primarily by situational factors, yet interpret the behaviour of others as influenced by their personal characteristics, or internal dispositional factors. This effect has been demonstrated across a range of settings (Kelley and Michela, 1989).

Results from attribution research most relevant to performance ratings are, first, that consistent behaviour (performance) is more likely to be attributed to dispositional factors than is inconsistent behaviour (Frieze and Weiner, 1971). Second, and related to this finding, unexpected performance outcomes are attributed more to chance than to ability on the part of the ratee (Zuckerman, 1979). Third, observing behaviour consistent with what is expected tends to be interpreted as dispositionally caused, whereas unexpected behaviour is thought to be more situationally determined.

Two studies that demonstrate the usefulness of attribution theory for understanding performance ratings are, first, Deaux and Emswiller's (1974) study, in which they found that men's successful performance is more likely to be attributed to their own doing than to chance, while the opposite pattern of attribution is evident for women. The second study, by Scott and Hamner

(1975), required raters to evaluate the performance of videotaped actors exhibiting mean levels of performance, but with some showing ascending (i.e., improving) levels of performance and others descending levels. The actors who showed ascending levels were rated relatively high on motivation and effort and lower on ability as compared with their descending level counterparts.

Attribution theory raises the question of what factors raters use when making performance judgements and how those factors influence ratings. For example, when raters attribute poor performance to situational causes, do they give "extra credit", providing higher ratings than warranted on the basis of actual effectiveness, thus allowing for these situational influences? Attribution theory provides some alternative ways of thinking about and studying the performance rating process.

Rating Processes Research

The research on rating processes has also contributed to identifying how people perceive and make judgements about performance. It provides a framework for assisting in the elimination of rating errors, biases, and inaccuracies.

Appraising performance from the appraiser's perspective is construed as a process of cognitively processing information in order to make judgements (Ilgen, Barnes-Farrell, and McKellin, 1993). Three critical sets of operations have been identified. These are: the acquisition of information about the people being evaluated, the organisation and storage of this information in memory, and retrieval and integration of the information so a judgement can be made (DeNisi, Cafferty, and Meglino, 1984; Feldman, 1981).

Two kinds of rating process cognitive models, that place slightly different emphases on the three stages, have emerged in the performance rating literature (Borman, 1991). The first model depicts the rating process as a sequence that describes the observation, encoding, and storage of information, recall of information and the judgement steps (DeNisi, Cafferty, and Meglino, 1984; Landy and Farr, 1980). The second model is similar but emphasises and elaborates on the encoding step of the rating process. It considers, in some depth, the categorisation process that occurs during the encoding step (Feldman, 1981; Ilgen and Feldman, 1983; Lord, 1985). The principles of the two models are discussed below.

Behavioural Model of Perceiving and Making Judgements About Performance

This model has been called a data-driven approach (Abelson, 1981), a bottom-up approach (Fiske and Taylor, 1984), and a behaviour model (Borman, 1977, 1978) of human judgement. The model developed by DeNisi et al. (1984) proposes that raters must first observe the behaviour of the ratee, then form a cognitive representation of that behaviour, store the representation in memory, retrieve the information needed for the evaluation, reconsider and integrate the retrieved information with present information and, finally, assign the formal evaluation.

This model depicts the judgement process as an objective process by which we accumulate many specific pieces of factual information, then integrate this information in a logical and systematic way to form accurate judgements about people (DeNisi et al., 1984; Thornton, 1992). The model assumes we are capable of attending to details of people's behaviour, storing memories of specific events, and forming objective judgements based on what actually

takes place. The rating sequence, along with factors hypothesised to influence that process, is provided in Figure 2.1.

The DeNisi et al. (1984) model is detailed in specifying the cognitive steps that take place during the rating process (see Figure 2.1). Performance information is sought, coded, and installed first in "individual memory bins" and then in longer term memory. Before performance is evaluated, the rater makes judgements about possible external influences on the performance and how typical this performance is of the ratee. DeNisi et al. (1984) emphasise that the rater is an active seeker of performance information; they also note the central importance of memory in the rating process.

While this model views the perceiver as an objective receiver and processor of information, it is recognised that different raters observing the same person may observe, encode, store, and recall different information (Tsui and Ohlott, 1988). Potential sources of error are rampant (Borman, 1991). These include inadequate sampling of the job behaviour domain, lack of knowledge or cooperation by the raters, or changes in the job environment. It is recognised that the distortion of information may occur at any stage of the perceptual or memory processes (Cantor and Mischel, 1977)

The behaviour model indicates that observers are able to observe and remember specific behaviours (Hintzman, 1986,1988). Research has shown that when people observe others they can in fact remember most of the social interaction that takes place (Hastie and Kumar, 1979; Locksley, Borgida, Brekke, and Hepburn, 1980). However, it is acknowledged by most researchers that it is unlikely that humans are able to perceive and store in long-term memory all the stimuli they encounter (Thornton, 1992).

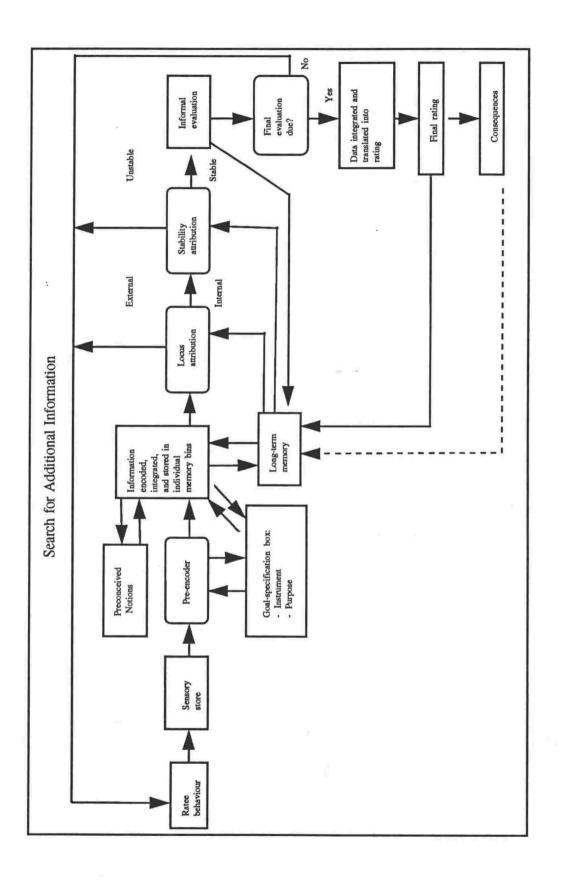


Figure 2.1: De Nisi, Cafferty, and Meglino (1984) Model of Performing Rating

One factor that determines what behaviours we observe and record is the purpose of the observation (Higgins and Bargh, 1987). In most everyday social interactions, individuals need to form only general impressions of other people, so they tend to extract and retain overall impressions, a fact which supports the schema theory. However, when people are told that the purpose of the observation is to observe and note in detail what they observe, as in assessment centres, they can in fact do so (Alba and Hasher, 1983).

Schema Model of Perceiving and Making Judgements About Performance

This model is described as a schema-driven approach (Fiske and Taylor, 1984). It has also been called a top-down approach and a cognitive categorisation model (Nisbett and Ross, 1980). These terms convey the idea that when we think about people's behaviour we are influenced by our prior perceptions, memory, and inferences about these people; that we fail to see objectively many detailed behaviours that take place; and that our memory consists largely of general impressions and broad evaluations of people.

This model emphasises and elaborates on the encoding step in the previous model and considers, in some depth, how information is categorised and processed (Feldman, 1981; Ilgen and Feldman, 1983; Lord, 1985). This approach states that we have limited capacities to attend to the vast array of environmental stimuli that bombards us, and therefore we are selective in the events we attend to and have flawed capacities to remember prior events (Alba and Hasher, 1983; Thornton, 1992).

The Feldman (1981, 1986) and Ilgen and Feldman (1983) models contain the cognitive-based information processing sequence that was described previously in the behavioural model, with two additional features. First, they elaborate considerably on the categorisation process, that part of the process model where encoding takes place. Confronted with the barrage of performance-related information about ratees, the rater simplifies the information by categorising it into dimensions that represent, in relatively simple form, the complexity of the "raw" behaviour observed. Categories are selected for a ratee behaviour via a matching process between features of the behaviour (e.g., works long hours) and the category (e.g., hardworking). When work-related information about the ratee is to be recorded, often the category is brought up rather than the specific behaviour (Lord and Maher, 1989).

The classification schemes we use are devices to help us simplify our observations and may not be meaningful categories. The categories we use, the associations we make among specific behaviours within categories, and the associations we make among categories may be artificially created by the implicit personality theories that we hold about people (Cooper, 1981). If a person believes, for example, that people who speak fluently are intelligent, then, according to schema theory, these systems of beliefs may be artificially created and not based on real behaviour.

A second difference between the behavioural and schema model is that automatic and controlled attentional processes are distinguished. When the patterns of ratee behaviour conform with previous impressions, then the behaviour is "automatically" categorised without much conscious effort. However, when an unexpected or otherwise noteworthy behaviour is observed, more active categorising, including changing categories for a ratee (e.g., from "conscientious" to "careless at times"), is likely to occur.

Schema-driven theory also states that memories are predominantly composed of abstract representations or interpretations of events that have been witnessed (Cooper, 1981; Fiske and Taylor, 1984). This implies that short-term memory may consist of accurate details whereas long-term memory consists largely of general categories lacking in detail (Wyer and Srull, 1986). Furthermore, any detail transferred to long-term memory remains there only for a limited period of time. Decay takes place, and this decay is selective. According to this theory, we tend to retain those bits of information that are consistent with the general impressions we hold.

As mentioned earlier, categorising performance-related behaviour simplifies a large amount of performance information that is observed. Research in cognitive psychology has confirmed the heuristic usefulness of some kinds of knowledge categories or structures. These categories have been used to explain social classifications in performance appraisal (Borman, 1987; Nathan and Lord, 1983), leadership perceptions (Lord, Foti, and De Vader, 1984), threat versus opportunity labels in strategic decision-making (Dutton and Jackson, 1987), organisational culture (Harris, 1989), goal-related cognitions (Gioia and Poole, 1984; Lord and Kernan, 1987), and framing effects in decision-making (Beach, 1990). These categories are referred to by many different names, with minor variations in meaning, such as schemata, prototypes, stereotypes or scripts (Lord and Maher, 1991).

As defined earlier, schemata are virtually synonymous with categories, both referring to reference concepts used by raters to help make judgements about people. Prototypes highlight modal or typical features of a category (e.g., Hastie, 1981) and can be thought of as good examples of schemata. An example of a prototype, is "Joe is a perfect example of what I think of as sociable". Stereotypes are similar to prototypes but refer to groups of people rather than individuals (Hamilton and Gifford, 1976). Stereotypes have been defined as shared, consensual beliefs about a group (Bar-Tal and

Kruglanski, 1992). Attributes are assigned to a person solely on the basis of the class or category to which they belong. In addition, stereotypes tend to carry a significant affective component, usually negative. Finally, scripts of events or event sequences are what is remembered as being representative of a person's actions (Abelson, 1981). They are often abstracted versions of actual events, with gaps filled in to create a coherent story. In filling these gaps, actions and other made-up parts of the story are included to be consistent with what is remembered about the events sequence relating to the person being evaluated.

According to schema theory, our selective perception operates in a predictable way, we tend to under-sample relevant observations (Cooper, 1981; Major, 1980); that is, we make relatively few observations that are relevant to the judgements we must make. In addition, our prior knowledge of an individual influences our subsequent observations. According to this view, the observer has a difficult time withholding judgement and may make judgements based on little relevant information, instead of taking into account the abundant information that is usually available. Basically, schemata and associated hypothesised knowledge structures are used to reduce the complexity in social perception. They also result in specific behavioural information not being retained, which invariably results in errors and biases in perception.

It is clear that there are two well developed points of view about how we perceive information and how we make judgements: the schema-driven and behaviour-driven based theories. There is theoretical and research support for each theory. The social judgement research provides some useful guidelines on when each of the two approaches is used. If people are simply forming general impressions of others, then schemata are more likely to affect observations, memory, and judgements (Fiske and Taylor, 1984). On the other hand, if people are told to observe details, they can and do

perceive and retain a vast amount of specific information (Sherman, Judd, and Park, 1989). If observers must rely on memory, implicit personality theories may come to mind, and artificially high relationships among the dimensions may result (Cooper, 1981). Nathan and Lord (1983) have shown that if behaviours fit into clear cognitive dimensions, observers are able to put observations directly into long term memory, but if observers do not have a clear understanding of the categories, they will not recall real behaviours and may in fact reconstruct events to fit the general schemata they hold (Alba and Hasher, 1983).

Thornton (1992) states that neither of the approaches explains what happens in all instances of interpersonal judgement. He states that instead of trying to determine which theory is the most accurate, we should try to understand when each process occurs, what conditions foster behaviour-based or schema-based evaluation, and what can be learned to foster better assessment. In addition, there has also been a call to focus on why raters often distort ratings (i.e., why some people rate people favourably, when they regard their performance as poor). These motivational variables are often not considered in the cognitive processing models (Dipboye, 1985; Fried, Bellamy, and Tiegs, 1992; Schmitt and Klimoski, 1990).

Cognitive Structures Used in Perception

Recent perception research has focused primarily on the structures people use to perceive information. Personality traits are viewed as one of the many structures people use to make sense of other people (Fiske, 1993).

The most popular and enduring taxonomy of personality descriptors is the Five Factor model (Digman, 1990). Generally, researchers agree that there are five robust factors of personality that can serve as a meaningful

taxonomy for classifying personality attributes (Digman, 1990; Mount, Barrick, and Strauss, 1994). People tend to assess and describe people in relation to this five-factor model, because they believe these five traits largely reflect people's goals and predict their behaviour.

This taxonomy has consistently emerged in longitudinal studies from different sources (e.g., ratings by self, spouse, acquaintances, and friends); with numerous personality inventories and theoretical systems; and in different age, sex, race, and language groups (Digman, 1990; Mount, Barrick, and Strauss, 1994). Although the names for these factors differ across researchers, the following labels and prototypical characteristics are representative: extraversion (sociable, talkative, assertive, ambitious, and active), agreeableness (good-natured, cooperative, and trusting), conscientious (responsible, dependable, able to plan, organised, persistent, and achievement-oriented), emotional stability (calm, secure and not nervous), and openness to experience (imaginative, artistically sensitive, and intellectual) (Mount, Barrick, and Strauss, 1994).

People also use stereotypes in much the same way as personality traits to distinguish among people. Compared with traits, stereotypes have richer associations, more visual features, more distinctive characteristics, and operate more efficiently (Anderson, Klatzky, and Murray, 1990). People's stereotypes are often well established and categorisation happens automatically (Fiske, 1993). Appearance is frequently used as a basis for stereotyping people.

One specific type of stereotyped appearance that has recently provoked considerable research, is the degree to which a person's face is babyish (Zebrowitz, 1990). Perceivers see baby-faced others (regardless of whether they are an infant or adult) as needing to be nurtured. Baby-faced adults are seen as submissive, naive, warm, innocent, and not shrewd. No doubt there

are some real benefits to possessing a "baby-face" for some occupations such as salesperson.

A third type of categorisation that has received attention in recent times is the use of stories to assist in making sense of events where the individual does not have ready categorisations (Brunner, 1991). People create brief stories in their head that allow them to make sense of puzzling or conflicting information. For example, stories could be fabricated to help understand why an A grade student who had a wide circle of friends and interests committed suicide.

There are clearly many cognitive errors that can interfere with our evaluations of people's performance. Integral to our understanding of the evaluation process is an understanding of the cognitive errors or illusions that occur when we make evaluative decisions.

Cognitive Errors

As mentioned earlier, we rely on simplifying strategies, or rules of thumb, when making decisions which often introduce a number of errors into the evaluation process (Bazerman, 1990). The simplifying strategies that we use to make decisions are called heuristics. They are standard rules that implicitly direct our judgement. They serve as a mechanism for coping with the complex environment surrounding our decisions. In general, heuristics can be useful in that they often provide people with a simple way of dealing with an abundance of complex information (Bazerman, 1990).

Northcraft, Neale, and Huber (1989) suggest there are three specific biases that are most relevant to evaluation decisions: availability, salience bias and anchoring, and adjustment. They state that other cognitive errors such as

hindsight, representativeness, base-rate fallacy, fundamental attribution error, false consensus, and halo also impact on evaluation decisions.

Availability and Salience bias

When we evaluate people's performance we recall instances of their past performance. People assess the frequency, probability, or likely causes of an event by the degree to which instances or occurrences of that event are readily available in memory (Tversky and Kahneman, 1973). Our ability to recall information is vulnerable to the availability bias (Downing, 1994). Often, managers rely on intuitive judgements about the frequency of certain types of performance to base their overall assessment on the ease with which instances come to mind.

Underlying this process is the assumption that available behaviour is frequent behaviour, and is therefore representative of an employee's overall performance (Brodt, 1990). If a person, for example, is asked to evaluate a performer and only instances of poor performance come to mind, they might conclude that poor performance is more frequent than superior performance and that the employee is an overall poor performer. Research on the availability heuristic suggests that samples of behaviour brought to mind are randomly selected, and the ease with which instances come to mind is not necessarily indicative of their relative frequency (Tversky and Kahneman, 1973).

There are a number of ways in which the availability heuristic might bias judgements. First, as Taylor and Thompson (1982) suggest, information that is salient and vivid captures a disproportionate amount of people's attention and may therefore bias judgement. Nisbett and Ross (1980) defined vivid as

"(a) emotionally interesting, (b) concrete and imagery-provoking, and (c) proximate in a sensory, temporal, or spatial way" (p. 45).

For instance, information about a female senior executive's performance might tend to be remembered more easily if she were the only female senior executive. Information about her performance would tend to be more salient because she would "stand out" amongst an all-male peer group. Often salient information may be given overdue emphasis (Nisbett and Ross, 1980). Three factors may underlie the relative ease of accessing vivid information from memory. First, valid information attracts attention so it is processed more fully than less memorable information. Second, vivid information often evokes a mental image that facilitates encoding retrieval of information from memory. Third, people often respond emotionally to vivid information.

Familiarity also influences how availably the information can be recalled. For instance, Tversky and Kahneman (1974) gave two groups of subjects lists of names that contained well-known celebrities. One group was given a list that included more famous men than women, and the other group was given a list that included more famous women than men. Both groups were asked to estimate the number of men and women included on the lists. Both groups overestimated the number of people in the gender category that included more famous people. Familiarity with the names had made the information more available, which influenced the frequency estimate.

Recency also influences the availability of information (Tversky and Kahneman, 1974). Recent instances are more available than instances that occurred in the past, even though a recent event may be highly atypical. Often managers recount what a subordinate did that morning, yesterday, and the day before, as an indicator of their performance. So a mediocre manager is likely to get a higher performance rating if she or he had recently

been responsible for completion of a successful project, because of the recency of the success.

Anchoring and Adjustment

When we make judgements about people we invariably start from a base point or anchor and then proceed through a series of adjustments as we receive more information until a final evaluation is reached (Brodt, 1990; Switzer and Sniezek, 1991). Hogarth (1988) proposes that this estimation is an ongoing process. He describes the process of person perception, for example, as one of incremental adjustments from an initial impression (possibly inaccurate) to a state of knowing the individual.

The initial value, or starting point, may be suggested from historical precedent, from the way in which a problem is presented, or from random information. Judgements progress incrementally through a series of tentative judgements or "best guesses" and, presumably, their adjustment process corrects any inaccuracies along the way. Errors can occur if there is an over-reliance on an arbitrary anchor, or reference point, or if there is an insufficient adjustment away from the initial value. When measuring performance, managers have a variety of potential anchors at their disposal (e.g., goals, group norms); but they tend to anchor their assessments on past performance (e.g., "How well did she do relative to last year?").

Neale, Huber, and Northcraft (1987) provide evidence of anchoring effects in performance appraisal and allocation of resources. They found that subordinates who had received accolades in the past were significantly more likely to continue to benefit in the future, compared with subordinates who had received lower assessments. In particular, subordinates who had previously received high ratings and who continued to receive positive

feedback, were rewarded larger pay increases, were high in the probabilities of promotion, and were less likely to be perceived as in need of training compared with their subordinates who had received lower past assessments. In this case the anchor was their previous past performance. Similarly, Goodman (1974) reported that independent of subordinate performance, managers who received raises tended to award larger raises to their subordinates than did managers with lower salaries. The manager's salary in this case may act as an anchor.

Other Illusions

Brodt (1990) states that the evaluation of performance is also vulnerable to five other cognitive illusions. They are hindsight, representativeness, base-rate fallacy, fundamental attribution error, false consensus, and halo error. Research suggests a "hindsight" illusion, or a "knew-it-all-along" effect can lead people to over-exaggerate what could have been anticipated when dealing with a problem (Wood, 1978). This effect refers to people's tendency to alter their perception of the inevitability of an event once they know the outcome of the event (Christensen-Szalanski and Willham, 1991). The view of what actually happened (e.g., a stock market crash) is seen by people as relatively more inevitable than before it happened (Fischhoff and Beyth, 1975).

Hindsight bias results in assessors being harsh when evaluating people's performance, particularly if performance is poor. People believe that it should be possible to anticipate events much more easily than is actually the case. This results in successful forecasting being given less credit than it deserves. Also, the mistakes which people make appear baffling and obvious in hindsight, because people cannot divorce themselves from the

outcome and understand what it was truly like for the person making the decisions, without the benefit of knowing the outcome.

In a typical hindsight study, subjects are presented with information about a chance event which has two or more possible outcomes. They are then informed about which outcome actually occurred and are asked to indicate the likelihood of that outcome occurring had they not been told what happened. This results in a hindsight probability estimate being determined. This is compared with a "foresight" probability estimate, which is calculated by giving another group of subjects the same information but not telling them the outcome. The greater the difference between the two probability estimates, the greater the effect of hindsight bias. When the hindsight bias is operating, events which have occurred retrospectively are seen as having been more likely to have occurred and events which did not occur are retrospectively seen as been less likely to have occurred (Christensen-Szalanski and Willham, 1991).

The representativeness heuristic allows a rater to assess an employee's performance quickly by evaluating the goodness of fit between the individual and a category prototype such as "a good performer" or "a bad performer". It is a cognitive shortcut that reduces a complex task of evaluation to a "simple goodness of fit" assessment. Managers use the representativeness heuristic on a regular basis. They predict a person's performance based on the category of persons that the focal individual represents for them in their past (Bazerman, 1990).

In some cases the use of the heuristic is a good first cut approximation, in other cases, it leads to discriminatory behaviour. Often individuals tend to rely on such strategies, even when this information is insufficient and better information exists with which to make an accurate judgement. More often representativeness leads to serious errors because of the inconsistency

between the logic of probability and the logic of representativeness. More research needs to be done on identifying salient categories that people use to judge effectiveness (Brodt, 1990).

Base rate fallacy occurs when people tend to under-use base rate information when making predictions, or information about the prior probability of an event. Conversely, people overemphasise specific, concrete, and anecdotal information, which is often less valid and reliable than base rate information (Hamill, Wilson, and Nisbett, 1980; Taylor, 1982).

This is demonstrated in Tversky's and Kahneman's (1973) study. They asked subjects to read a personality description and estimate the likelihood that the person was an engineer or a lawyer. For one group of subjects the individual was randomly drawn from a group of 70 engineers and 30 lawyers, and for another group the individual was drawn from a group of 30 engineers and 70 lawyers. Both groups were given identical personality descriptions for the individual in question. Since the two groups of subjects were given different base rates (prior odds), different estimates should have been obtained from these two groups, according to Bayes's rule. However, subjects from both groups gave the same probability estimates. Tversky and Kahneman concluded that the base rate information had been ignored because the subjects based their judgements on the representativeness of the personality description (i.e., whether the personality description sounded more "attorney-like" or "engineer-like").

Fundamental attribution error occurs when people attribute behaviour to a person's disposition and ignore powerful determinants of behaviour (Ross and Anderson, 1982). Ross (1977) argues that people rarely analyse situations as "intuitive scientists" who are in search of the true course of an action or event; rather people's investigations are biased, generally overlooking situation factors in favour of personality traits and dispositions.

For example, a general manager may conclude that the sales managers are less committed and motivated than the previous year because of a drop in the number of sales. The manager may be overlooking the three new competitors that have entered the market, and that all three were selling similar products. The general manager's erroneous assumption about the sales managers' performance is likely to be an example of a fundamental attribution error. Fundamental attribution error has been shown to have a negative impact on the quality of assessments in work situations (Borman, 1991).

Another error is the tendency to perceive "false consensus". That is, an individual's own behaviour and responses to situations are considered typical and appropriate, while other alternatives are considered odd and inappropriate (Ross and Anderson, 1982). False consensus bias presents potentially the gloomiest forecast for the future of fair and equitable performance evaluation. False consensus implies that the manager believes that his or her choices in behaviour are the norm. As a result of false consensus, a capable subordinate who excels may be robbed of the rewards for successful performance. A subordinate may, for example, excel and his manager believes she would have behaved similarly to her subordinate. given the same situation. The manager would reframe the subordinate's behaviour as commonplace and treat it as such, by not recognising the subordinate's behaviour. This may lead the subordinate to devalue his accomplishments and reconstrue the event as being unexceptional. In this way false consensus can undervalue excellent performance in the work place.

The halo effect (Thorndike, 1920) is another error that can interfere with the rating process. It is probably the most pervasive bias in performance evaluation. The halo effect occurs when a rater generalises from one trait or a global impression to all other traits (Murphy, Jacko, and Anhalt, 1993; Tsui

and Ohlott, 1988). An individual is rated either high or low on many factors because the rater knows (or thinks they know) that the individual is high or low on some specific or key factor. In other words, the ratings do not discriminate among different performance factors.

The concept of personal constructs helps shed light on how a halo is formed by raters (Ostroff and Ilgen, 1985). The categories used to evaluate people are based on global traits rather than on specific behaviours observed, and the rater's belief about trait covariation will affect his or her evaluation of others. A similar idea is discussed by DeNisi, Cafferty, and Meglino (1984), who suggest that preconceived notions that the rater holds about the ratee are one determinant of the kinds of information the rater seeks about the ratee's performance. These preconceived notions help the rater form the basis or schema that will be used to interpret incoming stimuli. If a rater characterises a ratee in terms of "good" or "bad" schema, the rater will collect and recall only those pieces of information that are consistent with the schema.

A common assumption is that increased observation of performance-relevant ratee behaviour will reduce halo bias and therefore improve the validity of subsequent ratings. The available evidence indicates, however, that when raters have a greater opportunity to observe a rater's performance, and are more familiar with the behaviour to be rated, halo actually increases (Jacobs and Kozlowski, 1985). Other suggested solutions to the halo problem have ranged from rater training (Borman, 1975; Pulakos, 1984) to statistical correction for halo (Holzbach, 1978; Landy, Vance, Barnes-Farrell, and Steele, 1980), both of which have demonstrated mixed success.

In conclusion, a number of factors influence how people perceive and make judgements about work performance. The focus over the last 20 years has changed from primarily focusing on the rating form to trying to understand

people's cognitive processes. In particular, more emphasis is being placed on examining the categories people use to decide about the effectiveness of others (Barnes-Farrell and Coutkure, 1984; Ilgen, Barnes-Farrell and McKellin, 1993).

It is now necessary to focus on issues related to managerial effectiveness, such as the criterion, the format and content of competencies, the definition and nature of managerial work, and the concept of managerial effectiveness.

CHAPTER THREE MANAGERIAL EFFECTIVENESS

The search for the behaviours that capture the essence of effective managerial performance is not too dissimilar to the search for the Holy Grail. Much effort has been spent producing lists of managerial skills that describe what managers must possess or be able to do if they want to be effective. The search for this elusive list of managerial skills seems almost out of control, if the explosion of popular management books that contain the latest essential (sic) management skills is any indication (Luthans, Hodgetts, and Rosenkrantz, 1988).

The commitment to identifying the criteria for effective managerial performance, in fact, any workers' performance, has been the focus of psychologists for a number of years (Austin and Villanova, 1992).

Psychologists well appreciate that measures of criterion performance are necessary for sound personnel practices in organisations (Borman, 1991). They are therefore essential for assessing the impact of any personnel management action on individual and group performance (Schmitt and Klimoski, 1990).

The Criterion

There have been many ways in which the criterion has been defined (Austin, Villanova, Kane, and Bernardin, 1991; Guion, 1993). Austin and Villanova (1992) in their review of criterion measurement defined it as "a sample of performance (including behaviour and outcomes), measured directly or indirectly, perceived to be of value to organisational

constituencies for facilitating decisions about predictors or programs" (p. 838). The criterion is essentially an evaluative standard that can be used to measure a person's performance. Psychologists are committed to defining criteria accurately so they can develop methods for observing and measuring them, so people can better predict who will be successful and who will not.

When criteria are discussed they are often referred to as the "criterion problem" (Campbell, McCloy, Oppler, and Sager, 1993; Cascio, 1991; Landy and Farr, 1983; Smith, 1976). This term is often invoked to alert people to the difficulties involved in the process of conceptualising and measuring performance constructs that are multidimensional and appropriate for different purposes (e.g., selection, training initiatives, performance appraisal, etc.). Austin and Villanova (1992) provided a comprehensive review of the issues surrounding the criterion problem. They considered the conceptualisations, technical advances, and controversies in the measurement and use of criteria since the formal beginnings of industrial and organisational psychology. Recently the dimensionality of criteria, the combining of criteria, and whether criteria are dynamic, have been topics of general interest.

Criterion dimensionality is an intriguing and complicating concept in the area of criterion measurement (Borman, 1991; Ghiselli, 1956). The notion is that two or more persons on the same job may be equally effective, but may reach the level of performance very differently in behavioural terms. This is likely to be the case in positions that have a reasonable amount of discretion in the way in which activities can be performed. In a management job, for example, one manager may lead with charisma and flair, while another may have virtually no flair or charisma but have a very participative and caring management style. Therefore, different dimensions of performance are relevant for assessing the effectiveness of

these two managers. In positions where different behavioural patterns are possible for success, this could create a potential criterion problem (Borman, 1991; Cascio, 1991).

Another criterion dimensionality issue is the expansion of the criterion to include extra role behaviours, those behaviours that go beyond the requirements of a specified job role (Werner, 1994). Borman and Motowidlo (1993) suggested that the notion of contextual performance needs to be considered when considering the criteria required for specific positions. These extras are not directly involved in task performance but are similar to constructs such as "citizenship" (Organ, 1988) and "prosocial organisational behaviour" (Brief and Motowidlo, 1986). Examples of contextual performance dimensions include extra effort, volunteering for tasks, helping others, and following organisational rules. Research suggests that as much as 30% of a manager's job may be defined in terms of contextual performance dimensions (Landy and Shankster, 1994). In addition, it is hypothesised that contextual performance has a strong influence on personnel decisions (e.g., promotion, training opportunities). Contextual performance issues, such as helping others, will no doubt attract considerable research attention in future years.

Another issue that has caused considerable debate is multiple versus composite criteria (Latham and Wexley, 1994). There are those who maintain that measures of different aspects of job performance should be combined into a single overall composite measure, and those who feel measures of performance should be kept separate and used independently (Schneider and Schmitt, 1986).

While this controversy has been waged for many years, the solution appears relatively straightforward. Both sides are right in different

situations. The resolution of the controversy depends on how the criteria or criterion will be used. If the goal is to make practical decisions about staff members, such as in selection or hiring, then computation of some weighted composite is essential. However, if the goal is to understand the dimensions of job performance and how they contribute to job success, as in the case of the identification of training needs, then multiple criteria should be used.

However, the composite criterion concept is not useful when high performance on one dimension cannot compensate for low job performance on another. For example, consider the case of a manager who has well developed critical thinking skills but has difficulty communicating with staff. Clearly, the manager's analytical ability can not compensate for the inability to communicate. The idea that lack of good performance in one dimension can be compensated for by high performance in other dimensions works for most, but not all, jobs (Schneider and Schmitt, 1986).

There has been much debate over whether criteria are dynamic and therefore change in importance over time (Austin, Humphreys, and Hulin, 1989; Barrett and Alexander, 1989; Barrett, Caldwell, and Alexander, 1989; Deadrick and Madigan, 1990; Hanges, Schneider, and Niles, 1990). The dynamic criterion phenomenon could cause certain variables to be good predictors of performance at one point in an employee's tenure but not at another. The dimensions of performance that seem to be appropriate and valid early in people's careers may in fact be unrelated to their job performance at a later stage (Cascio, 1991). In management jobs the standards against which people are evaluated change over time. The criteria for assessing the effectiveness of a new manager may concentrate on factors such as "willingness to learn" or "ability to assume

responsibility", while at a later time the standards may concentrate more on the manager's effectiveness in achieving organisational goals.

The research studies that have tackled the issue of dynamic criteria have not as yet produced a definitive answer on whether work performance criteria are dynamic (Austin, Humphreys, and Hulin, 1989; Barrett and Alexander, 1989; Landy and Shankster, 1994). A fundamental issue embedded in the research on dynamic criteria concerns how change is measured. Researchers have at last started to shed light on the dynamic criteria debate by investigating individual change patterns. The researchers are keen to establish whether changes in performance are systematic and, if they are, whether there are inter-individual differences in intra-individual change patterns (Hofmann, Jacobs and Baratta, 1993).

Hofmann and his colleagues (Jacobs, Hofmann, and Kriska, 1990; Hofmann, Jacobs, and Baratta, 1993; Hofmann, Jacobs, and Gerras, 1992) have attempted to tackle the issue of how change is measured. They argue that the apparent stability of performance measures over time is the result of aggregating the different performance patterns of individuals. They found, for example, that after five years, three different patterns of performance appear in baseball players. One group continues to get better, one group stays about the same, and another group gets worse. While these results play havoc with utility estimates, it does provide a possible solution to the dynamic criteria debate: both sides are right (Landy and Shankster, 1994). Some people change and some people stay the same. This avenue of research is still too new to provide a definitive answer, but it is an interesting area for further research (Landy and Shankster, 1994).

Definition of Managerial Competencies

Recently, the term "competency" has been used in the management literature to describe the criterion. The use of this term has led to a renewed interest in defining the criterion for effective managerial performance. As with the criterion, defining the competencies required to be an effective manager should, if identified and described clearly, form the basis of an organisation's human resource practice (Sparrow, 1994). These competencies can be used to select, promote, and develop future managers (Lipshitz and Nevo, 1992).

The introduction of the term competencies by researchers and practitioners has been attributed to two sources, Boyatzis's 1982 book "The Competent Manager" (Woodruffe, 1992), and British educationalists and trainers. In the 1980s, the latter produced a stream of influential publications and reports attacking Britain's poor management (Sparrow, 1994). The competency approach was seen as the solution to improving management skills, as it defined in behavioural terms what was required of effective managers. One of the attractions of the competency approach was that it focused on what people "can do" rather than on what they know (Hogg, Beard, and Lee, 1994).

The increased interest in defining the competencies of effective managers has been attributed to two main factors (Boam and Sparrow, 1992). First, the realisation that an organisation's effectiveness rests largely with its managers (Hanson, 1986; Thomas, 1988; Thurow, 1984). Day and Lord (1989) estimate that the actions of senior management can explain as much as 45% of an organisation's performance. Other studies suggest that a chief executive's performance is the largest determinant of an organisation's success (Hunter, Schmidt, and Judiesch, 1990). While a small body of researchers assert that a manager's performance is an

inconsequential determinant of organisational performance (Meindl and Ehrlich, 1987; Pfeffer, 1977), the majority of the research indicates that managers play a key role in both the success and failure of an organisation (Hanson, 1986; Whetten and Cameron, 1991).

Second, the failure of large scale change programmes to deliver the necessary improvements in individual employee behaviour has also contributed to the recent interest in competencies (Beer, Eisenstat, and Spectue, 1990; Boam and Sparrow, 1992). These programmes have often failed to change staff because they have omitted to define the "new" behaviours expected of employees. They have mostly concentrated on developing quality and cultural change programmes that are heavy on theoretical concepts, but light on defining the skills employees need to be effective.

There has been considerable confusion about what is meant by the term "competency" (Elkin, 1995; Sparrow, 1994). What psychological constructs do competencies describe (e.g., work functions, aptitudes, attitudes, performance outcomes, etc.)? Are there generic competencies or are they all organisation-specific? Are they able to be learnt or are they discriminative (i.e., selectable)?

Spencer and Spencer (1993) defined them as underlying characteristics of an individual that are causally related to criterion-referenced effective and/or superior performance in a job. A competency in this instance can be defined as a motive, trait, skill, aspect of a person's self image or social role, or a body of knowledge. Criterion-referenced means that the competency actually predicts who does something well or poorly, as measured on a specific criterion or standard. Spencer and Spencer (1993) stressed that a competency is not a competency unless it predicts something meaningful in a real world environment.

Houghiemstra (1990) provided a similar definition of competency, by suggesting a competency is the accumulation of know-how, skills, standards and values, ideas, qualities, traits, and motives which successful people bring to their work. Saul (1989) provided a simpler definition, suggesting that a competency is any characteristic of a manager that enables him/her to perform successfully in a job. Boyatzis (1982) defined managerial competencies as underlying characteristics of a person that differentiate superior from average and poor managerial performance.

The literature is not helpful in removing the confusion surrounding the use of the term competency, as it contains a myriad of definitions. On the one hand, it is said to relate to effective performance, and is definable and measurable. On the other hand, it can refer to underlying characteristics which are difficult to measure (Hogg, Beard, and Lee, 1994). The term competency has often been used as an umbrella term to cover almost anything that might directly or indirectly affect job performance (Woodruffe, 1992).

Competency Formats

There are currently three major perspectives on the format competencies should take (Gonczi, Hager, and Athanasou, 1993). The first, and probably the most widely held, is referred to as the task-based, output-oriented, or behaviourist approach. It is similar to the Functional Job Analysis approach developed by Sidney Fine (1971). This approach conceptualises competencies in terms of the tasks of the job that need to be performed competently. In effect the task becomes the competency, such that, if managers can manage staff, they are said to possess the

competency of staff management. Evidence for the possession of the competency is based on direct observation of the task.

The tasks, the focus of this competency approach, have been defined in different ways (Harvey, 1991). Gael (1988) reported that the definitions have some common ground, such as: tasks involve an action or series of actions or elements; these actions are performed closely in time and usually in the same order; the task has an identifiable starting and stopping point; task performance results in a meaningful and identifiable goal, outcome, or objective, and tasks are assignable to individual positions. The task action verb (e.g., calculate, locate, refer, etc.) is critical and should be observable and as behaviourally explicit as possible.

The task based approach has been criticised for ignoring underlying managerial attributes that contribute to the manager's performance and therefore not providing a complete picture of the competencies required to perform the job (Gonczi, Hager, and Athanasou, 1993). To manage staff effectively, the manager will need to possess managerial attributes such as perceptiveness, sensitivity, and listening ability. If a purely task-based or output-oriented approach is adopted, these attributes would be ignored because the competencies only describe the tasks that needed to be performed (i.e., provide feedback to staff) and do not describe the performance standards that need to be achieved (i.e., feedback is given on a regular basis). The identification of personal attributes helps to distinguish between average and superior performance (Boyatzis, 1982). The ability to provide feedback to staff sensitively, for example, may be a factor that differentiates average from superior managers.

The second competency model concentrates on the general attributes of the position holder that are crucial to effective performance. This approach has been called an "inputs"-oriented approach to competencies (Baker, 1991). These competencies are often more behaviourally abstract than the task-based competency approach (Harvey, 1991).

Such an approach concentrates on the underlying attributes people need to display to perform a job effectively (e.g., sensitivity, critical thinking) and not with the job itself (i.e., staff management). It takes into account some of the so-called "soft" competencies like sensitivity and creativity, which are now seen as increasingly important to an organisation's effectiveness (Jacobs, 1989). In this model, competencies are thought of as general attributes. The model ignores the context in which they might be applied (i.e., what tasks require sensitivity to be displayed?).

The inputs orientation to competencies has been criticised for its inability to link the attributes required to perform the job effectively (i.e., sensitivity) with the tasks or functions that need to be performed (i.e., provide feedback to staff on their performance). If an effort is not made to link the attributes to the tasks, the list of competencies required for a position can grow exponentially, because no checks are in place to ensure the attributes are really necessary for performing the tasks. The overriding criticism to the "inputs" approach is that it is not useful for comparing the similarities and differences between management positions, because different terms (i.e., empathy versus sympathy) could be used to describe the same input competency (Baehr, 1988).

The third approach seeks to marry the input and output approach to competency development. It brings together the behaviours people need to display in order to do the job effectively (e.g., sensitivity) and the functions and tasks (e.g., staff management). As shown in Table 3.1, it shows which competency inputs (i.e., attributes) are required for completing the various managerial outputs (i.e., functions or tasks).

Table 3.1: Grid Relating Competency Inputs and Outputs

	Competency Inputs				
Competency Outputs	Sensitivity	Critical Thinking	Perceptiveness	Organisation	
Staff Management	х	Х	х	х	
Budgeting		х			
Business Development		х	x		
Strategic Planning		х	х		

There is no one correct competency format (i.e., input, output, or a combination of the two). The format of the competency model should be dictated by the purpose of its application. If competencies are required for selection, then the personal attributes (e.g., inputs such as critical thinking, sensitivity, etc.) that are required to perform the job successfully need to be defined (Harvey, 1991). This is important in situations where the person has not had previous experience in the role, and therefore his or her knowledge of the tasks that need to be performed cannot be assessed.

The research on validity generalisation is useful in assisting in selection decisions where a person does not have previous experience. Studies have shown that a number of predictors can predict performance across different jobs (Schmidt, Hunter, and Pearlman, 1982). For example, cognitive ability is seen as a good predictor of performance across a

range of positions (Hunter and Hunter, 1984). It might therefore be expected that cognitive ability will play a significant role in a management competency model.

If competencies were required for a job description it would be more appropriate that the competencies describe the job outputs expected in the role (e.g., planning, budgeting, etc.) that need to be performed. This would provide potential employees with the type of information they would need to make a more informed decision. This would be difficult if a list of personal attributes were provided instead.

Competency Content

A number of recent competency approaches have started to view managerial competence as the interactions of behaviours and the cognitive processes which underlie them (both conscious and unconscious) (Hogg, Beard, and Lee, 1994). Competency models have become more comprehensive in their description and more complex. They can be threshold or differentiating competencies, motive or trait competencies, and social role or self image competencies (Boyatzis, 1982). In addition, they are often regarded as dynamic.

Threshold and Differentiating Competencies

Competencies can be divided into "threshold" and "differentiating" categories according to the job performance criterion they predict (Boam and Sparrow, 1992; Spencer and Spencer, 1993). Threshold competencies describe behaviour that is required to perform a job at an acceptable level, they do not differentiate between high and low

performers (Worledge, 1992). A threshold competency for a manager may be ability to speak English, in an English-speaking country.

Therefore the ability to speak English would be a requirement of all managers, but is not a competency that is likely to differentiate between effective and less effective managers. Ineffective managers are likely to be able to speak English just as competently as effective managers.

Critics of the threshold approach to competencies state that they only underpin base level performance, and are not causally related to superior competency performance (i.e., they do not distinguish superior from average performers) (Worledge, 1992). Threshold competencies are regarded by some researchers as largely generic, in that these skills will be required by most managers irrespective of the organisation (Hogg, Beard, and Lee, 1994).

Differentiating competencies are the competencies that underpin superior performance and are capable of distinguishing superior from average performers (Spencer and Spencer, 1993). The ability of the criterion to discriminate between effective and less effective employees is regarded as essential if the criterion is to be useful (Cascio, 1991). A manager, for example, who consistently sets and achieves goals higher than those required by their employing organisation, is displaying the competency of "Achievement Motivation". This competency has been found to differentiate superior from average salespeople (Spencer and Spencer, 1993). Whereas other competencies, such as loyalty, may not differentiate between effective and less effective managers, both types of managers could display the same amount of loyalty.

The concept of differentiating competencies can be seen as appealing from an organisation's perspective, because organisations constantly search for the competencies that will help identify superior managers.

However, the quest to identify only differentiating competencies may mean that many of the threshold competencies, which are still important for effective performance, are overlooked because they are viewed as mundane or "run of the mill".

Some take the view that competency lists should be considered as a whole, which means that some competencies should not be regarded as more important than others (Boam and Sparrow, 1992). If a competency list described "self-confidence" as a threshold competency and "sensitivity" as a differentiating competency, the latter is likely to be more valued. However, both are equally important and interact closely. A sensitive person who is not self-confident may be seen as weak by others; on the other hand, a self-confident person who is not sensitive runs the risk of being seen as abrupt, or worse, obnoxious. People should be assessed on all competencies that are relevant to the job, and therefore need to be given the opportunity to develop on all of them.

Motive and Trait Competencies

Competencies can also take the form of a trait or a motive. Traits are defined as psychological features, such as attitudes, emotions, and ways of perceiving and thinking, that exist inside a person and explain the recurring tendencies in that person's behaviour (Hogan, 1991). Traits are often thought of as summaries of past behaviour. McClelland (1971) defined motive as a recurrent concern for a goal state, or condition, appearing in a fantasy, which drives and directs an individual's behaviour. Motives are said to exist at both the conscious and unconscious levels.

Boyatzis (1982) states that motives are different from traits in a number of ways. A motive includes thoughts related to a particular goal state or theme. People who think (consciously or unconsciously) about improving and competing against a standard of excellence are said to have an achievement motive (McClelland, 1956). Motives cover competencies such as sense of purpose, commitment, and motivation.

A trait, on the other hand, includes thoughts and psychomotor activity related to a general category of events. People who believe themselves to be in control of their future and fate are said to have the trait of efficacy (Stewart and Winter, 1974). When people with efficacy encounter a problem or issue, they take the initiative to understand the problem or resolve the issue (Woodruffe, 1992). Traits cover competencies such as initiative, flexibility, and self-control.

Competencies in the form of motives and traits are an important component of effective managerial performance. It is possible for a manager to have the necessary skill to perform a task (i.e., provide feedback to staff), but lack the necessary motive (i.e., commitment) and trait (i.e., initiative) to perform effectively. Motives and traits address the issue of whether a manager will perform a managerial function effectively rather than whether they can perform the managerial function. The distinction is often described as "will do" versus "can do" (Byham and Cox, 1992). Assessment Centres, along with other selection tools, have been criticised because they often assess a manager's ability to perform a managerial function effectively (i.e., sensitively give feedback to staff) but do not assess a manager's motivation to perform the function effectively in the work environment. On the other hand, since assessment centres are able to predict performance, it could be that they are providing some indication of motivation (Gaugler, Rosenthal, Thornton, and Bentson, 1987).

While the concepts of motives and traits provide interesting theoretical discussion, the ability to differentiate between them is not easy. In assessment situations it would be difficult for individuals to differentiate between the two. It is impossible to imagine how you would assess whether the behaviour you were observing was in fact a motive or a trait, let alone whether the motive was conscious or unconscious. Furthermore, it needs to be asked whether there is any purpose differentiating the two.

Self-Image and Social Role Competencies

Competencies have also been differentiated on the basis of whether they have a self-image or social role function. Self-image refers to a person's perception of himself or herself and the evaluation of that image. The definition of self-image incorporates the constructs of both self concept and self-esteem (Boyatzis, 1982). Woodruffe (1992) states that people's evaluation of the self concept results from a comparison of themselves with others in their environment. Such that a person's self assessment might result in seeing themselves as creative and expressive. Their jobs may require them to be organised and self-disciplined. Consequently, as a result of feedback, they may see themselves as too creative and expressive and with insufficient planning ability and self-discipline. Self-image encompasses competencies such as personal maturity.

Social role refers to the set of social conventions and norms which an individual perceives as acceptable within the social groups(s) (i.e., business, family, church) to which he or she belongs. The particular social role adopted by an individual is a combination of the characteristics which he or she possesses and of how others expect that person to act. The category includes competencies such as communication skills, social skills, and leadership skills (Woodruffe, 1992).

These competencies seem to be defining similar concepts and Boyatzis appears to be needlessly creating different competency categories.

Again, as with motives and traits, it would be difficult to determine whether the competency that was being observed was in fact a social role or self-image competency. It is difficult to comprehend how this distinction would be useful in helping a person identify and develop his or her skills.

Dynamic Competencies

Managerial competencies are also said to be dynamic and changing (Baker, 1991). This concept of dynamism is slightly different from earlier discussion about dynamic criteria. The previous discussion focused on the fact that the dimensionality of job performance changes as a function of job tenure. Another way in which criteria can be viewed as dynamic concerns changes in organisational policy about the criteria or competencies that are important for managerial effectiveness. If the importance of managerial competencies do change over time, this suggests that the construct validity of competencies will also change.

Prien (1966) proposed that changes in organisational goals may lead to changes in the relative importance of job functions making up a given job. He cites the example that over time a company may change its primary goal from growth to the development of existing client accounts. In this case, the function "acquisition of new clients and accounts" would decline in importance, while the development function would increase in importance. What this means is that the weights assigned to various job performance facets in any combination of these criterion elements would change. It has been shown that people in similar types of organisations may need different competencies depending on their organisation's

prevailing business strategy (Gupta and Govindarajan, 1984; Szilagyi and Schweiger, 1984).

An organisation's competencies change to reflect the unstable and turbulent business environment within which some companies work. As the world changes, the demands on managers change and they must adapt to meet the new demands. The competencies required of managers 15 years ago are different from what is expected today (Bennett, 1994). Fifteen years ago, many managers spent their careers in bureaucratic, autocratic, and hierarchical management environments where effective management hinged on telling subordinates what to do and when to get it done. The emphasis on the skills managers need has now changed. They now need to form collegial relationships with their subordinates and peers, consult them on a regular basis, and demonstrate their commitment to total quality principles (Limerick and Cunnington, 1993).

Another school of thought about dynamic competencies is that competencies do not change, but the titles and definitions used to describe them do. The changes often reflect the latest terms used in the popular business books. For example, the competency that was once called delegation is now referred to as "empowerment" or, more recently, as the ability to "zapp" people (Byham and Cox, 1992).

Definition of the Term Manager

The New Zealand Dictionary (Orsman and Ransom, 1989) defines a manager as "a person who manages, especially a person in charge of a business" (p. 683). This definition implies that the manager will be responsible for the performance of people and will need to achieve results

through people. Others have defined the term differently. For example, McLennan, Inkson, Dakin, Dewe, and Elkin (1987) define managers as "essentially anyone who has formal responsibility for the supervision of other people" (p. 64). Jacques (1976) reported that managers are further distinguished in that they are assigned more work than they can do, so are required to delegate work to others.

The term manager can be further defined by examining what managers do. This is done by classifying employees as managers, on the basis of the functions and outputs demanded of them (Boyatzis, 1982). In this sense, "a person in a management job contributes to the achievement of organisational goals through planning, coordination, supervising, and decision-making regarding the investment and use of corporate human resources" (Boyatzis, 1982, p.16). This is close to the definition offered by Drucker (1974) of managers as those people who give direction to their organisations, provide leadership and make decisions about the way the organisation will use the resources it has available.

The Nature of Managerial Work

Most research on the nature of managerial work has involved descriptive methods such as direct observation, diaries, and anecdotes obtained from interviews (Yukl and Van Fleet, 1992). Reviews of this research have been published by McCall and Segrist (1980), and Hales (1986). The typical pattern of managerial activity reflects the dilemmas faced by most managers. Managers need to make decisions that are based on information that is both incomplete and overwhelming, and they require cooperation from many people over whom they often have little authority.

The descriptive research shows that managerial work is inherently hectic, varied, fragmented, reactive, and disorderly (Kanter, 1983; Kaplan, 1984; Martinko and Gardner, 1990). Many activities involve brief oral interactions that provide an opportunity to obtain relevant, up-to-date information, discover problems, and influence people to implement plans. Many interactions involve people beside subordinates, such as peers, superiors, and outsiders.

Research on managerial decision-making, and problem-solving provides additional insights into the nature of managerial work (Cohen and March, 1986; Gabarro, 1985; Simon, 1987). Decision processes are highly political, and most planning is informal and needs to be adaptive so as to reflect changing conditions. Effective managers develop a mental agenda of both short and long-term objectives and strategies (Kotter, 1982a). For managers to implement plans that require significant innovation, or to affect the organisation's distribution of power and resources, it is necessary for the manager to forge a coalition of supporters and sponsors (Kaplan, 1984). Managers also need to relate problems to each other so they can find opportunities to solve more than one problem at the same time (McCall and Kaplan, 1985).

While considerable progress has been made in understanding the nature of managerial work, there is much more that needs to be learned (Hales, 1986). More research is needed to integrate the descriptions of managerial activities with the purpose of the activities, and description of the skills required to perform the activities effectively.

Leaders and Managers

Leadership has been defined in many ways, many of which are similar to managerial definitions (Yukl and Van Fleet, 1992). After a comprehensive review of the leadership literature, Stogdill (1974) concluded that "there are almost as many definitions of leadership as there are persons who have attempted to define the concept" (p. 259). Leadership has been defined in terms of individual traits, leader behaviour, interaction patterns, role relationships, follower perceptions, influence over followers, influence on task goals, and influence on organisational culture (Yukl and Van Fleet, 1992). Most definitions involve an influence process but appear to have little else in common.

A similar controversy surrounding the definition of leader continues over the differences between a leader and a manager (Jacques and Clement, 1994; Kotter, 1990). The degree of overlap between a manager's and a leader's roles has been a point of sharp disagreement. Some writers contend that the two are qualitatively different, even mutually exclusive. For example, Bennis and Nanus (1985) offered a puzzling solution when they proposed that "managers are people who do things right and leaders are people who do the right thing" (p. 21). Zaleznik (1977) proposed that managers are concerned about how things get done, and leaders are concerned with what things mean to people.

The essential distinction appears to be that leaders influence commitment, whereas managers merely carry out position responsibilities and exercise authority. The concept of leadership and management has been described as three complementary functions: setting a direction for the company versus planning and budgeting, aligning people to the vision versus organising and staffing the organisation, and motivating and inspiring people versus controlling and problem-solving (Kotter, 1990).

The separation of "manager" and "leader" has reinforced a tendency to devalue the importance of the management role. A manager is often seen as someone who imposes his or her hierarchical authority on others, whereas a leader gets things done exclusively through his or her "good" personality, without having to exercise hierarchical authority.

Yukl and Van Fleet (1992) believe that management and leadership are not separate entities. In their comprehensive review of leadership theory and research they emphasised the lack of differences between the two by using the terms manager and leader interchangeably. There is considerable overlap between the constructs of leadership and management and there does not appear to be any good reason for assuming it is impossible to be both a manager and a leader at the same time.

Effective Managers

While much of the management and psychological literature is sprinkled liberally with the term "effective managers", most of the literature does not describe what is meant by the term "effective" and readers are often required to draw their own conclusions (Hales, 1986; Sayles, 1979). Campbell, Dunnette, Lawler, and Weick (1970) conducted one of the few studies to define managerial effectiveness. They defined managerial effectiveness as having four components: individual characteristics, individual behaviour, organisational outcomes, and internal/external organisation environment.

The term "individual characteristics" refers to the personal qualities and traits that are required for managerial effectiveness (e.g., intelligence, aptitudes, personality, temperament, etc.). These characteristics have

been exhaustively documented in managerial trait research (Bray and Howard, 1983; Stodgill, 1974; Yukl, 1989). "Individual behaviour" describes the way managers act in response to various work situations.

Organisational outcomes occur as a result of the interaction of the individual manager's characteristics and behaviour and are often defined as the level of return for the shareholder, level of productivity, etc. The internal/external organisation environment interacts with the other three variables. The internal organisational environment represents variables such as an organisation's tasks, functions, policies, procedures, and the external environment reflects variables such as market characteristics. This model of managerial effectiveness is shown in Figure 3.1.

The model implies that a definition of managerial effectiveness should fulfil at least two requirements. First, it must link the characteristics and behaviours of the individual manager with the desired organisational outcomes. Second, it must acknowledge that the pattern of effective behaviour will vary across different jobs, bosses, organisations and environments, and in response to the characteristics of the individual manager (Campbell et al., 1970; Hales, 1986).

It must also be noted that a manager's characteristics and patterns of behaviour that are effective in one context may not be so in another (Luthans, Rosenkrantz, and Hennessey, 1985). The effectiveness of the manager is determined by the degree of fit between the characteristics and behaviours of the manager and the demands of the particular job situation.

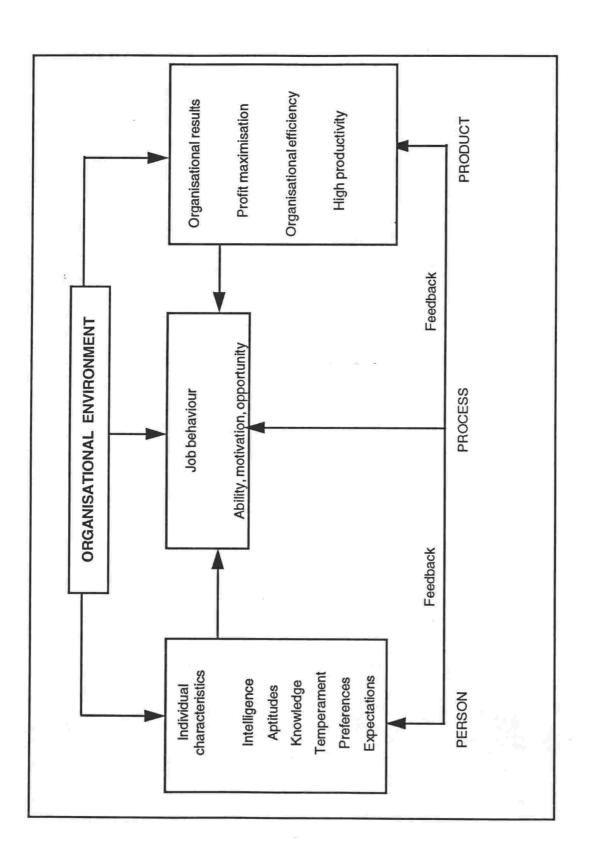


Figure 3.1: Campbell, Dunnette, Lawler, & Weick's (1970) schematic portrayal of the determiners of managerial behaviour

Cammock (1991) drew on a number of the effective manager definitions and developed, "one who optimises the long term functioning of the organisation by engaging in the behaviours best fitted to the internal and external environment in which they manage and to their characteristics and preferences" (p. 32). He used the term "optimises" rather than "maximises" in deference to Seashore and Yuchtman's (1967) argument that maximisation of outcomes such as profit or growth would generate imbalances which could be dysfunctional. While the definition acknowledges a concern with both performance outcomes (e.g., survival, productivity) and with outcomes related to the internal characteristics of the organisation (e.g., morale, job satisfaction) it fails to refer to the concept of managing people.

Frequently the terms "effective" and "successful" are used interchangeably in the research (Luthans, Hodgetts, and Rosenkrantz, 1988). Luthans (1988) has been one of the few researchers who have defined the terms "successful" and "effective". In their study they examined the characteristics that distinguish effective from successful managers. "Successful" was defined as managers who were promoted rapidly and "effective" managers as ones who led high performing units with satisfied and committed subordinates. Of the managers they studied, they found only 10% of the managers were both successful and effective.

The research showed that successful managers needed different skills compared with those required by effective managers. Luthans (1988) found that managerial success was more strongly correlated with networking, and managerial effectiveness was more correlated with the management of people. However, the ability to network has also been identified in other studies as being important for the performance of effective management (Kotter, 1982a).

Managerial Effectiveness

A range of objective and subjective measures have been used to describe managerial effectiveness. The relative advantages of these types of measures are often hotly debated (Robertson, 1994; Yukl and Van Fleet, 1992).

One commonly used, seemingly objective, measure of managerial effectiveness is the extent to which the manager's group or organisation performs its tasks successfully and achieves its goals (Austin and Villanova, 1992). Examples of objective measures of performance are profit growth, profit margin, sales increase, return on investment, productivity, and production output. Objective criteria are frequently deficient because they often ignore important aspects of the job and they only provide a narrow window on a manager's performance. Objective criteria do not often acknowledge the impact of the manager's behaviour on his or her unit and the organisation, such as staff commitment to the organisation. A performance domain needs to include the scope of behaviours relevant to the goals of the organisation, and not necessarily be tied to specific job tasks (Guion, 1991). Borman and Motowidlo (1993) stated that criteria such as organisational commitment should be considered as long as people's performance on those criteria increased organisational effectiveness.

Another factor that diminishes the effectiveness of objective criteria as a stand-alone measure of effectiveness is the potential for the criteria to be contaminated by factors beyond the manager's control (Campbell et al., 1970; Nathan and Alexander, 1988). There is little control over factors in the internal and external environment, such as the market in which the company operates, or increases in interest rates. Objective criteria do not

often take account of the impact of such uncontrollable factors on the perceived effectiveness of the manager.

Another type of criterion information is personnel data, the data usually available in a person's personnel folder (Landy, 1989). Some of the variables that are classified as personnel data include absences, tardiness, turnover, rate of advancement, salary adjustments, and accidents. Almost all of these measures tend to affect the well-being of the organisation, but their global nature makes them inappropriate measures of managerial effectiveness. They also fall prey to the potential confounding effects of other variables, such as the unreliable coding of absences, and the fact that the data is rarely recorded (Toulson, 1990).

The difficulties that have been raised in relation to the use of objective and personnel data do not mean they should be disregarded as criteria (Landy, 1989). Rather, if they are to be useful, a careful analysis of the relationship between the elements of a manager's job as identified by job analysis, and the elements of behaviour that reflect effectiveness is necessary. Even if this is successfully accomplished, there are still many jobs for which performance will need to be described in terms other than those provided by objective and personnel data. In many cases this will mean collecting subjective or judgemental data.

A commonly used subjective measure is ratings of a manager's effectiveness (Landy, 1989). These ratings are frequently obtained from a manager's superiors, peers, and subordinates (Cascio, 1991). Experienced superiors are a good source of information, because typically they have seen relatively large numbers of employees working on the job and therefore have a good idea of different performance levels. Peers are also a useful source of information as they are often privy to the important information regarding their co-worker's performance; it is difficult to hide

actual work performance from colleagues. Subordinates also have especially relevant information about their supervisor's behaviour (i.e., a manager's ability to counsel and coach staff) that other work colleagues are unable to observe.

As highlighted by Borman (1991), there are disadvantages associated with each of these rating sources. Superiors may not actually observe much of the day-to-day work performance of their subordinates and often their ratings, like many other ratings, are confounded by halo. Frequently superiors give higher ratings to managers they like, regardless of whether they are performing well (Cascio, 1991; Campbell et al., 1970).

Peers and subordinates often lack experience in making formal performance evaluations, and the latter are typically in a position to see only a relatively small portion of their superior's job performance (i.e., they do not get to see how their manager interacts with other senior managers). Correlations between superiors' and subordinates' ratings of managerial performance are often low to nonexistent (Campbell et al., 1970). The degree to which superiors, peers and subordinates can provide accurate ratings on performance often depends on the level of interaction between superiors, co-workers, and subordinates and their knowledge of the job. In addition, superiors, peers, and subordinates place a different emphasis on criteria when assessing a manager's performance and their ratings are often contaminated with halo and information processing errors (Campbell, McCloy, Oppler, and Sager, 1993; Tsui, 1984).

Another source of valuable information is self-ratings (Levine, 1980). A number of studies have used them as a measure of effectiveness (Lawler, 1967; McEnery and McEnery, 1987; Staley and Shockley-Zalaback, 1986). However, leniency and social desirability are some of the factors

that have been shown to negatively affect them as a source of measurement (Anderson, Warner, and Spencer, 1984; Arnold and Feldman, 1981). Self assessment seems best used in situations where the negative impact of low ratings is minimal.

In recent years, it has become common for researchers to collect information on a range of subjective measures that do not fit neatly into a manager's functional job requirements, but are relevant to managerial effectiveness (Werner, 1994). These include measures such as subordinate commitment to the manager's proposals and strategies, commitment to the organisation, and organisational citizenship behaviour (Organ, 1988). In addition, managerial effectiveness is occasionally measured in terms of a manager's contribution to the quality and efficiency of group processes as perceived by followers or outside observers. Examples of these criteria include the level of cooperation and teamwork, the effectiveness of group problem-solving and decision-making, and the readiness of the group to deal with change.

Management effectiveness has been studied in a number of ways, depending on the researchers' conception of management and their methodological preferences. These approaches can be classified according to whether the primary focus is on manager or leader traits and behaviour, power and influence, or situational factors (Yukl and Van Fleet, 1992).

The behavioural approach to managerial effectiveness emphasises what managers actually do on the job and the relationship of this behaviour to effectiveness. Major lines of research have included classification of

managerial behaviours into behavioural categories and identification of behaviours related to managerial effectiveness. The methods used to identify the skills or competencies required for effective managerial performance is the next important issue to contemplate.

CHAPTER FOUR

METHODS USED TO DEVELOP MANAGERIAL COMPETENCY MODELS

Identifying the competencies required for a position involves the use of one or more of a large family of job analysis methods. Even a cursory look at Gael's (1988) Job Analysis Handbook reveals at least 40 different job analysis techniques that can lead directly or indirectly to the formulation of competencies. Job analysis is any procedure used to develop insights into job components: things people do on a job, resources they draw on to do them, and organisational implications of doing them well or poorly (Guion, 1991).

Job analysis techniques can range from highly task-oriented methods (Fine, 1971), focusing on precise definitions of the tasks to be carried out, to methods focusing on the human qualities (i.e., attributes) required to perform the job (Kandola and Pearn, 1992). Historically, job analysis methods assumed that jobs were not changed appreciably by the individual performing them or by situational factors. So early on, only narrative descriptions of the job's activities (i.e., what activities were performed) were emphasised (Cascio, 1991). These "job-oriented" approaches concentrated on workers' accomplishments or achievements rather than their behaviour. More recently job analysis techniques have attempted to describe jobs in "worker-oriented" terms (i.e., what skills people need to bring to the job to allow them to perform the activities effectively) to supplement the job-oriented approach.

When choosing a method to identify competencies, many writers have stressed that one source of data is probably insufficient as each job analysis method has its strengths and weaknesses (Hakel, 1986). A multiple method approach will enable the strengths of one job analysis approach to counterbalance the weaknesses of another (Cook, 1993). The critical incident job analysis method (Flanagan, 1954), for example, which provides descriptions of the behaviours that differentiate effective from less effective performers, is typically used as an adjunct to other job analysis methods. It often supplements methods which provide information on the functional demands of a position.

The choice of job analysis methods will depend on the objectives of the user, (i.e., whether the competencies are to be used for selection, job evaluation purposes, etc.), and other constraints such as organisational size, time frame for identification of competencies, and budget. While there are numerous job analysis methods, the three main methods are observation, interviews, and questionnaires (Ash, 1988).

Observation

In this method, as the name suggests, employees are directly observed performing job tasks, and their behaviours are coded for presence or absence of a range of predetermined categories. These could include whether the incumbent is performing certain tasks, the time spent performing tasks, or whether the incumbent displays certain competencies. Observing people's work also provides information on important aspects of a job, such as possible stress or pressure points, and general operating atmosphere. Observational methods also produce extremely rich qualitative descriptions of not only "what" people do but "how" they perform their various activities (Martinko and Gardner, 1985; Martinko and Gardner, 1990).

Although these aspects of work can be directly reported through other job analysis techniques, their significance becomes more apparent when

observed. In addition, research indicates that people's descriptions of their work behaviour often conflicts with their observed behaviour (Landy, 1989). The observation approach has been used to collect data on managerial jobs (Mintzberg, 1973) and the results have yielded a somewhat different picture of managerial work from that obtained through studies using structured questionnaires (Martinko, 1988; Tornow and Pinto, 1976).

There are also disadvantages associated with observation. Direct observation is susceptible to selective attention and biased interpretation of events by the observer, due to stereotypes and implicit theories (Yukl and Van Fleet, 1992). Attribution errors also may occur if an observer or interviewer has information about the performance of the manager's unit (i.e., whether the manager heads a high- or low-performing unit). However, these attributional errors are likely to occur across the range of competency analysis techniques, and are not unique to observational analysis.

Observation does not always produce rich, detailed information about managerial processes. In some observation studies the observer merely checks off pre-determined categories in an attempt to classify events rather than writing narrative descriptions that can be coded at a later time. Highly structured observation may mean that activities or events that do not fit into the pre-determined categories may be overlooked (Martinko, 1988). Unlike narrative description, the use of pre-determined categories tends to reduce the scope for other researchers to verify the coding or reclassify events in terms of different category systems, particularly if the original categories are vague.

One of the disadvantages of direct observation is that it can influence and distort the way in which the job is carried out, thus resulting in biased data (Martinko, 1988; Orne, 1962). Furthermore, it may not be possible to observe all the important or critical aspects of a job directly, such as thinking

or planning (Martinko and Gardner, 1985; Synder and Glueck, 1980). Although the output from planning activities is available, it is difficult to observe the thinking that led to the planning output. It can also be an expensive and time consuming way to collect information (Martinko and Gardner, 1990).

Work Diaries

The work diary is a form of observation, in that it requires job incumbents to observe and record their own behaviour. It is a pencil and paper tool that requires workers to record activities they perform in their job over a specified period of time. The diary is known by names such as activity log, work activities listings, or simply activity list. It is often used when it is difficult to observe the person's work or when little information is available on the position (Freda and Senkewicz, 1988). It is an inexpensive technique for determining the job activities performed by incumbents and the sequence in which they occur (Martinko, 1988).

The chief advantage of the diary approach is that it is flexible, easy to use, and, at the same time, produces useful information that can be quantitatively analysed (Freda and Senkewicz, 1988). Some of the disadvantages are that managers often forget to fill the diary out and therefore the quality of their recordings is likely to be affected by memory lapses. Also, the activities job incumbents record may not reflect what they actually do.

The job incumbents also often find completing a work diary a tedious task. This would be particularly so for managers, because, as mentioned earlier, they perform numerous tasks, often simultaneously, that are often very short in duration. Therefore, accurately recording their activities would be difficult. As a result, researchers report that there is often a considerable

deterioration in both detail and accuracy of incumbents' recordings as the number of days incumbents are required to fill out work diaries increases (Gael, 1988). A further problem is that the process may not collect all the important activities that are performed by the job incumbent. This would occur when the completion of the diary falls within a time frame where important activities are not performed.

Interviews

The interview is the most frequently used method of collecting competency information (Cascio, 1991). It can be conducted with job holders and others who have relevant information or viewpoints about the position under consideration, and a window can be obtained into how people make decisions about the effectiveness of their managers. It can be used to elicit information about the activities performed in a job or the human attributes required for effective performance (Baehr, 1991).

One of the key advantages of interviewing people is that it provides an opportunity to clarify, through direct questioning, their understanding of the terms they use to describe their work. This overcomes one of the problems of the less interactive job analysis techniques (i.e., observation, diaries, etc.). Limitations of the interview method include the reliance on the recall of the respondent, in that only information that the respondent happens or chooses to remember is presented in the interview. This can result in self-serving or biased information (Boyatzis, 1982). The job analysis interview is also just as susceptible to the sources of bias and distortion (e.g., halo effect, influence of non-verbal information, interviewee's appearance, etc.) that affect other interviews, particularly when the focus is on obtaining evidence (Cascio, 1991; Landy, 1989).

Interviews as a form of data gathering have the advantage of being potentially sensitive to unusual or subtle aspects of a job, in that the job analyst can ask probing questions to ascertain the competencies required by the job holder. The interview can be both structured and unstructured. Outlined below are some of the more common types of structured job analysis interview approaches.

Critical Incident interviews

The critical incident interview technique involves collecting critical incidents of behaviour which lead to good or poor performance outcomes (Flanagan, 1954). Critical incidents refer to important work events which powerfully affect work effectiveness. Critical incident data is usually collected by asking subject matter experts to recall examples of particularly effective or ineffective job behaviour they have witnessed or performed (Harvey, 1991).

To qualify as an incident, two criteria have to be met. First, the incident has to be observable in some way, and second, there should be no doubt about its relevance to effective or less effective performance (Schneider and Schmitt, 1986). In order to be critical, an incident should occur in a situation in which the purpose or intent of the act seems clear to the observer and where its consequences are sufficiently clear to leave little doubt about its effects. The technique assumes that the best way to identify competencies is to focus on differences between good and poor performers.

The strength of the critical incident approach lies in the emphasis placed on describing behaviours that highlight successful and unsuccessful job performance. This approach has been criticised because the job analyst needs to make a judgement concerning the knowledge, skills, and abilities that are required of individuals to perform successfully the critical incidents

that are described (Schneider and Schmitt, 1986). There seems little in the way of methodology to assist the job analyst to determine the competency requirements for each critical incident. This invariably means that two job analysts could listen to the same critical incident (e.g., a description of a manager who was giving feedback to a subordinate) and identify different competencies (i.e., sensitivity, judgement, listening ability, etc.) as critical for effective performance.

One of the problems with collecting critical incidents is that the technique often fails to identify general competency dimensions that are important for job performance (Caird, 1992; Harvey, 1991). The focus is on competency as excellence, not adequacy. It did not, for example, reveal that writing skills are a requirement for work as a Foreign Service Officer, because they do not differentiate superior from average performers (Spencer, 1983). In this case, superior performers were differentiated from average performers by skills such as non-verbal empathy, speed in learning political networks, and having positive expectations of others.

Finally, emphasis on incidents may lead to a fragmented view of what the job entails. The technique does not provide comprehensive information on the functions or tasks that are performed. Nevertheless, as mentioned earlier, the critical incident technique is a useful adjunct to other job analysis methods.

Behavioural Event Interviews

A variation of the critical incident technique is behavioural event interviewing, the prime method used in the analysis of general managerial competencies carried out by Boyatzis (1982) for the American Management Association. The main difference in this approach, compared to the critical

incident technique, is that the events are analysed in much greater detail so that a smaller number of "incidents" is obtained.

The method goes beyond Flanagan's interview approach by obtaining data about the interviewees' personality and cognitive style (e.g., what they think about, feel, and want to accomplish in dealing with the situation). An interviewee may be required to recall the actual words used by someone in an incident they are recounting, so that the analyst has almost enough information to be able to recreate accurately the situation or event under examination. In the interview people are asked to focus on the most critical situations they have faced in their positions. This produces data on the most important competencies required by the position. Interviewees tell vivid "short stories" about how they handled the toughest, most important parts of their jobs, and, in doing so, reveal the competencies required to do the job (Spencer and Spencer, 1993).

Some of the advantages of this method are that it is useful for validating competency hypotheses and for discovering new competencies. Spencer and Spencer (1993) state that it provides detailed information on competencies that is free from racial, gender, and cultural bias. It is difficult to see how this is accomplished better than by any other job analysis method. This technique would seem to have similar advantages and disadvantages to the critical incident technique, although it is probably more time-consuming because more detailed information is collected about each incident.

Both the critical incident and behavioural event interview are likely to be useful in generating information that is relevant to the identification of competencies. There is still, of course, a gap to be bridged between long lists of discrete behaviours and the identification of competencies underlying job effectiveness, which are judged to be critical (Kandola and Pearn, 1992).

A leap needs to be made from the behavioural events and critical incidents to the formulation of underlying competencies. This is usually achieved through the more subjective process of having analysts group the behaviours into competencies or alternatively the behaviours can be translated into a questionnaire and subjected to statistical analysis such as factor analysis.

Repertory Grid Interviews

Repertory grid interviews are derived from George Kelly's (1955) Personal Construct Theory. As discussed earlier, the ways in which people view the world are known as personal constructs, and the way these constructs are elicited is through the repertory grid interview. The repertory grid interview is now widely used as a versatile and flexible competency identification technique (Boam and Sparrow, 1992).

The objective of the technique is to uncover the constructs which people use to structure and understand their environments. It is an attempt to stand in others' shoes, to see their world as they see it, to understand their situation, and their concerns (Fransella and Bannister, 1977). Although the repertory grid technique can vary with respect to the ways in which constructs are elicited, all of these procedures require the subjects to rank or rate a set of environmental elements (i.e people) or events in relation to the constructs they identified. Each of the constructs has evaluative bipolar dimensions. So, if people were asked to describe how their work peers were alike and different, the bipolar construct might be, "Has a good sense of humour- can see the funny side to things" versus "Takes everything seriously".

The repertory grid interview produces a matrix of elements by constructs. By analysing the constructs that people identify, the construct ratings they assign to each of their elements, the structure and content of people's cognitions can be assessed (Dunn and Ginsberg, 1986; Ginsberg, 1989; Wacker, 1981). As seen in Table 4.1, there are four steps involved in the administration and scoring of the repertory grid, as described by Dunn and Ginsberg (1986).

<u>Table 4.1</u>: The Four Steps Involved in the Administration and Scoring of the Repertory Grid (Dunn and Ginsberg, 1986).

Step	Description of Step
Element Selection	Respondents select element variables
	that reflect the domain under
	consideration
Element Comparison	Elements are randomly divided into
	triads and the respondent is asked to
	name a way in which two elements are
	similar and different from the third.
Element Evaluation	Respondents are asked to evaluate the
	extent to which each element is
	characteristic of each construct.
Grid Analysis	The element and construct rankings or
	ratings are analysed to yield measures
	of the structure and content of the
	respondent's cognitive constructs.

The repertory grid approach has several advantages. It can generate data that is often difficult to generate by other means, because it gets to the heart of the constructs people use to determine the effectiveness of the job incumbents under investigation. It deliberately allows the individual or groups under study to describe ways by which they typically understand, compare, and contrast people in their work. It does not impose predetermined constructs on subjects. It is a powerful and useful adjunct for identifying, defining, and establishing behavioural competencies (Kandola and Pearn, 1992).

One of its main advantages is that it does not ask participants unstructured questions about how they cognitively organise their world. These types of questions tend to elicit descriptions of "espoused theories" rather than theories that actually govern behaviour (Dunn and Ginsberg, 1986). The attraction of the repertory grid approach is that it attempts to go straight to the underlying behaviours and skills which distinguish between effective and less effective job performers.

Disadvantages of the approach include the problem that information collected through the process is often achieved at the expense of a systematic and detailed picture of the actual tasks that need to be carried out or the objectives to be met. Furthermore, job analysts can often assume they have a shared understanding of the words interviewees use to describe a person's performance and therefore do not ask probing questions to obtain a clear understanding of the interviewees' performance example. Thus they may assume they know what an interviewee means when they describe a person as being charismatic and empathetic, when in fact they do not. Unless interviewees are probed and prompted, the advantages of the technique are not apparent. It is also time-consuming and expensive, because it requires a reasonable investment in time from both the job analyst and the person being interviewed.

Questionnaires

After the use of job analysis interviews, the second most popular job analysis method is the use of questionnaires (Yukl and Van Fleet, 1992).

Questionnaires can take many forms. They can range from straightforward lists of activities and/or behaviour, produced by a manager or group of managers, to highly standardised and elaborate inventories involving several hundred items that need to be computer analysed.

The more structured questionnaires typically contain the characteristics that are likely to be encountered in the job under analysis, and require the respondent to indicate to what extent (if any) they perform the listed tasks or behaviours, or use the listed knowledge, skills or abilities. In contrast, the unstructured questionnaires rely on respondents to describe the tasks they perform and list the personal characteristics required to perform the job effectively. Respondents to both structured and unstructured questionnaires usually include job incumbents, supervisors, and occasionally job analysts (Ash, 1988).

Questionnaires can be highly task-focused, worker-focused, or a combination of the two. They can vary considerably in the sophistication required of the user and have considerable potential for quantification and statistical analysis. When competency information is collected by questionnaires, experts in the organisation are typically asked to rate competency items according to importance for effective job performance, how frequently the competency is required, how much the skill distinguishes superior from average performance, and how reasonable it is to expect new hires to have the characteristic, and the like (Gael, 1988).

Questionnaires are often used to identify the competencies (e.g., tasks that need to be performed, attributes required to perform the tasks, etc.) that are critical for effective managerial performance. While the concept of asking people to analyse and describe the criteria they use to evaluate a manager's effectiveness sounds quite simple and reasonable, it is fraught with difficulties. People do not have great insight into the criteria they use to evaluate the effectiveness of other people, as shown in the policy-capturing studies discussed earlier (Stumpf and London, 1981; Graves and Karren, 1992). People also tend to overestimate the number of criteria they use to evaluate people (Graves and Karren, 1992).

The advantages of the questionnaire is that it is a quick and inexpensive method for collecting sufficient data for statistical analysis. Large numbers of jobs can be studied efficiently to identify trends in competency requirements. The completion of questionnaires also allows a large number of employees to be involved in the process of identifying organisational competencies, which assists in gaining employee acceptance for the competencies that are developed (Gael, 1988). Questionnaires can also be completed at the respondent's leisure, therefore avoiding lost production time (Cascio, 1991).

One of the potential disadvantages of the method is that there is a reduced chance of identifying new competencies that may be required for effective performance. This occurs because respondents are typically asked to endorse the competencies that are supplied by the designers of the questionnaire, and therefore are less likely to generate their own list of competencies. This is more likely to occur if the competencies covered by the questionnaire do not comprehensively sample the domain of work under consideration.

Another problem with questionnaires is the vagueness and inaccuracies that occur with the use of language. People define and interpret the words that are used to describe managerial competencies differently (Gael, 1988; Stewart, 1988). The word "integrity", for example, can mean many things to different people. The huge variability that occurs when people interpret language seems to have been ignored in the design of some questionnaires. However, others, such as the Position Analysis Questionnaire (PAQ) (McCormick, Jeanneret, and Meacham, 1972) provide comprehensive descriptions of the terms they use to describe work skills.

Questionnaires often provide respondents with the titles of managerial competencies (i.e., initiative, sincerity, honesty, etc.) and ask them to rank or rate this list in terms of importance. The problem with this approach seems obvious, but we still seem to have a misguided belief in our ability to have a shared understanding of the meanings of these words.

While some questionnaires do provide the title and definitions of the managerial competencies, these questionnaires can also have their problems. Often people focus solely on the title and do not read the definition, particularly if the title is a commonly used managerial term such as "analytical". Frequently respondents do not bother to read the definition to see if it reflects their understanding of the competency. This problem becomes compounded when the managerial competency that is being described is not clearly observable. The competencies of perceptiveness or empowering, for example, are not as observable as the competency of oral communication. Gioia and Sims (1985) found that ratings of leaders' behaviour were less accurate when the behaviours were ambiguous rather than concrete and clearly observable.

People are also often asked in questionnaires to focus on a mythical manager when completing them, rather than a manager they know. The process is therefore unlikely to uncover the constructs the respondents use to assess the effectiveness of *their* managers. Focusing on a mythical manager might make criteria less relevant, if the goal is to get closer to how a person actually perceives a real manager's effectiveness. The competencies that are identified are more likely to reflect the fashionable concepts of managerial effectiveness, rather than the constructs people use to distinguish good from poor performers

The less structured questionnaires that ask people to generate their own list of managerial competencies rather than rating a pre-determined list attempt to get closer to understanding the criteria people use to judge effectiveness. While the intention is good, this approach faces most of the difficulties posed by the more structured questionnaires that were discussed earlier. However, the people analysing the questionnaire are faced with the added problem of trying to analyse what is meant by the different names given to the managerial competencies so they can be grouped into dimensions. Factor analysis could assist in grouping the competencies to identify the underlying performance dimensions, through mathematically reducing semantic ambiguity.

Another type of questionnaire is those using computer-based "expert" systems (Spencer and Spencer, 1993). Such systems can pose questions to researchers, managers, and other experts about the competencies required of a position. Instead of requiring a job analyst to produce a narrative description of the skills required for the job, the job analyst or job incumbent makes ratings of a job on a number of descriptors (i.e., tasks, attributes, etc.) (Schneider and Schmitt, 1986). These questions are keyed to an extensive knowledge base of competencies identified by previous studies. The outputs can range from a list of work functions to a list of work functions and

corresponding attributes. The expert system manages the analysis process and provides a detailed description of competencies required for adequate and superior job performance.

Common generic questionnaires are the Position Analysis Questionnaire (PAQ) (McCormick, Jeanneret, and Meacham, 1972), the Professional and Managerial Position Questionnaire (PMPQ) (Mitchell and McCormick, 1979), (Management Position Description Questionnaire (MPDQ) (Tornow and Pinto, 1976) and the Work Profiling System (WPS) (Saville and Holdsworth, 1988). The greatest advantage of these instruments is that they efficiently analyse and identify the required competencies in a fraction of the time of other competency methods. The main disadvantage is that like any expert system the quality of the output depends on the quality of the database. The questionnaires may also overlook specialised or technical competencies that are specific to certain organisation roles.

Analysis of Competency Data

Managerial competencies are usually analysed and grouped in one or two ways. They can be grouped thematically or statistically. On a thematic basis, skills are grouped together if they refer to the same underlying concept. They are usually sorted individually by independent judges. Competencies are assigned to categories when there is a high level of agreement among the independent judges on the allocation of the competency to the category.

The main advantage of the thematic approach is that it is a relatively quick method for grouping competency data. The disadvantage is that it does not examine the relationship between how the different competencies relate to each other, so some competencies may be assessing the same thing or

there may be a significant overlap in what they are assessing. This method also produces a lengthier list of managerial competencies than what is obtained through statistical analysis.

If competencies are grouped statistically, usually through factor analysis, information can be obtained on how the competencies relate to each other. The output also can provide information on how much weight people attribute to the various factors. Such that, information can be obtained on how much importance people may place on technical and interpersonal competencies when evaluating managers' performance. Managerial competencies that are identified through factor analysis tend not to be as lengthy as those grouped thematically. The identification of competencies through statistical techniques is not totally objective, because the naming of the factors in techniques such as factor analysis is left to human judgement. Nevertheless, such procedures do provide a quantitative assessment of how a large sample of people group variables.

Sources of Job Data

One of the most critical decisions made in the course of conducting a job analysis is identifying the people who will describe the job and provide job ratings. As Thompson and Thompson (1985) noted, the safest strategy is to collect information from as many people knowledgeable about the job under consideration as possible. These sources are usually job incumbents, supervisors, and job analysts. Subordinates are also able to provide information on the job under consideration, but are not frequently used as it is often not politically acceptable to ask subordinates to comment on the requirements of their managers' jobs. They also have a limited perspective because they can only comment on the parts of a manager's job they are able to observe.

Job incumbents, given that they are involved in the day to day performance of the job in question, are among the most frequently used sources of job information (Goldstein, Zedeck, and Schneider, 1993; Harvey, 1991). The main drawback to using incumbents is that they may harbour motives that are in conflict with the goal of obtaining an accurate and complete description of the job under consideration. They may, for example, perceive an advantage in exaggerating their duties, particularly if the data is used for compensation purposes.

Supervisors can also provide valuable job competency information. There is usually a high level of agreement between supervisors and incumbents on the tasks that need to be performed in the incumbent's role (Cornelius and Lyness, 1980; O'Reilly, 1973). However, supervisors and incumbents tend to disagree about the attributes required to perform a role. In general, supervisors and incumbents provide among the best sources of job information, particularly when the information is obtained using techniques (i.e., structured interviews) that allow the job analyst to probe the validity of their statements.

The use of job analysts to collect data also has a number of advantages. They are able to produce the most consistent competency ratings across jobs because of their familiarity with the competency method (Harvey, 1991). This is especially true for standardised job analysis questionnaires, particularly when the questionnaires use terms that are unfamiliar to job incumbents or their supervisors.

However, there are drawbacks associated with using external job analysts. They can be expensive, particularly for positions that are unfamiliar to the job analyst. Considerable time and effort may be required by the job analyst to become familiar with the job. Problems can also occur if a job analyst is familiar with a type of position, because an analyst may rely on his or her

pre-existing knowledge of similar positions, that may or may not accurately describe the job at hand.

In conclusion, there are many job analysis methods for deriving competencies. Choices between them must be made to suit the purpose of the competency derivation exercise. It is now important to consider the main management competency models that have been proposed in the management and psychological literature.

CHAPTER FIVE MANAGERIAL EFFECTIVENESS MODELS

Over the last 50 years there has been an exponential growth in the managerial and leadership research that has attempted to identify the competencies required by managers (Yukl and Van Fleet, 1992). Models of management competencies have long been espoused in the popular literature and taxonomies of effective managerial skills are extensive (Baldwin and Padgett, 1994). The purpose of this chapter is to overview and compare some of the major models. Models of leadership competencies are included when the models refer to the competencies required by managers.

Management Competency Models

Katz (1955) and Mann (1965) proposed some of the earliest managerial skill taxonomies (Yukl and Van Fleet, 1992). Their taxonomy contained three basic categories of skills: technical skills, human relations skills, and conceptual skills.

Technical skills include knowledge of products and services, knowledge of work operations, procedures, and equipment, and knowledge of markets, clients, and competitors. Human relations skills include the ability to understand the feelings, attitudes, and motives of others from their words and actions (empathy, social sensitivity, etc.), ability to communicate clearly and effectively (speech fluency, persuasiveness, etc.), and ability to establish effective and cooperative relationships (tact, diplomacy, etc.). Conceptual skills refer to the ability to analyse complex

events and perceive trends, recognise changes, and identify problems and opportunities; develop creative, practical solutions to problems; and conceptualise complex ideas and use models, theories, and analogies.

Katz (1955) and Mann (1965) proposed that leaders needed these three skills to fulfil their role requirements, but that the relative importance of the skills depended largely on the leadership situation. They stated that the skills required by leaders were in part dependent on the manager's position in the organisation (i.e., middle manager, senior manager, etc.). While they did not produce data to support their claims, their propositions were subsequently supported in later research (Yukl, 1989). Both researchers did not attempt to ascertain the relationship between the three skill categories and managerial effectiveness.

Ohio State Leadership Model

The most significant early work on dimensions of leadership behaviour was conducted by Shartle and his colleagues at Ohio State University in the 1950s (Fleishman, 1973; Shartle and Stogdill, 1953). They sought to understand what leaders and managers actually do on the job and the relationship of this behaviour to leadership effectiveness.

They developed a questionnaire that contained a range of leadership behaviours which subordinates of leaders completed. Factor analysis of the questionnaires revealed that subordinates perceived the behaviour of their leader primarily in terms of two independent categories, one dealing with task-oriented behaviours (initiating structure) and the other dealing with people-oriented behaviours (consideration). The questionnaires based on these two categories dominated leadership and managerial research for the next two decades. The simple two-factor model of task-

oriented and people-oriented behaviour provided a good starting point for conceptualising leadership behaviour. This model received a high level of acceptance because it was easy to understand and contrasted with the exhaustive list of competencies that were being developed by their fellow researchers (Clark and Clark, 1990).

However, a number of researchers felt that the behaviours were too broadly defined and too abstract to be useful for managers to understand the specific role requirements facing them (Campbell et al., 1970; Clark and Clark, 1990). In addition, the two-factor model was criticised because it did not take into account the situational relevance of leader behaviours (Yukl and Van Fleet, 1992). It is recognised that some task-oriented and people-oriented behaviour is necessary for any leader, but the relative importance of specific forms of this behaviour varies from situation to situation (Yukl, 1989).

It is not enough for a leader to show high concern both for task objectives and relationships with subordinates; the specific behaviours selected by the leader to express these concerns must be relevant to the task, the organisational context, and the subordinates. The clarifying of subordinates' work roles by leaders, for example, is necessary, but the appropriate amount, form, and timing of the behaviour depends on the complexity and the uniqueness of the task and the competence and experience of the leader's subordinates. Ineffective managers may be unable to determine what behaviours are appropriate for the situation, or they may recognise what behaviour is appropriate but lack the skills or motivation to carry it out (Yukl and Van Fleet, 1992).

Mintzberg's Management Model

According to classical management theory, effective managers excel in executing the managerial functions of planning, staffing, coordinating, organising, and controlling (Barnard, 1938; Gulick and Urwick, 1937; Koontz and O'Donnell, 1964). This notion was dispelled by Mintzberg (1973), who observed five chief executives and found that the classical functions seemed irrelevant to much of what they actually did. Specifically, Mintzberg and other researchers found that managerial behaviour work is characterised by "brevity, variety, and fragmentation" (Martinko and Gardner, 1990; Mintzberg, 1973; Stewart, 1989).

Mintzberg (1973) reported that, "If you ask a manager what he (sic) does he will most likely tell you that he plans, organises, coordinates, and controls. Then watch what he does. Don't be surprised if you can't relate what you see to these four words" (p. 49). Mintzberg's research suggested that classic management theory, with its emphasis on proactivity, analysis, and comprehensiveness, appeared to be more folklore than fact. Mintzberg (1973) proposed that what managers actually do is best captured by three interpersonal roles (figurehead, leader, and liaison), three informational roles (monitor, disseminator, and spokesman) and four decision-making roles (entrepreneur, disturbance handler, resource allocator, and negotiator).

However, difficulties with Mintzberg's work have been noted in the literature. The rationale for the tripartite division and the assignment of the ten roles is unclear, information is not provided on how the roles are carried out, and what skills are necessary to perform them (Carroll and Gillen, 1987; Robertson and Iles, 1988; Shapira and Dunbar, 1980). In addition, his descriptions of the ten roles are global, which makes it difficult to highlight differences in roles across managerial jobs

(Schippmann, Prien, and Hughes, 1991). The small sample of chief executives he studied also raises the question about the generalisability of the results.

Kotter's Managerial Skills

Kotter (1982b) proposed an alternative conceptualisation of the skills required of general managers. According to Kotter, managers face two basic dilemmas: "figuring out what to do", and "getting things done". He regarded them as dilemmas because managers work in an environment that is highly uncertain, they are often faced with information overload, and there is often a gap between the power managers have and the power they need to fulfil their responsibilities.

Kotter states that effective managers overcome these dilemmas by developing loosely connected agendas of goals and plans, which they implement opportunistically, and by building a network of relationships with people who are important for implementing their agenda. He found that they do two main things. First, they create agendas. Managers spend time observing and working out where they want the organisation to go. Second, they build networks of contacts. As their agendas take shape, they can create links with the people who can help them. Two factors that are particularly important for working effectively in this fashion are establishing a track record of success and having a comprehensive knowledge of their organisation.

One of the major criticisms of Mintzberg's and Kotter's pioneering work concerns the critical question of the relationship between managerial behaviour and managerial effectiveness. Mintzberg failed to consider this question, and Kotter observed a small sample of effective managers who

were not compared with ineffective managers. Both researchers conducted little in the way of statistical analysis, which would have allowed them to examine the relationship between the different managerial competencies (Robertson and Iles, 1988).

However, these problems are not unique to these researchers (Hales, 1986; Martinko and Gardiner, 1985). More recent studies have focused on the relationship between the various managerial competencies and their relationship to managerial effectiveness (Boyatzis, 1982; Luthans, Hodgetts, and Rosenkrantz, 1988; Powers, 1987).

The American Management Association (AMA) Competencies

Perhaps the most widely publicised recent effort to systematically identify a taxonomy of managerial competencies is described by Powers (1987), who reports on a study commissioned by the American Management Association (AMA). The AMA is the largest management-related organisation in the United States, with approximately 90,000 members. AMA commissioned researchers to find out what makes managers competent and to design a programme where managers could develop these competencies.

The researchers interviewed 2000 managers in 41 different types of jobs in 12 different organisations. The findings are published in the book, "The Competent Manager, A Model for Effective Performance" by Richard Boyatzis (1982). Using the Job Competence Assessment methodology pioneered by Boyatzis (1982), the research identified 18 competencies which clustered into five groups, as shown in Table 5.1.

Table 5.1: AMA Management Competency Model

1. Goal and Action Management Cluster- this cluster deals with the manager's initiative, image, problem-solving skills, and goal orientation

Efficiency Orientation - Concern with doing something better (in comparison with previous personal performance, others' performance, or a standard of excellence).

Proactivity - Disposition toward taking action to accomplish something (e.g., instigating activity for a specific purpose).

Concern with Impact - Concern with the symbols and implements of power in order to have impact on others.

Diagnostic Use of Concepts - Use of a person's previously held concepts to explain and interpret situations.

2. Directing Subordinates Cluster- This cluster involves a manager's freedom of expression both in terms of giving directives and orders, and in giving feedback to help develop subordinates.

Use of Unilateral Power - Use of forms of influence to obtain compliance.

Developing Others - Ability to provide performance feedback and other needed help to improve performance.

Spontaneity - Ability to express oneself freely and easily.

3. Human Resources Management Cluster- Managers with these competencies have positive expectations about others, have realistic views of themselves, build networks or coalitions with others to accomplish tasks; and stimulate cooperation and pride in work groups.

Accurate Self Assessment - Realistic and grounded view of oneself.

Self Control - Ability to inhibit personal needs in order to service organisational goals.

Stamina and Adaptability - The energy to sustain long hours of work and the flexibility and orientation to adapt to changes in life and the organisational environment.

Perceptual Objectivity - Ability to be relatively objective, rather than be limited by excessive subjectivity or personal biases.

Positive Regard - Ability to express a positive belief in others.

Managing Group Process - Ability to stimulate others to work effectively in a group setting. Use of Socialised Power - Use of influence to build alliances, networks, or coalitions.

4. Leadership Cluster - This cluster represents a manager's ability to discern the key issues, patterns, or objectives in an organisation, and to then conduct themselves and communicate in a strong fashion.

Self Confidence - Ability to consistently display decisiveness or presence.

Conceptualisation - Use of concepts de novo to identify a pattern in an assortment of information.

Logical Thought - A thought process in which a person orders events in a causal sequence. Use of Oral Presentations - Ability to make effective oral presentations to others.

5. Specialised Knowledge

While the list appears comprehensive the independence of some of the competencies is debatable. It is difficult to see, for example, how the competencies "Diagnostic Use Of Concepts" in the Goal and Action Management Cluster is different from "Conceptualisation" in the Leadership Cluster.

A number of the competencies listed under each of the competencies would also appear to fit under some of the other competency clusters. For example, the "Managing Group Process" competency in the Human Resource Cluster could also fit under the Directing Subordinates and Leadership Clusters. Some of the competency definitions also appear vague and difficult to understand (e.g., "use of concepts de novo to identify a pattern in an assortment of information" and "concern with symbols and implements of power in order to have an impact on others"). Boyatzis also drew a distinction between differentiating and threshold competencies, and other types of competencies such as motives and traits and self-image and social-role competencies. The value of these distinctions, as discussed earlier, is questionable.

Boyatzis's research, on which the AMA model was based, set out to determine which characteristics of managers are related to effective performance in a variety of management jobs and organisations. Boyatzis found numerous significant differences in the characteristics of competent managers between sectors (public versus private), levels (entry, middle, executive), and functions (marketing, manufacturing, personnel). He also found differences in the degree to which the competencies were relevant to the different managerial functions. Competencies were found to be required to a greater and lesser extent depending on the function being performed by the manager across the five functions of planning, organising, controlling, motivating, and coordinating.

Hogg, Beard, and Lee (1994) noted other limitations to Boyatzis's research. First, they felt that the results, contrary to Boyatzis's opinion, could not be generalised to managers in small companies because the managers who were involved in the research were nearly all drawn from large organisations (i.e., Federal Departments). They felt that the skills required of managers in smaller organisations were significantly different from those required in larger organisations, although they failed to provide any research to support their view. Second, they felt that comparisons could not be made between the skills required by managers in different functions and levels because some of the small sample sizes (i.e., six poor performing managers were compared to four superior performers at the lower management level). They state that this may have resulted in significant differences between groups of managers being obscured. Boyatzis himself (1982) admits that caution needs to be taken in generalising his findings and conclusions, and that they should be considered exploratory and not definitive.

Management Charter Initiative Competencies

In 1981 the British government established the National Council for Vocational Qualifications to develop national employment qualification standards. A component of this programme was the establishment of the Management Charter Initiative (MCI) whose brief was to "derive a list of generic management standards", similar to the exercise undertaken by the AMA.

The Training Enterprise and Education Directorate, funded by the Government, defined the behaviours required to perform managerial jobs at the junior and middle management level, irrespective of functional specialisation or industry sector (Hogg, Beard, and Lee, 1994). The

competencies were developed from interviews and workshops designed to elicit the views of managers. The MCI middle management competencies are shown in Table 5.2 (Middle Management Standards, 1992).

Table 5.2: MCI Middle Management Competencies

Key Roles	Units of Competence
Manage Operations	(1) Initiate and implement change and improvement
	in services, products, and systems.
	(2) Monitor, maintain, and improve service and
	product delivery.
Manage Finance	(3) Monitor and control the use of resources.
	(4) Secure effective resource allocation for activities
	and projects.
Manage People	(5) Recruit and select personnel.
	(6) Develop teams, individuals, and self, to enhance
	performance.
	(7) Plan, allocate, and evaluate work carried out by
*	teams, individuals, and self.
	(8) Create, maintain, and enhance effective working
	relationships.
Manage Information	(9) Seek, evaluate, and organise information for
	action.
	(10) Exchange information to solve problems and
	make decisions.

The Management Charter Initiative (MCI) is now identified as the leading body for management competency standards in Britain. It is responsible for encouraging the implementation of the Training Enterprise and Education Directorate's competency standards in British organisations and for providing the necessary support to implement the competencies.

The process used to elicit the competencies is similar to functional job analysis (Baehr, 1991; Fine, 1971), but expands on the process by describing, in detail, the performance standards linked to the various functions. The competence model works from key broad purposes, breaking these down into constituent parts (i.e., units and elements of competence) until performance criteria and range statements are defined. An illustration of the competency model components are shown in Table 5.3.

Table 5.3: Example of a MCI Middle Management Competency

Component	Example
Key Purpose	To sustain and enhance the performance of the
	organisation to meet its objectives.
Unit of Competence	Exchange information to analyse problems and
	make decisions.
Element of Competence	Lead meetings and group discussions to analyse
	problems and make decisions.
Performance Criteria	The purpose of the meeting is clearly established
	with others from the outset. Any decisions taken
	fall within the group's authority.
Range Statements	This covers type and size of meeting (informal or
	formal); content of the meetings (e.g., group
40.5	decision-making); and attendees.

The implementation of the MCI competencies has not been very successful (Reed and Anthony, 1992; Sparrow, 1994). Organisations who had developed and implemented competencies in their organisation were surveyed to determine their satisfaction with their competency model (Personnel Management, 1990). Of the organisations sampled, only 43% chose to use the task-based approach. Of these organisations, 85% reported that they would not use the information for promotion decisions, 91% were negative about its usefulness for recruitment, and 70% felt it had not influenced the way they trained and developed managers.

MCI competencies have been criticised by people (Canning, 1990; Hamlin and Stewart, 1990) who feel that management competencies are not generic and therefore a single list of management competencies cannot be applied across industries. Other researchers, on the other hand, have shown that there are large areas of commonality and overlap in the competencies required by managers across a range of different organisations (Dulewicz, 1989).

The functional job analysis approach is also seen to promote reductionism and sanitising of managerial roles and performance to fit neatly into a preferred classificatory system (Baehr, 1991). Baehr (1991) states that this approach does not acknowledge the richness of managerial work. These criticisms seem to be unfounded. Regardless of the job analysis approach, functional or otherwise, the competencies will invariably be grouped in some type of classification system. If the functional job analysis is comprehensive, it is likely that the diversity of the challenges faced by managers will be captured.

In addition, Hamlin and Stewart (1990) believe that the model only describes average performance and not the skills required by superior managers. Unlike the AMA study, MCI emphasises that its focus is not on "excellent practice" nor with what is simply "adequate" but on "what you might realistically expect a good manager to be able to do" (Training Agency, 1990).

The criticism levelled at MCI competencies (Hamlin and Stewart, 1990) for not being representative of a superior manager's performance is harsh. It is difficult to imagine what additional behaviours managers would need to exhibit to be seen as superior. The competencies seem comprehensive and cover the major management functions. The reason people may dislike the MCI competencies may not be a disagreement about the performance level at which they are pitched, but rather a dislike for the behavioural manner in which they are described. Some researchers prefer to describe managerial competencies in a more trait-based rather than in a functional or activity-based way (e.g., Boyatzis, 1982; Powers, 1987).

Whetten and Cameron's (1991) Model

Another model of managerial effectiveness is presented in a popular text by Whetten and Cameron (1991). Their managerial skill model is the most widely taught in undergraduate and graduate education in the United States (Albanese, 1989). The authors interviewed highly effective managers in a variety of firms and industries and extracted the ten most frequently mentioned management skills, as shown in Table 5.4.

Table 5.4: Whetten and Cameron's (1991) Model

- 1. Verbal communication (including listening)
- 2. Managing time and stress
- 3. Managing individual decisions
- 4. Recognising, defining, and solving problems
- 5. Motivating and influencing others
- 6. Delegating
- 7. Setting goals and articulating a vision
- 8. Self-awareness
- 9. Team building
- Managing conflict

The authors analysed the data and clustered the skills into four main groups. However, information is not provided on how this was done. One group of skills focused on participative and human relations skills (e.g., supportive communication and team building), while another group focused on just the opposite, that is, on competitiveness and control (e.g., assertiveness, power, and influence skills). A third group focused on innovativeness and entrepreneurship, such as creative problem-solving, while a fourth group emphasised quite the opposite type of skills, namely maintaining order and rationality (e.g., managing time and rational decision-making).

A review of the four groupings of skills indicates that effective managers are required to demonstrate quite paradoxical skills. That is, the most effective managers are both participative and hard-driving, and nurturing and competitive. They are able to be flexible and creative while also

being controlled, stable and rational. It appears that to be an effective manager one needs to master diverse, and at times, seemingly conflicting skills. The need for managers to exhibit these conflicting skills seems to reflect the reality of a manager's demanding job.

Whetten and Cameron (1991) stress that management skills are interrelated and overlapping. No effective manager can perform one skill or one set of skills independently of others, so in order to motivate others effectively, skills such as supportive communication, influence, and delegation are also required. Effective managers, therefore, develop a constellation of skills that overlap and support one another to allow flexibility in managing diverse situations.

This view supports the earlier argument about a composite criterion not always being applicable for managers, except cases where promotion or selection decisions need to be made. High performance on one dimension is unable to compensate for poor performance on another. Managers need to achieve a balance between the various managerial competencies, because many of them complement one another.

Luthans, Hodgetts, and Rosenkrantz's (1988) Management Model

Luthans, Hodgetts, and Rosenkrantz (1988) were one of the few researchers to identify the differences between effective and successful managers. Most studies do not separate the two, which suggests that the criterion identified may lack construct validity. As stated earlier, a high percentage of the studies conducted on managerial effectiveness do not define what is meant by the term "effective".

Successful managers were defined as managers who were promoted rapidly, and effective managers were defined as managers who headed high-performing units with satisfied and committed subordinates.

Luthans, Hodgetts, and Rosenkrantz (1988) looked at how successful and effective managers differ from unsuccessful and less effective ones.

Detailed observation of 44 managers from a variety of organisations indicated there were 12 behavioural categories associated with managerial success and effectiveness. The authors subsequently clustered the behavioural categories into the four managerial functions, as shown in Table 5.5.

Effective and successful managers were compared to determine the amount of time they dedicated to these four activities. Table 5.6 illustrates the differences between them in terms of how they allocate their time.

Effective managers engage in more routine communication, traditional management activities, and human resource management than successful managers and spend considerably less time networking than successful managers. The successful managers spend just under half their time networking.

It is noteworthy that the cluster of traditional management includes some of the functions identified in classical management theory. The communication cluster is equivalent to Mintzberg's informational roles and the human resource cluster expands Mintzberg's interpersonal role.

Lastly, the cluster "networking" corresponds to Kotter's notion of building a network of relationships. This study supports Mintzberg (1973) and Kotter (1982a) in its emphasis on the importance of "networking" and face to face politicking to managerial success.

<u>Table 5.5:</u> Luthans, Hodgetts, and Rosenkrantz's (1988) Management Model

(1) Communication

This activity consists of two behavioural categories, exchanging information and paperwork. Its observed behaviours include answering procedural questions, receiving and disseminating requested information, conveying the results of meetings, giving or receiving routine information over the phone, processing mail, reading reports/memos/letters, routine financial reporting and book keeping, and general desk work.

(2) Traditional Management

This activity consists of planning, decision-making, and controlling. Its observed behaviours include setting goals and objectives, defining tasks needed to accomplish goals, scheduling employees, assigning tasks, providing routine instructions, defining problems, handling day-to-day operational crises, deciding what to do, developing new procedures, inspecting work, monitoring performance data, and doing preventative maintenance.

(3) Human Resource Management

This activity consists of motivating/reinforcing, managing conflict, staffing, and training/developing. Its observed behaviours include allocating formal rewards, asking for input, conveying appreciation, giving credit where due, listening to suggestions, giving positive feedback, group support, resolving conflict between subordinates, appealing to higher authorities or third parties to resolve a dispute, developing job descriptions, reviewing applications, interviewing applicants, filling in where needed, arranging for training, clarifying roles, coaching, mentoring, and walking subordinates through a task.

(4) Networking

This activity consists of socialising/politicking, and interacting with outsiders. Its observed behaviours include non-work related "chit chat"; informal joking around; discussing rumours, hearsay and the grapevine; complaining, griping and putting others down; politicking and gamesmanship; dealing with customers, suppliers and vendors; attending external meetings; and doing/attending community service events.

<u>Table 5.6:</u> Comparison of the Contributions of Each of the Four Managerial Activities to Managerial Effectiveness and Success.

Managerial Activity	Relative Contribution to Manager Effectiveness	Relative Contribution to Manager Success	
Routine Communication	45%	28%	
Human Resource Management	27%	11%	
Traditional Management	15%	13%	
Networking	12%	48%	

Yukl, Wall, and Lepsinger's (1990) Management Model

Yukl, Wall, and Lepsinger (1990) developed one of the most comprehensive competency models (Hogan, Curphy, and Hogan, 1994). They conducted a series of studies to identify and measure categories of managerial behaviour important for managerial effectiveness which spanned over a decade. They have created an integrated taxonomy that consists of 11 managerial categories of behaviour, as shown in Table 5.7.

Table 5.7: Yukl, Wall, and Lepsinger's (1990) Management Model

- (1) Planning and Organising: determining long-term objectives and strategies for adapting to environmental change, determining how to use personnel and allocate resources to accomplish objectives, determining how to improve the efficiency of operations, and determining how to achieve coordination with other parts of the organisation.
- (2) Problem solving and Disturbance Handling: identifying work-related problems, analysing problems in a timely but systematic manner to identify causes and find solutions, and acting decisively to implement solutions and resolve important problems or crises.
- (3) Monitoring Operations and Environment: gathering information about work activities, checking on the progress and quality of the work, evaluating the performance of individuals and the organisational unit, and scanning the environment to detect threats and opportunities.
- (4) Motivating: using influence techniques that appeal to emotion, values, or logic to generate enthusiasm for work, commitment to task objectives, and compliance with requests for cooperation, assistance, support, or resources; also setting an example of proper behaviour.
- (5) Recognising and Rewarding: providing praise, recognition, and rewards for effective performance, significant achievements, and special contributions.
- (6) Informing: disseminating relevant information about decisions, plans, activities to people that need to do their work; answering requests for technical information; and telling people about the organisational unit to promote its reputation.
- (7) Clarifying Roles and Objectives: assigning tasks, providing direction in how to do the work, and communicating a clear understanding of job responsibilities, task objectives, deadlines, and performance expectations.
- (8) Supporting and Mentoring: acting friendly and considerate, being patient and helpful, showing sympathy and support, and doing things to facilitate someone's skill development and career advancement.
- (9) Consulting and Delegating: checking with people before making changes that affect them, encouraging suggestions for improvement, inviting participation in decision-making, incorporating the ideas and suggestions of others in decisions, and allowing them to have substantial responsibility and discretion in carrying out work activities and making decisions.
- (10) Conflict Management and Team Building: encouraging and facilitating the constructive resolution of conflict, and encouraging cooperation, teamwork, and identification with the organisational unit.
- (11) Networking: socialising informally; developing contacts with people who are a source of information and support; maintaining contacts through periodic interaction, including visits, telephone calls, correspondence, and attendance at meetings and social events.

The main method used to identify the managerial skills in this research was a questionnaire, but it was also supplemented with diaries, interviews and integration of behaviour categories found in other work on managerial effectiveness. The behavioural categories in the taxonomy have been developed into a questionnaire called the Managerial Practices Survey (MPS) and have been shown to be related to independent measures of managerial effectiveness (Yukl and Lepsinger, 1991; Yukl, Wall, and Lepsinger, 1990).

They conducted a series of studies which validated the MPS and examined the relationships among various managerial practices and managerial effectiveness. The results showed that the importance placed on the various management practices varied across different manager populations. They found that the relationship between managerial behaviour and effectiveness was context-dependent. For example, they found differences between the management competencies required in civilian and military contexts.

Yukl et al.'s study is noteworthy because of its comprehensive data collection techniques, its large sample sizes and lengthy research into the predictive validity of the various managerial skills. Yukl and his colleagues were thorough in describing the managerial skills in language that is clear and free of jargon, a point that is often ignored by recent managerial competency researchers. He and his fellow researchers are continually testing and refining their eleven managerial competencies (Clark and Clark, 1990).

The Spencer and Spencer (1993) Management Models

Spencer and Spencer's 1993 book called "Competence at Work" summarised 20 years of research using the McClelland/McBer job competency assessment methodology. They analysed the management competency models that had been developed since Boyatzis developed the management competency model for the AMA. They designed a generic model by reviewing the competencies in more than 250 jobs. They reviewed competency models from a wide range of management levels (first-line supervisors to general managers) in a number of functions (production, sales, marketing, human services, educational, etc.) and environments (military, educational, health care, industry, financial services, etc.).

Spencer and Spencer (1993) found that superior managers of all types and levels share a general profile of competencies. They also found that managers of all types are also more like each other than they are like the people they manage (i.e., salespeople, factory workers, human service professionals, technical professionals). Table 5.8 shows the generic competency model that was developed. Spencer and Spencer use the term "weight" in Table 5.8 to refer to the ability of the competency to distinguish between superior and average managers. It seems that the competencies "Impact and Influence" and "Achievement Orientation" are the two most distinguishing competencies in this case.

Their results are very similar to the original work conducted by Boyatzis (1982). The differences seem to be in the names that are given to competencies, rather than the content. For example, what Boyatzis called "Managing Group Process" and "Conceptualization", Spencer and Spencer called "Team Leadership" and "Conceptual Thinking".

There appears to be a great deal of overlap between a number of the competencies in their model. Analytical and conceptual thinking and self-confidence and directiveness/assertiveness, for example, seem to be closely related. It would be difficult to assess whether behaviour being observed should be attributed to the "self-confidence" or "directiveness/assertiveness" competency.

<u>Table 5.8</u>: Spencer and Spencer's (1993) Generic Management Competency Model

Weight	Competency
XXXXXX	Impact and Influence
XXXXXX	Achievement Orientation
XXXX	Teamwork and Co-operation
XXXX	Analytical Thinking
XXXX	Initiative
XXX	Developing Others
XX	Self-Confidence
XX	Directiveness/Assertiveness
XX	Information Seeking
XX	Team Leadership
XX	Conceptual Thinking
Base Requirements	Organisational Awareness and Relationship Building
-	Expertise/Specialised Knowledge

The method they used to cluster the competencies may have contributed to the overlap in the competency descriptors, although it is difficult to ascertain their clustering approach. They state the competencies were clustered on the basis of "underlying intent, which is a level of analysis between deep underlying social motives and superficial behaviours. An intent is specific to a particular circumstance and has a more ephemeral and surface quality than an underlying motive or disposition" (Spencer and Spencer, 1993, p. 22)

Spencer and Spencer (1993) have not considered in any depth the relationship of the competencies to one another. They state that some competencies are "linked" or prerequisites to other competencies (e.g., Information Seeking is a prerequisite for Conceptual Thinking) but do not provide any details on the practical implications of how this "linking" information should be taken into account. Furthermore, it is difficult to assess from their research how they objectively determined the weightings they assigned each of the competencies in Table 5.8. or how these weightings can be used.

New Zealand Management Competency Models

Few studies of managerial competencies have been developed in New Zealand. Most of the management models used in business and in the universities are based on American and United Kingdom models.

The Canterbury Management study (Dakin, Hamilton, Cammock, and Gimpl, 1984) was one of the few studies to examine the characteristics of New Zealand managers. This study set out to answer four main questions: What do chief executives do? Who are the chief executives?

How do chief executives develop? and Can New Zealand grow chief executives more quickly?

While the study did not specifically set out to identify the characteristics of effective chief executives, a small section of the study was devoted to assessing the personal qualities needed in a general manager (this term was used interchangeably with chief executive). The chief executives rated a list of personal qualities which had helped them succeed. Their five most important personal qualities were: a strong need to achieve, strong social skills, a good sense of priorities, good planning and organising abilities and entrepreneurial flair. Not too many conclusions can be drawn from this section of the research because the Chief Executives were only provided with a small number of personal qualities to choose from when identifying the qualities that related to success.

Cammock (1991) conducted a study to identify the characteristics and behaviours of effective versus ineffective managers in a large public sector organisation (The Department of Social Welfare). He interviewed 89 managers using the Repertory Grid approach and then surveyed 365 managers using the constructs identified in the interviews. Factor Analysis of the 20 questionnaire scales, that described effective and less effective managers, revealed a two factor managerial structure. The two factors that made up the structure indicated that the managers required Conceptual and Interpersonal skills.

While this study provides information on how managers and staff assess managerial effectiveness in a government department, the applicability of these results to the wider New Zealand business environment is questionable. In addition, a number of high loadings were observed on both the factors, which suggests that that the factors were not totally independent. For example, the dimension Problem-solving loaded .78

and .50 respectively on Factor One and Two, and Prioritising loaded .71 and .46 respectively on Factor One and Two.

A review of the skills identified in Cammock's conceptual factor also contain some quite disparate concepts. For example, the level of drive a person possesses falls under the same category as the skill that is described as overview (i.e., the ability not to get bogged down in detail so as to maintain the big picture). His combination of what appears to be quite different dimensions is not comparable with the overseas research describing managerial skills.

Page, Wilson, and Kolb (1994) conducted one of the few New Zealand studies that purported to identify the skills required by effective managers. They asked several groups of managers to generate descriptions of management competencies, cluster similar competencies together, and rate them in terms of importance. They clustered the competencies using a procedure called concept mapping which produced a visual representation of the relationship between competencies. Each concept map contains an assortment of shapes and colours which represent the relationship between competencies. Each group of subjects developed its own competency model.

The similarities and differences between the competencies generated by each group is difficult to determine because the relationship between the different competencies was presented pictorially. It is therefore almost impossible to make sense of the competencies that were developed, let alone compare this study with others.

The authors developed a list of 46 management competencies that are required by effective managers, but they state that the list is far from comprehensive. The competencies are not presented in any order of

importance and no information is provided on the relationship of the competencies to each other. An overview of them indicates there is a high degree of overlap in their list. It is difficult to distinguish, for example, between "logical/rational thinking" and "analytical/critical thinking" and "high stamina/energy" and "persistence". They did not seem to address the issue of the relationship between the competencies. In addition, the authors made the assumption that the skills managers say they use are in fact the ones they use on a daily basis. It is difficult to see how this study furthers our knowledge on the competencies required by managers in New Zealand.

Comparison of Managerial Competency Models

In reviewing the recent work on management models, several observations can be made. First, though there are some notable differences between competency models, certain competencies appear time and time again. In general, the research supports the conclusion that technical skills, interpersonal skills, and administration skills are necessary for most managerial positions (Bass, 1990; Boyatzis, 1982; Hosking and Morley, 1988). Specific skills within these broad categories are useful for all managers (e.g., analytical ability, persuasiveness, empathy, tact, etc.).

Yukl and Van Fleet (1992) note that the relative importance of these skills probably varies greatly depending on the situation. Unfortunately, only a limited amount of research has examined how situational differences moderate the relationship between managerial competencies and effectiveness. Dulewicz (1989) notes there is a "high degree of commonality" across competency lists in different organisations for similar levels in management. He estimated that 70% of competencies are

general requirements of management, whilst the remaining 30% may represent organisationally specific factors. Dulewicz did not elaborate on the type of skills that would be organisationally specific.

From studying managers' ratings of their managers attending the general management course at Henley Management College, he found that the factor analysis of 40 basic competencies produced 12 independent dimensions of managerial performance (referred to as supra competencies). These fall under four main headings as shown in Table 5.9.

Table 5.9: Dulewicz's (1989) Management Competencies

(1) Intellectual

Strategic Perspective

Analysis and Judgement

Planning and Organising

(2) Interpersonal

Managing Staff

Persuasiveness

Assertiveness and Decisiveness

Interpersonal Sensitivity

Oral Communication

(3) Adaptability

Adaptability and Resilience

(4) Results Orientation

Energy and initiative

Achievements-motivation

Business sense

A criticism that is often levelled at managerial competencies is the failure to identify specific behaviours. Indeed, there is still a tendency for some work to fall prey to the type of imprecise trait labels and global behavioural descriptions which researchers have long lamented (Campbell et al., 1970). However, despite some overlap and cases of hazy descriptions (Boyatzis, 1982), a significant contribution of recent management competency models is that they are more precise in the behavioural specification of competencies (Yukl, Wall, and Lepsinger, 1990).

A review of these models indicates that many of the competencies are relevant to all work. These characteristics are called "universals" (Smith, 1994). A characteristic in the universal domain is defined as one which enables effective performance in 90 per cent of jobs. It is postulated that there are probably only three subdomains within the universal characteristics: cognitive ability, vitality, and the importance people place on work.

Cognitive ability, a characteristic fairly close to the concept of intelligence, is probably the most widely recognised universal skill (Hunter, 1986; Hunter and Hunter, 1984; Schmidt and Hunter, 1981). Work requires people to expend energy, this energy is often described in terms of vitality. It encompasses both physical and mental energy. It is postulated that vitality is linearly related to performance, particularly in situations where performance is measured over an extended time period (Smith, 1994). The third universal, work importance, is similar to work centrality or work ethic (Rabinwitz and Hall, 1977). This universal may also be related to the personality factor, "the will to achieve", which has been repeatedly identified in personality studies (Digman, 1990). The competencies that have been developed recently appear to be more complicated. They are now discussed in terms of base level or threshold

skills, motive or trait level, or social-role or self-image dimensions (Boyatzis, 1982). Advanced competency approaches have viewed managerial competencies as the interaction of behaviours and the cognitive processes which underlie them, both conscious and unconscious (Lee and Beard, 1994). This can create practical problems as competencies are broken down to such a fine level that it is not possible to observe them.

Many of the managerial competency models that are used in New Zealand, as mentioned earlier, are based on United Kingdom or United States models. No New Zealand studies have identified the competencies people use to assess what constitutes an effective senior manager across industries in New Zealand. So it is clear that a large scale New Zealand study would help identify what constitutes effective managerial performance in this country.

CHAPTER SIX THE DERIVATION OF THE COMPETENCIES

The purpose of this study was to identify the competencies people use to assess the effectiveness of senior managers. It was carried out in two parts.

In the first study, chief executives and senior managers in 75 organisations from 8 industries were interviewed using the repertory grid interview approach to identify the competencies they use to determine the effectiveness of their senior managers. The repertory grid technique was used because it provided the opportunity to capture the constructs people actually use to assess the effectiveness of their managers. Therefore a framework of predetermined managerial constructs was not imposed on the subjects. In addition, differences between industries and the different-sized organisations in the competencies required of effective managers were also determined.

In the second study, the managerial competencies identified in the first part of the study were incorporated into a questionnaire and administered to senior managers in two organisations. The questionnaire required respondents to rate an effective senior manager on a range of questionnaire constructs and rate his or her overall effectiveness. It identified the relationship between the competencies and determined the importance people place on the various managerial factors. It also provided the opportunity to compare the model developed in this study with overseas competency models.

Study One: Repertory Grid Interviews

Subjects

The subjects were a sample of 225 chief executives and senior managers from 75 organisations. In each organisation interviews were sought with the chief executive and two of their senior managers.

A total of 227 chief executives and senior managers were invited to participate in the study. Two of the 227 people who were approached, one chief executive and one senior manager, declined to be interviewed, which resulted in a response rate of 99.1%. Twenty nine of the subjects were female (12.9% of the total sample) and 196 were male (87.1% of the total sample). Seventy four of the subjects were chief executives and 151 were senior managers. Only one of the chief executives was female.

The mean number of employees in the managers' organisations was 1195 (Std dev = 1639). The managers had been in their current position for a mean of 3.91 years (Std dev = 3.98).

Selection Criteria and Rationale for the Selection of Subjects

Organisation size, industry classification, and managers' position and tenure were used as the key criteria to select chief executives and senior managers to participate in the interviews. Subordinates of senior managers were not interviewed in this study, because the interview procedure required the subjects to be familiar with the behaviour of three effective and three less effective senior managers in the organisation. While they would be familiar with the behaviour of their senior manager, it was unlikely that they would

have had the opportunity to observe first hand the behaviour of five other senior managers.

For the purpose of this study, senior managers were defined as the managers who report directly to the chief executives in organisations with 150 or more employees. Organisations with 150 or more employees are more likely to have a senior management level as they have clearly defined functional areas with at least four levels of management. A management level typically occurs when people have responsibility for managing staff at a lower level.

To be eligible to be a subject, senior managers and the chief executive in each organisation needed to have been in their current position, or have previously held a senior managerial position in their employing organisation, for a minimum of 12 months. This was to ensure they had a basic level of knowledge of their senior manager's performance. This was because they were required to discuss the behaviour of six of their senior managers during the interview.

Rationale for the Selection of Organisations

The organisations targeted in the study represented eight of the nine major industry groups as defined by the New Zealand Standard Industrial Classification (1991). The number of organisations selected in each industry group was determined on a proportional basis by the number of people employed in each group. For approximately every 25,000 people working in each industry one organisation was targeted (see Table 6.1).

Initially the Mining and Quarrying Industry was included in the study. This industry was eventually excluded because, according to industry employers,

mining organisations often employed substantially fewer than 150 people. In addition, employers stated that it was difficult to define the industries' senior managers.

<u>Table 6.1</u>: Organisations Sampled and Number of People Interviewed in the Eight Industry Groups

Industry Grouping	No of people employed	Organisations sampled	No. of chief executives and senior managers interviewed
Agriculture, Hunting, Forestry and Fishing	23,343	2	6
Manufacturing	280,238	15	44
Electricity, Gas and Water	13,037	3	9
Building and Construction	83,276	3	9
Wholesale, Retail Trade, Restaurants and Hotels	280,896	15	44
Transport, Storage and Communication	87,626	4	14
Financing, Insurance, Real Estate and Business Services	141,184	15	45
Community, Social and Personal Services	311,637	18	54

Strategies Used to Identify and Obtain the Cooperation of Organisations

Partners of the researcher's employing organisation were asked to contact clients and friends who held chief executive positions in the target industries to see if they would participate in the study. The partners were provided with a one page description of the study (see Appendix 1) to assist them in persuading chief executives to participate.

Referrals to chief executives from family and friends and from people the researcher met on planes were also obtained. All the chief executives who were approached, with one exception, agreed to participate. The chief executive who declined to be interviewed stated he did not wish to participate as he felt his competitors might access the information and in turn obtain a competitive advantage. The networks that were available to the researcher contributed to the high level of participation of chief executives and senior managers in the interviews.

Oversampling occurred in a number of industries because people who were initially asked to contact chief executives continued to solicit more subjects to participate in the study after they had been told by the researcher that no more subjects were required. In addition, organisations contacted the researcher directly to see if they could participate.

When a chief executive agreed to participate she or he was sent a facsimile outlining the purpose of the study. When the researcher completed the interviews with the chief executives they were asked to nominate two of their senior managers in the organisation who could also be interviewed. All the senior managers who were referred to the researcher by the chief executive, with the exception of one person, agreed to participate in the study. The one

senior manager who refused to participate stated that he was unable to spare the time because of his overseas commitments.

Repertory Grid Interview

Rationale for the Selection of the Repertory Grid Interview

A repertory grid interview based on Kelly's (1955) work on personal construct theory was chosen as the method for identifying how managers make decisions about the effectiveness of their colleagues. As mentioned earlier, it is an effective procedure for uncovering the constructs which people use to structure and understand their environments (Kandola and Pearn, 1992). It helps a researcher understand how subjects perceive their environment. It has been a widely used method for identifying managers' cognitions (Fransella and Bannister, 1977; Ginsberg, 1989; Stewart and Stewart, 1981). In summary, the repertory grid interview has several advantages.

First, the technique minimises the degree of influence and input the interviewer has on the interviewees' responses (Stewart and Stewart, 1981). The structured nature of the interview focuses the interviewer on eliciting the meanings of their constructs, so they can be recorded and rated. This means that the interviewer has less opportunity to share his or her own constructs with the interviewee. This in turn reduces the chance of the interviewer influencing the interviewee's responses.

Second, the repertory grid interview does not ask participants how they cognitively organise their perceptions, since such questions tend to elicit descriptions of "espoused theories" rather than theories that actually govern behaviour (Ginsberg, 1989). It therefore helps capture the constructs people

really use to assess the effectiveness of their managers rather than what they believe they should be using.

The technique can also provide quantitative data that can be analysed statistically and provides results that can be replicated and validated (Dunn and Ginsberg, 1986). The quantitative data is collected when interviewees evaluate their elements (i.e., people, events, etc.) on the constructs they have developed through the procedure of comparing elements. The approach provides a qualitative and quantitative representation of an individual's mental map of the topic under discussion.

Similar to an open ended interview, it also provides the opportunity for the interviewees to describe managerial characteristics (integrity, charisma, etc.) in their own words. This is important because people do not have a shared understanding of words that are frequently used to describe managerial skills (i.e., delegation, empowerment, leadership, etc.).

Managers also find it an intriguing and novel data collection technique. It is novel because the interviewees are required to write the names of three effective and three less effective managers on six cards. The cards become the focus of the interview, with the interviewee being asked to select three cards and discuss what makes one of their three managers more effective than the others. The interview takes on average an hour and a half to complete so it was critical that managers enjoyed the interview so they did not terminate the interview prematurely, and were willing to nominate two of their peers to be interviewed.

Repertory Grid Interview Instructions

The interview progressed through a number of stages as outlined below.

Introduction

Subjects were initially thanked for participating and were given a brief overview of the study and information about the feedback they would receive as a result of participating (i.e., feedback on the criteria other organisations use to assess the effectiveness of their managers). They were told the purpose of the interview was to find out how they decided whether senior managers in their organisation were effective or less effective. It was stressed that there were no right and wrong answers. They were asked a number of general questions (i.e., length of time in current role, number of employees in the organisation, and their organisational title).

Labelling of Cards

Subjects were shown six cards which were labelled A to F in the bottom right hand corner. On cards A, B, and C they were asked to write the names, initials, or nicknames of three current or past senior managers in their organisation they regarded as effective. On cards D, E, and F they were asked to write the names, initials, or nicknames of three current or past senior managers in their organisation they regarded as less effective. It was stressed that they should only write down the names of the senior managers with whom they were familiar because they needed to describe their behaviour. They were told the cards would remain their property and the researcher was not interested in the names on the cards.

Generating Descriptions of Effective and Less Effective Behaviour

The cards labelled B (i.e., effective manager), D, and E (i.e., less effective managers) were placed in front of the subject. They were asked

"Think about how these three managers perform their job. In what way is one or two of these managers more effective than the other(s) in the way they perform their job?".

The subject indicated which of the three managers on the cards were more effective and described the skill that made that person or persons more effective.

Two completed repertory grid examples are shown in Figure 6.1. This example form was available to the subjects to refer to during the interview. The form contained the question and rating scale the subjects used to rate their senior managers.

The subjects were asked a number of questions in an attempt to elicit behavioural descriptions of the skill they were describing. So if the subject said that one of the managers was more effective because she or he exhibited "leadership" they were asked questions such as, "What would I see him or her doing that would tell me he or she demonstrated leadership ability?" or "How would I know that person had leadership ability?". The positive behaviour they described was written in the column labelled, "How are one or two people more effective?". A copy of the complete repertory grid form that was used to collect the competency information is provided in Appendix 2.

Example Form

DEFINING EFFECTIVE PERFORMANCE

	Importance Rating	1			
rs	×	How are one or two people less effective?	Communication style is pitched to the level of understanding of the client that they are speaking with. (1)	Is able to make decisions in absence of organisational guidelines. (1)	
Behaviours		How are one or two people more effective?	Uses overly technical language when communicating with clients who do not have the same level of technical knowledge. (6)	Dithers when asked to make decisions, especially when there are no set guidelines. (6)	
	Fred	ш	. გ	2 6	
	Les	ш	-	8	
gers	Ann	D	9	e	
Managers	Sally	ပ	4	9	
	Nic Tom Sally Ann Les Fred	В	m	2	
	Nic	٧	ო	4	
Triad			BDE	CEF	ACD

Think about how these three managers perform their job. In what way is one or two of these managers more effective than the other(s) in the way they perform their job?

Figure 6.1: Example Repertory Grid Form

After the subject had described the positive skill of the effective manager(s), they were asked what the less effective manager(s) did that indicated that they did not have the same level of skill as the other manager(s). The description of the negative behaviour was written in the column headed, "How are one or two people less effective?" on the repertory grid form. The description of the negative behaviour provided the opportunity to clarify and enhance their description of the positive behaviour. The researcher recorded the exact words the subject used to describe the positive and negative behaviours and repeated these back to the subject to ensure they had been accurately recorded.

If the subject described a number of skills (e.g., leadership, intelligence, self confidence, etc.) rather than one skill that differentiated between the effective and less effective managers, these were noted and dealt with separately. The subject was asked if they were talking about the same thing when they grouped behaviours together (i.e., "Is leadership the same thing as intelligence?"). It was then explained to the subject that each behaviour would be discussed one at a time.

Rating Performance on Identified Constructs

Once the positive and negative dimensions of the behaviour had been described the subject was asked to place all six cards in front of them. They were asked to rate all six of their managers on the skill they had just described, with the scale point (1) representing the positive end of the effective behaviour and the scale point (6) representing the negative end of the effective behaviour. Subjects were told they could allocate the same ratings to two or more people. They were told that in many cases the managers that they initially categorised as less effective might score quite well on a number of the behaviours and that the reverse might occur for

some of their effective managers. This was said to ensure that the subjects felt that they didn't feel obliged to consistently rate their effective managers high and their less effective managers low.

Once the subjects had a clear understanding of the instructions, the process outlined above was repeated. The researcher asked them each time to take three predetermined combinations of cards (i.e., C, F, and D) and describe how one or two of the managers on the cards were more effective than the other(s) in the way they performed their job.

The researcher recorded their positive and negative descriptions of the behaviour on the repertory grid sheet. The subject was then asked to rate all six managers on the behaviour that had just been discussed. This process continued until the subject was unable to describe any more new behaviours that differentiated the effective from the less effective managers.

Ratings of Construct Importance and Overall Effectiveness

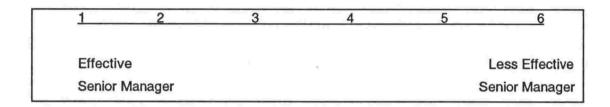
When the subjects were unable to identify further constructs, they were then asked to rate the importance of each of their constructs on a six point scale as shown in Figure 6.2.

Figure 6.2: Repertory Grid Importance Scale

1	2	3	4	5	6
Extreme	ely				Not
Importa	nt				Important

The subjects were then asked to rate each of the six manager's overall effectiveness on six point scale shown in Figure 6.3.

Figure 6.3: Repertory Grid Overall Effectiveness Scale



Subjects were then thanked for their time and asked if they had any questions. If the subject was a chief executive he or she was asked for the names of two senior managers who could also participate in the study.

Pilot Testing and Revision of the Interview Procedure

The interview methodology was pilot tested to identify whether the instructions were clear to participants and to ensure that the interview technique collected the required information efficiently and effectively. The repertory grid interviews were pilot tested in five organisations with five chief executives and ten senior managers. The organisations were selected from three of the eight industry groups (i.e., Community, Social, and Personal Services; Financing, Insurance, Real Estate and Business Services; Electricity, Gas, and Water). The pilot organisations were selected because they were current clients of the researcher's organisation and they were willing to participate in the pilot study. Outlined below are the three changes made to the initial repertory grid interview procedure based on the findings from the pilot study.

First, the term "less effective manager" was used instead of "ineffective manager". Initially when the subjects were asked to think of poor performing senior managers, the term "ineffective managers" was used to describe them. This term produced quite negative reactions from the people who were interviewed and they became quite reluctant to assign managers to this category. In two organisations managers appeared to be personally affronted that the researcher thought that their organisation would harbour managers who were "ineffective". Pilot interviewees felt that the term "ineffective" was too extreme and they felt highly uncomfortable classifying people whom they regarded as poor performers to this category. Managers felt more comfortable identifying and allocating managers to a "less effective manager" category.

Second, the number of effective and ineffective managers identified by the subject was broadened to include past as well as current managers who worked in their employing organisation. The pilot study highlighted that asking subjects to nominate only three effective and three less effective managers who *currently* worked in the organisation was too narrow. A number of interviewees found it difficult to do this because managers in three of the five organisations said their less effective managers had recently been made redundant. The criteria that subjects used to select managers were therefore changed to include managers who had left the organisation.

Finally, the number of people interviewed in each organisation was limited to three people (i.e., the chief executive and two senior managers). In the pilot study each chief executive was asked if all their senior managers could be interviewed. Four of the five chief executives stated they would consent to two senior managers being interviewed, but felt uncomfortable about the amount of time the organisation was investing if the numbers exceeded two. So limiting the number of people interviewed in each organisation to three

increased the researcher's chance of organisations agreeing to participate in the study.

Data Analysis and Results

Interview Constructs

A total of 2299 constructs was identified during the interviews and entered onto a database. The mean number of constructs that was generated by each person was 10, with a minimum of 5 and a maximum of 18. A four step procedure was used to group the constructs collected during the interviews.

First, the constructs were checked for accuracy. This was done by checking 23 of the handwritten interview response forms (10% of the sample) with the qualitative and quantitative information that was entered on the database. The data were carefully checked for accuracy.

Second, the researcher then grouped the constructs into categories.

Constructs were allocated to a category when the same or similar words were used to describe the same concept (i.e., "Can articulate vision of organisation to staff so they can understand it" was put with the construct "Able to interpret the vision and policies of the company and put it into a message that is understood by all"). Each category was assigned a numerical code.

Third, six individuals not involved in the interviews then independently sorted each of the constructs into categories. They coded each of the constructs using either the categories developed by the researcher or, if they felt those categories did not capture the essence of the construct, developed new categories. If they were unable to determine what was meant by the

constructs they were left uncoded. This typically occurred when the definitions were very brief (i.e., "is bright", "knows his stuff"), or when conflicting information was presented in the same statement (i.e., "Is fair - but they can really put the heat on their people if they think they are being slack") and when two concepts were described in the one construct (i.e., "able to deliver on all his commitments and is very good at communicating in social situations").

Finally, constructs were assigned to categories when four or more of the seven raters agreed on the construct category to which the construct belonged. In cases where more than three people disagreed the construct was not assigned to a category. There was a high level of agreement between raters on the assignment of constructs to categories. All seven raters assigned constructs to the same category 66% of the time. Four or more of the raters agreed 89.2% of the time on the assignment of constructs to categories. Eighty two of the 2299 constructs were not assigned to a category and were discarded. The final construct category list is shown in Appendix 3.

Analysis of Rating Scale Distribution

An analysis was conducted on the distribution of the respondent's responses on the three rating scales (i.e., construct ratings for their six managers, their manager's overall effectiveness rating, and construct importance rating). The scales were assessed for their degree of normality. The mean and standard deviations for the three scales are shown in Table 6.2.

Table 6.2: Rating Scale Characteristics

Scale	Mean	Standard Deviation	
Construct Rating Scale	2.97	1.53	
Overall Effectiveness Scale	3.12	.90	
Construct Importance Scale	1.78	.80	

A frequency count of each variable construct was completed to identify the constructs the subjects mentioned most often. As shown in Table 6.3, 22 constructs accounted for 50.4% of all the constructs that were identified. The construct 9.01 Delegation was the most frequently mentioned, at 5.3%. The 20 most frequently mentioned constructs in each of the eight industries are shown in Appendix 4.

A one way analysis of variance was conducted to determine whether different industry groups regard some constructs as more or less important for managerial effectiveness. This statistical method compared subjects' ratings of construct importance in each industry, when ten or more constructs had been mentioned in each industry. There were no significant differences at the p<.01 or p<.05 level between the industry groups on the importance they attributed to the various constructs.

Table 6.3: Frequency of Constructs That Were Mentioned by Subjects

Construct Title	Frequency	Pct	Cum Pct
Delegation skills	117	5.3	5.3
Strategic vision	79	3.5	8.8
Communicates well	65	2.9	11.7
Technical skills	64	2.9	14.6
Planning and organising	62	2.8	17.4
Can deliver	59	2.7	20.01
Weights factors appropriately	54	2.4	22.5
Decisive	52	2.3	24.8
Focuses on organisation's agenda	49	2.2	27.0
Empathy/Sensitivity	46	2.1	29.1
Passes on information	45	2.0	31.1
Open and honest	45	2.0	33.2
Build a team	43	1.9	35.1
Continuous improvement focus	41	1.8	36.9
Knows how all parts of the organisation function	41	1.8	38.7
Intelligence	40	1.8	40.5
Pitches communication correctly	39	1.8	42.3
Approachable	39	1.8	44.1
Makes and takes the tough decisions	37	1.7	45.8
Confidence/Conviction	37	1.7	47.5
Persuade/Influence people	33	1.5	49.0
Consultative	32	1.4	50.4

Another one way analysis of variance was conducted to find out whether the subjects' rating of importance for each construct varied as a function of their organisation's size. The organisations were put into four groups. They were: up to 500 employees (n= 110), between 501-1000 employees (n=38), 1001-2000 employees (n=44), and more than 2001 employees (n=33). Again, to be included in the analysis, each of the four groups needed to contain ten construct ratings. There were no significant differences at the p<.01 or p<.05 level between what the different size organisations regarded as important constructs.

Analysis of the Constructs That Predict a Manager's Overall Effectiveness

A stepwise linear regression was conducted to determine the impact of the individual constructs on the subject's perception of their managers' overall effectiveness. This multivariate technique analyses the relationship between a dependent or criterion variable and a group of independent or predictor variables. Multiple regression was considered an appropriate tool for this study because of its recognised robustness (Harris, 1985; Klecka, 1984; Tabachnick and Fidell, 1983) and the extensive descriptive data it provides.

As Harris (1985) puts it, multiple regression is nothing more than the familiar Pearson correlation between an outcome measure or dependent variable and a linear combination of a subject's scores on a number of predictor variables. A measure of the accuracy of prediction, or strength of linear association, is the ratio of explained variation in the dependent variable, Y, to the total variation in Y, or R² (Edwards, 1984).

The contribution of predictor variables to a linear association described by regression coefficients is generally reported as BETA weights, or standardised regression coefficients. Standardisation allows a comparison of two or more independent variables when these variables are measured in different units (Kim and Kohout, 1975). The effect of an additional predictor variable being added to an equation can be described by a change in R². R² is a part correlation coefficient which describes the relationship between the dependent variable and the additional predictor, with the linear effects of the variables already in the equation removed (Norusis, 1993).

In stepwise regression, the first variable considered for entry into the equation is the one with the largest positive or negative correlation with the dependent variable. If the variable fails to meet entry requirements, the

procedure terminates with no independent variables in the equation. If it passes the criterion, the second variable is selected based on the highest partial correlation. If it passes the entry criteria, it also enters the equation. After the first variable is entered, the first variable is examined to see if it should be removed according to the removal criterion (i.e., a minimum F value). Variables with a value less than the minimum F value are eligible for removal. In the next step, variables not in the equation are examined for entry.

After each step, variables already in the equation are examined for removal. Variables are removed until none remain that meet the removal criterion. While it is recognised that there is no one best variable selection procedure (e.g., forward, backward) (Norusis, 1993), stepwise regression is the most commonly used as it is less likely to result in a distortion of significance levels (Cliff, 1987).

The independent variables were the constructs people used to rate each manager's performance and the dependent variable was the overall performance rating subjects gave each of their managers. In this study only the predictor variables (i.e., constructs) that were mentioned by five or more subjects were included in the analysis. This cut-off point was adopted to eliminate analysing "one-off" constructs that were unique to an individual and did not relect the more frequently mentioned constructs.

Thirty three constructs entered into the equation and an R^2 of .71631, and an adjusted R^2 of .70905 was obtained. Based on the adjusted R^2 , 50% of the variance can be explained by the 33 constructs, as shown in Table 6.4. The constructs in the equation contribute between 2% and 4.7% of the variance.

Table 6.4: Multiple Regression Summary Table

Construct Title	Beta Weight	% Variance	F	р
Technical skills	0.123059	4.6780	251.850	<.00
Can deliver	0.121293	4.6109	282.644	<.00
Delegation skills	0.113104	4.2995	312.481	<.00
Focus on organisational end goals	0.107398	4.0826	185.768	<.00
Weights factors appropriately	0.105937	4.0271	164.835	<.00
Clear and succinct communicator	0.105512	4.0109	228.510	<.00
Decisive	0.100733	3.8293	147.135	<.00
Strategic Vision	0.094575	3.5952	329.813	<.00
Persuade/influence people	0.091674	3.4849	160.103	<.00
Build a team	0.090677	3.4470	177.123	<.00
Confidence/conviction	0.089321	3.3954	170.122	<.00
Passionate about work	0.086973	3.3062	210.480	<.00
Gets on with everyone	0.081975	3.1162	155.378	<.0
Open and honest	0.077933	2.9624	128.144	<.0
Can translate vision	0.077775	2.9565	131,142	<.0
Empathy/sensitivity	0.074985	2.8505	125.281	<.0
Pitches communication correctly	0.074969	2.8499	137.510	<.0
Knows own strengths and weaknesses	0.072151	2.7427	140.359	<.0
Continuous improvement focus	0.071058	2.7012	197.549	<.0
Passes on information	0.070022	2.6618	151,176	<.0
Knows market/industry	0.067122	2.5516	108.978	<.0
Factors that affect vision	0.066051	2.5109	119,457	<.0
Learns new skills	0.065825	2.5023	106.750	<.0
Well prepared before communicating	0.064242	2,4421	116.569	<.0
Long term goals are top of mind	0.063751	2.4234	143.640	<.0
Knows how all parts of the organisation	0.063601	2.4177	134.218	<.0
function				
Satisfies customers	0.062804	2.3874	122.375	<.0
Approachable	0.062677	2.3826	113.964	<.0
Interesting presentation style	0.061866	2.3518	111.482	<.0
Make and take the tough decisions	0.058179	2.2116	104.759	<.0
Expects high standards	0.057525	2.1867	102.636	<.00
Intelligence	0.054047	2.0545	100.655	<.00
Does research	0.051762	1.9677	98.704	<.0

Discussion of Study One

The purpose of this first study was to produce a comprehensive set of statements that described effective managerial performance across a range of New Zealand industries. These statements form the basis of the survey in

the second study. As can be seen in Appendix 5, a comprehensive list of statements of both effective and less effective managerial performance was captured through the repertory grid interview process.

The words managers used in this study to describe their effective managers appear to be more straightforward and less "dressed up" than the words used to describe effective managerial performance in many competency models (Boyatzis, 1982; Powers, 1987; Spencer and Spencer, 1993). For example, the majority of words used in this study (e.g., can deliver on what they promise; is open to new ideas and change in the workplace; realistic and accurate when estimating the resources required to meet objectives, etc.) are clear, and easy to understand. These descriptions contrast markedly with some of the competency descriptors (e.g., use of concepts de novo to identify a pattern in an assortment of information; use of socialised power; use of unilateral power, etc.) used in other models.

The differences in the use of language may have occurred for a number of reasons. First, the popular management books that describe management skills are in the business of selling books, and therefore they differentiate their books by giving new names to familiar management skills (e.g., giving the competency "empowering" the new name of "zapping") (Byham, 1994). They often go to great lengths to "mysticise" the concept of competencies by using a variety of techniques, such as describing the competencies required by managers as occurring at a conscious and unconscious level and using complicated language to describe simple concepts (Boyatzis, 1982).

Second, the data collection technique used in this study minimised the demand characteristics on managers to use the latest "politically correct" terms that litter the popular management press. The repertory grid approach captured the terms managers *actually* use when evaluating the effectiveness of their managers, rather than capturing the terms they feel they should be

using to show they are up to date with current managerial trends. Third, it may well be that New Zealand managers use simpler language than those from other countries.

The number of behavioural descriptors identified through the interview process seem to be larger than other studies. The reason for this was that the purpose of the first part of the study was to develop a comprehensive set of descriptors to cover the domain of effective managerial performance. This was beneficial in that it allowed a more stable factor analysis to be conducted in the second study (Gorsuch, 1983).

Many of the managerial behaviours identified in this study were similar to the behavioural groupings identified in the non-New Zealand management competency models, although different words may have been used to describe the same skill. For instance, the managerial skills that are present in most competency models (i.e., interpersonal, analytical, adaptability, etc.) are captured in the present study. There are also some novel behavioural descriptors identified in this study that do not appear in other competency models (i.e., "knows when to stop partying", "plays or has played sport", "can manage own personal finances", etc.).

There were no significant differences at the p<.01 or p<.05 level between the industry groups on the importance they attributed to the various managerial constructs. This partially supports Dulewicz's (1989) view that 70% of the skills required by managers are similar across organisations and industries. So, strategic vision, delegation, and communication are needed by all managers. This study would suggest that a higher percentage of managerial skills were common requirements across industries.

While a number of people disagree with this view (Canning, 1990; Hamlin and Stewart, 1990), the main source of disagreement seems to be the words

that are used to describe essentially the same skill; for example, what is called delegation in one organisation may be called empowerment in another. While there were no differences identified between industries in the behaviours that were regarded as important for managerial effectiveness, the number of people sampled in each industry was not large enough to be sensitive to differences. It would be interesting in the future to expand the second stage of the study by surveying staff across a range of industries to identify whether there are differences in the importance placed on the various competencies.

The competencies regarded as important for effective managerial performance also did not differ as a function of the size of the organisation. Again the difference between organisations may not have been truly determined because of the small number of managers who were interviewed in each organisation. It may be important to determine whether the competencies that were valued by organisations did vary as a result of the organisation's size. This could be another avenue for future research.

The multiple regression output demonstrated that technical skills were the highest contributor to a manager's perceived level of overall effectiveness. This appears to contrast with the majority of other research, which states that technical skills are not highly valued at the senior management level (Thornton and Byham, 1982). As managers' careers develop and they get promoted, their technical, specialist skills supposedly become less important as they adopt a more generalist approach at senior management levels (Dakin and Hamilton, 1986; Mahoney, Jerdee, and Caroll, 1965).

Highly valuing technical skills at the senior management level may be a function of the New Zealand culture (i.e., the colonial spirit). New Zealand senior managers may be expected to be more versatile and able to demonstrate a high level of skill across a range of areas, including technical

skills. Placing such a high value on technical skills may also mean that senior managers may not fully appreciate the importance of spending time managing people. The more time managers spend doing this invariably means they spend less time in their technical area of expertise.

However, the multiple regression results in this study need to be interpreted with caution, as many of the constructs may in fact be describing the same competency. The factor analysis in the second study assists in identifying the relationship between the constructs.

The descriptions of effective managerial behaviour identified in this study have provided the data to determine how the various construct descriptors group together and how much importance is placed on the different construct groupings, which will now be considered.

CHAPTER SEVEN THE DEVELOPMENT OF A MANAGEMENT COMPETENCY MODEL

The purpose of this study was to develop a model that described the competencies required by effective senior managers in New Zealand. This was achieved by developing a managerial effectiveness questionnaire that contained the descriptions of effective and ineffective behaviour that were identified in the first study. After the questionnaire was piloted it was administered to senior managers in two industry groups. The questionnaire identified the relationship between the descriptions and determined the importance senior managers place on the various competencies.

Study Two: The Managerial Effectiveness Questionnaire

Selection Criteria and Rationale for the Selection of Questionnaire Participants and Organisations

The main criteria for the selection of subjects was that they had worked closely with senior managers in their employing organisation. This was critical as they needed to have observed a wide range of the senior managers' behaviour in order to accurately complete the questionnaire.

Another factor that influenced the selection of organisations to participate in this study was the degree of influence the researcher had in the targeted organisation. The researcher was operating on the premise that the more influence she had in the organisation, the higher the response rate to her questionnaires. As mentioned earlier, senior managers are often very

reluctant to complete questionnaires, particularly lengthy questionnaires, therefore it was important to select organisations and managers who were sympathetic to the study.

The subjects were drawn from two organisations, the New Zealand Police Service and KPMG, a business advisory firm. The New Zealand Police is classified as belonging to the Community, Social, and Personal Services Industry and KPMG to the Financing, Insurance, Real Estate, and Business Services Industry.

KPMG was chosen as a suitable organisation because it was the researcher's employing organisation and she was able to follow up questionnaire participants personally in an endeavour to achieve a high response rate. The New Zealand Police was selected because they were committed to ongoing research into the effectiveness of their senior managers. The researcher had also worked closely with many of their senior managers in developing a managerial assessment and development centre for Assistant Commissioners. The Police were interested in incorporating the results of the questionnaire in the design of their future assessment and development centres. In addition, the Police is one of New Zealand's largest employers, and therefore has a large number of senior managers.

The researcher's discussions with senior managers in KPMG indicated that people who held the position of Senior Consultant or above would be able to comment knowledgeably about a senior manager's performance. Senior managers in KPMG were classified as people who held the positions of Manager, Senior Manager, Director/Associate Director, and Partner. All these positions were responsible for managing staff. The researcher's discussions with staff in the Human Resources section of the New Zealand Police indicated that people who held the rank of Inspector and

Superintendent would be able to assess accurately senior managers who held the rank of Superintendent.

Subjects

At the time of data gathering KPMG employed 256 staff and The New Zealand Police Service employed 6500 staff. A total of 80 managerial effectiveness questionnaires were distributed to KPMG staff who held Senior Consultant, Assistant Manager, Manager, Senior Manager, and Director/Associate Director and Partner positions. The participants worked in either one of three divisions of KPMG (i.e., management consultancy, audit services, or business services). The majority of participants (73.2%) had been in their current role for a period of three years or more. A total of 56 questionnaires were returned, resulting in a response rate of 70%.

A total of 298 questionnaires were sent to New Zealand Police Service employees who at the time of the questionnaire distribution held Superintendent and Inspector positions. The questionnaire participants held positions in one of three branches (i.e., General Duties Branch, Criminal Investigation Branch, or Traffic Safety Service Branch). Just over half the subjects (57.8%) had been employed in their current role for six years or less and 42.2% had been in their roles for more than six years. One hundred and twenty nine questionnaires were returned, resulting in a response rate of 43.3%. In total 185 questionnaires were received from KPMG and the Police Service, resulting in a overall response rate of 48.9%.

Additional demographic details on the questionnaire participants were not collected. The pilot study highlighted the importance of keeping the information requested about questionnaire participants to a minimum because of its potentially sensitive nature. Two of the participants in the

pilot study were concerned that their responses about the effectiveness of a manager in their organisation could be linked to them.

Questionnaire Design and Implementation

The questionnaire was designed to achieve two purposes: First, to allow identification of the underlying factors of managerial performance, and second, to assess the impact or importance of these factors on managerial effectiveness.

The questionnaire incorporated the constructs that were identified in the repertory grid interviews and asked participants to evaluate a senior manager they regarded as effective and knew well. A copy of the questionnaire is provided in Appendix 7.

Questionnaire items were developed in a number of stages. Firstly, three independent psychologists reviewed the construct descriptions in the repertory grid construct list (see Appendix 3). This review was carried out to ensure that the constructs that contained different concepts were not included in the questionnaire in their raw form (i.e., as one questionnaire item).

For example, the definition for construct (1.01) is

"Demands high standards of self and others - does not accept work of average quality or second best. Is very thorough in all work s/he does and attends to detail (i.e., "crosses the t's and dots their i's")" This construct description was perceived by the three independent judges as containing three slightly different concepts within this one construct. If the construct description was included in the questionnaire in the form shown above, it would have been confusing for the questionnaire respondent. In this case, a senior manager could theoretically demand high standards of their work colleagues but not be thorough in their own work and not attend to details in a work situation. Construct (1.01) therefore needed to be split into three parts before it could be included in the questionnaire, as shown below in Table 7.1.

<u>Table 7.1</u>: The Components of Construct (1.01) That Were Included in the Questionnaire

Positive Behaviour	Negative Behaviour
Demands high standards from work colleagues.	Doesn't demand high standards from work colleagues.
Sets high standards for self to achieve.	Doesn't set high standards for self to achieve.
Thorough in their work approach and attends to detail (i.e., crosses their t's and dots their i's).	Not thorough in work approach and takes short cuts.

If two of the three people assessing the construct list felt the construct contained statements with slightly different meanings, the construct was split into separate questionnaire items, as shown in Table 7.1. Appendix 5 contains a list of how the original constructs were separated.

A negative construct pole was created to accompany each of the positive descriptors. A negative pole was created either by putting the word "doesn't" in front of the positive statement or incorporating the negative behaviours

captured during the repertory grid interviews that reflected the opposite behaviour. When the negative behaviour for a particular construct contained a very specific example, as shown in Table 7.2, it became a component of the negative construct, not a feature.

Table 7.2: Example of a Positive and Negative Construct

Positive	Negative
Able to give behavioural feedback to staff so is able to	Talks in generalisations - so is no good at
help their development.	developing people.

So the negative pole changed to, "Doesn't present feedback in a way that promotes development (i.e., talks in generalisations)". These changes were made so the questionnaire respondent was able to rate his or her manager on the full spectrum of the scale. If these changes had not occurred the subject may have felt inhibited rating their manager on the negative pole because they may not have exhibited the specific behaviour mentioned (talks in generalisations), but were in fact not good at giving behavioural feedback.

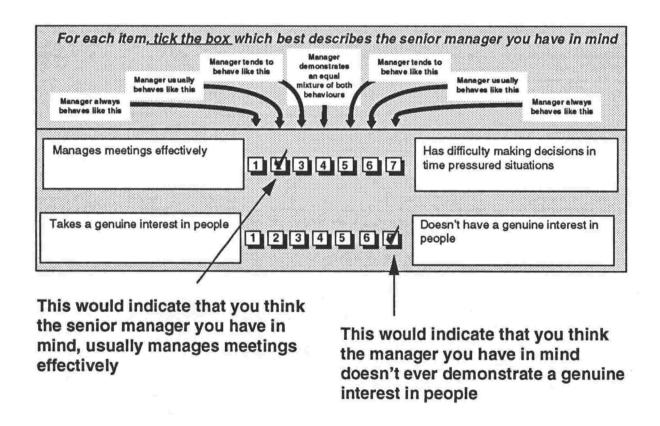
The references to gender in the construct descriptions were taken out and substituted with a neutral term such as "theirs" or "she/he". Grammar was also changed to assist in the ease of reading. In addition, the word "business" was changed to "organisation" because the word business was not relevant for The New Zealand Police. In most cases the words that were used to describe the positive and negative behaviours of managers in the repertory grid interviews were retained. The construct items in the questionnaire were allocated on a random basis.

Questionnaire Rating Scale

The subjects were asked to think of an effective senior manager they knew well or had known. They were asked to use this person as a reference point when completing the questionnaire. It was important that they knew the person well because they were required to rate the person on a wide range of behavioural constructs.

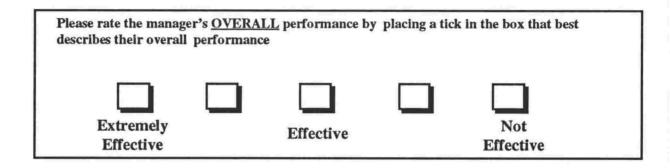
The subjects indicated on a seven point scale the degree to which the questionnaire items were descriptive of their effective manager. The scale was positioned between the positive and negative questionnaire construct items. The scale that was used is shown in Figure 7.1.

Figure 7.1: Questionnaire Rating Scale



The word "manager" that is used in the scale was substituted for "Superintendent" in the Police questionnaire. On completion of the bipolar construct items the subjects rated the manager's overall effectiveness on a five point scale, see Figure 7.2.

Figure 7.2: Managerial Effectiveness Scale



Pilot Testing and Revision of the Questionnaire

A pilot study was conducted to ensure the questionnaire instructions were clear and the questionnaire items were unambiguous. The study was conducted on five people in KPMG and three people in The New Zealand Police to identify any amendments that might be needed. As a consequence of the pilot study the following changes were made:

First, the question that asked participants to state their gender was deleted. Female participants felt that they could be personally identified if this question was asked. They felt their anonymity was not assured because of the relatively small numbers of female managers in both organisations. They perceived it would be easy to trace responses back to participants.

Second, the pictures of a female and male face that accompanied the request for the questionnaire respondent to think of an effective Superintendent was modified as a result of the pilot study. The picture of the female face in the Police questionnaire was substituted with a male face. This change was made because there were no female Superintendents at the time of the questionnaire administration and therefore the picture of the female face was not realistic.

Finally, the positive and negative construct items were not reversed throughout the questionnaire as in the pilot study version. The participants stated quite strongly that they would be reluctant to fill out the questionnaire if the item polarity was reversed because they felt it would take significantly more time to complete.

Eight constructs were removed from the Police Questionnaire because they were not relevant to their work. The positive pole of these constructs is listed in Table 7.3. Appendix 7 contains a copy of the KPMG Questionnaire.

Table 7.3: Constructs That Were Deleted From the Police Questionnaire

Constructs
Has a good mix of entrepreneurial and financial skills (i.e., knows what will make money and what won't).
Looks the part (i.e., is well groomed).
Has business or commercial acumen - can understand what is required for a business to be successful.
Technically very competent in own specialist area (e.g., marketing, financial management, etc.).
Can manage own personal finances.
Able to attract clients that reflect the future strategy of the organisation.
Able to identify business opportunities the organisation could get into to give it a competitive advantage.
Able to close a deal and sell a product or service.

Questionnaire Administration

KPMG questionnaire respondents were sent a copy of the questionnaire through the internal mail system. A handwritten note from the researcher accompanied it urging them to complete it. They were asked if they could complete the questionnaire within two weeks and return it to the researcher through the internal mail. The anonymity of their replies was assured.

The New Zealand Police respondents were sent a copy of the questionnaire along with a letter signed by the Commissioner of Police (see Appendix 6) encouraging them to complete the questionnaire. The questionnaires were sent through the internal mail and returned in the same way. An Inspector in the Human Resources section of the New Zealand Police coordinated the distribution and collection of the questionnaires.

Data Analysis and Results

The accuracy of the questionnaire responses entered on the database was checked for clerical accuracy. This was done by comparing the responses from 19 questionnaires (10% of the sample) with the information that was entered on the database. A frequency analysis was completed to identify data input errors.

The data from the KPMG and Police questionnaires was combined. The eight construct items that were deleted from the Police questionnaire (refer Table 7.3) were not included in the analysis. A factor analysis was conducted on the questionnaire responses to identify the relationship between the questionnaire constructs.

Factor Analysis

Factor analysis was used to explore the ways in which the managerial constructs identified in the repertory grid interviews interact, and to develop a model of managerial effectiveness. Exploratory factor analysis was chosen as a suitable analysis technique because it minimises the number of variables, while also maximising the amount of information produced in the analysis. Cluster analysis was also performed, but it did not provide the richness of data because loadings of variables on each cluster are not provided and the clusters are not as conceptually clear as the factors produced by factor analysis (Gorsuch, 1983).

When performing a factor analysis four heuristics have been recommended to assist in ensuring a stable factor structure (Fergusson and Cox, 1993). These heuristics are: a minimum sample size of between 100 and 200 (Comrey, 1978; Kline, 1986); a minimum ratio of subjects (n) to variables (p) of between 2:1 and 10:1 (Gorsuch, 1983; Kline, 1986; Nunnally, 1978); a minimum ratio of subjects to expected factors and variables to expected factors of between 2:1 and 6:1 (Catell, 1978).

The present study meets all these requirements except the minimum recommended ratio of subjects to variables. In this study it was recognised that many of the items in the questionnaire were not discrete variables (i.e., different words had been used to describe similar concepts) and therefore the heuristic recommending a minimum ratio of subjects to variables was less relevant. The relative merits of these four heuristics have been discussed by Guadagnoli and Velicer (1988), who concluded that sample size is the most important heuristic and that a minimum of 100 subjects is required for factor analysis.

A principal components factor analysis with varimax rotation was used to analyse the questionnaire data. Varimax rotation was chosen because it attempts to simplify the columns of a factor matrix. It tries to get variables to load high or low on factors. The factors are orthogonal in varimax, which aids interpretation, and consequently it is the most widely used rotational procedure in the psychological literature and is recommended as the best rotational procedure to adopt (Fergusson and Cox, 1993). While oblique solutions are possible, they are often difficult to interpret as they allow for a degree of correlation among factors, which makes factors difficult to interpret (Gorsuch, 1983).

The Factors That Were Extracted

Factors are determined by the size of the construct loading on each of the factors. A measure of the degree of generalisability found between each variable and each factor is calculated and referred to as a factor loading. Factor loadings reflect quantitative relationships. The further the factor loading is from zero, the more one can generalise to that variable from each factor. A high factor loading implies that the construct variable can aid in the interpretation of the factor, and in turn can provide some information about how the variables were used.

Clearly statistical significance alone cannot be used to determine the salience of a loading, because with large samples, loadings so small as to be uninterpretable may be statistically significant. In factor analytic studies absolute values of 0.3 are popular as the minimum loading required for a variable to be adequately interpreted (Velicer, Peacock, and Jackson, 1982). This can have problems when a variable loads highly on several factors, because the meaning of the variable must be split between factors when an interpretation of factors is attempted. This can make it difficult to interpret a

factor and can make it necessary for a high loading of a variable to be discarded if it does not aid interpretation. What may be an interpretable salient loading for one variable may not be an interpretable salient loading for another.

The initial procedure in interpreting the factors was to extract them with eigenvalues greater than one. An eigenvalue gives an estimate of the amount of variance associated with any factor. It is the most commonly used method of extraction. As shown in Table 7.4, 49 factors passed this criterion level. The 49 factors accounted for 85.5% of the total variance. Factor One clearly contributed the greatest amount of variance at 43.3%. Overall the first 12 factors contributed 64.9% of the total variance.

Factor analysis was also performed on the individual KPMG and Police data. The factors that contributed one percent or more of the variance for both sets of data, are shown in Appendix 9. In the Police data the first 18 factors accounted for 83.8% of the variance, and in the KPMG data 22 factors accounted for 97.6% of the variance.

There appears to be no clear cut answer in the literature as to how the number of factors in the final solution is determined (Gorsuch, 1983), especially when the scree test does not suggest a natural cut off point. The number of factors in this study's competency model was determined in two ways. First, by identifying the factors with the greatest contribution to the overall variance and second, by identifying the factors that contributed the greatest degree of variance in the multiple regression analysis. Multiple regression was used to determine how much importance people placed on the various factors. This analysis was conducted by regressing the factor scores for each of 49 factors on the overall effectiveness rating the questionnaire respondent gave his or her manager.

Table 7.4: The 49 Factors That had an Eigenvalue Greater Than one

Factor	Eigenvalue	Pct of Var	Cum Pct
1	130.59896	43.4	43.3
2	19.05078	6.3	49.7
2 3	7.89553	2.6	52.3
4	6.05705	2.0	54.3
5	5.04367	1.7	56.0
6	4.72889	1.6	57.6
7	4.37669	1.5	59.1
8	4.22752	1.4	60.5
9	3.59689	1.2	61.7
10	3.25926	1.1	62.8
11	3.21424	1.1	63.9
12	3.09153	1.0	64.9
13	2.72244	0.9	65.8
14	2.68199	0.9	66.7
15	2.55759	0.8	67.5
16	2.47042	0.8	68.3
17	2.39988	0.8	69.1
18	2.38998	0.8	69.9
19	2.26241	0.8	70.7
20	2.17988	0.7	71.4
21	2.17166	0.7	72.1
22	2.05001	0.7	72.8
23	1.93761	0.6	73.4
24	1.92559	0.6	74.0
25	1.83859	0.6	74.6
26	1.82299	0.6	75.2
27	1.75343	0.6	75.2 75.8
28	1.69860	0.6	76.4
29	1.64104	0.5	76.9
30	1.62913	0.5	77.4
31	1.55056		
32		0.5	77.9
	1.54109	0.5	78.4
33	1.49876 1.43251	0.5	78.9
34		0.5	79.4
35	1.38812	0.5	79.9
36	1.37374	0.5	80.4
37	1.36523	0.5	80.9
38	1.33640	0.4	81.3
39	1.29948	0.4	81.7
40	1.26748	0.4	82.1
41	1.22167	0.4	82.5
42	1.20197	0.4	82.9
43	1.14639	0.4	83.3
44	1.11723	0.4	83.7
45	1.10848	0.4	84.1
46	1.98536	0.4	84.5
47	1.05995	0.4	84.9
48	1.02648	0.3	85.2
49	1.00937	0.3	85.5

Using these guidelines, a six factor solution was developed. The questionnaire items that loaded on each of the six factors are shown in Appendix 8. The following section describes the factor analysis and multiple regression results.

Interpreting the Factors

The next step in interpreting the factors was to highlight all questionnaire items that loaded 0.3 and above on each of the factors after varimax rotation. The first 12 factors which contributed 1% or more of the variance will be discussed in the following section.

One hundred and eighty eight questionnaire items loaded 0.3 and above on Factor One. Table 7.4 shows Factor One's 20 highest loading questionnaire items. After considering the loadings and content of the questionnaire items, it seemed appropriate to call the factor "Interpersonal Skills", since all the variables were related to interacting and communicating with people. The highest 20 loadings are clearly interpersonal in nature, with the exception of questionnaire item 193 (Can laugh at themselves, and doesn't take self too seriously), as they relate to managers' interactions with people.

The second factor had 69 questionnaire items loading 0.3 and above. Table 7.6 shows Factor Two's 20 highest loading questionnaire items. After reviewing the content and loading of the questionnaire items on Factor Two it appeared appropriate to name the factor "Conscientious and Organised". The questionnaire items describe the actions of managers who are organised, conscientious, thorough, and focused in their work.

Table 7.5: Factor One's 20 Highest Loading Questionnaire Items

Positive Questionnaire Item	Factor Loading	Questionnaire Item
Takes a genuine interest in people	.84376	80
Makes an effort to make people feel at ease	.83621	221
when talking to them		
Is consultative with staff	.83414	166
Sensitive when dealing with staff	.83293	212
Empathetic when dealing with staff	.83121	208
Is accessible to their staff	.81092	197
Treats all people as their equal	.80327	114
Easy to speak to, people feel comfortable being around them	.79751	14
Takes time to build relationships and understand their staff	.78093	165
Open to other's ideas even if they are different to their beliefs or views	.77898	222
Makes people feel comfortable when they communicate with them	.77468	36
Makes an effort to communicate with everyone in the organisation	.77324	240
Gets on well with everyone in the organisation	.76875	126
Is compassionate when dealing with staff	.76411	173
Can laugh at themselves, and doesn't take self too seriously	.75646	193
Able to relate well to a wide range of people (e.g., managing directors, clerical staff, etc.)	.75645	147
Able to respond and deal appropriately with staff member's feelings (e.g., depression, anger)	.74626	282
Is a team player - can work as a member of a team	.74288	154
Has a harmonising effect on people, can draw people together, who are polarised	.73965	30
Has a basic respect for all staff in the organisation	.73762	79

Table 7.6: Factor Two's 20 Highest Loading Questionnaire Items

Positive Questionnaire Item	Factor Loading	Questionnaire Item
Planned and organised in their work approach	.83517	181
Effectively manages their time	.78036	143
Thorough in their work approach and attends to detail	.73442	219
Focuses on tasks at hand and doesn't go off on tangents or lose track of priorities	.70836	75
Thoroughly researches topic area before conducting presentations on the topic area	.63964	40
Has a strong results orientation and delivers on what they commit themselves to in the required time frame	.63884	66
Focuses on the work that needs doing	.59958	121
Researches information before making decisions	.57920	306
Thorough and focused when researching an issue	.57716	222
Can be relied upon to follow through on what they promise	.56218	4
Manages meetings effectively	.56183	37
Does not over commit self to responsibilities that they can't deliver to	.55980	226
Is decisive and timely when making decisions	.55688	169
Written communication is clear, logical, and can be understood by the reader	.55139	308
Presents and frames information in a logical and easy-to-follow manner	.53993	231
Is consistent in what they say and do	.53146	305
Decision making is consistent and in line with decisions they have previously made	.52983	242
Gives a consistent and stable performance in pressure situations	.51626	257
Written communication is focused so the reader is clear about the purpose of their communication	.51363	309
Objective when making decisions	.47879	243

The third factor contributed 2.6% of the variance. Thirty six questionnaire items loaded 0.3 and above on this factor. Table 7.7 shows Factor Three's 20 highest loading variables

Table 7.7: Factor Three's 20 Highest Loading Questionnaire Items

Positive Questionnaire Item	Factor Loading	Questionnaire Item
Is focused on the strategic direction of the organisation	.70629	167
Their planning reflects the organisation's short and long term goals	.66396	263
Puts the organisation's interests first - is focused on achieving the goals of the organisation	.65584	168
Has an appreciation of how and where the organisation fits into the wider environment (i.e., NZ context)	.65396	203
Their actions reflect the direction of the organisation's strategic plan	.63430	258
Focuses on achieving both their own area's goals as well as the goals of the organisation	.62485	124
Able to achieve a balance between focusing on long and short term goals when developing strategic plans	.61229	267
Keeps up to date with the latest developments in the organisation's area of business	.59090	187
Has a grasp of the issues facing the organisation	.55769	29
Has strategic vision - able to see where the organisation needs to go in the future	.54559	213
Able to articulate the organisation's strategic vision for staff so staff know how they can contribute to the organisational vision	.54551	269
Strives to do things better in the work place (i.e., work practices) and improve on the status quo	.54807	254
Their own individual goals are aligned with the organisation's goals	.53501	261
Has an in-depth knowledge of what is happening in others parts of the organisation	.53280	159
Has comprehensive knowledge of the industry the organisation is in	.52891	160
Has a strong loyalty to the organisation and will support or defend the organisation's or management's views and decisions	.51842	178
Accepts the need to implement organisational initiatives that they may not agree with	.51808	304
Has a good appreciation of all the functions of the organisation, what the different areas do, and how they interact	.50507	86
Their actions support the organisation's policies they promote to their staff members	.48122	16
Has a good general knowledge	.45864	200

A review of the questionnaire items suggest it is appropriate to name the third factor "Strategic Behaviour". The first 11 items describe the behaviour of a manager who is able to plan and behave in a way that reflects the organisation's strategic goals. In some of the lower loading questionnaire items an underlying sense of loyalty to the organisation's strategic goals becomes evident (i.e., "Has a strong loyalty to the organisation and will support or defend the organisation's or management's views and decisions" and "Accepts the need to implement organisational initiatives that they may not agree with"). Questionnaire Item 200 ("Has a good general knowledge") does not seem relevant to the factor.

The fourth factor accounted for 2% of the total variance. Twenty five questionnaire items loaded 0.3 and above on this Factor. Table 7.8 shows this factor's ten highest loading factors. A review of these questionnaire items suggest it can be named "Problem-Solving". All these items relate to solving problems independently, decisively, quickly, and in time-pressured situations.

The fifth factor accounted for 1.7% of the total variance. Eighteen questionnaire items with loadings of 0.3 and above loaded on this factor. Table 7.9 shows Factor Five's 5 highest loading factors.

A review of Factor Five's questionnaire items suggest that it would be appropriate to name this factor "Drive and Enthusiasm". All the items relate to people achieving results through their personal drive, enthusiasm and energy.

Table 7.8: Factor Four's 10 Highest Loading Questionnaire Items

Positive Questionnaire Item	Factor Loading	Questionnaire Item
Can make decisions independently without deferring to others	.81908	141
Able to make decisions in the absence of guidelines or rules	.80243	139
Able to make decisions in time pressured situations	.77870	140
Can think quickly on their feet	.54999	152
Can make links between issues or patterns that are not obvious	.54150	142
Able to analyse conflicting or incomplete information	.53908	134
Able to analyse and synthesise a wide range of information in a short time frame	.53430	297
Able to think conceptually	.50321	170
Able to see the big picture when analysing information	.49131	295
Able to solve complex or new problems	.46643	151

Table 7.9: Factor Five's 10 Highest Loading Questionnaire Items

Positive Questionnaire Item	Factor Loading	Questionnaire Item	
Has a high level of drive and energy to achieve results	.7033	207	
Is enthusiastic and passionate about their work	.6676	210	
Has a strong drive to succeed	.6638	202	
Enthusiastic when persuading or influencing others	.6307	211	
Has an energetic approach which motivates others	.6043	95	
Takes personal responsibility for making things happen in the organisation	.5998	112	
Has a strong work ethic (i.e., dedicated and hard working)	.5171	84	
They set high standards for themselves to achieve	.5141	106	
Has definite views on subjects - prepared to voice ideas and opinions (i.e., says what they think)	.5132	236	
Has a sense of urgency about them - understands what needs to be done today	.4779	105	

Seven other factors contributed between 1.7 and 1.0 % of the variance. The questionnaire items that loaded 0.3 and above on these factors are shown in Table 7.10.

<u>Table 7.10:</u> Factor Six, Seven, Eight, Nine, Ten, Eleven, and Twelve's Highest Loading Questionnaire Items

Positive Questionnaire Item	Factor	Factor Loading	Questionnaire Item
Gives regular negative feedback and constructive criticism to staff if they are not performing to the required level Provides accurate and honest feedback to staff about their performance	6	.75531	26 20
Able to capture an audience's attention due to their varied and interesting interpersonal style	7	.54597	163
Has well developed financial skills Can bring a financial focus to problem- solving Thorough in their financial planning and the monitoring of their budgets	8	.76904 .59477 .57932	161 8 218
Has a thirst for knowledge Can pick-up and learn things quickly	9	.61125 .41476	85 137
Works to achieve win-win outcomes in conflict situations Prepared to question information - doesn't take information at face value	10	.7083 .3498	45 53
Strikes a balance between being a perfectionist and producing results in the required time frames	11	.63571	192
Their personal presence demands attention Aggressive, forceful, and hard-hitting when negotiating - takes a no compromises approach	12	.39693	262 215

Factors six to twelve only contribute 7.2% of the total variance. Only a small number of the questionnaire items load on these factors. A review of them suggests that suitable names are; Factor 6: "Honest Feedback"; Factor 7: "Interesting Presenter"; Factor 8: "Financial Management Skills"; Factor 9:

"Knowledgeable"; Factor 10: "Tenacious"; Factor 11: "Realistic"; Factor 12: "Personal Impact".

It is interesting to note, that the factor structure for the individual KPMG and Police data was similar to the factor profiles derived from the combined data. In the Police data four of the five largest factors (Interpersonal Skills, Conscientious and Organised, Problem-Solving, and Drive and Enthusiasm) were the same as the main factors identified in the combined data. The factor that was not evident in the Police data was "Strategic Behaviour".

The top five factors derived from the KPMG data contained all five of the largest factors(Interpersonal Skills, Conscientious and Organised, Strategic Behaviour, Problem-Solving, and Drive and Enthusiasm), although Drive and Enthusiasm and Problem-Solving presented as a combined factor. However, the KPMG data needs to be interpreted with caution as it did not contain the recommended minimum sample size of 100 to perform a factor analysis (Fergusson and Cox, 1993). The highest factor loadings for the Police and KPMG's first five factors are shown in Appendix 10.

Multiple Regression

A stepwise linear regression was conducted to determine how much importance or weight people place on the various factors when determining the overall effectiveness of their managers. The independent variables were the factor scores derived from the 49 factors with an eigenvalue of one or more. The dependent variable was the overall effectiveness rating the questionnaire respondent gave his or her effective manager. The range of responses on this scale was restricted because subjects were only rating effective managers.

Table 7.11 shows the degree of variance each of the factors contributed to questionnaire respondents' perception of their managers overall effectiveness. An R^2 of .77827 and an adjusted R^2 of .75785 was obtained. Based on the adjusted R^2 , 57% of the variance was explained by 14 factors, with the first two factors contributing 36.69% of the variance. The factors contribute between 2.98 and 21.59% of the variance.

As mentioned earlier, the final factor solution in this study is determined by identifying the factors with the greatest contribution to the overall variance and secondly, by identifying the factors that contributed the greatest degree of variance in the multiple regression. A review of Table 7.4 and 7.11 would suggest that the six largest factors should make up the final factor solution. Table 7.11 indicates that these six factors are the main factors that are being used to assess performance.

Table 7.11: Multiple Regression Summary Table

Factor	Beta Weight	% Variance	F	р
(1) Interpersonal Skills	.541143	21.5947	78.48928	<.001
(2) Conscientious and Organised	.374383	15.0993	75.37882	<.001
(3) Strategic Behaviours	.243571	9.8347	67.10125	<.001
(4) Problem-Solving	.247387	9.9926	66.31552	<.001
(5) Drive and Enthusiasm	.238394	9.4692	69.41396	<.001
(6) Honest Feedback	.118365	4.7821	62.38359	<.001
42	.124201	4.9993	57.75275	<.001
12	.103152	4.2420	49.79787	<.001
41	.094417	3.7791	49.79787	<.001
21	.090946	3.5943	46.96738	<.001
24	.085241	3.4491	44.43677	<.001
15	.078688	3.1933	42.04149	<.001
34	.075095	2.9883	39.85442	<.001
16	.074463	2.9812	38.10904	<.001

Discussion of Study Two

The purpose of this study was to identify the relationship between the various managerial characteristics and behaviours identified in the first study, and to determine how much importance people place on the various managerial skill groupings. This study provided the opportunity to develop a framework of managerial competencies that captured the words and concepts New Zealand managers use to determine the effectiveness of their senior managers. It also provided the opportunity to compare a New Zealand model of management effectiveness with overseas models.

The factor analysis identified one main factor, Interpersonal Skills, that contributed just over 40% of the total variance. The five other factors: Conscientious and Organised, Strategic Behaviour, Problem-Solving, Drive and Enthusiasm, and Honest Feedback, contributed between 1.6% and 6% of the variance. The identification of a general factor and a range of smaller factors indicates that people do not construe managerial effectiveness in terms of large numbers of discrete factorial dimensions that are provided in the popular competency models (Boyatzis, 1982; Powers, 1987; Spencer and Spencer, 1993).

The results of this study indicate that managerial effectiveness is assessed by a small number of factors. The competency models that contain a smaller number of competencies (Cammock, 1991; Kotter 1982b, 1990) appear to reflect realistically how people conceptualise managerial effectiveness. The fact that competency models are often listed as a number of independent factors reflects the way in which the competencies were developed. Competency models are often developed through manually grouping similar concepts rather than statistical grouping. As mentioned earlier, when competencies are grouped manually, people tend to overestimate the number of discrete competencies they take into account when evaluating

others, which often results in a significant overlap in the competencies (Graves and Karren, 1992).

The fact that the main factor was Interpersonal Skills is not too surprising, given that a large component of a manager's job involves interacting with people. All the competency models discussed in Chapter Five had the competency Interpersonal Skills, in some form, as a component of their models. Many of the models split interpersonal skills into a number of discrete interpersonal categories or competencies.

The results from this study suggest that people view interpersonal skills as one construct when they assess people. This would indicate that the competency models that go to great lengths to isolate the different interpersonal skills, conflict with how we actually assess interpersonal skills. However, that is not to say that separating competencies into distinct categories is not useful. Research has shown that when we are specifically asked to observe discrete competencies, we can (Alba and Hasher, 1983). It is just that we are probably not so vigilant in our day to day interactions.

One of the reasons that Interpersonal Skills is such a large factor may be because it is one of the critical skills required by managers. It may also be more prone to a halo effect than other competencies. For example, if managers were seen as being friendly and accessible to staff, it is often assumed they exhibited the other interpersonal skills such as being compassionate and sensitive to individual needs. During the repertory grid interviews it became quite evident that people often classified their senior managers in a rather black and white way when discussing their interpersonal skills. They were either seen as a "people person" or not a "people person". The majority of the items in Factor One capture the many descriptors respondents used to describe the skills or behaviours people need to deal with people.

The importance placed on interpersonal skills in this study may reflect the changing emphasis in the skills required by managers, a pervasive theme in current organisational literature (Baldwin and Padgett, 1994). For example, a manager's ability to influence people by using a wide range of interpersonal skills has become more important in today's organisational environment. Keys and Case (1990) suggest that increasing team interdependence and widening spans of control are diminishing the effectiveness of formal or line authority and, therefore, the ability of a manager to persuade people through influence is becoming more important. The ability to influence and persuade peers, subordinates, and superiors is strongly linked to the interpersonal skills described in Factor One.

A review of the questionnaire items that loaded highly on Factor One indicates that many of the items describe character or personality traits. For example, the ability to be empathetic when dealing with staff, the ability to be approachable and easy to speak to, and the ability to laugh at yourself. The fact that many of the skills described in Factor One describe the characteristics of people's personality and nature has interesting implications for people who train and develop current and future managers. Many of the behaviours and characteristics that make up Factor One are difficult to teach successfully. They are areas in which people find it hard to achieve long term behaviour change (Hellervik, Hazucha, and Schneider, 1992). There would be some difficulty teaching a manager to take a genuine interest in people or teaching managers to be perceptive at reading and understanding the needs of staff.

Factor Two, contributing 6.3% of the variance, also contains statements that describe a number of inherent personality characteristics (e.g., has a strong results orientation and delivers on what is committed to in the required time frame, can be relied on to follow through on what they promise, etc.). However, it also contains a number of managerial activities that are more

amenable to learning (e.g., manages meetings effectively, researches information before making decisions, etc.).

A Comparison of the Main Factors With the Big Five Personality Factors

The results of this study indicate that managerial effectiveness is closely linked to a number of personality characteristics. A number of studies that have investigated the characteristics of effective managers indicate that personality factors are regarded as an important component of managerial effectiveness (Campbell et al., 1970; Clark and Clark, 1990; Hogan, Hogan, and Murtha, 1992). A considerable body of research (Aronoff and Wilson, 1985; Clark and Clark, 1990; Megargee and Carbonell, 1988; Stogdill, 1948, 1974) suggests that a particular combination of personality characteristics (e.g., self-confidence, assertiveness, ambition, and energy) is reliably associated with high-rated performance across organisational type and managerial level. While some people oppose this trait approach to the study of managerial effectiveness (Stogdill, 1948, 1974), developments in personality research and managerial effectiveness have led to a renewed interest in the relationship between personality characteristics and managerial and leadership effectiveness (Clark and Clark, 1990; Hogan, Hogan, and Murtha, 1992).

A number of the more significant factors identified in this study would appear to fit quite closely with the Big Five model of personality structure endorsed by personality psychologists (Digman, 1990; Goldberg, 1993; Hogan, Hogan, and Murtha, 1992; McCrae and Costa, 1987). Factor One "Interpersonal Skills" fits extremely closely with the personality dimension "Agreeableness" and Factor Two closely matches "Conscientiousness" as well as a number of the statements in "Emotional Stability". A number of the

dimensions in Factor Three match the characteristics in "Intellectance", whereas a number of the dimensions in the fifth factor "Drive and Enthusiasm" reflect components of the dimensions "Extraversion" and "Conscientiousness". The fourth largest factor identified in this study, Problem-Solving, is the only main factor that is not adequately covered by the Big Five personality dimensions. This is, however, not surprising because it is probably linked more closely to cognitive ability than personality.

It is noteworthy that the main factor in this study, Interpersonal Skills, which matches closely the dimension of "Agreeableness", has been identified as the dimension with the greatest predictive potential (Tett, Jackson, and Rothstein, 1991) and the dimension "Conscientiousness" has been found to predict all job performance criteria for all occupational groups (Barrick and Mount, 1993). The results of this study suggest that the Big Five model provides a useful framework for identifying how people conceptualise many of the concepts of managerial effectiveness (Hogan, Curphy, and Hogan, 1994). It appears that the Big Five dimensions can be regarded as cognitive prototypes (Cantor and Mischel, 1977) or cognitive schemata (Fiske and Linville, 1980) that people use to evaluate the effectiveness of managers. This would suggest that much of a manager's job is to do with personality

It is noteworthy, that, Barrick and Mount (1993) found, that jobs that are high in autonomy, such as managers' jobs, have stronger links between personality constructs and overall performance. This is in line with the general theoretical proposition that individual difference variables, such as personality, will exert more influence in situations where people are not constrained by rules and regulations (Adler and Weiss, 1988). This study suggests that personality traits predict managerial performance.

Comparison of the Competency Model Developed in This Study With Non-New Zealand Competency Models

The competency model developed from the current study contains most of the key competencies described in the competency models presented in Chapter Five, although it uses slightly different words to describe them (Boyatzis, 1982; Luthans et al., 1988; Powers, 1987; Yukl, Wall, and Lepsinger, 1990). The earlier models (Mintzberg, 1973; Shartle and Stogdill, 1953) contained a number of the behaviours described in the larger factors in this study, although they differed in that the competency of Strategic Behaviour was not evident. This may be because the term "strategic" was not in vogue or was not regarded as a critical part of a manager's job at that time.

The model identified in this study differs because of its heavy emphasis on the behaviours and characteristics of effective managers rather than descriptions of the managerial functions or activities they perform. It appears that people tend to think and evaluate a manager's effectiveness predominantly in relation to a number of personality characteristics and behaviours, rather than thinking about a manager's effectiveness in relation to the content of their jobs (e.g., information management, client/customer relations, etc.). A high percentage of the personal characteristics (i.e., loyalty, drive, etc.) identified in this study impact on the various managerial activities (i.e., delegation, management of resources, etc.).

As mentioned earlier, the main difference between the non New Zealand competency models and this study's model is the emphasis on the manager's interpersonal skills, which are largely a product of their personality. This model also differs from a number of the overseas models because it contains one general factor and a number of smaller factors, rather than a long list of independent competencies.

While there are differences between the factor structure and words used to describe managerial effectiveness, there are similarities between the behaviours and characteristics described in this study and other models. This would indicate that there are common perceptions of what is regarded as "effectiveness" in a manager across cultures, industries, and organisations.

Comparison of the Competency Model Developed in This Study With New Zealand Competency Models

It is useful to compare the results of this study with others that have been developed in New Zealand. As discussed earlier, the most comprehensive study that has been conducted is Cammock's 1991 study (Cammock, 1991). He identified the behaviour and characteristics staff use to assess the effectiveness of their managers in a large public sector organisation.

He found that staff used two factors (i.e., Conceptual and Interpersonal Abilities) to differentiate between ineffective and effective managers. The Interpersonal factor matches quite closely the Interpersonal factor identified in the current study. However, the Conceptual factor is not similar to the other factors in this study. It seems to represent a composite of some of the concepts in Factor Two: Conscientious and Organised; Factor Three: Strategic Behaviour; Factor Four: Problem-Solving; and Factor Five: Drive and Enthusiasm, as well as a number of the concepts identified in the smaller contributing factors. A review of the skills identified in Cammock's Conceptual factor contains some quite disparate concepts. For example, the level of drive a person possesses falls under the same category as the skill that is described as overview (i.e., the ability not to get bogged down in detail so as to maintain the big picture). This combined factor may have been a function of the two-factor solution he adopted.

This study built on and captured a number of additional behaviours and characteristics that were not identified in Cammock's study. The most obvious differences are evident in the third factor, Strategic Behaviour. The items in this factor reflect more of an emphasis on the strategic direction of the organisation and the individual manager's implementation of the strategic direction, than some of the more general items covered in Cammock's conceptual scales. For example, the factor items describe a manager's ability to develop plans that reflect the short and long term goals of the organisation, the ability to focus on achieving both their own area's goals as well as the goals of the organisation, and the ability to articulate the organisation's strategic vision, so staff know how they contribute to the vision. This factor also describes a manager's ability to have an appreciation of the organisation's industry as well as how and where the organisation fits into the wider New Zealand environment.

In addition, the skills that loaded highly on the fourth problem-solving factor (i.e., the ability to make decisions in the absence of guidelines and to make decisions independently without deferring to others) were not captured in Cammock's Conceptual factor. This may be because the managers he surveyed in the public sector organisation did not have to make many decisions that did not have established guidelines, or were not required to make significant decisions without deferring to others. Financial Management skills represented in Factor Eight were also another dimension that was not present in Cammock's list.

The additional behaviour and characteristics that were identified in this study, that were not evident in Cammock's study, are likely to be the result of sampling managers across a range of organisations, rather than sampling managers in one organisation. In addition, some of the additional competencies identified by the current study, such as the emphasis on strategic planning, may reflect the managerial level that was the focus of the

study. Cammock interviewed and surveyed managers and staff across a range of organisational levels, whereas only the views of chief executives and senior managers were canvassed here. A manager's ability to implement the strategic vision of the organisation would therefore be more crucial for this level of manager.

The Importance Placed on the Various Managerial Factors

Limited research has been conducted overseas and in New Zealand on the importance people place on the various managerial factors. As seen from this study (see Table 7.11), people place most importance on interpersonal skills when evaluating the overall effectiveness of their managers. This result is similar to Luthans, Hodgetts, and Rosenkrantz's (1988) findings that a manager's communication is the major contributor to managerial effectiveness. Their "Communication" is similar to this study's "Interpersonal Skills" dimension.

In summary, this study proposes a six-factor model of managerial effectiveness. It consists of one large factor called "Interpersonal Skills" that contributes 43% of the total variance. Five smaller factors contribute between 1.6 and 6.3% of the variance. These six factors describe the main factors people use to assess a manager's effectiveness.

CHAPTER EIGHT OBSERVATIONS FROM THE REPERTORY GRID INTERVIEWS

Many observations were made during the interviews with the 225 chief executives and senior managers. While these depart from the parameters usually associated with conventional field experiments, they do provide some additional insights into the assessment of managers in the work environment.

The Elicitation of the Competencies

During the course of the interviews it became obvious that many of the chief executives and senior managers were reluctant to elaborate on the terms they used to describe certain managerial skills. A number of them appeared quite exasperated and annoyed when asked to describe what they meant by such terms as "leadership", "initiative", "charisma", etc. In response to the request for further clarification they often just repeated their initial one-word definition.

The manager's frustration with the quietly persistent line of questioning appeared to stem from three sources. First, their belief that everyone has a common understanding of the words used to describe managerial competencies (e.g., intelligence, charisma, etc.). This proved to be far from the truth. A diverse range of definitions were provided for many of the managerial competencies. Second, a number of the chief executives may not have been used to people questioning them or asking them to explain themselves. This appeared more likely for managers from

traditional hierarchical organisations. Third, the managers may not have previously considered how they defined the managerial terms they use. The difficulty managers experienced describing the managerial competencies could potentially have quite serious ramifications for the management of people in their organisation. If they are unable to define the managerial competencies they think are important, it is unlikely that their staff and peers will receive clear behavioural feedback about the areas in which they need to improve. One chief executive, in particular, said he was quite exasperated at the lack of "leadership" shown by his senior managers. When asked to elaborate on what he meant by leadership, he was unable to define it and kept repeating phrases such as "You know it when you see it" or "You get this feeling in your gut about a person". No doubt this chief executive will continue to be frustrated with the lack of "leadership" until such time as he can articulate what he means by the term.

The responses from some chief executives and senior managers indicated they considered a narrow range of competencies when comparing their managers. A few managers found it difficult to generate more than three or four managerial competencies that differentiated their effective and less effective managers. It appeared that some managers tended only to assess their peers and subordinates on one performance dimension (i.e., communication ability). In these instances the three or four competencies they generated tended to be variations on a theme; for example, they discussed their managers' ability to communicate informally, formally, and in writing.

During the interviews a number of managers attempted to recall the "latest terms" that were used to describe managerial competencies in the popular management texts (e.g., synergistic team member). They wanted to use these terms, rather than use the words they would normally use to

describe managerial performance. The interviewees wanted to be seen as "up-to-date". Interestingly, in cases where the popular textbook terms (e.g., empowerment, etc.) were used many of the managers were unable to state what the term meant.

A number of the managers, when describing the competencies displayed by their managers, would sometimes group disparate competencies together and say that they were the same competency. So if a manager were skilled in a competency (i.e., intelligence), it was assumed he or she was similarly skilled in another competency (i.e., oral presentation skill). Interviewees were asked in these circumstances whether the competencies they were describing were different, because a manager could be intelligent but not demonstrate effective oral presentation skills. It was indeed surprising when interviewees said that disparate competencies were the same thing. It appeared that some managerial competencies had an inherent halo effect. Effective oral presentation, for example, was often linked with a number of positive managerial competencies (e.g., strategic vision, intelligence, etc.).

On occasions it was difficult to elicit competencies from some managers because they rambled. They were unable to describe the effective or less effective constructs without describing in detail all their experiences with that person. In such circumstances it sometimes took over ten minutes to generate one construct.

The level of openness with which people discussed their effective and less effective managers was surprising. The managers did not appear to be inhibited about discussing them by name. In most interviews they wrote the full names of the managers they regarded as effective and less effective on the repertory grid cards.

It was surprising the number of managers who were able to describe in great detail, and with much confidence, behaviours they had never observed. On a number of occasions the interviewees were asked if they had actually observed their peers performing the behaviours they were describing. This line of questioning was prompted because it seemed strange that the interviewees could talk so vividly about their managers' competencies that would have been difficult to observe first-hand for all six managers (i.e., the manager's ability to conduct a performance appraisal review). Again, it appeared that a manager's ability in one particular area created a halo effect. So again, if someone was perceived to be a friendly person, he or she was also thought to be effective at conducting performance appraisal reviews.

A few of the managers asked that some of the competencies they described not be recorded. They felt that their replies were not "politically correct" criteria to be judging managerial performance. Competencies such as, "This manager is more effective because they look the part", "I like them more because they are easier to talk to", "They are able to talk knowledgably about a range of sport", "They have presence when they walk into a room", "They have represented their province at sport" are examples that were vetoed by some managers.

Often during the interviews managers talked about leadership and management as being different competencies. While many managers saw them as being different, the content of their replies indicated they were unable to distinguish between the two. Regardless of whether they were talking about management or leadership, they still discussed competencies such as communication, planning, analytical ability, etc. A strong impression was gained that having "leadership" ability, whatever it was, was regarded as more desirable than possessing "management"

ability. This was evident when people described a manager as being ineffective because she or he was "More of a manager than a leader".

A Comparison of the Competencies Identified in the Interviews With the Competencies Developed for the Subject's Organisation

At the outset of the interview, when subjects were told its purpose, about a quarter of the managers attempted to locate a list of the managerial competencies that had been developed for their organisation. The subjects were asked if they would mind leaving the organisation's competency list to one side until after the interview, so that the information on the list did not bias their responses. On completion of the interview the chief executives and senior managers compared their responses with their organisation's competency list.

In most cases the competencies generated by the managers during the interview did not resemble their organisation's competencies. The manager's organisational competency list was often long and contained imprecise and vague language to describe the competencies required of managers. Many of the competencies, like "conceptual integrity" and "interpersonal versatility", were difficult to understand in behavioural terms.

A number of organisations seem to have lost sight of the intended purpose of managerial competencies (i.e., to help managers understand what competencies they need to exhibit to be effective and to provide a sound basis for the organisation's human resource practices). It was evident that in many organisations the language used to describe managers' competencies had become an exercise in "word smithing"

rather than a tool to help managers understand what they need to do differently.

Identification and Discussion About the Organisations' Ineffective Managers

A number of the managers were embarrassed about the ease with which they could identify their ineffective managers and the numerous examples they provided of their poor performance. At the conclusion of some of the interviews managers said quite sheepishly, "You are probably wondering why we have these ineffective managers working in the organisation". From discussions with managers it appeared that few of their less effective managers had been told their performance was not of the required standard. This has serious implications for the effective functioning of the organisation and its individual managers. As people are more likely to improve if they are given accurate and timely feedback, it is an important part of the learning process.

From discussions with the managers, there appeared to be a number of factors that inhibited people from resolving performance issues with their ineffective managers. These factors included such things as the manager's friendship with the ineffective manager, the long length of organisational service by the ineffective manager, the fact that the person was a "nice" person, and the burdens they faced in their personal life (e.g., their partner had psychiatric problems). It was surprising that in times of massive restructuring, managers who were often described as incompetent managed to retain senior management positions.

The Limited Number of Female Subjects

The lack of female senior managers encountered in the organisations that were sampled was disappointing. The one chief executive and 28 senior managers who were interviewed contrasted with the 196 males who were interviewed. While the focus of the study was not to identify potential gender differences, it would have been interesting to assess whether there were differences between female and male senior managers in how they evaluated the effectiveness of their colleagues. The researcher attempted to boost the number of women in the sample by asking each chief executive at the conclusion of the interview whether at least one of the senior managers they nominated to be interviewed could be female.

In the majority of cases the chief executives stated that women did not hold senior management positions in the organisation. They were often embarrassed and frequently volunteered explanations. These included such things as, it was difficult to recruit females who were senior managers, that females didn't appear to stay long in the organisation, or they recounted an experience where a past female employee "hadn't worked out". It is noteworthy that the number of women in the sample (12.9%) would seem to be an over-representation of the number of females in senior management positions in New Zealand. A recent study indicated that 7.8% of people employed in senior management are women (McGregor, Thomson, and Dewe, 1994).

Comments on the Interview Process and Research Study

A number of the managers told the researcher they found the repertory grid process excellent for clarifying how they made decisions. They said it was useful, because they rarely had time to think about the criteria they

used to judge the effectiveness of the organisation's managers. In one instance the interviewee thanked the interviewer because it had helped him determine why he wanted a particular manager dismissed!

During a number of the interviews the managers expressed an "antiacademic" feeling and stated they were initially reluctant to participate in a
"university-type study". Many of the senior managers and chief
executives felt the skills taught at university were of little use to business,
and that the universities emphasised the theoretical at the expense of
practical skills. One manager illustrated this by saying, "You get taught
the different motivational theories at university, but you don't get taught
how to sit down and talk to your staff to see what motivates them". It
appears that the concerns they raised were often precipitated by their
experiences of staff who had received excellent grades at university, but
had failed at work because they had poor interpersonal competencies or
lacked what they perceived to be "common sense".

CHAPTER NINE DISCUSSION

Summary of Research Findings

This research project set out to develop a New Zealand model of managerial effectiveness. It presents the managerial competencies that chief executives and senior managers use to determine the effectiveness of their senior managers. This research was carried out in two parts.

In the first part, a comprehensive list of the behaviours and characteristics New Zealand managers use to assess their managers was developed. Chief executives and senior managers in 75 organisations across 8 industries were interviewed using the repertory grid interview approach. This approach provided the opportunity to capture the criteria used to assess the effectiveness of their senior managers.

In the second part, a New Zealand management competency model was developed. The behaviours and characteristics identified in the first study were incorporated in a questionnaire and administered to senior managers in two organisations. Factor analysis and multiple regression was used to identify the competency factor structure and assess the importance managers attributed to the various factors.

In short, the results showed that managers use a small number of factors to assess their managers' performance. A six-factor competency model was proposed. The factors are: Interpersonal Skills; Conscientious and Organised; Strategic Behaviour; Problem-Solving; Drive and Enthusiasm; and Honest Feedback. Interpersonal Skills is the most influential in

determining managerial effectiveness. Five of these factors have strong parallels with the Big Five personality factors that people use to assess personality. It is now important to consider more general issues that relate to these results and the management competency research.

The Identification of Competencies in the Current New Zealand Environment

Over the last five years many organisations, particularly public sector organisations, have been consumed by the trend to identify the critical competencies for their staff and organisation. Discussions with managers interviewed in this study suggests that consultants have been widely used to assist in the identification of competencies. Numerous seminars have been run (e.g., Developing Managers: Managing Development, 1993; Competency-Based Management Development, 1994) to educate people about identifying and implementing management competencies. Discussions with managers and reviews of the literature suggest that the growth of the management competency area has occurred for a number of reasons.

First, some organisations saw "competencies" as the answer to longstanding staff performance problems. They felt that if they could tightly define the criteria used to describe effective performance, they could rid themselves of poor performing employees. The competencies would assist them to refocus their training initiatives and improve their performance evaluation and selection procedures.

Second, a number of organisations felt that competencies could help in the implementation of their organisational cultural change programme. As mentioned earlier, this is a frequently cited reason for developing organisational competencies (Hogg et al., 1994; Iles, 1992; Sparrow and Bognanno, 1993). Competencies were seen as an integral part of change programmes because they specified the behaviours expected of people in the new culture (i.e., team based culture, quality service culture, etc.). Sponsors of cultural programmes felt their initiatives had previously failed because the behaviours expected of people had been described in vague ways or had not been described at all.

One chief executive, for example, described why his organisation's quality service change programme was unsuccessful. They spent thousands of dollars on a "glossy" quality customer service campaign that involved motivational speeches on the importance of customer service, nailing the organisation's five customer service values to most office walls, and numerous newsletters and video clips outlining the virtues of customer service. This campaign was not effective because they did not define what staff needed to do to demonstrate the new values of the organisation (i.e., "customer dedication"). There were negligible changes in staff behaviour.

Third, the New Zealand Government introduced The Industry Training Act in 1992 (Government Printing Office, 1992), which was designed to increase the quality, relevance, and amount of industry training in New Zealand. Funding was made available to assist industries conduct training needs analyses, develop and implement training programmes, and purchase external job training. The availability of funds to enhance industry skills provided the impetus for organisations to identify the competencies relevant to their industry.

Finally, it appears that some organisations sought outside assistance to develop competencies, because they wanted to be seen to embrace the popular competency approach. Often these organisations had not

thought how they would implement the competencies once they had been developed. The development of a competency list was seen as an end in itself.

Over the last year, organisations have now begun the process of integrating competencies into their Human Resource systems. They are used to enhance performance appraisal systems, and in particular are being used as the basis for developing and selecting managers in Assessment Centres. Many organisations feel the most effective way to reinforce their managerial competencies is to assess managers against the competencies and draft development plans that specify the required behavioural changes.

The Development of New Zealand Management Competencies

The New Zealand Qualification Authority (NZQA), who are responsible for accrediting the unit standards developed for training industries, have been trying for the last two years to develop a generic New Zealand model of management competencies. Their mandate was to develop the core competencies required by all managers, regardless of organisational age, size, structure, and sector. The management competency model is intended to be similar to the MCI competencies developed for United Kingdom managers.

Their initial endeavours have been largely unsuccessful. Discussions with managers suggest there are several reasons why this has occurred. First, many organisations find NZQA's competency format unappealing. It divides a job into units that describe outcomes (e.g., management of human resources), elements that describe the competencies to be acquired for each unit (e.g., providing feedback to staff members), and

performance criteria which specify the standards to which the activity must be performed (e.g., feedback is given in a timely manner, etc.) and for which evidence must be gathered (NZQA, 1992).

It appears many organisations were happy with NZQA's format for lower level jobs (i.e., tradespeople, factory workers), but felt that it did not capture the essence of managerial positions. Problems with the format centred around the lack of personality descriptions (e.g., integrity, self confidence, etc.) that people feel are critical for effective managerial performance. As shown in the present study, people tend to think about the effectiveness of managers mostly in terms of personality characteristics, and to some extent, cognitive ability. Therefore, NZQA are in the unenviable position of trying to sell a competency format that is foreign to the way people think about managerial performance.

The current NZQA competency approach does, however, provide an appropriate way to assist in the identification of training needs. Many of the personality characteristics that are important for effective managerial performance are in the performance standards. So, a performance standard for providing feedback may be, "gives negative feedback in private", which implies that the manager needs to possess sensitivity. It is certainly a more useful way to identify training needs than if people are assessed on the competency "sensitivity", which could be open to a wide range of interpretations. Furthermore, it would be a difficult task to instruct people to improve their sensitivity without having the competency framework that described the behaviours they needed to exhibit. No doubt this would further heighten managers' reluctance to give accurate and specific feedback.

Second, it is possible that organisations find the NZQA competency format inappropriate because people think of managers' jobs as different

or special, and therefore the format that is used to describe other jobs is not seen as appropriate. To some degree there appears to be a status issue associated with managers' jobs. This attitude is similar to the different names that are given to training courses targeted at the supervisory, middle, and senior management levels. Frequently, the training content is similar, but in order to sell the courses to managers, they are called quite different names to emphasise and recognise the "specialness" of the management level that is being targeted. So a middle management course might be called "Managers for Tomorrow" or "Visionary Managers" whereas a similar senior managers' course may be called "Industry leaders" or "Strategy for 21st Century Leaders".

Third, because there was little funding for developing the management competencies, as it is not a recognised industry, little consultation occurred in the initial drafting of the managerial competencies. This resulted in a low level of acceptance from industry managers as they saw it as an academic exercise unrelated to the business environment.

NZQA appear to be in a difficult position. If they consult widely with industry managers they are unlikely to please everyone. The managers they consult are likely to be disappointed if they don't see the exact words they used to describe certain competencies. As shown by this study, managers use different words to describe the same concept, and managers are often strongly attached to the words they use to describe managerial performance. Some managers dismiss some competency lists because they do not contain, the words that *they* use, to describe a particular competency.

NZQA will have difficulty gaining acceptance for a generic management competency model for much the same reasons that have been found overseas (Canning, 1990; Hamlin and Stewart, 1990; Personnel

Management, 1990; Sparrow, 1994). People feel that the skills required by their managers are different from the ones required by other organisations. Few organisations see the benefit of generic competency descriptions because they see them as overly bureaucratic, unspecific, and irrelevant to the "way we do things round here". For this reason, no amount of selling will convince some managers that a single list of managerial competencies is applicable to all organisations, or even parts of the same organisation. This view was prevalent when conducting the repertory grid interviews. Quite a few of the managers said that the managers in their organisation needed skills that were unique to their organisation, yet they went on to describe the same skills that people in other organisations had mentioned (i.e., critical thinking, oral presentation skills, etc.).

There is no simple answer to NZQA's problem of developing a generic management competency model that has high acceptance by industry managers. Although NZQA could resolve some of their problems by developing a model that more closely matches how people assess managers performance, as identified in this study. It seems that people do not think about managerial performance in terms of discrete functions, as proposed by NZQA, but rather they evaluate people using personality traits. NZQA could therefore combine their functional approach with the managerial effectiveness framework proposed in this study. This model will fit more closely with how managers think about and evaluate other managers' performance. NZQA's approach needs to be flexible enough to develop a model that reflects how people actually assess managers and that meets the needs of New Zealand business. At present they seem reluctant to do this.

The Relationship Between Management and Psychology Disciplines in the Identification and Implementation of Competencies

There is often a lack of shared knowledge between disciplines. As far as competencies are concerned, management and psychology researchers are pursuing the same issues without an awareness of the efforts of the other discipline. For years, psychologists have been investigating and rigorously debating the issues that management researchers are currently tackling. A considerable amount of psychological research has been conducted on what has been termed the "criterion problem", which, as mentioned earlier, deals with the same issues that are faced by competencies (Austin and Villanova, 1992).

A great deal of psychologically based research has been done on a number of topics pertinent to competencies, such as, multiple and composite criteria (Schneider and Schmitt, 1986), the dynamic nature (or not) of criteria (Austin, Humphreys, and Hulin, 1989; Barrett and Alexander, 1989; Barrett, Caldwell, and Alexander, 1989; Deadrick and Madigan, 1990; Hanges, Schneider, and Niles, 1990), and the expansion of criterion to include extra-role behaviours (Brief and Motowidlo, 1986; Organ, 1988). The lessons that have been identified through this research have been largely ignored in the management competency literature.

Management researchers in the area of competency identification could have, for example, built on the psychological findings that examine how people process information. A number of studies have shown that decision-makers have limited insight into their own decision processes, that people have a poor ability to estimate the type and number of criteria they use when evaluating people (Graves and Karren, 1992; Stumpf and London, 1981; Zedeck and Kafry, 1977). Given that this information is

available, it is surprising that management authors (e.g., Page, Wilson, and Kolb, 1994) continue to assume that people have excellent insight into their own rating style. Management researchers seem to accept uncritically self reports of assessment.

Another example of psychological research that is largely ignored in the management literature is the work conducted on selection methodologies. Managers who work in the human resource area are often quite oblivious to the extensive psychological research on the validities of selection approaches (Hunter and Hunter, 1984; Robertson, 1994; Robertson and Iles, 1988). Managers' beliefs about the accuracy of selection predictors are often not consistent with the extensive psychological selection literature. New Zealand research has shown that when managers who make recruitment decisions are asked to rank the usefulness of selection procedures (e.g., cognitive ability tests, interviews, etc.) their responses indicate they had an inaccurate view of the validities of the different predictors (Dakin and Armstrong, 1989).

The fact that some management researchers do not embrace psychological research can in part be attributed to how the research is conducted. Often the results appear to lack relevance because it is carried out in the laboratory, often with first year students, or using hypothetical subjects, which are commonly referred to as "paper people" (i.e., written vignettes of mythical employees) (Sackett and Larsen, 1990). An experimental policy capturing design, for example, is often used to assess the decision policies of selection interviewers.

Policy capturing requires each interviewer to evaluate candidates who vary along several criteria. The interviewer's evaluations of the applicants are then analysed to determine his/her decision rules for evaluating candidates. In these experiments, profiles of hypothetical applicants are

created by manipulating a number of criteria in a balanced factorial design (Graves and Karren, 1992). While the key advantage of this approach is that correlations between criteria are zero, the principal disadvantage is that hypothetical profiles may not offer a representative simulation of real profiles and may lack external validity (Hobson and Gibson, 1983; Lord and Maher, 1989).

It is often felt that the inferential leap from laboratory-based samples to field applications is seldom warranted (Bernardin and Villanova, 1986; Campbell, 1986; Landy and Shankster, 1994). While the desire to control for a number of variables in experimental studies is laudable, the relevance of the findings to work settings is sometimes limited (Landy and Shankster, 1994; Sackett and Larsen, 1990). Once psychologists acknowledge the importance of obtaining a balance between field and laboratory studies, management researchers and practitioners will no doubt start looking more keenly at the results of these studies. However, management researchers can also be accused of not achieving a balance between field and laboratory studies, as they are predominantly field-based. Ideally, both field and laboratory studies need to be carried out, as it is unlikely that the answers to research questions will be addressed exclusively by either one.

Another reason why valuable information from psychological research is not used is because psychologists are poor at disseminating and advocating their research (Smith, 1982). They do not appear to consider it part of their professional role, whereas management researchers appear to be more inclined to promote their research findings.

As a result of management researchers "repackaging" criterion analysis as competency analysis, organisations have started to recognise the importance of defining the skills required by their staff. It is difficult to

imagine that any amount of pleading by psychologists about the importance of criterion analysis would have led to the intense interest in organisational competencies. Psychologists lament the lack of interest in applying the lessons learnt through psychology, but they may have themselves to blame (Smith, 1982). When psychologists start simplifying the applicable lessons from research (e.g., validity coefficients for selection instruments, utility analysis, etc.) so they are better understood by people in business, psychological principles will start to be integrated into management practices (Boudreau, Sturman, and Judge, 1994).

Issues Related to the Identification of Management Competencies

There are many issues that cloud and complicate the identification of management competencies. First, they are multidimensional so a number of criteria can contribute to successful performance. Consider the competency "problem-solving", an often-cited management competency. A number of facets of problem-solving need to be considered when assessing a person's ability in this area. If only accuracy of problem-solving is measured, this would lead to a partial assessment of a person's ability on this competency. Factors like speed of problem-solving also need to be considered to give a balanced picture.

Second, difficulties are encountered in determining the right amount of competency that a person needs to be effective. Recent research on leaders' traits and skills has introduced the concept of "balance" (Yukl and Van Fleet, 1992). This concept means that the optimal amount of some competencies may be a moderate amount, rather than a very low or very high amount of the competency. Managers need self-confidence to be effective in influencing others, but high levels of self-confidence are likely to be seen as detrimental to performance. Overly confident managers are

likely to be unresponsive to feedback and are unlikely to actively seek the views of others.

However, there are also competencies, such as intelligence, which are generalisable across all jobs (Hunter and Hunter, 1984). Measures of general intelligence provide the single best predictor of job success across all jobs (Ree and Earles, 1993; Schmidt and Hunter, 1993), although there are some studies that suggest that excessive intelligence is a handicap rather than an asset to management (e.g., Most, 1994). Managers with an extraordinarily high intelligent quotient may lack patience with their less intelligent work colleagues and may rely too heavily on their analytical powers rather than seeking important sources of information or accepting advice from their peers (Wagner and Sternberg, 1991).

Similar to the "amount" of competency is the "combination" of competencies that are required for effective performance. Most research on managerial effectiveness has focused on individual competencies, rather than examining how effective managers use combinations of specific competencies to achieve their agendas (Yukl and Van Fleet, 1992). It is likely that specific competencies interact in complex ways and that managerial effectiveness cannot be understood unless these interactions are studied. A manager is not likely to be effective at planning, for example, unless she or he has reasonable analysis skills, which often requires that she or he gather information through networking and consulting activities.

Third, another difficulty that occurs, as mentioned in an earlier chapter, is that quite different managerial styles and corresponding behaviours can lead to equally effective outcomes. Therefore, no one set of

competencies is likely to provide the ideal formula for the successful manager for one position.

Fourth, the domain for describing the competencies required to be an effective manager has expanded. When people describe effective managers, they often describe skills that are not directly related to effective performance in the managers' specific positions. They often discuss behaviours that are described as organisational citizenship behaviour (Organ, 1988), prosocial organisational behaviour (Brief and Motowidlo, 1986), and "fit" with the cultural and behavioural norms of the organisation (Bowen, Ledford, and Nathan, 1991; Judge and Ferris, 1992). These additional behaviours have expanded management roles.

A further difficulty encountered when defining management competencies is the use of language. As shown in this study, the words that are used to describe managerial competencies are often imprecise and mean different things to different people. Where possible this can be overcome by providing a comprehensive definition that describes the behaviours represented by the management competency name. However, this suggestion assumes that people will read the definition, and not assume they understand the definition without reading it.

When developing competencies, in addition to the language used, thought needs to be given to the competency format (i.e., number of competencies that need to be assessed, whether they are organised along work functions or personality factors, etc.). It is useful to identify and use formats that are compatible with the effective observation and evaluation of behaviours. Ideally, they should be structured so that the operations required of raters reflect their natural cognitive structures (Borman, 1991). This results in more efficient and effective processing of information.

The results from this study suggest that people assess managers largely in relation to traits and therefore it may be useful to group managerial competencies along these lines. The closer the competency framework to the way people assess behaviour, the more accurate their assessments will be (Lord and Maher, 1991). Memory researchers have consistently found that the retrieval of information from long-term memory is much more likely when the retrieval conditions, or cues, match the conditions under which information was encoded (Schacter, 1989). Therefore, intervention techniques, such as competency frameworks, are most effective when they match the way people encode information. The ultimate goal is to describe performance requirements in a way that is cognitively compatible, so raters can make accurate performance judgements (Borman, 1991).

Issues Related to the Implementation of Management Competencies

There are a number of barriers and issues related to the successful implementation of competencies in an organisational setting. First, as discussed earlier, people possess and use different schemata or categories to assist in the simplification and processing of information (Fiske, 1993). When managers assess the performance of their staff against organisational competencies, their schemata may interfere with the manager's assessment. While some managers' schemata may match closely the organisational competency list, others may not.

A manager, for example, may value staff who are cautious and methodical, which may contrast with the competencies valued by the organisation, such as risk-taking. To assist managers use the organisation's competencies consistently, rather than their own faulty schemata, it would be worthwhile helping people gain insight into their

own schemata. This might enable people to exercise conscious control over their decision processes and apply criteria, such as competencies, consistently across staff members (Graves and Karren, 1992).

An issue related to the implementation of competencies that has not received much attention is the distortion of staff members' ratings by deliberately inflating or (albeit to a lesser degree) deflating ratings (Fried, Bellamy, and Tiegs, 1992; Ilgen and Favero, 1985; Longnecker, Sims, and Gioia, 1987). Raters often seem more concerned with how ratings best serve their interest as managers rather than their accuracy (Fisher, 1989; Latham and Wexley, 1994). Schuler, Farr, and Smith (1993) captured the essence of the problem when they said that despite the technical gains in designing performance appraisal systems, the political realities of corporate life supersede goals of accuracy and honesty when managers are asked to complete performance appraisals.

Conversations with managers in this study suggest that the problem is pervasive across organisations and industries. This inability of employers to assess their managers honestly makes the implementation of organisational competency models problematic. To ensure competency models are implemented effectively, more attention needs to be spent on helping managers to overcome the difficulties associated with giving accurate feedback and motivating them to give honest assessments (Schuler, Farr, and Smith, 1993). This topic rarely seems to be tackled in rater training.

A third issue is the need for organisations to appreciate that some competencies are best assessed by certain people. For example, the ability to give constructive feedback to subordinates is best evaluated by subordinates rather than superiors. To be effective, performance evaluation systems need to use multiple rating sources (i.e., peer,

superior, and subordinate feedback) (Fletcher, 1994; Wohlers and London, 1989). A review of multiple rating sources cited the value (e.g., increased reliability, fairness, and ratee acceptance, etc.) of using raters from different sources (Harris and Schaubroeck, 1988). While many organisations talk about the benefits of "360 degrees feedback" (i.e., feedback from peers, subordinates and superiors) few appear to have effectively implemented it.

Ideally, organisations should also use one comprehensive competency model to meet the needs of their human resource initiatives (Baehr, 1991). This means an organisation would use it to perform such functions as remunerating, selecting, appraising, and training staff. The development of a competency model that meets the needs of a range of human resource functions has the major advantage of continually reinforcing the competencies that are valued in the organisation. In practice this rarely happens as a result of the long-term investment in cost and time associated with such a project. Separate competency models for the different human resource systems are usually developed in isolation (Caldwell and O'Reilly, 1986). When different competency models are used to select, train, remunerate, and appraise people, conflicting messages are often conveyed about the importance of the different competencies in each of them.

Another contentious issue, illustrated by the current results, is that the effectiveness of managers is largely assessed on personality dimensions. This has strong implications for managers and people who develop managers. Given that personality traits are thought to be relatively stable over time and situations, it is unlikely that developmental activities will bring about relatively permanent changes in these areas.

Some personality characteristics are more stable and less likely to change over time (Hellervik, Hazucha, and Schneider, 1992). The establishment of empirically based hierarchies of changeability has important implications for training and selection applications. So, individuals could increase the return on their training by targeting characteristics with a reasonable chance of success, and organisations could select people on the basis of skills that are trainable.

While a number of researchers have started to examine the level of changeability of a number of human characteristics, it has not progressed far (Mount, Barrick, and Strauss, 1994). Conley (1984) made a major contribution to documenting the relative stability of intelligence, personality, and self opinion (i.e., with the latter being defined as variety of state measures of satisfaction and wellbeing). Howard and Bray (1988) found the "Need for Order" was the most stable, and the "Need for Affiliation" the most changeable over a 20 year time span. Given the extraordinary amount of money spent by organisations developing and training managers, this topic is worthy of additional research (Baldwin and Padgett, 1994; Wexley and Baldwin, 1986).

Problems are likely to be encountered with teaching people to behave in ways that do not fit with their natural style of behaving. This can cause problems, as the managers who adopt artificial styles or follow practices that are not consistent with their personalities are likely to be viewed with suspicion by their staff (Livingstone, 1971). An alternative option is to provide managers with the opportunity to gain insight into their strengths and weaknesses. This would allow them to manage in a way that is consistent with their own personalities, or take steps to move into a role that better suits their personalities.

The results of this study indicate that personality variables have an important role in determining managerial effectiveness. This suggests they would be useful predictors of managerial performance. The effectiveness of individuals is dependent, in part, upon people's personality characteristics. However, as mentioned earlier, discussions in the last decade suggest that mental ability is the only really well established and important predictor, and that measures of general mental ability prove sufficient for many jobs (Gottfredson, 1986; Hunter and Hunter, 1984).

Historically, a large number of different personality constructs have been used in personnel selection research (Robertson, 1994). Until recently there were few generalisable findings and the prevailing climate of opinion amongst researchers was in line with the view expressed by Guion and Gottier (1965), that there was no evidential basis for recommending the use of personality testing in selection decisions. Part of the difficulty in evaluating findings and organising research into the criterion-related validity of personality constructs lay in the lack of clear consensus about the nature and structure of personality dimensions (Robertson, 1994), although this seems to have been largely overcome with the identification of the Big Five personality factors (Digman, 1990). Recent research into personality and work performance looks more promising, as it has uncovered linear relationships between various personality constructs (i.e., conscientiousness) and work performance (Barrick, Mount, and Strauss, 1993).

Another implementation issue that needs to be considered is why some competency models are successfully implemented and others are not. There has been limited research on the reasons for the success and failure of organisational competency programmes. Developing a competency model that is successfully implemented is difficult. A fine

balance needs to be achieved between developing a model that is practical to use (i.e., has a limited number of competencies, uses the words people use to describe effectiveness, etc.) and is politically acceptable to staff (i.e., the competencies acknowledge the "specialness" of the positions that are being targeted, complex terms are used to describe the competencies, contains long lists of competencies, etc.). The model in this study may in fact be resisted by managers as it contains a small number of factors and does not describe the competencies in complex terms.

Discussions with managers indicate that their organisational competency models have met with mixed success. Three of the greatest stumbling blocks are not consulting widely with staff in the organisation on the competencies required by the groups being targeted, not developing a competency format that meets a range of needs (i.e., can be used for recruiting staff, identifying appropriate training programmes, etc.), and not agreeing with staff at the beginning of the competency project on the format of the competencies. This includes whether the competency list will describe managerial activities, personality characteristics, or a mixture of the two.

Consulting with staff on the competencies required by the organisation is difficult. While it is important to canvass people's views, often the process creates unrealistic expectations. A fine balance needs to be made between producing a long list of competencies that captures everyone's words and producing a shorter more practical one. Agreement also needs to be reached early on in the competency identification process about the format of the competencies. People can easily reject a competency list if discussions are not held on the format of the competency model (i.e., list of activities, performance standards, personality characteristics, etc.).

Limitations of the Research and Possibilities for Future Research

The main limiting factor of this research was the sample size in the second study. It would have been interesting to see if any differences in the overall factor structure would have occurred if more organisations had been sampled. In addition, the managers who were interviewed were predominantly male and European: it would have been desirable to get more of a cross-section of society. The results and experience of conducting the research suggests a number of possibilities for future research. These suggestions are related to the managerial effectiveness model developed in this research and the competency movement in general.

First, it would be interesting to administer the Managerial Effectiveness questionnaire to managers and chief executives across a range of industries to assess the robustness of the factor structure. This would provide the opportunity to confirm, or negate, the existence of a generic management model. Analysis of the individual KPMG and Police data indicated that the factor structure was very similar, even though the organisation's structure and culture are different. As mentioned earlier, the size of the sample for the questionnaire could be perceived as a limiting factor. It would be interesting to assess whether the factor structure and importance placed on the factors varied as a function of a number of variables such as the organisation's industry, size, questionnaire respondents position, and gender. Although the latter may be difficult, given the researcher's earlier comments about the limited numbers of senior women managers.

A second possible line of research would be to compare whether the competencies required by senior managers, as identified in this study, are different from the skills required by middle managers and those who hold

more junior management or supervisory positions. Discussions with managers during this study suggested a range of views. Some felt that the competencies required by senior managers were very different from other levels of management, while others felt that similar competencies were required. The strong Interpersonal factor identified in this study suggests that it is likely to be a requirement of all managers with staff responsibility.

Third, the stability of managerial competencies over time could also be examined. While much research has been done in the area of dynamic criteria, the studies have not focused on managerial competencies.

Although there is scarce empirical data, many people are of the view that competencies are dynamic (Boam and Sparrow, 1992; Peters and Quinn, 1988). It appears to be uncritically accepted that new competencies are required when the organisation changes its business strategy. However, little research has been done on the "shelf life" of competencies, and whether they in fact do change over time. These results would have implications for organisations who want to know if, and when, they should update their competencies.

A neglected area of research is the managerial competencies required by the small business manager. Management competency research tends to focus predominantly on large organisations. Given that a high percentage of New Zealand businesses are small businesses (i. e., they employ less than 10 staff), understanding the skills required by these managers may assist in reducing their high failure rate (Business Activity Statistics 1992-1993, 1994). While it is recognised that the failure of these small businesses cannot be attributed purely to the managers' skills, research into the competencies required by these small business managers would be a useful starting point.

Another more general area of research is assessing and quantifying the value of competency models to organisations. The literature suggests content and process benefits occur when competencies are implemented (Sparrow, 1994). Content benefits are defined as specific improvements to the content of human resource management practices, such as defining the standards by which potential employees are assessed in a recruitment interview. Process benefits are general improvements associated with the implementation of organisational competencies (e.g., involvement of line managers in the identification process results in high ownership of the results).

However, many of these benefits, such as more effective succession planning, better decisions about the organisation's structure, and more appropriate self-selection, are untested. Empirical investigations of such claims are being carried out (Mabey and Iles, 1993; Robertson, Iles, Gratton, and Sharpley, 1991), but it will be many years before the impact of the competency-based approach on human resource processes can be truly assessed. Indeed, the fact that competency-based approaches are used in conjunction with organisational changes makes systematic assessment of benefits problematic, as well as the obvious danger of the variable quality of the competency analysis and identification process.

In conclusion, this study has a number of practical implications for the use of management competencies in organisations. Organisations need to minimise the vague and often flowery terms they use to describe managerial performance and use the descriptions managers actually use to assess performance. They also need to be less concerned about using the latest terms in the popular management literature and use words that managers understand. Consideration also needs to be given to adopting a framework that matches closely the way in which people assess managerial effectiveness. Ideally, the cognitive demands on assessors

should be limited, by restricting the number of competencies that assessors need to assess.

Competencies are useful, in that, like the criterion, they help focus people on the requirements of positions. However there needs to be further integration between the psychology and management literature so both can benefit from each other. Ideally, competencies should be the foundation of an organisation's Human Resource systems. Clearly more research is needed on the effectiveness of competency identification and implementation strategies, so organisations can make more informed decisions. However, the competency approach offers the promise of integrating a large number of Human Resource management initiatives that in the past have been developed in a piecemeal fashion.

REFERENCE LIST

- Abelson, R. P. (1981). Psychological status of the script concept. American Psychologist, 36, 715-729.
- Adams-Weber, J. R. (1979). Personal construct theory. New York: John Wiley & Sons.
- Adler, S., & Weiss, H. M. (1988). Recent developments in the study of personality and organizational behaviour. In C. L. Cooper & I. T. Robertson (Eds.), *International review of industrial and organizational psychology* (pp. 307-330). Chichester, England: John Wiley.
- Alba, J. W., & Hasher, L. (1983). Is memory schematic? *Psychological Bulletin*, *93*, 203-231.
- Albanese, R. (1989). Competence-based management education. Journal of Management Development, 8(2), 66-76.
- Anderson, C. D., Warner, J. L., & Spencer, C. C. (1984). Inflation biases in self-assessment examinations: Implications for valid employee selection. *Journal of Applied Psychology*, 69, 574-580.
 - Anderson, S. M., Klatzky R. L., & Murray, J. (1990). Traits and social stereotypes: Efficiency differences in social information processing. Journal of Personality and Social Psychology, 59, 192-201.
 - Aronoff, J., & Wilson, J. P. (1985). *Personality in the social process*. Hillsdale, NJ: Erlbaum.
- Arnold, H. J., & Feldman, D. C. (1981). Social desirability response bias in self-report choice situations. Academy of Management Journal, 24, 377-385.
 - Ash, R. A. (1988). Job analysis in the world of work. In S. Gael (Ed.), The job analysis handbook for business, industry, and government (Vol. 1, pp. 3-13). New York: John Wiley and Sons.
 - Austin, J. T., Humphreys, L. G., & Hulin, C. L. (1989). A critical reanalysis of Barrett et al. *Psychological Bulletin*, 42, 583-596.
 - Austin, J. T., & Villanova, P. (1992). The criterion problem: 1917-1992. Journal of Applied Psychology, 77(6), 836-874.

- Austin, J. T., Villanova, P., Kane, J. S., & Bernardin, H. J. (1991). Construct validation of performance measures: Issues, development, and development of indicators. In G. R. Ferris & K. M. Rowland (Eds.), Research in personnel and human resource management (Vol. 9, pp. 159-233). Greenwich, CT: JAI Press.
- Baehr, M. E. (1988). The Managerial and Professional Functions Inventory (formerly the Work Elements Inventory). In S. Gael (Ed.), The job analysis handbook for business, industry, and government (Vol. 2, pp. 1072-1085). New York: John Wiley and Sons.
- Baehr, M. E. (1991). Job analysis procedures for higher-level executive and professional positions. In J. W. Jones, B. D. Steffy, & D. W. Bray (Eds.), Applying psychology in business: The handbook for managers and human resource professionals (pp. 169-183). New York: Lexington Books.
- Bailey, C. D. (1986). Avoiding errors in judgement. *Internal Auditor*, 43, 25-28.
- Baker, B. R. (1991). MCI management competencies and APL: The way forward for management education, training and development? Journal of European Industrial Training, 15 (9), 17-26.
- Baldwin, M. W. (1992). Relational schemas and the processing of social information. *Psychological Bulletin*, 112(3), 461-484.
- Baldwin, T. T., & Padgett, M. Y. (1994). Management development: A review and commentary. In C. L. Cooper & I. T. Robertson (Eds.), Key reviews in managerial psychology (pp. 270-319). Chichester, England: John Wiley and Sons.
- Bannister, D., & Fransella, F. (1986). *Inquiring man: The psychology of personal constructs* (3rd ed.). London: Croon Helm.
- Barnard, C. (1938). *The functions of the executive*. Cambridge: Harvard University Press.
- Barnes, J. H. (1984). Cognitive biases and their impact on strategic planning. *Strategic Management Journal*, *5*, 129-137.
- Barnes-Farrell, J. L., & Coutkure, K. A. (1984). Effects of appraisal salience on immediate and memory-based judgements (Technical Report No. 84). Honolulu, University of Hawaii, Department of Psychology.

- Barrett, G. V., & Alexander, R. A. (1989). Rejoinder to Austin, Humphreys, and Hulin. Critical reanalysis of Barrett, Caldwell, and Alexander. *Personnel Psychology*, 42, 597-612.
- Barrett, G. V., Caldwell, M. S., & Alexander, R. A. (1989). The predictive stability of ability requirements for task performance: A critical reanalysis. *Human Performance*, 2, 167-181.
- Barrick, M. R., & Mount, M. K. (1993). Autonomy as a moderator of the relationship between the big five personality dimensions and job performance. *Journal of Applied Psychology*, 78, 111-118.
- Barrick, M. R., Mount, M. K., & Strauss, J. P. (1993). Conscientiousness and performance of sales representatives: Test of the mediating effects of goal setting. *Journal of Applied Psychology*, 78, 715-722.
- Bar-Tal, D. & Kruglanski, A. W. (1992). The social psychology of knowledge. New York: Cambridge University Press.
- Bass, B. M. (1990). Bass and Stogdill's handbook of leadership: Theory, research, and managerial applications (3rd ed.). New York: Free Press.
- Bazerman, M. H. (1990). Judgement in managerial decision making (2nd ed.). New York: John Wiley & Sons.
- Beach, L. R. (1990). Image theory: Decision making in personal and organisational contexts. Chichester, England: Wiley.
- Beach, L. R., & Frederickson J. R. (1989). Image theory: An alternative description of audit decisions. *Accounting, Organisations and Society, 14*, 101-112.
- Beer, M., Eisenstat, R., & Spectue, B. (1990). The critical path to corporate renewal. Boston: Harvard Business School Press.
- Bennett, C. E. (1994). Core management competencies for senior executives. Virginia: University of Virginia, The Darden Graduate School Foundation.
- Bennis, W., & Nanus, B. (1985). Leaders. New York: Harper Row.
- Bernardin, H. J., & Villanova, P. (1986). Performance appraisal. In E. A. Locke (Ed.), *Generalizing from laboratory to field settings* (pp. 43-62). Lexington, MA: Lexington Books.

- Boam, R., & Sparrow, P. (1992). Designing and achieving competency: A competency-based approach to developing people and organisations. London: McGraw-Hill Training Series.
- Borman, W. C. (1975). Effects of instructions to avoid halo error on reliability and validity of performance evaluation ratings. *Journal of Applied Psychology*, *60*, 556-560.
- Borman, W. C. (1977). Consistency of rating accuracy and rater errors in the judgement of human performance. *Organizational Behaviour and Human Performance*, 20, 238-252.
- Borman, W. C. (1978). Exploring upper limits of reliability and validity in job performance ratings. *Journal of Applied Psychology*, 63, 135-144.
 - Borman, W. C. (1983). Implications of personality theory and research for the rating of work performance in organizations. In F. Landy, S. Zedeck, & J. Cleveland (Eds.), *Performance measurement and theory* (pp. 127-165). Hillsdale, New Jersey: Erlbaum.
 - Borman, W. C. (1987). Personal constructs, performance schemata, and "folk theories" of subordinate effectiveness: Explorations in an army officer sample. *Organizational Behaviour and Human Decision Processes*, 40, 307-322.
 - Borman, W. C. (1991). Job behaviour, performance and effectiveness. In M. D. Dunnette & L. M. Hough (Eds.), *Handbook of industrial and organizational psychology* (2nd ed.) (Vol. 2, pp. 271-326). Palo Alto, CA: Consulting Psychologists Press.
 - Borman, W. C., & Motowidlo, S. J. (1993). Expanding the criterion domain to include elements of contextual performance. In N. Schmitt & W. C. Borman (Eds.), *Personnel selection in organisations* (pp. 71-98). San Francisco: Jossey-Bass.
 - Borman W. C., Motowidlo, S. J., Rose, S. R., & Hanser, L. M. (1987).

 Development of a model of soldier effectiveness (Army Research Institute Technical Report No 741). VA: USA.
 - Boudreau, J., Sturman, M., & Judge, T. (1994). Utility analysis: "Black Boxes". In N. Anderson & P. Herriot (Eds.), Assessment and selection in organisations: Methods and practice for recruitment and appraisal, first update and supplement 1994 (pp. 77-96). Chichester, England: John Wiley and Sons.

- Bowen, D. E., Ledford, G. E., Jr, & Nathan, B. R. (1991). Hiring for the organization, not the job. *Academy of Management Executive*, 5, 35-51.
- Boyatzis, R. (1982). The competent manager. New York: Wiley.
- Bray, D. W., & Howard, A. (1983). The AT&T longitudinal studies of managers. In K. W. Schaie (Ed.), Longitudinal studies of adult psychological development (pp. 112-146). New York: Guilford.
- Brief, A. P., & Motowidlo, S. J. (1986). Prosocial organizational behaviours. *Academy of Management Review*, 11, 710-725.
- Brodt, S. E. (1990). Cognitive illusions and personnel management decisions. In C. L. Cooper & I. T. Robertson (Eds.), *International Review of Industrial and Organisational Psychology* (Vol. 5, pp. 158-188). Chichester, England: John Wiley & Sons.
- Brunner, J. S. (1991). The narrative construction of reality. *Critical Inquiry*, 18, 1-21.
- Buchman, T. A. (1985). An effect of hindsight on predicting bankruptcy with accounting information. *Accounting, Organisations and Society*, 10, 267-285.
- Business Activity Statistics 1992-1993, (1994). Wellington, New Zealand: Department of Statistics.
- Byham, W. (1994, April). The Empowering Leader: Changing Job Requirements and Dimensions. Paper presented at the 22nd International Congress on the Assessment Centre Method, San Francisco.
- Byham W., & Cox, J. (1992). Zapp: The lightning of empowerment. New York: Fawcett Columbine.
- Caird, S. (1992). Problems with the identification of enterprise competencies and implications for assessment and development. Management Education and Development, 23(1), 6-17.
- Caldwell, M. R., & O'Reilly, C. (1986). Designing and linking human resource programs. *Training and Development Journal*, 40(9), 60-65.
- Cammock, P. (1991). The characteristics and behaviours of effective and ineffective managers. Unpublished doctoral dissertation, Canterbury University, New Zealand.

- Campbell, J. P. (1986). Labs, field, and straw issues. In E. A. Locke (Ed.), *Generalizing from laboratory to field settings* (pp. 269-279). Lexington, MA: Lexington Books.
- Campbell, J. P., Dunnette, M. D., Lawler, E. E., & Weick, K. E., Jr. (1970). Managerial behaviour, performance, and effectiveness. New York: McGraw Hill.
- Campbell, J. P., McCloy, R. A., Oppler, S. H., & Sager, C. E. (1993). A theory of performance. In N. Schmitt, W. C. Borman, & Associates (Eds.), *Personnel selection in organizations* (pp. 35-70). San Francisco: Jossey-Bass.
 - Canning, R. (1990). The quest for competence. *Industrial and Commercial Training*, 22(5), 12-16.
 - Cantor, N., & Mischel, W. (1977). Traits as prototypes: Effects on recognition memory. Journal of Personality and Social Psychology, 35, 38-48.
 - Carroll, S. J., & Gillen, D. J. (1987). Are the classical management functions useful in describing managerial work? *Academy of Management Review*, 1, 38-51.
- Cascio, W. F. (1991). Applied psychology in personnel management (4th ed.). New Jersey: Prentice Hall.
 - Catell, R. (1978). The scientific use of factor analysis in the behavioural and life sciences. New York: Plenum Press.
 - Christensen-Szalanski, J. J., & Northcraft, G. (1985). Patient compliance behaviour. The effects of time on patients' values of treatment regimes. *Social Science and Medicine*, *21*, 263-273.
 - Christensen-Szalanski, J. J., & Willham, C. F. (1991). The hindsight bias: A meta-analysis. *Organizational Behaviour and Human Decision Process*, 48, 147-168.
 - Clark, K. E., & Clark, M. B. (1990). *Measures of leadership*. Greensboro, North Carolina: Leadership Library of America.
 - Cliff, N. (1987). Analyzing multivariate data. Orlando, Florida: Harcourt Brace Jovanovich.
 - Cohen, M. D., & March, J. G. (1986). Leadership and ambiguity: The American college president (2nd ed.). Cambridge, MA: Harvard Business School Press.

- Competency-Based Management Development (February, 1994).

 Conference organised by the Institute for International Research,
 Wellington: New Zealand.
- Comrey, A. (1978). Common methodological problems in factor analytical studies. *Journal of Clinical and Consulting Psychology*, 46, 648-659.
- Conley, J. J. (1984). The hierarchy of consistency: A review and model of longitudinal findings on adult individual differences in intelligence, personality, and self opinion. *Personality and Individual Differences*, 5, 11-25.
- Cook, M. (1993). Personnel selection and productivity (2nd ed.). Chichester, England: John Wiley and Sons.
- Cooper, W. H. (1981). Ubiquitous halo. *Psychological Bulletin*, *90*, 218-244.
- Cornelius, E. T., & Lyness, K. S. (1980). A comparison of holistic and decomposed judgement strategies in job analyses by job incumbents. *Journal of Applied Psychology*, *65*(2), 155-163.
- Dakin, S. R., & Armstrong, J. S. (1989). Predicting job performance: A comparison of expert opinion and research findings. International Journal of Forecasting, 5, 187-194.
- Dakin, S. R., & Hamilton, R. T. (1986). Approaches of general managers to general management (Unpublished paper). Christchurch, New Zealand: University of Canterbury, Department of Management.
- Dakin, S., Hamilton, R., Cammock, P & Gimpl, M. (1984). *The Canterbury Management Study*. Christchurch, New Zealand: Canterbury Division, New Zealand Institute of Management.
- Day, D. V., & Lord, R. G. (1989). Executive leadership and organizational performance: Suggestions for a new theory and methodology. *Journal of Management*, 14 (3), 453-464.
- Deadrick, D. L., & Madigan, R. J. (1990). Dynamic criteria revisited: A longitudinal study of performance stability. *Personnel Psychology*, 44, 717-744.
 - Deaux, K., & Emswiller, T. (1974). Explanations of successful performance on sex-linked tasks: What is skill for the male is luck for the female. *Journal of Personality and Social Psychology*, 29, 80-85.

- DeNisi, A. S., Cafferty, T. P., & Meglino, B. (1984). A cognitive view of the performance appraisal process: A model and research propositions. *Organizational Behaviour and Human Performance*, 33, 360-396.
- DeNisi, A. S., & Williams K. J. (1988). Cognitive approaches to performance appraisal. In G. Ferris & K. Rowland (Eds.), Research in personnel and human resource management (Vol. 2, pp. 35-79). Greenwich, CT: JAI Press.
- Developing Managers: Managing Development (August, 1993). The IPM National Conference, Auckland: New Zealand.
- Digman, J. M. (1990). Personality structure: The emergence of the five-factor model. *Annual Review of Psychology*, 41, 417-440.
- Dipboye, R. L. (1985). Some neglected variables in research on discrimination in appraisals. *Academy of Management Review*, 10, 116-127.
- Downing, L. L. (1994). Criterion shaped behaviour: Pitfalls of performance appraisal. *Journal of Selection and Assessment*, 2(1), 1-21.
- Drucker, P. F. (1974). *Management: Tasks, responsibilities and practises*. New York: Harper and Row.
- Duck, S. (1982). Two individuals in search of agreement: The commonality corollary. In J. Mancuso & J. Adams-Webber (Eds.), *The construing person* (pp. 222-234). New York: Praeger.
- Dulewicz, V. (1989). Assessment centres as the route to competence. Personnel Management, 21(11), 56-59.
- Dunn, W. N., & Ginsberg, A. (1986). A sociocognitive network approach to organizational analysis. *Human Relations*, 40, 955-976.
- Dutton, J. E., & Jackson, S. E. (1987). Categorizing strategic issues: Links to organizational action. *Academy of Management Review*, 12, 76-90.
- Edwards, A. L. (1984). An introduction to linear regression and correlation (2nd ed.). New York: W. H. Freeman.

- Elkin, G. (1995). The development of managerial competence and leadership. In P. Boxall (Ed.), *The challenge of Human Resource management. "Directions and debates in New Zealand"* (pp. 250-267). New Zealand: Longman Paul.
- Feldman, J. M. (1981). Beyond attribution theory: Cognitive processes in performance appraisal. *Journal of Applied Psychology*, 66, 127-148.
- Feldman, J. M. (1986). A note on the statistical correction of halo error. Journal of Applied Psychology, 71, 173-176.
 - Fergusson, E., & Cox, T. (1993). Exploratory factor analysis: A user's guide. *International Journal of Selection and Assessment*, 1(2), 84-94.
 - Fine, S. A. (1971). An introduction to functional job analyses.

 Kalamazoo, MI: Upjohn Institute for Employment Research.
 - Fischhoff, B., & Beyth, R. (1975). "I knew it would happen": Remembered probabilities of once future things. *Organizational Behaviour and Human Performance*, 13, 1-16.
 - Fisher, C. D. (1989) Current and recurrent challenges in HRM. *Journal of Management*, 15, 157-180.
 - Fiske, S. T. (1993). Social cognition and social perception. *Annual Review of Psychology*, 44, 155-194.
 - Fiske, S. T., & Linville, P. W. (1980). What does the schema concept buy us? *Personality and Social Psychology Bulletin*, *6*, 543-537.
 - Fiske, S. T., & Taylor, S. E. (1984). *Social cognition*. New York: McGraw-Hill.
 - Flanagan, J. C. (1954). The critical incident technique. *Psychological Bulletin*, *51*, 327-385.
 - Fleishman, E. A. (1973). Twenty years of consideration and structure. In E. A. Fleishman & J. G. Hunt (Eds.), *Current developments in the study of leadership* (pp. 1-37). Carbondale: Southern Illinois University Press.
 - Fletcher, C. (1994). Performance appraisal in context: Organizational changes and their impact on practice. In N. Anderson & P. Herriot (Eds.), Assessment and selection in organisations: Methods and practice for recruitment and appraisal, first update and supplement 1994 (pp. 41-56). Chichester, England: John Wiley and Sons.

- Fransella, F., & Bannister, D. (1977). A manual for repertory grid technique. London: Academic Press.
- Freda, L. J., & Senkewicz, J. J. (1988). Work diaries. In S. Gael (Ed.) The job analysis handbook for business, industry, and government (Vol. 1, pp. 446-452). New York: John Wiley and Sons.
- Fried, Y., Bellamy, A. R., & Tiegs, R. B. (1992). Personal and interpersonal predictors of supervisor's avoidance if evaluating subordinates. *Journal of Applied Psychology*, 77(4), 462-468.
- Frieze, I. H., & Weiner, B. (1971). Cue utilizational and attributional judgements for success and failure. *Journal of Personality*, *39*, 591-605.
- Gabarro, J. J. (1985). When a new manager takes charge. *Harvard Business Review, May-June*, 110-123.
- Gael, S. (1988). Interviews, questionnaires, and checklists. In S. Gael (Ed.), *The job analysis handbook for business, industry, and government* (Vol. 1, pp. 391-414). New York: John Wiley and Sons.
- Gaugler, B. B., Rosenthal, D. B., Thornton, G. C. III., & Bentson, C. (1987). Meta-analysis of assessment centre validity. *Journal of Applied Psychology*, 72, 493-511.
- Ghiselli, E. E. (1956). Dimensional problems of criteria. *Journal of Applied Psychology*, 40, 1-4.
- Ginsberg, A. (1989). Construing the business portfolio: A cognitive model of diversification. *Journal of Management Studies*, *26*(4), 417-438.
- Gioia, D. A., & Poole, P. P. (1984). Scripts in organizational behaviour. Academy of Management Review, 9, 449-459.
- Gioia, D. A., & Sims, H. P. (1985). On avoiding the influence of implicit leadership theories in leader behaviour descriptions. *Journal of Educational and Psychological Measurement*, 45, 217-237.
- Goldberg, L. R. (1993). The structure of phenotypic personality traits. *American Psychologist*, 48, 26-34.
- Goldstein, I. L., Zedeck, S., & Schneider, B. (1993). An exploration of the job analysis-content validity process. In N. Schmitt, W. C. Borman & Associates (Eds.), *Personnel selection in organisations* (pp. 3-34). San Francisco: Jossey-Bass.

- Gonczi, A., Hager, P., & Athanasou, J. (1993). The development of competency-based assessment strategies for the professions (Research Paper No. 8). University of Technology, Sydney: Australian Government Publishing Service.
- Goodman, P. (1974). Effect of perceived inequity on salary allocation decisions. *Journal of Applied Psychology*, *21*, 372-375.
- Gorsuch, R. L. (1983). Factor analysis (2nd ed.). Hillsdale, New Jersey: Lawrence Erlbaum.
- Gottfredson, L. S. (1986). The *g* factor in employment (Special issue). Journal of Vocational Behaviour, 29(3), 415-420.
- Graves, L. M., & Karren, R. J. (1992). Interviewer decision processes and effectiveness: An experimental policy-capturing investigation. *Personnel Psychology*, *45*, 313-340.
- Guadagnoli, E., & Velicer, W. (1988). Relation of sample size to the stability of component patterns. *Psychological Bulletin*, 103, 265-275.
- Guion, R. M. (1991). Personnel assessment, selection, and placement. In M. D. Dunnette & L. M. Hough (Eds.), Handbook of industrial and organizational psychology (2nd ed.) (Vol. 2, pp. 327-398). Palo Alto, California: Consulting Psychologists Press.
- Guion, R. M. (1993). The need for change: Six persistent themes. In N. Schmitt, W. C. Borman & Associates (Eds.). Personnel selection in organizations (pp. 481-496). San Francisco: Jossey Bass.
- Guion, R. M., & Gottier, R. F. (1965). Validity of personality measures in personnel selection. *Personnel Psychology*, 39, 349-374.
 - Gulick, L., & Urwick, L. (1937). Papers on the science of administration. New York: Columbia University Press
 - Gupta, A. K., & Govindarajan, V. (1984). Business unit strategy, managerial characteristics, and business unit effectiveness at strategy implementation. Academy of Management Journal, 27, 25-41.
 - Guttentag, J., & Herring, R. (1984). Credit rationing and financial disorder. *Journal of Finance*, *39*, 1359-1382.
- Hakel, M. L. (1986). Personnel selection and placement. Annual Review of Psychology, 37, 351-380.

- Hales, C. P. (1986). What do managers do? A critical review of the evidence. Journal of Management Studies, 23, 88-115.
 - Hamill, R., Wilson, T., & Nisbett, R. (1980). Insensitivity to simple bias: Generalizing from atypical cases. *Journal of Personality and Social Psychology*, 39, 578-589.
 - Hamilton, D. L., & Gifford, R. K. (1976). Illusory correlation in interpersonal perception. A cognitive basis of stereotypic judgements. *Journal of Experimental Psychology*, 12, 392-407.
 - Hamlin, B., & Stewart, J. (1990). Approaches to management development in the United Kingdom. *Leadership and Organizational Development Journal*, 11(5), 27-32.
- Hanges, P. M., Schneider, B. J., & Niles, K. (1990). Stability of performance: An interactionist perspective. *Journal of Applied Psychology*, 75, 658-667.
 - Hanson, G. (1986). Determinants of firm performance: An integration of economic and organizational factors. Unpublished doctoral dissertation, University of Michigan Business School, Michigan.
 - Harris, M. M., & Schaubroeck, J. (1988). A meta-analysis of self-supervisor, self-peer, and peer-supervisor ratings. *Personnel Psychology*, 41, 43-62.
 - Harris, R. J. (1985). A primer of multivariate statistics (2nd ed.). Orlando, Florida: Academic Press.
 - Harris, S. G. (1989). A schema-based perspective on organizational culture. Paper presented at the annual meeting of the Academy of Management, Washington, DC.
 - Harvey, R. J. (1991). Job analysis. In M. D. Dunnette & L. M. Hough (Eds.), Handbook of industrial and organizational psychology (2nd ed.) (Vol. 2, pp. 71-164). Palo Alto, California: Consulting Psychologists Press.
 - Hastie, R. (1981). Schematic principles of human memory. In E. T. Higgins, C. A. Herman, & M. P. Zanna (Eds.), Social cognition: The Ontario symposium (Vol. 1, pp. 39-88). Hillsdale, New Jersey: Erlbaum.
 - Hastie, R., & Kumar, P. A. (1979). Person memory: Personality traits as organizing principles in memory for behaviours. *Journal of Personality and Social Psychology*, 37, 25-38.

- Hedge, J., & Kavanagh, M. (1988). Improving the accuracy of performance evaluations: Comparison of the three methods of performance appraiser training. *Journal of Applied Psychology*, 73, 68-73.
- Hellervik, L. W., Hazucha, J. F., & Schneider, R. J. (1992). Behaviour change: Models, methods, and a review of evidence. In M. D. Dunnette & L. M. Hough (Eds.), *Handbook of industrial and organisational psychology* (2nd ed.) (Vol. 3, pp. 823-895). Palo Alto, California: Consulting Psychologists Press.
- Higgins, E. T., & Bargh, J. A. (1987). Social cognition and social perception. *Annual Review of Psychology*, *38*, 369-425.
- Hintzman, D. L. (1986). "Schema abstraction" in a multiple-trace memory model. *Psychological Review*, *93*, 411-428.
- Hintzman, D. L. (1988). Judgement of frequency and recognition memory in a multiple-trace memory model. *Psychological Review*, 95, 528-551.
- Hobson, C. J., & Gibson, F. W. (1983). Policy capturing as an approach to understanding and improving performance appraisal: A review of the literature. *Academy of Management Review*, 8, 640-649.
- Hofmann, D. A., Jacobs, R., & Baratta, J. E. (1993). Dynamic criteria and the measurement of change. *Journal of Applied Psychology*, 78(2), 194-204.
- Hofmann, D. A., Jacobs, R., & Gerras, S. J. (1992). Mapping individual performance over time. *Journal of Applied Psychology*, 77(2), 185-195.
- Hogan, R. T. (1991). Personality and personality measurement. In M. D. Dunnette & L. M. Hough (Eds.), Handbook of industrial and organizational psychology (2nd ed.) (Vol. 2, pp. 873-919). Palo Alto, California: Consulting Psychologists Press.
- Hogan, R., Curphy, G. J., & Hogan, J. (1994). What do we know about leadership: Effectiveness and personality. American Psychologist, 46(6), 493-504.
- Hogan, R., Hogan, J., & Murtha, T. (1992). Validation of a personality measure of managerial performance. *Journal of Business and Psychology*, 2, 225-237.

- Hogarth, R. M. (1988). *Judgement and choice*. Chichester, England: Wiley.
- Hogg, B., Beard, D., & Lee, G. (1994). Competencies. In L. Geoff, and D. Beard, (Eds.), Development centres: Realizing the potential of your employees through assessment and development (pp. 18-56). London: The McGraw-Hill Training Series.
- Holzbach, R. L. (1978). Rater bias in performance ratings: Superior, self, and peer ratings. *Journal of Applied Psychology*, 63, 579-588.
 - Hosking, D., & Morley, I. E. (1988). The skills of leadership. In J. G. Hunt, B. R. Baliga, H. G. Dachler, & C. A. Schnesheim (Eds.), Emerging leadership vistas (pp. 89-106). Lexington, MA: Heath.
 - Houghiemstra, T. (1990). Management of talent. European Management Journal, June, 142.
 - Howard, A., & Bray, D. W. (1988). *Managerial lives in transition:*Advancing age and changing times. New York: Guilford Press.
 - Hunter, J. E. (1986). Cognitive ability, cognitive aptitudes, job knowledge and job performance. *Journal of Vocational Behaviour*, *29*, 340-362.
 - Hunter, J. E., & Hunter, R. F. (1984). Validity and utility of alternative predictors of job performance. *Psychological Bulletin*, *96*, 72-98.
 - Hunter, J. E., Schmidt, F. J., & Judiesch, M. K. (1990). Individual differences in output variability as a function of job complexity. *Journal of Applied Psychology*, 75(1), 28-42.
 - Iles, P. (1992). Centres of excellence? Assessment and development centres, managerial competence, and human resource strategies. *British Journal of Management*, 3(2), 79-90.
 - Ilgen, D. R., Barnes-Farrell, J. C., & McKellin, D. B. (1993). Performance appraisal process research in the 1980s: What has it contributed to appraisals in use? Organizational Behaviour and Human Decision Processes, 54, 321-368.
 - Ilgen, D, R., & Favero, J. L. (1985). Limits in generalization from psychological research to performance appraisal processes. *Academy of Management Review*, 10, 311-321.

- Ilgen, D. R., & Feldman, J. M. (1983). Performance appraisal: A process focus. In B. M. Shaw & L. L. Cummings (Eds.), Research in organizational behaviour (Vol. 5, pp. 141-197). Greenwich, C. T: JAI Press.
- Industry Training Act (1992). Wellington, New Zealand: Government Printing Office.
- Jacobs, R. (1989). Getting the measure of managerial competence.
 Personnel Management, 21(6), 32-37.
 - Jacobs, R., Hofmann, D. A., & Kriska, S. D. (1990). Performance and seniority. *Human Performance*, 3(2), 107-121.
 - Jacobs, R., & Kozlowski, S. W. J. (1985). A closer look at halo error in performance ratings. Academy of Management Journal, 28, 201-212.
 - Jacques, E. (1976). A general theory of bureaucracy. London: Heinemann and Halstead.
 - Jacques, E., & Clement, S. D. (1994). Executive leadership: A practical guide to managing complexity. Cambridge: Cason Hall and Co.
 - Jones, J. W., Steffy, B. D., & Bray, D. W. (1991). Applying psychology in business: The handbook for managers and human resource professionals. New York: Lexington Books.
 - Judge, T. A., & Ferris, G. R. (1992). The exclusive criterion of fit in human staffing decisions. *Human Resource Planning*, 15, 47-68.
 - Kandola, R., & Pearn, M. (1992). Identifying competencies. In R. Boam & P. Sparrow (Eds.), Designing and achieving competency: A competency-based approach to developing people and organisations (pp. 31-49). London: McGraw-Hill Training Series.
 - Kanter, R. M. (1983). *The change masters*. New York: Simon and Schrister.
 - Kaplan, R. E. (1984). Trade routes: The manager's network of relationships. *Organizational Dynamics*, *Spring*, 37-52.
 - Katz, R. L (1955). Skills of an effective administrator. *Harvard Business Review, Jan-Feb*, 33-42.
 - Kelley, G. A., & Michela, J. L. (1989). Attribution theory and research. Annual Review of Psychology, 31, 457-501.

- Kelly, G. A. (1955). The psychology of personal constructs. New York: Norton.
- Keys, B., & Case, T. (1990). How to become an influential manager.

 Academy of Management Executive, 4(4), 38-49.
- Kim, J., & Kohout, F. J. (1975) Multiple regression analysis: Subprogramme regression. In N. H. Nie, C. H. Hull, J. G. Jenkins, K. Steinbrenner, & D. H. Bent (Eds.), Statistical package for the social sciences (2nd ed.) (pp. 320-367). New York: McGraw-Hill.
- Klecka, W. R. (1984). *Discriminant analysis*. Sage University Paper Series, Quantitative Applications in the Social Sciences. London: Sage Publications.
- Kline, P. (1986). Handbook of test construction: Introduction to psychometric design. London: Methuen and Co.
- Koontz, H., & O'Donnell, C. (1964). Principles of management (3rd ed.). New York: McGraw-Hill.
- Kotter, J. P. (1982a). What effective managers really do. Harvard Business Review, 60(6),156-167.
 - Kotter, J. P. (1982b). The general managers: New York: Free Press.
- Kotter, J. P. (1990). What leaders really do. Harvard Business Review, May-June, 103-111.
 - Landy, F. J. (1989). *Psychology of work behaviour* (4th ed.). California: Brooks/Cole Publishing.
 - Landy, F. J., & Farr, J. L. (1980). Performance rating. *Psychological Bulletin*, 87, 72-107.
 - Landy, F. J., & Farr, J. L. (1983). The measurement of work performance: Methods, theory, and applications. London: Academic Press.
- Landy F. J., & Shankster, L. A. (1994). Personnel selection and placement. Annual Review of Psychology, 45, 261-296.
 - Landy, F. J., Vance, R. J., Barnes-Farrell, J. L., & Steele, J. W. (1980). Statistical control of halo error in performance ratings. *Journal of Applied Psychology*, *65*, 501-506.

- Landy, F. J., Zedeck, S., & Cleveland, J. (1983). *Performance management and theory.* Hillsdale, New Jersey: Erlbaum.
- Latham, G. P., & Wexley, K. N. (1994). Increasing productivity through performance appraisal (2nd ed.). Reading, Massachusetts: Addison-Wesley.
- Lawler, E. E. (1967). The multitrait-multirater approach to measuring managerial job performance. *Journal of Applied Psychology*, 51, 369-381.
- Lee, G., & Beard, D. (1994). Development centres: Realizing the potential of your employees through assessment and development. London: The McGraw Hill Training Series.
- Levine, E. L. (1980). Introductory remarks for the symposium "Organisational applications of self-appraisal and self-assessment: Another look". *Personnel Psychology*, *33*, 259-262.
- Limerick, D., & Cunnington, B. (1993). *Managing the new organisation: A blueprint for networks and strategic alliances*. Australia: Business and Professional Publishing.
- Lipshitz, R., & Nevo, B. (1992). Who is a "good manager"? Leadership and Organizational Development Journal, 13(6), 3-7.
- Livingstone, J. S. (1971). Myth of the well-educated manager. *Harvard Business Review, January-February*, 79-88.
- Locksley, A., Borgida, E., Brekke, N., & Hepburn, C. (1980). Sex stereotype and social judgement. *Journal of Personality and Social Psychology*, *39*, 821-831.
- Longnecker, C. O., Sims, H. P., & Gioia, D. A. (1987). Behind the mask: The politics of employee appraisal. *The Academy of Management Executive*, 1, 183-193.
- Lord, R. G. (1985). An information processing approach to social perceptions, leadership and behavioural measurements in organisations. In B. M. Shaw & L. L. Cummings (Eds.), Research in Organisational Behaviours (Vol 7, pp. 87-128). Greenwich, CT: JAI Press.
- Lord, R. G., Foti, R., & De Vader, C. (1984). A test of leadership catergorization theory: Internal structure, information processing, and leadership perceptions. *Organizational Behaviour and Human Performance*, 34, 343-378.

- Lord, R. G., & Kernan, M. C. (1987). Scripts as determinants of purposeful behaviour in organizations. Academy of Management Review, 12, 265-277.
- Lord, R. G., & Maher, K. J. (1989). Cognitive processes in industrial and organisational psychology. In C. L. Cooper & I. T. Robertson (Eds.), International review of industrial and organisational psychology (Vol. 4, pp. 49-91). Chichester, Great Britain: John Wiley & Sons.
- Lord, R. G., & Maher, K. J. (1991). Cognitive theory in industrial and organisational psychology. In M. D. Dunnette & L. M. Hough (Eds.), Handbook of industrial and organisational psychology (2nd ed.) (Vol. 2, pp. 1-62). Palo Alto, California: Consulting Psychologists Press.
- Luthans, F. (1988). Successful vs. effective real managers. *Academy of Management Executive*, 2(2), 127-132.
- Luthans, F., Hodgetts, R. M., & Rosenkrantz, S. A. (1988). *Real managers*. Cambridge, MA: Ballinger.
- Luthans, F., Rosenkrantz, S. A., & Hennessey, H. W. (1985). What do successful managers really do?: An observational study of managerial activities. *The Journal of Applied Behavioural Science*, 21(3), 255-270.
- Mabey, C., & Iles, P. (1993). The strategic integration of assessment and development practices: Succession planning and new manager development. *Human Resource Management Journal*, 3(4), 16-34.
- Mahoney, T. A., Jerdee, T. H., & Carroll, S. J. (1965). The jobs of management. *Industrial Relations*, 4, 97-110.
- Major, B. (1980). Information acquisition and attribution processes. Journal of Personality and Social Psychology, 39, 1010-1023.
- Mann, F. C. (1965). Toward an understanding of the leadership role in formal organizations. In R. Dublin, G. C. Homans, & D. C. Miller (Eds.), *Leadership and productivity*. San Francisco: Chandler.
- Martinko, M. J. (1988). Observing the work. In S. Gael (Ed.) The job analysis handbook for business, industry, and government (Vol. 1, pp. 419-431). New York: John Wiley and Sons.
- Martinko, M. J., & Gardner, W. L. (1985). Beyond structured observation: Methodological issues and new directions. Academy of Management Review, 10, 676-695.

- Martinko, M. J., & Gardner, W. L. (1990). Structured observation of managerial work: A replication and synthesis. *Journal of Management Studies*, 27(3), 329-357.
- McCall, M. W., & Kaplan, R. E. (1985). Whatever it takes: Decision makers at work. Englewood Cliffs, NJ: Prentice-Hall.
- McCall, M. W., & Segrist, C. A. (1980). In pursuit of the manager's job: building on Mintzberg (Tech. Report No. 14). Greensboro, NC: Center for Creative Leadership.
- McClelland, D. C. (1956). *The achieving society*. Princeton, NJ: Van Nostrand.
- McClelland, D. C. (1971). Assessing human motivation. New York: General Learning Press.
- McCormick, E. J., Jeanneret, P. R., & Meacham, R. C. (1972). A study of job characteristics and job dimensions as based on the Position Analysis Questionnaire (PAQ). *Journal of Applied Psychology*, 56, 347-367.
- McCrae, R. R., & Costa, P. T., Jr. (1987). Validation of the five-factor model of personality across instruments and observers. *Journal of Personality and Social Psychology*, 52, 81-90.
- McEnery, J., & McEnery, J. M. (1987). Self-rating in management training needs assessment: A neglected opportunity? *Journal of Occupational Psychology*, 60, 49-60.
- McGregor, J., Thomson, M., & Dewe, P. (1994). Women in management in New Zealand: A benchmark survey. Women in management series (Paper No. 19). Massey University, Palmerston North: New Zealand.
- McLennan, R., Inkson, K., Dakin, S., Dewe, P., & Elkin, G. (1987). People and enterprises. Human behaviour in New Zealand organisations. Sydney: Holt, Rinehart, and Winston.
- Megargee, E. I., & Carbonell, J. L. (1988). Evaluating leadership with the CPI. In C. D. Spielberger & J. N. Butcher (Eds.), *Advances in Personality Assessment* (Vol. 7, pp. 203-209). Hillsdale, NJ: Erlbaum.
- Meindl, J. R., & Ehrlich, S. B. (1987). The romance of leadership and the evaluation of organizational performance. *Academy of Management Journal*, 30, 91-109.

- Middle Management Standards (1992). London: National Forum for Management Education and Development.
- Mintzberg, H. (1973). The nature of managerial work. New Jersey: Prentice-Hall.
- Mitchell, J. L., & McCormick, E. J. (1979). Development of the PMPQ: A structural job analysis questionnaire for the study of professional and managerial positions (Report No. 1). West Lafayette, IN: Occupational Research Centre, Department of Psychological Studies, Purdue University.
- Most, R. (1994). Hypotheses about the relationship between leadership and Intelligence. In K. Clark & M. Clark (Eds.), *Measures of Leadership*, (pp. 459-463). Greensboro, North Carolina: Leadership Library of America.
- Motowidlo, S. J. (1986). Information processing in personnel decisions. In G. Ferris & M. Rowland (Eds.), *Research in personnel and human resources management* (Vol. 4, pp. 1-44). Greenwich, CT: JAI Press.
- Mount, M. K., Barrick, M. R., & Strauss, J. (1994). Validity of observer ratings of the big five personality factors. *Journal of Applied Psychology*, 79(2), 272-280.
- Murphy, K. R., Jacko, R. A., & Anhalt, R. L. (1993). Nature and consequences of halo error: A critical analysis. *Journal of Applied Psychology*, 78(2), 218-225.
 - Nathan, B. R., & Alexander, R. A. (1988). A comparison of criteria for test validation: A meta-analytic investigation. *Personnel Psychology*, 41, 517-535.
 - Nathan, B. R., & Lord, R. G. (1983). Cognitive catergorization and dimensional schemata: A process approach to the study of halo in performance ratings. *Journal of Applied Psychology*, 68, 102-114.
 - Neale, M. A., Huber, V. L., & Northcraft, G. B. (1987). The framing of negotiations, contextual versus task frames. *Organizational Behaviour and Human Decision Processes*, 39(2), 228-241.
 - New Zealand Qualifications Authority (1992) *User book for writing Unit Standards*. New Zealand: NZQA.
 - New Zealand Standard Industrial Classification (1991). Department of Statistics, Wellington: New Zealand.

- Nisbett, R., & Ross, L. (1980). *Human inference: Strategies and shortcomings of human judgement*. Englewood Cliff, NJ: Prentice Hall.
- Northcraft, G., Neale, M., & Huber, V. (1989). The effects of cognitive bias and social influence on human resources management decisions. In G. Ferris & K. Rowland (Eds.), Research in personnel and human resource management (Vol 5, pp. 157-189). Greenwich, CT: JAI Press.
- Norusis, M. J. (1993). SPSS for windows base systems user's guide release 6.0. Chicago: SPSS Inc.
- Nunnally, J. (1978). Psychometric theory. New York: McGraw-Hill.
- O'Reilly, A. P. (1973). Skill requirements: Supervisor-subordinate conflict. *Personnel Psychology*, 26(1), 75-80.
- Organ, D. (1988). Organisational citizenship behaviour: The good soldier syndrome. Lexington, MA: Heath.
- Orne, M. T. (1962). On the social psychology of the psychological experiment, with particular reference to demand characteristics and their implications. *American Psychologist*, 17, 776-783.
- Orsman, H. W., & Ransom, C. C. (1989). Heinemann New Zealand Dictionary. Australia: Heinemann.
- Ostroff, C., & Ilgen, D. R. (1985). The effects of training on rater's accuracy and cognitive categories (Technical Report No. 85-5). East Lahsing, Michigan State University, Department of Psychology and Department of Management.
- Ostrom, T. M., Pryor, J. B., & Simpson, D. D. (1981). The organization of social information. In E. T. Higgins, C. P. Herman & M. P. Zanna (Eds.), Social cognition: The Ontario symposium on personality and social psychology (Vol. 1, pp. 1-38). Hillsdale, NJ: Erlbaum.
- Page, C., Wilson, M., & Kolb, D. (1994). *Management competencies in New Zealand: On the inside looking in?* Wellington, New Zealand: Ministry of Commerce.
- Personnel Management (1990). Management charter initiative has had little impact so far. *Personnel Management*, 22(1), 14.

- Peters, T. & Quinn, R. (1988). Beyond rational management: Mastering the paradoxes and competing demands of high performance. New York: Jossey Bass.
- Pfeffer, J. (1977). The ambiguity of leadership. *Academy of Management Review*, *2*, 104-112.
- Powers, E, A. (1987). Enhancing managerial competence: The American Management Association competency programme. *Journal of Management Development*, 6(4), 7-18.
- Prien, E. P. (1966). Dynamic character of criteria: Organisational change. *Journal of Applied Psychology*, *50*, 835-845.
- Pulakos, E. D. (1984). A comparison of rater training programs: Error training and accuracy training. *Journal of Applied Psychology*, 69, 581-588.
- Rabinwitz, S., & Hall, D. T. (1977). Organizational research on job involvement. *Psychological Bulletin*, 84, 265-288.
- Reed, M., & Anthony, P. (1992). Professionalizing management and managing professionalization: British management in the 1980s. Journal of Management Studies, 29(5), 591-613,
- Ree, M. J., & Earles, J. A. (1993). g is to psychology what carbon is to chemistry: A reply to Sternberg and Wagner, McClelland, and Calfee. Current Directions in Psychological Science, 1, 11-12.
- Robertson, I. T. (1994). Personality and personnel selection. In C. L. Cooper & D. M. Rousseau (Eds.) *Trends in organizational behaviour* (Vol. 1, pp. 75-89). Chichester, England: John Wiley and Sons.
- Robertson, I. T., & Iles, P. A. (1988). Approaches to managerial selection. *International Review Of Industrial and Organisational Psychology* (pp. 159-211). Chichester, England: John Wiley.
- Robertson, I. T., Iles, P. A., Gratton, L., & Sharpley, D. (1991). The impact of personnel selection and assessment methods on candidates. Human Relations, 44(9), 963-982.
 - Rodgers, W., & Housel, T. J. (1987). The effects of information and cognitive processes on decision making. *Accounting and Business Research*, 18, 67-74.

- Roehling, M. V. (1993). "Extracting" policy from judicial opinions: The dangers of policy capturing in a field setting. *Personnel Psychology*, 46, 477-502.
- Ross, L. (1977). The intuitive psychologist and his shortcomings:
 Distortions in the attribution process. In L. Berkowitz (Ed.),

 Advances in experimental social psychology (Vol. 10, pp. 174-177).

 New York: Academic Press.
- Ross, L. & Anderson, C. A. (1982). Shortcomings in the attribution process: On the origins and maintenance of erroneous social assessments. In D. Kahneman, P. Slovic & A. Trevsky (Eds.), Judgement under uncertainty: Heuristics and biases (pp. 129-152). New York: Cambridge University Press.
- Sackett, P. R. & Larsen, J. R., Jr, (1990) Research strategies in industrial and organizational psychology. In M. D. Dunnette & L. M. Hough (Eds.), Handbook of industrial and organizational psychology (2nd ed.) (Vol 1, pp. 419-490). Palo Alto, California: Consulting Psychologists Press.
- Saks, M. J., & Hastie R. C. (1988). Social psychology in court: The judge. In H. R. Arkes & K. R. Hammond (Eds.), Judgement and decision making: An interdisciplinary reader (pp. 255-274). New York: Cambridge University Press.
- Saks, M. J., & Kidd, R. F. (1988). Human information processing and adjudication: Trial by heuristics. In H. R. Arkes & K. R. Hammond (Eds.), Judgement and decision making: An interdisciplinary reader (pp. 213-242). New York: Cambridge University Press.
- Saul, P. (1989). Using management competencies to improve management performance and stimulate self development. Asia Pacific Human Resource Management, 27(1), 74-85.
 - Saville, P., & Holdsworth, R. (1988). Work profiling system manual. Esher: SHL.
 - Sayles, L. R. (1979). Leadership: What effective managers really do and how they do it. New York: McGraw Hill.
 - Schacter, D. L. (1989). Memory. In M. Prosner (Ed.), Foundations of Cognitive Science (pp. 683-725). Cambridge, MA: MIT Press.
 - Schippmann, J. S., Prien, E. P., & G. L. Hughes (1991). The content of management work: Formation of task and job skill composite classifications. *Journal of Business and Psychology*, *5*(3), 325-354.

- Schmidt, F. L., & Hunter, J. E. (1981). Employment testing: Old theories and new research findings. American Psychologist, 36, 1128-1137.
 - Schmidt, F. L., & Hunter, J. E. (1993). Tacit knowledge, practical intelligence, general mental ability, and job knowledge. *Current Directions in Psychological Science*, 1, 8-9.
 - Schmidt, F. L., Hunter, J. E., & Pearlman, K. (1982). Progress in validity generalization: Comments on Callender and Osburn and further developments. *Journal of Applied Psychology*, *67*, 835-845.
 - Schmitt, N. W., & Klimoski, R. J. (1990). Research methods in human resources management. Cincinnati, OH: South-Western.
 - Schneider, B., & Schmitt, N. (1986). Staffing organisations. Glenview, IL: Scott and Foresman.
 - Schneider, D. J. (1973). Implicit personality theory: A review. Psychological Bulletin, 79, 294-309.
 - Schuler, H., Farr, J. L., & Smith, M. (1993). Personnel selection and assessment: Individual and organizational perspectives. Hillsdale, NJ: Lawerence Erlbaum Associates.
 - Schwenk, C. R. (1988). The cognitive perspective on strategic decision making. *Journal of Management Studies*, 25, 41-55.
 - Scott, W. E., Jr., & Hamner, W. C. (1975). The influence of variations in performance profiles on the performance evaluation process: An examination of the validity of the criterion. *Organizational Behaviour and Human Performance*, 14, 360-370.
 - Seashore, S. E., & Yuchtman, E. (1967). Factorial analysis of organizational performance. *Administrative Science Quarterly*, 12, 377-395.
 - Shanteau, J. (1989). Cognitive heuristics and biases in behavioural auditing: Review, comments, and observations. *Accounting, Organizations and Society*, 14(1-2), 165-177.
 - Shapira, Z., & Dunbar, R. (1980). Testing Mintzberg's managerial roles classification using an in basket simulation. *Journal of Applied Psychology*, *65*, 87-95.
 - Shartle, C. L., & Stogdill, R. M. (1953). Studies in naval leadership:

 Methods, results and applications (Technical Report). Columbus:
 Ohio State University, Personnel Research Board.

- Sherman, S. J., Judd, C. M., & Park, B. (1989). Social cognition. *Annual Review of Psychology*, 40, 281-326.
- Simon, H. (1987). Making managerial decisions: The role of intuition and emotion. *Academy of Management Executive*, 1, 57-64.
- Sisson, J. C., Schoomaker, E. B., & Ross, J. C. (1988). Clinical decision analysis: The hazard of using additional data. In H. R. Arkes & K. R. Hammond (Eds.), *Judgement and decision making: An interdisciplinary reader* (pp. 351-363). New York: Cambridge University Press.
- Slovic, P., Fischhoff, B., &, Lichtenstein, S. (1982). Fact versus fears: Understanding perceived risk. In D. Kahneman, P. Slovic & A. Tversky (Eds.), *Judgement under uncertainty: Heuristics and biases* (pp. 463-489). New York: Cambridge University Press.
- Smith, M. (1994). A theory of the validity of predictors in selection.

 Journal of Occupational and Organizational Psychology, 67, 13-31.
- Smith, M. C. (1982). The in basket test as practical psychology.
 Unpublished doctoral thesis, Massey University, New Zealand.
- Smith, P. C. (1976). Behaviour, results and organizational effectiveness. The problem of criteria. In M. D. Dunnette (Ed.), Handbook of industrial and organizational psychology (pp. 745-775). Chicago: Rand McNally.
- Sparrow, P. R. (1994). Organizational competencies: Creating a strategic behavioural framework for selection and assessment. In N. Anderson & P. Herriot (Eds.), Assessment and selection in organisations: Methods and practice for recruitment and appraisal, first update and supplement 1994 (pp. 1-26). Chichester, England: John Wiley and Sons.
- Sparrow, P. R., & Bognanno, M. (1993). Competency requirement forecasting: Issues for international selection and assessment. *International Journal of Selection and Assessment*, 1(1), 50-58.
- Spencer, L. M. (1983). Soft skill competencies. Edinburgh: Scottish Council for Research in Education.
- Spencer, L. M., & Spencer, S. M. (1993). Competency at work: Models for superior performance. Toronto: John Wiley & Sons.

- Staley, C. C., & Shockley-Zalaback, P. (1986). Communication proficiency and future training needs of the female professional: Self-assessment versus supervisor's evaluations. *Human Relations*, 39, 891-902.
- Stewart, A. J., & Winter, D. G. (1974) Self definition and social definition in women. *Journal of Personality*, 42(2), 238-259.
- Stewart, R. (1988). *Managers and their jobs*. London: McMillan Press Ltd.
- Stewart, R. (1989). Studies of managerial jobs and behaviour: The ways forward. *Journal of Management Studies*, 26(1), 1-10.
- Stewart, V., & Stewart, A. (1981). Business applications of repertory grid. London: McGraw-Hill.
- Stogdill, R. M. (1948). Personal factors associated with leadership: A survey of the literature. *Journal of Psychology*, *25*, 35-71.
- Stogdill, R. M. (1974). Handbook of leadership: A survey of the literature. New York: Free Press.
- Stumpf, S. A., & London, M. (1981). Capturing rater policies in evaluating candidates for promotion. *Academy of Management Journal*, *24*, 752-766.
- Switzer, F. S., & Sniezek, J. A. (1991). Judgement processes in motivation: Anchoring and adjustment effects on judgement and behaviour. Organizational Behaviour and Human Decision Processes, 49, 208-229.
- Synder, N., & Glueck, W. F. (1980). How managers plan- the analysis of managers' activities. *Long Range Planning*, 13, 70-76.
- Szilagyi, A. D., & Schweiger, D. M. (1984). Matching managers to strategies: A review and suggested framework. *Academy of Management Review*, *9*, 626-637.
- Tabachnick, B. G., & Fidell, L. S. (1983). *Using multivariate statistics*. New York: Harper Row.
- Taylor, S. E. (1982). The availability bias in social perception and interaction. In D. Kahneman, P. Slovic & A. Tversky (Eds.), Judgement Under uncertainty: Heuristics and biases (pp. 190-200). New York: Cambridge University Press.

- Taylor, S. E., & Thompson, S. (1982). Stalking the elusive "vividness" effect. *Psychological Review*, 89, 155-181.
- Terpstra, D. E., & Baker, D. D. (1992). Outcomes of federal court decisions on sexual harassment. *Academy of Management Journal*, 35, 181-190.
- Tett, R. P., Jackson, D. N., & Rothstein, M. (1991). Personality measures as predictors of job performance. *Personnel Psychology*, 44(4), 703-742.
- Thaler, R. H. (1988). Illusions and mirages in public policy. In H. R. Arkes & K. R. Hammond (Eds.), Judgement and decision making: An interdisciplinary reader (pp. 161-172). New York: Cambridge University Press.
- Thomas, A. B. (1988). Does leadership make a difference to organizational performance? *Administrative Science Quarterly*, 33, 388-400.
- Thompson, D. E., & Thompson, T. A. (1985). Court standards for job analysis in test validation. *Personnel Psychology*, *35*, 865-874.
- Thorndike, R. L. (1920). A constant error in psychological ratings. Journal of Applied Psychology, 4, 25-29.
- Thornton, G. C. III. (1992). Assessment centres in human resource management. Reading, Massachusetts: Addison-Wesley.
- Thornton, G. C., Ill & Byham, W. C. (1982). Assessment centers and managerial performance. New York: Academic Press.
- Thurow, L. (1984). Revitalizing American industry: Managing in a competitive world economy. California Management Review, 27, 9-41.
- Tornow, W. W., & Pinto, P. R. (1976). The development of a management job taxonomy: A system for describing, classifying, and evaluating executive positions. *Journal of Applied Psychology*, 61, 410-418.
 - Toulson, P. K. (1990). Perceptions, practises, and productivity: An assessment of personnel management in New Zealand.
 Unpublished doctoral thesis, Massey University, New Zealand.
 - Training Agency, (1990). MCI standards on training. Sheffield: Training Agency.

- Tsui, A. S. (1984). A multiple-constituency framework of managerial reputational effectiveness. In J. G. Hunt, D. A. Hosking, C. A. Schnesheim, & R. Stewart (Eds.), Leaders and managers:

 International perspectives on leadership and managerial behaviour (pp. 28-44). New York: Pergamon Press.
- Tsui, A. S., & Ohlott, P. (1988). Multiple assessment of managerial effectiveness: Inter rater agreement and consensus in effectiveness models. *Personnel Psychology*, *41*, 779-803.
- Tversky, A., & Kahneman, D. (1973). Availability: A heuristic for judging frequency and probability. *Cognitive Psychology*, *5*, 207-232.
- Tversky, A., & Kahneman, D. (1974). Judgement under uncertainty: Heuristics and biases. *Science*, 185, 1124-1131.
- Velicer, W., Peacock, A., & Jackson, D. (1982). A comparison of component and factor patterns: A Monte Carlo approach. *Multivariate Behavioural Research*, 17, 371-388.
- Wacker, G. I. (1981). "Toward a cognitive methodology of organisational assessment". *Journal of Applied Behavioural Science*, 17, 114-129.
- Wagner, R. K., & Sternberg, R. J. (1991). Tacit knowledge: Its uses in identifying, assessing, and developing managerial talent. In J. W. Jones, B. D. Steffy & D. W. Bray (Eds.), Applying psychology in business: The handbook for managers and human resource professionals (pp. 333-344). New York: Lexington Books.
- Werner, J. M. (1994). Dimensions that make a difference: Examining the impact of in-role and extra role behaviours on supervisory ratings. Journal of Applied Psychology, 79(1), 98-107.
- Wexley, K. N., & Baldwin, T. T. (1986). Management development. Yearly Review of the Journal of Management, 12(2), 277-294.
- Wherry, R. J., & Bartlett, C. J. (1982). The control of bias in ratings: A theory of rating. *Personnel Psychology*, 35, 521-551.
- Whetten, D. A., & Cameron, K. S. (1991). *Developing management skills* (2nd ed.). New York: Harper Collins.
- Wohlers, A. J., & London, M. (1989). Ratings of managerial characteristics: Evaluation difficulty, co-worker agreement, and selfawareness. *Personnel Psychology*, 42, 235-261.

- Wood, G. (1978). The knew-it-all-along effect. *Journal of Experimental Psychology: Human Perception and Performance*, *4*, 345-353.
- Woodruffe, C. (1992). What is meant by a competency? In R. Boam & P. Sparrow (Eds.), *Designing and achieving competency: A competency-based approach to developing people and organisations* (pp. 16-29). London: McGraw-Hill Training Series.
- Worledge, L. (1992). Competencies: The quest for the managerial "x" factor. *The Practising Manager, April*, 11-14.
- Wyer, R. S., & Srull, T. K. (1986). Human cognition in its social context. *Psychological Review*, 93, 322-359.
- Yukl, G. A. (1989). *Leadership in organisations* (2nd ed.). Englewood Cliffs, NJ: Prentice-Hall.
- Yukl, G. A., & Lepsinger, R. (1991). An integrative taxonomy of managerial behaviour: Implications for improving managerial effectiveness. In J. W. Jones, B. D. Steffy & D. W. Bray (Eds.), Applying psychology in business (pp. 563-572). Lexington, MA: Lexington Books.
- Yukl, G. A., & Van Fleet, D. D. (1992). Theory and research on leadership in organisations. In M. D. Dunnette & L. M. Hough (Eds.), Handbook of industrial and organisational psychology (2nd ed.) (Vol. 3, pp. 147-197). Palo Alto, California: Consulting Psychologists Press.
- Yukl, G., Wall, S., & Lepsinger, R. (1990). Preliminary report on validation of the managerial practises survey. In K. E. Clark & M. B Clark (Eds.), *Measures of Leadership* (pp. 223-237). West Orange, NJ: Leadership Library of America.
- Zaleznik, A. (1977). Managers and leaders: Are they different? Harvard Business Review, 53, 348-352.
 - Zebrowitz, L. A. (1990). Social perception. Pacific Grove, CA: Brooks/Cole.
- Zedeck, S., & Cascio, W. F. (1984). Psychological issues in personnel decisions. Annual Review of Psychology, 35, 461-518.
 - Zedeck, S., & Kafry, D. (1977). Capturing rater policies for processing evaluation data. Organizational Behaviour and Human Decision Processes, 18, 269-294.

Zuckerman, M. (1979). Attribution of success and failure revisited, or: The motivation bias is alive and well in attribution theory. *Journal of Personality*, 47, 245-287.

Appendix 1: Description of the Study That was Sent to Partners to

Assist Them Persuade People to Participate in the Study

BRIEFING NOTES ON SHARON RIPPIN'S DOCTORAL RESEARCH ON MANAGERIAL EFFECTIVENESS

■ What is the study all about?

- Identifying the criteria chief executives and senior managers use to judge the effectiveness of their senior managers.
- Identifying whether the skills required by senior managers are the same or different across industries.

To date limited research has been conducted in New Zealand to identify the criteria used to assess managerial effectiveness.

■ Who does Sharon need to interview to collect her data?

The chief executive and two senior managers who report to her/him in an organisation that has one hundred and fifty or more staff. The chief executive/senior managers need to have been in their current position for at least a year.

What types of organisations/industries is Sharon targeting?

On the attached page are some of the industries that are being targeted, along with the names of potential organisations she would like to contact. This list is starting point. Sharon would be interested in the names of other organisations that fit under the various industry groupings.

■ What will each chief executive/senior manager be required to do?

Meet with Sharon to go through a structured interview process. During the interview they compare their effective and less effective senior managers. It is a fun process and most managers enjoy discussing the criteria they use to assess effectiveness.

■ How long does Sharon need with each chief executive/senior manager to collect her data?

1.5 hours

■ Chief executives/senior managers are very busy. How can I sell them on the idea?

They will receive information on the criteria managers in their organisation use to make judgements about effective and ineffective performance at the senior management level.

In addition, they will receive information on the competencies other industries and organisations use to make judgements about managerial performance. This will provide them with the opportunity to compare themselves with other industries and organisations in New Zealand.

P.S. I'm prepared to fit into anyone's time schedules (i.e., late at night, early in the morning, weekends, etc.,) to try and accommodate busy diaries.

Appendix 2: Repertory Grid Form

DEFINING EFFECTIVE PERFORMANCE

Name: Organisation:

Date:

	Importance Ratino	0					
	iours	How are one or two people more effective?					
	Behaviours	How are one or two people less effective?					
		L					
		ш					- 1
Managers		۵					
Mana		ပ					
		В					
		∢					
		Triad	BDE	CEF	ACD	BEF	ADE

Importance Rating How are one or two people more effective? Behaviours How are one or two people less effective? ш ш Managers Ω ပ m ⋖ Triad BCE ABF CDF ABC DEF ACE

Importance Rating How are one or two people more effective? Behaviours How are one or two people less effective? ட Managers ш ۵ ပ œ ⋖ Triad BDF ADF

DEFINING EFFECTIVE PERFORMANCE

	Importanc	Natill B				
ours		How are one or two people more effective?				
Behaviours		How are one or two people less effective?				
		ட				П
Managers		ш			venes	Н
Man		Δ			effecti	П
		ပ			Rating of overall effectiveness	П
		В			g of o	
		<			Ratin	
		riad				

Appendix 3: Repertory Grid Interview Construct Categories

	CONSTRUCT DICTIONARY
Construct Number	
	Striving for Excellence
1.01	Expects high standards of self and others - does not accept work of average quality or second best. Is very thorough in all work s/he does.
1.02	Strives to improve the status quo and to do things better. Encourages staff to improve excellence in the work place. Strives to minimise barriers to excellence.
	Planning Own and others' time
2.01	Planned and organised in work approach. Can establish current and future priorities, anticipate potential problems, and develop plans to meet deadlines.
2.05	Realistic and accurate when assessing what is required to deliver (i.e., how long it will take, what resources are required, etc.).
2.23	Sets objectives which are achievable but challenging.
	Strategic
2.06	Strong focus on achieving organisation's long term organisational goals (e.g., strategic goals/business plan goals). Planning has a long term focus.
2.21	Can take a strategic view of where organisation/business needs to go in the future. Has the vision and can rise above the detail.
2.22	Accurately identifies and incorporates the environmental and contextual factors that impact on the strategic vision.
	Attracting Clients
2.24	Able to attract clients that reflect the strategy of where the organisation is going.
	Managing Meetings

2.25	Manages meetings efficiently.
	Monitoring
3.03	Can monitor work in relation to end goal, they know where they are at any one time. Aware of what is happening.
	COMMUNICATING TO OTHERS
	Presenting to Communicating
6.01	Well prepared before communicating. They are able to answer questions because they are well prepared.
6.10	Delivering the Message
6.11	Clear, succinct, comprehensive, and logical when communicating. Checks intended message is being received correctly.
6.12	Adapts communication style and pitches communication at the right level - so everyone can understand what is being said. This includes translating technical terms into terms that can be understood by non-technical people.
6.15	Logical and clear in writing style,
6.16	Firm, direct, and assertive, when presenting information.
	Relating to Others
6.31	Able to start and engage people in conversation. Can make small talk. Able to talk about things apart from work.
6.33	Works hard to put people at ease when dealing with them.
6.34	Does not speak about people in disparaging terms.
6.35	Approachable. Gets on well with people - is open, natural, and friendly. People feel comfortable being around them.

6.36	Listens to others, considers their views, and checks they have received the right message. Able to relate to/gain rapport with a wide range of people. This includes gaining rapport with people from different cultures, settings, and situations.
6.38	Is perceptive - can "read" what's going on (both verbal and non verbal cues). Can form an accurate picture of what's not being said.
6.39	Can be a team leader or a team player . Can take a back seat or lead depending on what is appropriate for the situation.
6.40	Sense of humour, can tell a joke and laugh at themselves.
	Gaining attention
6.51	Varies presentation/communication style to hold audiences attention (e.g., humour, enthusiasm, being understated).
6.52	Has charisma, able to hold people's attention through sheer personal presence.
	MANAGING OTHERS
r	Managing own work area
9.01	Delegates clear objectives that are appropriate to the individual, specifies expectations of performance, gives authority & resources to be successful. Does not dictate how objectives should be achieved. Monitors tasks that have been delegated.
9.04	Mucks in and helps staff out when the unit is under pressure.
9.05	Can operationalise the organisation's vision to others. Staff can share in the organisation vision and see what part they play in the vision.
9.06	Accessible to staff. Has a high level of personal contact. Management by walking around.
9.07	Can accurately assess what skills are needed for the team/organisation and selects the people that best meet those needs.
9.11	Has a sense of urgency about them.

9.12	Discusses projected work load with staff.
	Developing people
10:11	Gives honest, constructive, regular positive and negative feedback about performance. Feedback takes place formally and informally. Staff are clear about what is required of them in the future.
11.02	Encourages and stimulates others to make the best of their individual ability.
11.03	Develops individual staff development plans that balance the short and long term development needs of staff and the organisation's objectives.
11.04	Fosters a learning environment where individuals are encouraged to develop. Mistakes are viewed as learning opportunities.
11.05	Identifies when staff are not performing to the required level and implements solutions to assist them develop.
11.06	Gives of their own time to coach/develop staff skills.
11.07	Promotes their group member's strengths and gives credit to others. Does not try and take credit for other's work.
11.08	Can accurately assess staff's skills, abilities, and strengths.
	Making and Taking the Tough Decisions
11.21	Able to tell people "bad news" that is likely to upset them (i.e., making people redundant, dismiss staff, can't have overtime, etc.). The "bad news" is delivered in the appropriate time frame. Makes hard/difficult decisions.
	Relating to others
11.31	Proactive in passing on information to peers, staff, and superiors that will impact on them/is of interest. Passes on information regularly and sieves out inappropriate information. Keeps people informed on a timely basis.
11.32	Is consistent in what they say and do. Is honest and fair.
11.33	Treats everyone as an equal, regardless of their position - doesn't talk down to people. Has respect for others.

11.35	Open, honest communicator - does not conceal or distort information. Expresses own thoughts and feelings (even if they don't know people's opinions on the issues). Is not influenced by what others think.
11.36	Fosters co-operative relationships with other business units, and helps people outside of their own unit. Is focused on organisation's goals.
11.37	Keeps an open mind, that is free of stereotyping when dealing with people of different sexes and race. Is not judgemental.
11.38	Is aggressive with staff, so they are kept on their toes.
11.40	Is a team player - recognises the skills of others and utilises them to achieve the best results.
	Resolving conflict
11.52	Encourages others with conflicting views to openly discuss and resolve issues.
	Motivating /persuading others
11.72	Can identify what motivates individuals and adapts own approach to meet the needs of the individual.
11.74	Can build a team. Has a harmonising effect on people. Pulls people together to focus on common goals. Can get group to work as a team. Is a leader, takes people along with them.
11.75	Able to persuade/influence people to gain co-operation. Can sell ideas and get "buy in".
11.76	Motivates staff by demonstrating genuine excitement/enthusiasm. Their enthusiasm engenders enthusiasm in others.
	Doing Deals
11.91	Aware of the subtle/non subtle cues when negotiating and therefore is not overly trusting.
11.92	Can identify other people's boundaries when negotiating. Can see what is important to others when negotiating.
11.93	Knows the final position they want to get to when negotiating.

11.94	Is aggressive when negotiating and takes a "no compromises" approach - is hard hitting.
11.95	Is prepared to compromise and meet people half way when negotiating so as to achieve a win/win solution for both parties.
	Empathy/Showing sensitivity to needs of others
14.00	Shows sensitivity to the needs of others. Shows a genuine desire to help people and is interested in them. This is shown by spending time with staff. Can see things from other person's point of view.
14.32	Is accepting of people holding different views/ways of doing things - even if they don't agree with them.
14.51	Encourages others to express themselves and actively seeks to identify and clarify the attitudes, views, and feelings of others.
	COLLECTING AND ANALYSING INFORMATION AND DECISION MAKING
	Collecting information
20.01	Is consultative. Seek the views of others when analysing information or making decisions. Achieves a balance between being inclusive/exclusive of others when consulting.
20.03	Establishes and uses informal formal networks to search for and gather relevant information.
20.07	Decision/advice is well researched - but knows when enough information has been gathered. Can justify decision in face of opposition due to research.
20.08	Gains acceptance for proposals/ideas by consulting with the right people at the right time.
20.22	Can ask the questions to get to the heart of the issue. Can ask questions outside own area of expertise. Doesn't take things at face value.
	Analysis
21.01	Has strong conceptual skills. Can identify patterns or meaning from factors or concepts which are not obviously related or may conflict or are ambianous or complex.
21.02	Able to see the issues. Identify key/relevant issues and prioritise them and weight them objectively and appropriately. Weighting is not affected inappropriately by others' views.
21.02	Inappropriately by others' views.

21.04	Identifies and uses the most appropriate framework (i.e., big picture, detail, theoretical, commonsense, management models, etc) or combination of frameworks to assist in the analysis of information. Can move between the different frameworks.
21.06	Weights the "people factor" highly when making decisions. Always considers how decisions will impact on people.
21.09	Able to see how decisions in own area will effect other areas.
	Generating Solutions
21.21	Can learn from past experience - and draw on ideas/past solutions to help develop future strategies.
21.23	Generates creative/innovative solutions to problems - behaviour is not governed by precedents, can see options/think laterally.
	Tackling Problems
21.41	Has a positive and optimistic approach to problem solving - sees problems as challenges not obstacles.
21.42	Identifies potential solutions to problems, rather than solely presenting problems to peers/superiors.
	Intellect
21.61	Intellectual, quick to learn, and can synthesise complex information quickly. Can identify issues clearly.
21.62	Can process and deal with a whole host of problems/information at the same time.
	Decision Making
22.01	Decision making is consistent and in line with decisions that have previously been made. Uses a set of similar principles when analysing information.
22.02	Decisive - able to make decisions in a timely manner. Commits self in the right timeframe so action can be taken.
22.03	Take decisions which are realistic for situations.

22.04	Considers a wide range of solutions before taking a decision.
22.05	Takes decisions in uncertain situations or in the absence of guidelines.
22.06	Able to re-evaluate decision/view in light of new information, does not prematurely close off options.
22.07	Acknowledges when a bad decision/idea has been made and makes the appropriate changes.
22.09	Can make decisions in time pressured situations, can think quickly on their feet
22.10	Sticks to decisions once they have been made. Takes ownership/responsibility for decision.
22.12	Can make decisions without deferring to others.
22.13	Modifies decisions to take into account political acceptability.
	MANAGING ONESELF
	Personal Drive and Commitment
25.01	Demonstrates and expresses confidence/conviction and surety of purpose/views. Expresses confidence in own ability and plans/initiatives.
25.03	Maintains commitment and effort in spite of set-backs or problems. Is tenacious. Keeps bouncing back.
25.06	Gets things done. Able to deliver on what they commit self to - has a strong achievement orientation. Is reliable - "valley of death material".
25.07	Is passionate about work- breathes and lives work, can put personal priorities on the back burner. Usually works long hours - shows high energy level.
25.08	Has capacity for high volume of work - can chum through work without a drop off in quality.
25.09	Strong focus on organisational end goal and priorities - doesn't get side-tracked on problems or issues that are not important.

25.10	Good role model.
25.11	Can achieve a balance between work and personal life.
25.12	Is honest - doesn't fiddle the system.
	Initiative and being responsible
25.20	Takes personal responsibility for making things happen.
25.21	Can see what needs to be done without being told. Has initiative, is a self starter.
25.23	Is accountable for outcome of work that is delegated to staff, does not pass the buck.
	Managing individual and organisational priorities
26.01	Focuses on organisational agenda rather than own or team agenda. Own personal agenda does not inappropriately influence organisational agenda.
26.02	Individual and organisational agenda is aligned.
26.04	Committed to a team approach and will work with others to come up with a team approach.
26.05	Doesn't get involved in the organisation's politics.
	Adapting to change
26.21	Is receptive to change and new ideas, is adaptable to change.
26.22	Will take risks.
26.23	Manages change processes so as to minimise resistance to change.

	Developing Self
27.02	Learns new skills - develops self to meet the demands of different and changing situations.
27.21	Identifies and acknowledges personal strengths and weaknesses. This involves seeking feedback from others and surrounding themselves with people who have skills they do not possess.
27.24	Transfers learning from one situation to another.
	Personal/Business/Organisational Knowledge
27.40	Clear understanding of their role and what is required of them.
27.41	Has in depth knowledge of what is happening in the organisation/own area (i.e., what staff think).
27.42	Has a good knowledge of the functioning of the organisation's different divisions (i.e., parts of the organisation) and how they inter-relate. Understands how the whole organisation works.
27.43	Has current knowledge of the market /industry and the organisation's position in relation to the market/industry.
27.44	Has good general knowledge.
27.46	Has a history of doing things right in previous positions.
27.47	Has worked way up from bottom, understands the work of those they supervise.
	Managing Personal Emotions and Stress
28.21	Remains calm in difficult or uncertain situations.
28.22	Gives a consistent and stable performance in pressure situations.
	Manage Personal Emotions and Stress

28.41	Accepts personal comments or criticism without becoming defensive.
28.42	Able to handle other's emotions.
28.43	Communicates the organisation's views/decisions objectively, even if they doesn't agree with them. Is loyal to the organisation.
28.44	Able to accept the need to do something they don't agree with.
28.45	Remains positive - even if the chips are down (this doesn't mean denying the problem(s)).
28.46	Has a good level of self control.
	Technical Skills
29.00	Computer skills
29.01	Soundness and depth in own technical area, Is up to date in own technical area.
29.02	Has sound financial skills. Has a clear understanding of the implications of financial decisions - brings a "number focus" to situations
29.04	Is commercially oriented (e.g., aware of what will be successful in the market & what won't). Can identify viable business opportunities organisation can get into. Able to balance business/financial skills (knows what will make money & what won't).
29.05	Able to close a deal and sell a product.
29.06	Knows how to maintain and satisfy customer relationships - knows what customers want/ what their needs are and comes up with the service to meet their needs.
29.07	Project management skills.
29.08	Clear sense of business ethics - what's right and what's wrong.
29.09	Monitors budgets. Plans and maintains budgets

29.10	Has an understanding of marketing issues and requirements
	Looks right and things are in order
30.01	Looks the part/well groomed
31.00	Doesn't break confidence (e.g., personal/organisation)
32.00	Personal affairs are in order.
20170	

Appendix 4: The 20 Most Frequently Mentioned Constructs in Each of the Eight Industries

Industry: Agriculture, Hunting, Forestry & Fishing

Construct Title	Frequency	Percent	Cum Pct
Delegation skills	5	9.1	9.1
Strategic vision	4	7.3	16.4
Planning & organising	3	5.5	21.9
Persuade/Influence people	3	5.5	27.4
Weights factors appropriately	3	5.5	32.9
Can deliver	3 3	5.5	38.4
Technical skills	3	5.5	43.9
Prepared before communicating	2 2	3.6	47.5
Listens	2	3.6	51.1
Gets on with everyone	2	3.6	54.7
Passes on information	1	3.6	58.3
Builds a team	2	3.6	61.9
Focuses on organisation's agenda	2	3.6	65.5
Knows factors that affect vision	1	1.8	67.3
Communicates well	1 1	1.8	69.1
Makes small talk	1 1 1	1.8	70.9
Perceptive	1 1	1.8	72.7
Charismatic/holds attention	1 1	1.8	74.5
Can translate organisational vision	1 1	1.8	76.3
Encourages others	11	1.8	78.1

Industry: Manufacturing

Construct Title	Frequency	Percent	Cum Pct
Delegation skills	17	4.2	4.2
Planning & organising	14	3.4	7.6
Technical skills	14	3.4	11.0
Can deliver	13	3.2	14.2
Gets on with everyone	12	3.0	17.2
Open and honest	11	2.7	19.9
Strategic vision	10	2.5	22.4
Communicates well	10	2.5	24.9
Knows how all parts of the organisation function	9	2.2	27.1
Continuous improvement focus	8	2.0	29.1
Weights factors appropriately	8	2.0	31.0
Intelligence	8	2.0	33.1
Decisive	8	2.0	35.1
Confidence/Conviction	8	2.0	37.1
Pitches communication correctly	7	1.7	38.8
Approachable	7	1.7	40.5
Can build a team	7	1.7	42.2
Empathy/Sensitivity	7	1.7	43.9
Passionate about work	7	1.7	45.6
Adaptable to change	7	1.7	47.3

Industry: Electricity, Gas, and Water

Construct Title	Frequency	Percent	Cum Pct
Communicates well	3	5.3	5.3
Approachable	3	5.3	10.6
Technical skills	3	5.3	15.9
Strategic vision	2	3.5	19.4
Listens	2	3.5	22.9
Delegation skills	2	3.5	26.4
Uses the right analysis framework	2	3.5	29.9
Intelligence	3 2 2 2 2 2 2 2 2 2	3.5	33.4
Decisive	2	3.5	36.9
Can deliver	2	3.5	40.4
Focuses on organisation's agenda	2	3.5	43.9
Copes with pressure	2	3.5	47.4
Pitches communication correctly	1 1	1.8	49.2
Charismatic/holds attention	1 1	1.8	51.0
Accessible to staff	1 1	1.8	52.8
Sense of urgency	1 1 1	1.8	54.6
Honest feedback	1 1	1.8	56.4
Passes on information	1 1	1.8	58.2
Open and honest	1 1	1.8	60.0
Sees what motivates people	1 1	1.8	61.8

Industry: Building and Construction

Construct Title	Frequency	Percent	Cum Pct
Persuade/Influence people	4	4.8	4.8
Confidence/Conviction	4	4.8	9.6
Commercial skills	4	4.8	14.4
Communicates well	3	3.6	18.0
Approachable	3	3.6	21.6
Perceptive	3	3.6	25.2
Charismatic/holds attention	3	3.6	28.8
Passes on information	3	3.6	32.4
Weights factors appropriately	3	3.6	36.0
Strategic vision	2	2.4	38.4
Delegation skills	2	2.4	40.8
Makes and takes the tough decisions	2	2.4	43.2
Can build a team	2	2.4	45.6
Empathy/Sensitivity	2	2.4	48.0
Positive about problems	2	2.4	50.4
Intelligence	2	2.4	52.8
Sees what needs to be done	2	2.4	55.2
Focuses on organisation's agenda	3 3 3 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2.4	57.6
Adaptable to change	2	2.4	60.0
Technical skills	2	2.4	62.4
Expects high standards	1 1	1.2	63.6

Industry: Wholesale, Retail Trade, Restaurants & Hotels

Construct	Frequency	Percent	Cum Pct
Delegation skills	22	4.9	4.9
Decisive	15	3.3	8.3
Can deliver	13	2.9	11.1
Continuous improvement focus	12	2.7	13.8
Focus on organisation's agenda	12	2.7	16.5
Technical skills	12	2.7	19.2
Planning and organising	10	2.2	21.4
Strategic vision	10	2.2	23.6
Generates creative solutions	10	2.2	25.8
Honest feedback	9	2.0	27.8
Can build a team	9	2.0	29.8
Empathy/Sensitivity	9	2.0	31.8
Passionate about work	9	2.0	33.8
Focuses on organisation's agenda	9	2.0	35.8
Approachable	8	1.8	37.6
Can translate organisational vision	8	1.8	39.4
Makes and takes the tough decisions	8	1.8	41.2
Open and honest	8	1.8	43.0
Conceptual skills	8	1.8	44.8
Intelligence	8	1.8	46.6

Industry: Transport, Storage, and Communication

Construct Title	Frequency	Percent	Cum Pct
Strategic vision	7	5.0	5.0
Delegation skills	7	5.0	10.0
Open and honest	7	5.0	15.0
Technical skills	6	4.3	19.3
Weights factors appropriately	5	3.6	22.9
Can deliver	5	3.6	26.5
Financial skills	5	3.6	30.1
Planning and organising	4	2.9	33.0
Communicates well	4	2.9	35.9
Listens	4	2.9	38.8
Sees what motivates people	4	2.9	41.7
Decisive	4	2.9	44.6
Expects high standards	3	2.2	46.8
Continuous improvement focus	3	2.2	49.0
Empathy/Sensitivity	3	2.2	51.2
Focus on organisation's agenda	3	2.2	53.4
Approachable	2	1.4	54.8
Interesting presentation	2	1.4	56.2
Can translate vision	2	1.4	57.6
Identifies what skills are needed	2	1.4	59.0

Industry: Financing, Insurance, Real Estate and Business Services

Construct Title	Frequency	Percent	Cum Pct
Delegation skills	25	5.5	5.5
Strategic vision	19	4.2	9.7
Communicates well	18	3.9	13.6
Focuses on organisation's agenda	15	3.3	16.9
Empathy/Sensitivity	14	3.1	20.0
Planning and organising	12	2.6	22.6
Can build a team	12	2.6	25.2
Pitches communication correctly	11	2.4	27.6
Passes on information	11	2.4	30.0
Persuade/Influence people	11	2.4	32.4
Weights factors appropriately	11	2.4	34.8
Technical skills	11	2.4	37.2
Can deliver	10	2.2	39.4
Knows how all parts of the organisation function	10	2.2	41.6
Approachable	9	2.0	43.6
Honest feedback	8	1.8	45.4
Makes and takes the tough decisions	8	1.8	47.2
Intelligence	8	1.8	49.0
Decisive	8	1.8	50.8
Confidence/Conviction	8	1.8	52.6

Industry: Community, Social, and Personal Services

Construct Title	Frequency	Percent	Cum Pct
Delegation skills	37	6.4	6.4
Strategic vision	25	4.3	10.7
Communicates well	20	3.5	14.2
Planning and organising	19	3.3	17.5
Weights factors appropriately	17	2.9	20.4
Passes on information	16	2.8	23.2
Consultative	15	2.6	25.8
Pitches communication correctly	13	2.2	28.0
Decisive	13	2.2	30.2
Focuses on organisation's agenda	13	2.2	32.4
Knows how all parts of the organisation function	13	2.2	34.6
Technical skills	13	2.2	36.8
Can deliver	12	2.1	38.9
Continuous improvement focus	11	1.9	40.8
Makes and takes the tough decisions	11	1.9	42.7
Open and honest	11	1.9	44.6
Can translate the vision	10	1.7	46.3
Empathy/Sensitivity	10	1.7	48.0
Does research	10	1.7	49.7
Intelligence	10	1.7	51.4

Appendix 5: Breakdown of Repertory Grid Interview Constructs That
Were Used in Questionnaire

Demands high work standards from colleagues	Doesn't demand high work standards from work colleagues)
Sets high standards	Doesn't set high standards for self to achieve
Thorough in the work that s/he does and attends to detail (i.e., crosses his/her "t"s and dots their "i"s).	Not thorough in the work that s/he does and takes short cuts

1.02

Strives to do things better (i.e., work practises) and improve on the status quo	Tends to stick with the status quo rather than look for ways to do things better
Questions and challenges the efficiency and effectiveness of current work practises	Doesn't question the effectiveness and efficiency of current work practises
Is open to new ideas and change in the work place	Is not open to new ideas and change - focuses on the problems created by introducing change
Encourages staff to identify and implement ways to improve work place practises	Does not actively encourage staff to identify and implement ways to improve work place practises

2.01

Planned and organised in their work approach	Is not planned and organised in their work approach - takes each day as it comes
Establishes current and future priorities so as to meet deadlines/goals	Doesn't establish current and future priorities
Effectively manages their time	Has difficulty managing their time effectively
Anticipates problems and develops strategies to resolve/minimise them	Does not anticipate problems and therefore doesn't develop strategies to resolve/minimise them

2.05

Realistic and accurate when estimating the resources required to achieve objectives	Unrealistic and inaccurate when estimating the resources required to achieve objectives
Does not over-commit self to responsibilities that they can't deliver on	Over commits self to achieving responsibilities

Sets objectives that are challenging but	Sets unrealistic goals/objectives for staff
achievable for staff	

Focused on strategic direction of the organisation	Focused on day-to-day activities
Actions reflect the direction of the strategic plan organisation's	Actions do not reflect the direction of the organisation's strategic plan
Planning incorporates both short and long term organisational goals	Planning focuses purely on short term goals rather than also addressing long term organisational goals

Involves staff in the strategic planning process	Doesn't involve staff in the strategic planning
	process

2.21

Has strategic vision - able to see where the organisation needs to go in the future	Focuses on the here-and-now, or short term goals, lacks strategic vision
Can see the bigger picture and can rise above the detail	Can not see the bigger picture - tends to get bogged down in the detail
Able to achieve a balance between long and short term goals when developing strategic plan	Unable to achieve a balance between long and short term goals when developing strategic plan
Takes into account a wide range of information when developing the strategic plan	Does not consider all possible information when developing the strategic plan
Can identify future trends that will impact on the organisation	Does not identify future trends that will impact on the organisation

2.22

Understands how the wider environment (i.e., NZ, International markets) impacts on the organisation	Does not have a good understanding of how the wider environment impacts on the organisation
Has a grasp of issues facing the business	Does not have a grasp of issues facing the business

2.24

Able to attract clients who reflect the future	Unable to attract clients who reflect the future
strategy of the organisation	strategy of the organisation

Manages meetings effectively	Does not manage meetings effectively

Knows where they are going and knows how far they have progressed at any point in time in relation to their end goal	Does not know where they are at in relation to their end goal
--	---

Able to anticipate the likely reaction of people when presenting information and is not thrown by their questions	Unable to anticipate the likely reaction of people when presenting and is likely to be thrown by their questions
Researches topic area before presenting to people	Does not research topic area thoroughly before presenting to people
Admits if they don't know an area when presenting to people	Does not admit when they don't know an area when presenting to people

6.11

Is articulate when communicating	Doesn't speak clearly and mumbles
Is concise and succinct when communicating	Waffly, and not focused when communicating
When communicating is up front and direct, people know where they are is coming from	When communicating is not up front and direct, people don't know where they are coming from
Checks that other people understand what they are communicating	Doesn't check that people understand what s/he they are communicating
Presents and frames information in a logical and "easy-to-follow" manner	Presents and frames information in a confusing and "difficult-to-follow" manner
Pitches communication at the right level so it is understood by the intended audience	Doesn't pitch communication at the correct level so is not understood by his/her audience

Makes people feel comfortable when they communicate with them	Tends to be stiff and formal - does not make people feel comfortable
Able to see the situation from the other person's perspective	Unable to see the situation from the other person's perspective
Can adapt style to meet audiences needs when they are communicating	Tends to have the same approach when dealing with people, regardless of who they are talking to
Keeps message simple when communicating	Doesn't keep messages simple when communicating
Can answer questions on the spot when presenting information	Can't answer questions on the spot
Has the ability to translate technical and complicated issues into simple terms that can be understood	Is overly complex or technical or complicated when explaining information

Written communication is clear, logical and can be understood by the reader	Written communication is confusing, illogical, and not easily understood by the reader
Written communication is focused so the reader is clear about the purpose of the communication	

Is firm and direct when communicating	Is not direct or is confrontational when communicating
Assertive when communicating, they say what	Timid when communicating, they say what
they think	others want to hear

6.31

Able to converse on a wide range of topics when socialising with people	Tends to just talk about work when socialising
Able to make "small-talk" and engage people in conversation	Has difficulty making and engaging people in conversation

6.33

Makes an effort to make people feel at ease	Not very good at making people feel at ease
when talking to them	when talking to them

6.34

Does not speak about people in disparaging	Talk about people in a derogatory, moaning,
terms	and/or bitchy way

Has an open and natural style (i.e., "what you see is what you get")	Has a closed communication style, difficult for people to read
Body language is welcoming	Body language is not welcoming
Extroverted and expressive interpersonal style	Introverted and flat personality style
Is relaxed when communicating	Is not relaxed when communicating
Makes an effort to communicate with everyone in the organisation	Tends only to talk to people that will help their cause
Ease to speak to, people feel comfortable being around them.	Difficult to talk to, people feel uncomfortable - is not approachable
Gets on well with everyone in organisation	Gets on well with certain people in the organisation

Listens to people and takes in what they are saying	Doesn't listen, often tries to dominate a conversation
Asks questions if they don't fully understand what has been said	Doesn't ask questions if they don't understand

6.37 Able to relate to/gain rapport with a wide range of people. This includes gaining rapport with people from different cultures/settings/situations

Able to relate well to a wide range of people (i.e., Managing Directors to operational staff)	Has difficulty relating to a wide range of people
Can relate to people from cultures different to their own.	Has difficulty relating to people from cultures different to their own
Can establish rapport with people quickly	Has difficulty establishing rapport with people
Fits in easily	Doesn't fit in well with others.
Strong at establishing/maintaining relationships with people	Not strong at establishing/maintaining relationships with people

6.38

Is perceptive and reads people well, can see	Doesn't read people well, doesn't pick-up where
where they're coming from	they are coming from
Is aware of how they impact on people and modifies their approach to reflect the needs of the situation	Doesn't adapt/modify their approach as they are unable to read the situation
Can read between the lines and form an accurate picture of what is not being said	Can't read between the lines and pick up on what is not being said

6.39

Can take a "back seat" or lead depending on what is most appropriate for the situation	Unable to take a "back seat", tends to want to lead in most situations
Contributes at meetings	Always wants to control meetings
Is a team player and can work as a member of a	Has difficulty working in a team, is a
team	loner/individualistic

Has a good sense of humour	Lacks a sense of humour
Can laugh at themselves, and doesn't take self	Is too serious, doesn't take anything light
too seriously	heartedly

Effective at representing the organisation to outside groups	Is not effective at representing the organisation to outside groups
Able to hold audience is attention when presenting	Doesn't hold audience attention when presenting
Able to capture an audiences attention due to their varied and interesting presentation style	Have difficulty capturing an audience is attention due to their monotonous or boring presentation style

His/her personal presence demands attention	His/her personal presence doesn't demand attention
Able to motivate and lead people due to their strong personality	Lacks personality and is not inspiring

9.01

Delegates clear objectives that are understood by the person receiving them	Doesn't delegate clear objectives - individuals are unsure of what is being delegated
Specifies expectations of performance when delegating objectives	Fails to specify expectations of performance when delegating objectives
Gives the necessary authority and resources when delegating objectives	Doesn't give authority and resources required for objectives to be effectively carried out
Ensures that delegated work is reasonable in terms of the demands placed on staff	Places unreasonable work demands on staff
Does not dictate the process of how delegated objectives should be achieved	Dictates the process of how delegated objectives should be achieved
Monitors tasks that have been delegated without getting "hands on"	Does not monitor tasks that have been delegated or gets "too hands on" when monitoring work
Delegates to assist in developing new staff	Delegations do not focus on developing staff
Achieves a balance between doing "hands-on" work and delegating work to others	Doesn't delegate work or delegates everything

9.04

Prepared to "muck in" to help out their staff	Not prepared to "muck in" to help out their
complete work in pressure situations	staff in pressure situations

Able to articulate the organisation's strategic vision for staff (i.e., they know how they contribute to the organisational vision)	Unable to articulate the strategic vision for staff-staff are unsure of how they fit into the strategic vision.
Able to sell the strategic vision to staff and get them to "buy into" it	Unable to sell the strategic vision to staff or get "buy in"

Has a high level of personal contact with staff - makes the effort to interact with staff "face-to- face"	Does not have a high level of personal contact with staff
Is accessible to staff	Not accessible to staff
Takes time to build relationships and understand their staff	Invests little time building relationships with staff

Is good at selecting the "right" people for positions in the organisation	Has difficulty selecting the "right" people for positions in the organisation
Able to identify the mix of skills required for the team/organisation when selecting staff.	Selects inappropriate staff as doesn't identify the skills required for a position
Selects people into the organisation on the basis of their skills	Is poor at selecting people as they focus on whether they like or dislike a person - not on whether they have the relevant skills

9.11

Has a sense of urgency about them -	Doesn't seem to have a sense of urgency
understands what needs to be done today	

9.12

Regularly discusses projected work load with staff	Rarely discusses projected work load with staff
--	---

9.50

Encourages staff to adopt a holistic view of the	Unable to get staff to adopt a holistic view of
organisation - (i.e., see all aspects of the	the organisation - (i.e., focuses on their own
organisation)	division)

Gives regular negative feedback and constructive criticism to staff if they are not performing to the required level	Does not give negative feedback and constructive criticism to staff if they are not performing to the required level
Gives regular positive feedback to staff	Either gives no, or irregular, positive feedback
Provides accurate and honest feedback to staff about their performance	Does not always give accurate feedback about how his/her staff are performing
Does not make premature judgements about people's performance and their ability to achieve	Makes premature judgements about people's performance and their ability to achieve
Gives informal feedback about performance and doesn't wait until performance appraisal time	Only gives feedback at performance appraisal time

Gives feedback to staff in a way that assists staff develop (e.g., describes what they need to do to develop in the future)	Doesn't present feedback in a way that assists staff develop (e.g., does not describe specific behaviour)
Their staff are clear about what is expected of them	Their staff aren't clear about what is expected of them

Encourages staff to develop their potential and provides opportunities for them to develop	Doesn't encourage staff to develop their potential or provide opportunities for them to develop
Develops individuals past their initial expectations of their own ability	Doesn't develop individuals past their initial expectations of their own ability

11.03

Staff development plans balance short and long term needs of the individual with those of the organisation	Staff development plans do not achieve a good balance between needs of the individual and the organisation
Puts in place individual development plans	Doesn't put in place individual development plans

11.04

Fosters a learning environment where staff are encouraged to develop and view mistakes as	Doesn't foster a learning environment, punishes staff if mistakes are made
learning opportunities	

11.05

Recognises when there is a problem with staff member's performance	Doesn't see when there is a problem with a staff member's performance
Develops and implements solutions to resolve	Tends to ignore problems with staff
staff performance problems	performance

11.06

Personally puts time into coaching and	Doesn't put time into coaching and mentoring
mentoring his/her staff	his/her staff

Gives credit to staff for the work they do	Doesn't give credit to staff where it's due, or takes credit for the ideas of others
Supports their staff when interacting with others	Doesn't support their staff members when communicating with others
Shows appreciation to individuals for what they do	Doesn't appreciate individuals or thank them for what they've done

Can accurately assess their staff's skills and	Can't accurately describe the skills and abilities
abilities	of their staff

11.21

Prepared to make and implement the tough/hard decisions in the appropriate time frame (e.g., make people redundant, dismiss staff members)	Puts off making and implementing the tough/hard decisions in a timely manner
Makes decisions that may be unpopular with staff	Puts off making decisions that may make them unpopular and tries to make everyone happy
Collaborates with other divisions in the organisation	Competes with other divisions of the organisation
Can deal with conflict situations	Tends to walk away from conflict, avoids getting involved

11.31

Proactive in passing on information to peers, staff and superiors that will impact on them or is of interest or use to them	Does not pass on information to peers, staff, and superiors
Keeps peers, staff, and superiors informed on a regular basis about information that is of interest, so there are no "surprises"	Doesn't communicate regularly with peers, staff, and superiors
Is politically aware and has a good idea of how behaviour may offend people	Is not very politically aware and does not have a good idea of what may offend people
Open when communicating with their staff on a regular basis so they are fully informed about what is happening in the organisation	Is not open when communicating with his/her staff
Sieves out inappropriate information before passing it on to colleagues	Passes on information without thinking whether it is appropriate to pass on to colleagues

11.32

Is consistent in what they say and do	Will say one thing and do another
Will treat people fairly	Has favourites and therefore does not treat all people equally
Actions support the organisation's policies they promote to their staff members	Do not always adhere to the policies they promote

Treats all people as equals	Speaks down to people and doesn't treat everyone as their equal
Has a basic respect for all staff in the organisation	Treats people differently - depending on their level in the organisation

Is prepared to say what they think	Very cautious/guarded when communicating.
Prepared to put forward a view that others may disagree with	Doesn't commit self to a view if others disagree
Is open and honest when communicating, doesn't have hidden agendas	Has hidden agendas when communicating

11.36

Co-operates with others in the senior management group	Does not co-operate with others in the senior management group
Takes an interest in peers' areas of responsibility	Only considers own area of responsibility
Shares ideas with peers so as to assist in their work	Keeps ideas to self and doesn't share them with peers so as to assist in their work
Shares resources with other parts of the organisation to assist in the wider goals of the organisation	Doesn't share resources with other parts of the organisation
Takes on a range of organisational tasks over and beyond their positional requirements (i.e., organisational initiatives)	Does not takes on a tasks that fall outside their position responsibility
Proactive in developing relationships with people in other parts of the organisation	Does not take the time to develop relationships with people in other parts of the organisation

11.37

Assesses people and situations objectively	Has a number of stereotypes and prejudices which distorts their ability to be objective
Able to relate to women as a peer or as a boss	Has difficulty relating to women as an equal

11.52

Works to achieve "win-win" outcomes in	Does not work to achieve "win-win" outcomes
conflict situations	in conflict situations focuses on winning for self

Knows what motivates their individual staff members	Unaware of what motivates their individual staff members
Uses a range of reward and recognition approaches to meet the various needs of staff members	Tends to use the same motivational approach regardless of the staff members they are dealing with
Has an energetic approach which motivates others	Doesn't motivate others through their energetic style

Has a harmonising effect on people, can draw together people, who are polarised	Tend to polarise people and provoke violent reactions
Able to lead/build teams and get people working together for a common purpose	Unable to lead/build teams - their people work in different/fragmented directions and not towards common goals
Ensures everyone in the team has the opportunity to participate/contribute	Does not ensure everyone in the team has the opportunity to participate/contribute
Is consultative with staff	Is dictatorial with staff
Able to take people along with them to achieve goals	Doesn't take people along with them
Behaviour demonstrates ability to be perceptive to team dynamics	Has difficulty understanding their team dynamics

11.75

Able to persuade/influence people to gain co- operation	Has difficulty persuading or influencing people to gain co-operation
Can sell his/her ideas/approaches to others	Unable to sell ideas/approaches to others
Enthusiastic when persuading or influencing	Lacks enthusiasm when persuading or
others	influencing others

11.76

Inspires/motivates people because of their enthusiastic style - can generate enthusiasm in others	Lacks enthusiasm and doesn't inspire/motivate people.
Looks at situations in a positive light - has a knack of turning negatives into positives	Only focuses on the problems in situations

11.91

Understands the subtleties of the negotiating process	Unaware of the subtleties of the negotiating process
Is street-wise and not overly trusting when negotiating	Is very trusting and naive when negotiating
Able to accurately judge the strengths and weaknesses of the other party when negotiating	Unable to judge the strengths and weaknesses of the other party when negotiating

Demonstrates a flexible approach when negotiating	Demonstrates an inflexible negotiation approach
When negotiating is able to look at a situation	When negotiating is unable to look at a
from other people's perspectives while still	situation from other people's perspectives -
holding own view	tends to focus only on own position

When negotiating knows how to make things	When negotiating does not know how to make
move forward to reach agreement	things move forward to reach agreement

Knows the final position they want to get to when negotiating (i.e., knows needs or "wish list")	Does not have a firm idea of their final position when negotiating
--	--

11.94

Aggressive, forceful and hard-hitting when negotiating, takes a no compromises approach	Not aggressive or forceful or hard-hitting when negotiating
When negotiating, doesn't show their "hand" too early	When negotiating shows their "hand" too early

11.95

When negotiating works to achieve "win/win" solutions for both parties	When negotiating does not try to achieve win/win solutions for both parties - other party
	feel "shafted"

14.00

Empathetic when dealing with staff	Lacks empathy when dealing with staff
Sensitive when dealing with staff	Lacks sensitivity when dealing with staff
Able to deliver bad news in an accurate, honest, and sensitive way so staff feel they have been treated well	Delivers bad news in a blunt way - staff feel they have not been treated well
Adapts own approach to reflect the needs of the staff members they are dealing with	Doesn't adapt own approach to reflect staff' member's needs/concerns
Is compassionate	Is not compassionate
Doesn't pry into staff member's problems, but willing to listen to assist them	Pries into staff member's affairs
Takes a genuine interest in people	Says the "right words" but doesn't have a genuine interest in people
Able to put themselves in the "shoes" of others and see where they are coming from	Unable to put themselves in other peoples' "shoes"
Encourages staff member's to come and see them if they have a problem	Not interested in staff member problems
Takes an active interest in staff member's life outside work	Is only interested in the time staff spend at work

Open to others ideas even if they are different	Not very tolerant of other people's beliefs or
to his/her beliefs or views	views which are different from their own

	Communication tends to be one way with staff- is directive and tells people what to do
Encourages active staff participation at meetings	Doesn't encourage active staff participation at meetings

20.01

Knows how, when, and who to consult with to achieve maximum results and organisational goals	Doesn't really know how, when, and who to consult with
Takes a consultative approach when analysing information and making decisions	Doesn't take a consultative approach when analysing information and making decisions
Consults with the organisation's outcome in mind	Tends to consult to death, as she/he doesn't really have an end goal in mind
Achieves the right balance between being inclusive and exclusive of others when consulting	Either consults with too many or too few people

20.03

Establishes and maintains a wide range of	Doesn't establish and maintain a wide range of
network relationships to gather information	network relationships to gather information
Able to plug into informal networks in the organisation to obtain information	Unable to plug into informal networks in the organisation to find out what is going on

20.07

Researches information before making decisions	Willing to make decisions based on little or no information
Knows when enough information has been gathered to make a decision	Gathers to little or too much information when making a decision
Thorough and focused when researching an issue	Not thorough or focused when researching an issue
Can justify decisions even in the face of opposition as the decisions are well researched	Unable to justify decisions due to the lack of research

Knows when and how to consult people to gain	Doesn't know when and how to consult people
	to gain acceptance of ideas

Asks the right questions to identify the issues even those outside own area of expertise	Doesn't ask the right questions to get to the heart of the issue
Prepared to question - doesn't take information at face value	Doesn't always question - accepts information at face value

21.01

Able to think conceptually	Is more of a "concrete" thinker
Able to solve complex or new problems	Has difficulty solving complex or new problems
Can make links between issues or patterns that are not obvious	Has difficulty making links between issues or patterns that are not obvious
Able to analyse conflicting or incomplete information	Has difficulty analysing conflicting or incomplete information

21.02

Can identify main and important issues when analysing information	Focuses on irrelevant or unimportant issues when analysing information
Analyses information objectively	Is subjective when analysing information
Able to analyse a wide range of information when making decisions	Tends to focus on a narrow range of information when making decisions
S/he makes decisions based on what the issues are and is not inappropriately swayed by what other people think	Tends to be inappropriately swayed by what other people think when making decisions

21.04

Quick to see the overall picture when analysing information	Doesn't always see the overall picture when analysing information
Able to see the "big picture" when analysing information	Very focused on the detail, can't see the "woods for the trees"
Able to look at both the "big picture" as well as the detail	Focuses on the detail or the bigger picture - doesn't achieve a balance between the two
Achieves a balance between using common- sense and theory	Tends to be too theoretical or only use common-sense when making decisions
Uses the appropriate framework(s) (i.e., big picture, detail, common-sense) to assist in analysing information	Doesn't use the appropriate framework to analyse information (e.g., focuses on the detail when a bigger picture view is required)

Weights the impact decision will have on people	Doesn't consider the people issues when making
when making decisions	decisions

Able to see how decisions made in own area	Doesn't always consider how decisions made in
will impact on other areas of the organisation	own area will impact on other areas of the organisation
	Organisation

21.21

Learns and draws on past experience to help	Doesn't see links between past expenses and
develop current and future strategies	current situation when solving problems or
	analysing information

21.23

Is creative/innovative when problem solving	Is not creative/innovative when problem solving
Able to generate new solutions to old problems	Has difficulty generating new solutions to old
	problems

21.41

Has a positive and optimistic approach to problem solving and sees problems as challenges and opportunities not obstacles	Has a dogmatic and pessimistic approach to problem solving and focuses on the barriers to resolving problems
Willing to tackle difficult or long standing problems	Unwilling to tackle difficult or long standing problems

21.42

When presenting problems to superiors they	When presenting problems to superiors only
always suggest possible solutions.	provides incomplete or no solutions.

21.61

Is intelligent, logical, and clear thinking	Lacks intelligence, is not logical, and clear thinking
Able to analyse and synthesise a wide range of information in a short time frame	When analysing information has difficulty analysing and synthesising a wide range of information within a short time frame
Can pick-up and learn things quickly	Has difficulty learning new information quickly
Can think quickly on their feet	Has difficulty thinking quickly on their feet

Able to work on a range of issues at the same	Has difficulty working on a range of issues at
time	one time

Decision making is consistent "in line" with decisions they have previously made	Tends to be inconsistent when making decisions (i.e., they make different decisions on similar situations)
Logical when making decisions	Tends to be subjective and not logical when making decisions

Is decisive and timely when making decisions	Is indecisive when decisions are required or
	does not make decisions when needed

22.03

Can develop realistic solutions to problems	Unable to develop realistic solutions to
	problems

22.04

Considers a range of options when solving problems	Tends to see only one option when solving problems
Considers other viewpoints when solving problem	Doesn't always consider other viewpoints when solving problems

22.05

Able to make decisions in the absence of	Has difficulty making decisions in the absence
guidelines or rules	of guidelines or rules

22.06

Prepared to change approach or decisions to accommodate important or better ideas	Reluctant or doesn't change approach or decisions in light of important information or better ideas
Is open to ideas that oppose own view on an issue	Attacks people who have view points which differ from their own

Is flexible when making decisions	Is rigid when making decisions
Prepared to admit/acknowledge when they have made a mistake/bad decision and will make the necessary changes	Tries to cover up mistakes/bad decisions

Situations	Able to make decisions in time pressured situations	Has difficulty making decisions in time pressure situations
------------	---	---

Sticks to decisions once they make them	Does not stick to decisions once they make them
Willing to take responsibility/ownership for their decisions	Unwilling to take responsibility/ownership of their decisions - passes the buck

22.12

Makes decisions without deferring to others	Has difficulty making decisions without
	deferring to others

22.13

When making decisions takes into account political issues that will affect the acceptability of the decision	Does not shape decisions to ensure political acceptability
--	--

25.01

Demonstrates confidence and conviction when dealing with people does not falter when questioned	Lacks confidence and conviction when dealing with people - tends to falter when questioned.
Has a strong drive to succeed	Lacks a strong drive to succeed
Has definite views on subjects prepared to voice ideas and opinions (i.e., says what they think)	Reluctant to put forward ideas and opinions - doesn't have definite views on subjects

25.03

Perseveres in the face of adversity and refuses	Tends to give up when ever the going gets
to be beaten	tough

Has a strong results orientation and delivers on what they commit themselves to in the required time frame	Doesn't deliver on what they commits to
Can be relied upon to follow through on what they promise	Can not always be relied upon to follow through

Is enthusiastic and passionate about their work	Lacks enthusiasm or passion for their work
Has a high level of drive and energy to achieve results	Lacks drive and energy
Puts in long hours to achieve results	Works pretty much to the required hours
Work priorities are of prime importance in their life - they put personal priorities on the "back burner"	Personal and life outside of work are of prime importance - work priorities are often on the "back burner"
Has a strong work ethic (i.e., dedicated and hard working)	Doesn't have a strong work ethic

Has the capacity for a high workload (i.e., can churn through the work and achieve quality	Doesn't have the capacity for a high workload
outputs)	

25.09

Focuses on tasks at hand and doesn't go off on tangents or lose track of their priorities	Doesn't focus on tasks at hand and goes off on tangents and/or loses track of their priorities
Achieves a balance between achieving the organisation's short and long term objectives	Doesn't achieve a balance between achieving the organisation's short and long term objectives
Strikes a balance between being a perfectionist and producing results in the required time	Is too much of a perfectionist
Has a controlled sense of urgency	Dithers or moves at a million miles an hour
Focuses on the work that needs doing	Focuses on the aspects of work that are enjoyable

25.10

Good role model - acts how people should	Poor role model - does not set a good example
behave in the organisation	

25.11

Achieves a balance between their work and	Does not achieve a balance between their work
personal life	and personal life

Has a high level of integrity/honesty and doesn't	Doesn't have a high level of integrity/honesty
try to fiddle the system	and may try to fiddle the system

25.20	
Takes personal responsibility for making things happen in the organisation	Doesn't take responsibility for making things happen - waits for others to make things happen
25.21	
Is a self starter and can identify what needs to be done and does it without being told	Isn't a self starter and needs guidance to get going
25.23	
Is accountable take responsibility for what happens in own work area (i.e., their own actions and actions of staff)	Isn't accountable - is not prepared to take responsibility for what happens in own work area
26.01	
Focused on organisational agenda or goals and can be relied upon to put the organisation's interests first	Focused on personal agenda or own goals and puts own interest first
Personal agendas don't inappropriately influence decision making process	Personal agendas inappropriately influence decision making process
Focuses on achieving both division and organisation goals	Focuses on achieving goals for own area
26.02	
Individual goals/agenda are aligned with organisation goals	Individual goals are not aligned with the organisation goals
26.04	
Encourages others to work together to achieve the best results	Is an individualist and doesn't encourage people to work together
26.05	
Gets on with his/her work - does not get involved in the politics of the organisation	Gets involved in the politics of the organisation - spends time building internal liaisons
26.21	
Is adaptable to change in the work environment	Unable to deal with or adapt to uncertainty/change

Takes calculated risks to achieve an advantage for the organisation	Avoids risk
26.23	
Manages the change process so as to minimise resistance or negative impact on staff	Unable to manage the change process to minimise resistance or negative impact on staff

Learns new skills and keeps up-to-date with changes in own area of work	Doesn't learn new skills and adapt to changing work needs
Has a thirst for knowledge	Doesn't have a thirst for knowledge

27.21

Is proactive in seeking feedback about own performance from peers, subordinates, and superiors so they can make improvements	Doesn't seek feedback about own performance from peers, subordinates, and superiors
Is aware of and honest about own strengths and weaknesses	Is unaware of or dishonest about own strengths and weaknesses
"Knows what they don't know" and admits when they need assistance	"Don't know what they don't know" and doesn't admit when they need assistance
Selects staff that are strong in areas that they are weak in	Selects staff who are clones of themselves

27.24

Can apply their skills across different organisational areas	Unable to transfer skills and pick up a new area of the organisation that they are not familiar with
--	--

27.40

Has a clear understanding of their role in the	Has a poor understanding of their role in the
organisation and what is required of them	organisation and what is required of them

Has an in-depth knowledge of what is happening in other parts of the organisation	Has little knowledge of what is happening in other parts of the organisation
Has an in-depth knowledge of what is	Lacks an in-depth knowledge of what is
happening in their own area of the organisation	happening in their own area of the organisation
(e.g., their staff concerns)	(e.g., their staff concerns)

	Has a narrow knowledge of business and tends
the organisation, what they do, and how they	to focus just on own area - doesn't see
interact	connections/relationships with other areas

27.43

Keeps up to date with the latest developments in the organisation's business	Is out of touch with the latest developments in the organisation's business
Has an appreciation of how and where the organisation fits into the wider environment	Lacks an appreciation of how and where the organisation fits into the wider environment
Is aware of customers and makes it obvious that customers are an integral part of business	Doesn't treat customers as they should be treated - as an integral part of business
Has comprehensive knowledge of the industry the organisation is in	Has superficial knowledge of the industry the organisation is in

27.44

Has a good general knowledge	Lacks a good general knowledge

27.46

Has a history of doing things right in previous	Doesn't have a history of doing things right in
positions	previous positions

27.47

	Hasn't worked their way up from the bottom and doesn't understands the work of those they supervise
--	---

28.21

Is calm in stressful situations	Is not calm in stressful situations - tends to be volatile
Has the ability to control extreme emotions (e.g., anger, passion)	Doesn't control extreme emotions (e.g., gets very angry) very depressed
Doesn't have real highs and lows and seems to be on an even keel	Tends to have real "highs or lows" and never seems to be on an "even keel"

Gives a consistent and stable performance in	The quality of his/her performance drops off in
pressure situations	pressure situations

Tends to either freeze, retreat, become
defensive, or very emotional when criticised
Unable to respond and deal with staff member's
feelings (e.g., depression, anger)
Is not loyal to the organisation and will not
support/defend organisation/management
views/decisions if they do not agree with them
Whinges and whines and is unable to accept the
need to do something that they do not agree with
Tends to have a black view of the world and is
always negative - tends to think of the things that will go wrong
Has a low level of self control (i.e., keeps
"partying")
Has limited computer knowledge
Only has a superficial/shallow knowledge in own technical area

Has financial management skills	Has very limited knowledge of financial systems and implications of financial decisions
Thorough in financial planning and in monitoring budgets	Not thorough in financial planning and in monitoring budgets
Can bring a number/financial focus to problem solving	Can't bring a number/financial focus to problem solving

29.04

Has a good mix of entrepreneurial and financial skills (i.e., knows what will make money and what will not)	Doesn't have a good mix of entrepreneurial and financial skills
Has business/commercial acumen - can understand what is required for a business to be successful	Lacks business/commercial acumen
Able to identify opportunities that the organisation could "get into" to give it a competitive advantage	Unaware, or unable to identify business opportunities for the organisation

29.05

Able to close a deal and sell a product/service

29.06	
Understands customers - knows how to maintain customer relationships and satisfy or service customer needs	Doesn't understand customers - doesn't know how to maintain customer relationships and satisfy or service customer needs
Able to think like a customer	Has difficulty putting themselves in the

customers shoes

Unable to close a deal and sell a product/service

29.07

Has well developed project management skills	Does not have strong project management skills
29.08	
	and the second s

Has a strong sense of business ethics, a clear	Does not have a strong sense of business ethics
sense of right and wrong	

29.09

Able to predict or plan expenditure and	Has difficulty predicting or planning
maintain budget levels	expenditure and often exceeds budgeted limits

Able to identify and articulate issues in	Has a haphazard approach to marketing					
marketing situations						

30.01

Looks the part	Doesn't look the part	
Is well groomed	Is not well groomed	

31.00

Is trustworthy - you can rely on them to do the right thing by you	Is not trustworthy				
Keeps both company and personal information confidential (i.e., doesn't break confidence)	Discloses information and breaks confidence				

32.00

Can manage own personal finances	Personal finances are not in order				
Plays or has played sport	Doesn't and hasn't played sport				

<u>Appendix 6</u>: Letter from the Commissioner of Police Asking Targeted Staff to Complete the Questionnaire

ASSESSMENT CENTRE DEVELOPMENT

As you will be aware, the New Zealand Policy currently operate an Executive Assessment Centre which seeks to identify potential in Superintendents who aspire to higher rank.

I have decided to build on our successful experience with the Executive Assessment Centre by authorising preliminary development work toward the identification of competencies for Senior Management Assessment Centre. This Centre would aim to identify potential in, as well as development opportunities for, Inspectors who aspire to Superintendent rank.

I must emphasise that a decision has not yet been made on the establishment of a Senior Management Assessment Centre. Further work is currently underway on the feasibility of establishing such a Centre. It is expected a proposal will be considered by the Police Executive Conference in early 1994.

In the meantime, the enclosed questionnaire is being distributed to a sample group of Superintendents and Inspectors to obtain their views on what it takes to be an effective Superintendent. It is critical that you follow the instructions closely and respond to the items as accurately as possible. Your answers will assist in defining the managerial skills required by Superintendents to be effective. Once completed, it should be mailed to Inspector Lindsay Duncan, Coordinator, Assessment Centres, Human Resources Planning Unit at Police National Headquarters. Please ensure your questionnaire is return by 10 December 1993.

Thank you for your assistance.

R N Macdonald Commissioner of Police Appendix 7: Study Two's Questionnaire (KPMG's Version)

What do you think it takes to be an effective Senior KPMG Manager?

A QUESTIONNAIRE TO IDENTIFY THE SKILLS KPMG MANAGERS NEED



HOW TO COMPLETE THE QUESTIONNAIRE

Please take some time to familiarise yourself with these instructions. The questionnaire is easy to complete but it may appear quite different to other questionnaires that you have completed.

BEFORE YOU BEGIN

Please think of an effective senior KPMG manager (Partner, Director, Associate Director, or Senior Manager) you know well or have known. Use this manager as the reference point for completing the entire questionnaire.

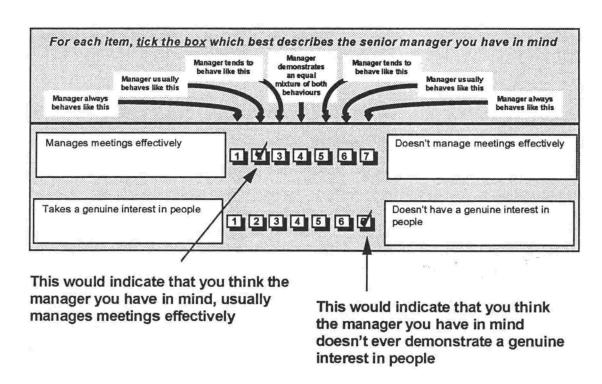




PLEASE NOTE

- · You need to be very familiar with the senior manager you choose
- Do not put the manager's name anywhere on the questionnaire
- The manager you choose may not necessarily be the most effective manager you know, but the one you know best

Look at the example below. You can see that each item in the questionnaire contains a pair of statements, with a seven point scale between them. For each item, think about which statement best describes the senior manager you have in mind and then put a tick in the appropriate box. For example:



WHAT IS THE PURPOSE OF THIS QUESTIONNAIRE?

The results of this questionnaire will be used to:

- · Identify the skills senior KPMG managers require
- · Assist with the development of a performance appraisal system for senior KPMG management

KPMG will then have a comprehensive basis for selecting, appraising, and developing its current and future managers.

In addition, it will also help me complete my Ph.D......

IMPORTANT POINTS ABOUT THE QUESTIONNAIRE

- The results of this questionnaire are CONFIDENTIAL. Do not put your name anywhere on this
 questionnaire.
- The questionnaire will take about 1 hour to complete. I appreciate the time you are investing.

WHAT IF I HAVE A QUESTION?

If you have any queries about the purpose of the questionnaire or any items in the questionnaire itself, please contact Sharon Rippin on extension 8618.

WHO DO I RETURN THE QUESTIONNAIRE TO?

Please place the questionnaire in the envelope provided and send it through the internal mail to Sharon Rippin, Organisational Psychology Unit by 22nd November 1993.

Thanks

Sharon Rippin

A COUPLE OF POINTERS

- Everybody has strengths and weaknesses. It is unlikely that the manager you have in mind will receive similar ratings on all of the items.
- You may find your attention beginning to wander after working on the questionnaire for a
 while. Take a break and come back to it.
- You may notice that there are a number of the questions in the questionnaire seem similar.
 These have been included to ensure all "shades" of meaning are represented.
- If a statement doesn't apply to the manager you are using as a reference please leave it blank.

F	For each item, <u>tick the box</u> whic	h best a	lescribes the	e sen	ior mana	ager you ha	ve in mind	
	Manager usually behaves like this Manager always		Manager demonstrates an equal mixture of both behaviours		ger tends to ve like this	Manager usually behaves like this	Manager always	
	behaves like this	7		9.7			behaves like this	
	"Knows what they don't know" and admits whe they need assistance	1 2	3 4 5 6	7		v what they don' n they need assis	t know" and doesn' tance	
	Takes calculated risks to achieve an advantag for the organisation	1 2	3 4 5 6	7	Avoids cald	culated risks		
3	Body language is open and welcoming	1 2	3 4 5 6	7	Body langu	age is not welco	oming	
	Can be relied upon to follow through on what they promise	1 2	3 4 5 6	7	Can not all through on	ways be relied up what they prom	oon to follow ise	
	Can see the bigger picture and can rise above the detail	1 2	3 4 5 6	7		e the bigger pict own in the detail	ure - tends to get	
	Can accurately assess the skills and abilities of their staff	1 2	3 4 5 6	7	Can't accu their staff	irately assess the	skills and abilities o	
	Can answer questions on the spot when presenting information	1 2	3 4 5 6	7		er questions on t information	he spot when	
	Can bring a number or financial focus to problem solving	1 2	3 4 5 6	7	Can't bring a number or financial focus to problem solving			
	Can read between the lines and form an accurate picture of what is not being said	1 2	3 4 5 6	7	Can't read between the lines and pick up o what is not being said			
	Encourages two-way, open communication with staff	1 2	3 4 5 6	7		ation tends to be what to do	one way with staff	
	Able to deliver bad news in an accurate, honest, and sensitive way so staff feel they hav been treated well	1 2	3 4 5 6	7		d news in a blunt een treated well	way - staff feel the	
	Demonstrates a flexible approach when negotiating	1 2	3 4 5 6	7	Demonstrat approach	tes an inflexible n	negotiation	
	Allows staff the freedom to determine how they will achieve their delegated objectives	1 2	3 4 5 6	7	Dictates the their object		staff should achiev	
	Easy to speak to, people feel comfortable being around them	1 2	3 4 5 6	7	Difficult to to being arour		el uncomfortable	
15	Has a controlled sense of urgency	1 2	3 4 5 6	7	Dithers or m	noves at a million	miles an hour	
	Their actions support the organisation's policies they promote to their staff members	1 2	3 4 5 6	7		ays adhere to the y promote to the		
	Achieves a good balance between their work and personal life	1 2	3 4 5 6	7	work and p	chieve a balance ersonal life - focu r their personal li	uses too much on	
	Encourages staff to identify and implement ways to improve work place practises	1 2	3 4 5 6	7			e staff to identify rove work place	
	Admits if they don't know an area when presenting information to people	1 2	3 4 5 6	7		dmit when they on the conting information	don't know an area n to people	

	For each item, <u>tick the box</u> which	best	describes	the sen	ior mana	iger you hav	ve in mind	
	Manager t behave li		Manager demonstrates an equal		ger tends to ve like this			
	Manager usually behaves like this Manager always		mixture of both behaviours			Manager usually behaves like this	Manager always	
	behaves like this	-3	1111	15			behaves like this	
20	Provides accurate and honest feedback to stat about their performance	ī	2 3 4 5	6 7	Does not all staff about	ways give accurd their performance	rte feedback to e	
21	Anticipates problems and develops strategies to resolve/minimise them	Î	2 3 4 5	6 7		nticipate problem velop strategies to	s and therefore resolve/minimise	
22	Co-operates with others in their senior management group (i.e., peer group)	ı	2 3 4 5	6 7		o-operate with oth ent group (i.e., pe		
23	Takes into account a wide range of Information when contributing to the development of the strategic plan	1	2 3 4 5	6 7			e information when nent of the strategic	
24	Contributes to a range of organisational initiatives over and beyond the requirements of their position		2 3 4 5	6 7		ontribute to organ side the responsib	isational initiatives olities of their	
25	Ensures everyone in their team has the opportunity to participate/contribute	1	2 3 4 5	6 7		nsure everyone in to participate/co	their team has the ontribute	
26	Gives regular negative feedback and constructive criticism to staff if they are not performing to the required level	П	2 3 4 5	6 7	constructive	ve regular negative criticism to staff in the required le	f they are not	
27	They know the final position they want to get to when negotiating (i.e., knows their needs and their wish list)	1	2 3 4 5	6 7	Does not have a firm idea of their final position when negotiating			
28	Understands how the wider environment (i.e., NZ, International happenings) impacts on the organisation		2 3 4 5	6 7	Does not have a good understanding of how the wider environment impacts on the organisation			
29	Has a grasp of the issues facing the organisation		2 3 4 5	6 7	Does not ha organisation	ave a grasp of the	issues facing the	
30	Has a harmonising effect on people, can draw people together, who are polarised		2 3 4 5	6 7	Does not ha who are po		effect on people	
31	Has a high level of personal contact with their staff - makes the effort to interact with staff face to-face	- 112	2 3 4 5	6 7	Does not ho with their sto		personal contact	
32	Has a strong sense of business ethics, a clear sense of right and wrong	1	2 3 4 5	6 7	Does not ha	ave a strong sense	of business ethics	
33	Has well developed project management skills	1	3 4 5	6 7	Does not ha	ve strong project	management skills	
34	Can identify future trends that will impact on the organisation	11/2	3 4 5	6 7	Does not ide on the orga	entify future trend nisation	s that will impact	
35	Knows where they are going and knows how far they have progressed in relation to their end goal at any point in time		3 4 5	6 7	Does not kno they are, in	ow where they ar relation to their e	e going and where nd goal	
36	Makes people feel comfortable when they communicate with them		3 4 5	6 7	Does not mo they commi	ake people feel o unicate with them	omfortable when	
37	Manages meetings effectively		3 4 5	6 7	Does not mo	anage meetings e	effectively	
38	Monitors tasks that have been delegated without getting too hands on		3 4 5	6 7	delegated o	onitor tasks that h or gets too hands delegated work		

	For each item, tick the Manager of Behaves II	Manager to behave like	ends to	Manager demonstrates an equal mixture of both behaviours	Manag	er tends to re like this	Manager usually behaves like this		
	Manager always behaves like this		-2)	111	55			Manager always behaves like this	
39	Proactive in passing on to peo superiors, information that will or is of interest or of use to the	impact on them,	1 2	3 4 5	6 7		ass on informatio peers, staff, and s	n that is of use or uperiors	
40	Thoroughly researches topic of conducting presentations on	area before the topic area	1 2	3 4 5	6 7	Does not re conducting	search topic are presentations	a thoroughly before	
41	When making decisions takes issues that will affect whether be accepted	into account the decision will	1 2	3 4 5	6 7		ape decisions to ity by others in th	e organisation	
42	Sticks to decisions once they r	nake them	1 2	3 4 5	6 7	Does not sti them	ick to decisions o		
43	They take into account the de of their staff when delegating		1 2	3 4 5	6 7	Does not to needs of sto	ike into account aff when delegat	the development ing work to them	
44	Proactive in developing relation people in other parts of the or	onships with ganisation	1 2	3 4 5	6 7	with people	in other parts of	evelop relationships f the organisation	
45	Works to achieve win-win outo situations	comes in conflict	1 2	3 4 5	6 7	Does not we conflict situe		in-win outcomes in ses on achieving a	
46	Able to accurately identify the required for their team and th when selecting staff		1 2	3 4 5	6 7		curately identify t when selecting sto	he skills required for aff	
47	Achieves a balance between the organisation's short and lo		1 2	3 4 5	6 7		nieve a balance l ganisation's short	between achieving and long term	
48	Adapts own approach to refle the staff members they are de		1 2	3 4 5	6 7		apt own approad leeds or concern	ch to reflect staff s	
49	s aware of how they impact o people and modifies their app the needs of the situation		1 2	3 4 5	6 7		apt/modify their of of the situation	approach to reflect	
50	Prepared to admit or acknow have made a mistake or bad make the necessary changes		1 2	3 4 5	6 7		mit or acknowled stake or bad dec	ge when they have cision	
51	Able to see how decisions ma area, will impact on other are organisation		1 2	3 4 5	6 7		rea will impact o	w decisions made in n other areas of the	
52	Considers other people's view solving problems	points when	1 2	3 4 5	6 7	Doesn't alw viewpoints v	ays consider oth when solving pro	er people's blems	
53	Prepared to question informat information at face value	ion - doesn't take	1 2	3 4 5	6 7	Doesn't alw at face valu		ccepts information	
54	Shows appreciation to individu do	uals for what they	1 2	3 4 5	6 7	Doesn't app what they'v		als or thank them fo	
55	Asks questions if they don't full what has been said	y understand	1 2	3 4 5	6 7	Doesn't ask what has be		don't understand	
56	Asks the right questions to ider issues are even when dealing outside their own area of expe	with subjects	1 2	3 4 5	6 7	Doesn't ask heart of the	the right question issue	ns to get to the	
57	Checks that other people und message they have been con		1 2	3 4 5	6 7		eck that people usey have been co		

		r tends to demonstrates an equal mixture of both behaviours Manager tends to behave like this Manager usually behaves like this Manager usually behaves like this Manager like this Manager like this behaves like this Manager always like this behaves like this behaves like the second
E 0	Co-operates/collaborates with other parts of	311111
58	the organisation	Doesn't co-operate/collaborate with other post of the organisation
59	Prepared to put forward a view that others mo disagree with	Doesn't commit self to a view if others may disagree with it
60	Keeps peers, staff, and superiors informed on a regular basis about information that is of interest, so there are no surprises	Doesn't communicate regularly with peers,, s and superiors
51	Considers the impact that their decisions will have on people	1 2 3 4 5 6 7 Doesn't consider the impact that their decision have on people
2	Actively contributes at meetings	1 2 3 4 5 6 7 Doesn't contribute much at meetings
3	Has the ability to control extreme emotions (e.g., anger, passion)	Doesn't control extreme emotions (e.g., gets very angry, very depressed)
4	Delegates clear objectives that are understood by the person receiving them	Doesn't delegate clear objectives - individuo are unsure of what is being delegated
5	Achieves a good balance between doing hands-on work and delegating work to others	1 2 3 4 5 6 7 Doesn't delegate work appropriately or delegates everything
	Has a strong results orientation and delivers on what they commit themselves to in the required time frame	d 1 2 3 4 5 6 7 Doesn't deliver on what they commit themse
	Demands high work standards from work colleagues	1 2 3 4 5 6 7 Doesn't demand high work standards from a colleagues
	Develops staff members past staff members' initial expectations of their own ability	Doesn't develop staff members past staff members initial expectations of their own at
	Encourages people in the organisation to work together to achieve the best results	Doesn't encourage people in the organisation to work together to achieve the best results
	Encourages active staff participation at meetings	Doesn't encourage staff to actively participed at meetings
	Encourages staff to develop their potential and provides opportunities for them to develop	Doesn't encourage staff to develop their potential or provide opportunities for them to develop
	Encourages staff members to come and see them if they have a problem	Doesn't encourage staff to talk through their problems with them
i r	Establishes and maintains a wide range of network relationships so as to pass on and gather information	Doesn't establish and maintain a wide range network relationships so as to pass on and gather information
	Establishes current and future priorities so as to meet deadlines/goals	Doesn't establish current and future priorities
	Focuses on tasks at hand and doesn't go off on tangents or lose track of their priorities	Doesn't focus on tasks at hand and goes off tangents and/or loses track of their priorities
e	Fosters a learning environment where staff are encouraged to develop and view mistakes as earning opportunities	Doesn't foster a learning environment -punish staff if mistakes are made

	For each item, <u>tick the box</u> w	hich best	describes the	e sen	ior mana	iger you ha	ve in mind
		nager tends to chave like this	Manager demonstrates an equal mixture of both behaviours		ger tends to ve like this	Manager usually behaves like this	
	Manager always behaves like this	-	Denaviours	(+			Manager always behaves like this
77	Gives credit to staff for the work they do	1	2 3 4 5 6	7		e credit to staff who for the ideas of c	
78	Gives the necessary authority and resourd people when delegating objectives	ces to	2 3 4 5 6	7		the necessary a people when de	uthority and elegating objectives
79	Has a basic respect for all staff in the organisation		2 3 4 5 6	7		erently - dependir	t for all staff. Treats ng on their level in
80	Takes a genuine interest in people	1 2	3 4 5 6	7	Doesn't hav	e a genuine inter	est in people
81	Has a good mix of enfrepreneurial and fir skills (i.e., knows what will make money ar what won't)	nancial nd	2 3 4 5 6	7	Doesn't hav financial skil		entrepreneurial and
82	Has a high level of integrity or honesty an doesn't try to fiddle the system	ī [2 3 4 5 6	7		e a high level of i to fiddle the syst	ntegrity or honesty em
83	Has a history of doing things right in previo positions	ous 1	3 4 5 6	7	Doesn't hav previous po	e a history of doir sitions	ng things right in
84	Has a strong work ethic (i.e., dedicated a hard working)	nd 1 2	3 4 5 6	7	Doesn't hav	e a strong work e	thic
85	Has a thirst for knowledge	1 2	3 4 5 6	7	Doesn't hav	e a thirst for know	rledge
86	Has a good appreciation of all the function the organisation, what the different areas and how they interact	ons of do,	3 4 5 6	7		e an appreciation the organisation	n of the different - tends to focus on
87	Has the capacity for a high workload (i.e. churn through the work and achieve qua outputs)	, can lity	3 4 5 6	7	Doesn't hav	e the capacity fo	or a high workload
88	Involve their staff in the strategic planning process	1 2	3 4 5 6	7	Doesn't invo planning pro	lve their staff in th ocess	ne strategic
89	Keeps message simple when communica	ting 1 2	3 4 5 6	7	Doesn't keep communica	p messages simpl iting	e when
90	Knows when and how to consult people t acceptance of ideas	o gain 1 2	3 4 5 6	7		w when and how eptance of ideas	to consult people
91	Learns new skills and keeps up-to-date wil changes in own area of work	h 1 2	3 4 5 6	7		n new skills to kee ng work needs	p them up-to-date
	Listens to people and takes in what they o saying	1 2	3 4 5 6	7	Doesn't lister conversation	n, often tries to do n	ominate a
93	Looks the part (i.e., is well groomed)	1 2	3 4 5 6	7	Doesn't look	the part (i.e., is n	ot well groomed)
	Makes and implements the tough/hard decisions in the appropriate time frame (e counselling people out)	.g., 1 2	3 4 5 6	7		te and implemen the appropriate t people out)	
95	Has an energetic approach which motivo others	rtes 1 2	3 4 5 6	7	Doesn't mot personal sty	ivate others throu le	igh an energetic

For each item, tick the box which best describes the senior manager you have in mind									
	Manager te behave lik Manager usually behaves like this	e this	Manager demonstrates an equal mixture of both behaviours		ger tends to ve like this	Manager usually behaves like this			
	Manager always behaves like this	-	1111	F			Manager always behaves like this		
96	Pitches communication at the right level so it is understood by the intended audience	1 2	3 4 5 6	7		th communication ot always underst udience			
97	Gives feedback to staff in a way that assists staff develop (e.g., describes what they need to do to develop their skills)	1 2	3 4 5 6	7	staff develo	sent feedback in p (e.g., does not to improve in the	describe what staff		
98	Personally puts time into coaching and mentoring their staff	1 2	3 4 5 6	7	Doesn't put time into coaching and ment their staff				
99	Questions and challenges the efficiency and effectiveness of current work practises	1 2	3 4 5 6	7		estion and challen as and efficiency			
100	is perceptive and reads people well, can see where they're coming from	1 2	3 4 5 6	7	Doesn't rea are coming		n't see where they		
101	Knows how, when, and who to consult with to achieve the best results	1 2	3 4 5 6	7		ly know how, whe			
102	Learns and draws on past experience to help develop current and future strategies	1 2	3 4 5 6	7	Doesn't see links between past experiences of current situations when solving problems or analysing information				
103	Recognises when there is a problem with a staff member's performance	1 2	3 4 5 6	7	Doesn't see when there is a problem with member's performance				
104	ls proactive in seeking feedback about their own performance from peers, subordinates, and superiors so they can improve their	1 2	3 4 5 6	7	performanc	k feedback abou e from peers, sub as to improve the	ordinates, and		
105	Has a sense of urgency about them - understands what needs to be done today	1 2	3 4 5 6	7	Doesn't see them	m to have a sense	of urgency about		
106	They set high standards for themselves to achieve	1 2	3 4 5 6	7	Doesn't set l achieve	nigh standards for	themselves to		
107	Shares their resources (i.e., staff, equipment) with other divisions to assist in achieving the wider goals of the organisation	1 2	3 4 5 6	7	Doesn't sha	re their resources	with other divisions		
108	ls articulate when communicating	1 2	3 4 5 6	7	Doesn't spe	ak clearly and is r	ot articulate		
109	Supports their staff when interacting with others inside and outside the organisation	1 2	3 4 5 6	7		port their staff me ating with others in ation			
110	Takes a consultative approach when analysing information and making decisions	1 2	3 4 5 6	7		e a consultative a formation and mo			
111	Able to take people along with them to achieve goals	1 2	3 4 5 6	7	Doesn't take achieve go	e people along w als	th them to		
112	Takes personal responsibility for making things happen in the organisation	1 2	3 4 5 6	7		e responsibility for aits for others to m	making things ake things happen		
113	is aware of customers and makes it obvious that customers are an integral part of business	1 2	3 4 5 6	7	Doesn't trea treated - as	it customers as the an integral part o	ey should be of business		
114	Treats all people as their equal	1 2	3 4 5 6	7		at everyone as the on to people	ir equal and		

	For each iten	n, <u>tick the box</u>	which i	best de	escribes t	he sen	ior mana	ager you hav	re in mind
	Manager always	Manager usually behaves like this	Manager ten behave like		Manager demonstrates an equal mixture of both behaviours	beha	ger tends to eve like this	Manager usually behaves like this	Manager always
	behaves like this			- 3)}	111	15			behaves like this
115		omers - knows how to ships and satisfy or so		1 2	3 4 5	6 7	how to mai	derstand custome intain customer re wice customer ne	lationships and
116		ate framework(s) (e. mmon-sense) to ass tion		1 2	3 4 5	6 7	analyse info	the appropriate to ormation (e.g., foo ager picture view k	uses on the detail
117	Achieves the right inclusive and exclusive	balance between to usive of others when	peing consulting	1 2	3 4 5	6 7	Either consu	ults with too many	or too few people
118	Gives regular posi	tive feedback to sta	ff	1 2	3 4 5	6 7	Either gives staff	irregular, or no po	sitive feedback to
119	Specifies what is e delegating object	xpected of people ives	when	1 2	3 4 5	6 7	Fails to spec when deleg	cify what is expec gating objectives	ed of people
120	Can identify main analysing informat	and important issue tion	s when	1 2	3 4 5	6 7	Focuses on when analy	irrelevant or unim sing information	portant issues
121	Focuses on the wo	ork that needs doing		1 2	3 4 5	6 7	Focuses on enjoyable	the aspects of wo	rk that are
122	the detail when ar	th the big picture as nalysing information e between the two.		1 2	3 4 5	6 7	analysing in	the detail or the b formation - doesn atween the two	igger picture when 't achieve a
123		ons in a positive light egatives into positive	- has a es	1 2	3 4 5	6 7	Focuses on situations	the negative fact	ors in most
124		ring both their own o e goals of the organ		1 2	3 4 5	6 7		y - doesn't focus o	oals for own area of an achieving wider
125	Knows when enou gathered to make	gh information has t a decision	peen	1 2	3 4 5	6 7	Gathers too making a d	o little or too much lecision	information when
126	Gets on well with e	everyone in the orgo	nisation	1 2	3 4 5	6 7	Gets on we organisation	II with certain peo n	ple in the
127		work - does not get itics of the organisa	too tion	1 2	3 4 5	6 7		volved in the politi n - spends too mu ions	
128	problem solving ar	optimistic approac nd sees problems as oportunities not obst		1 2	3 4 5	6 7		matic and pessimi lving and focuses oblems	
129	Has an open and r see is what you ge	natural style (i.e., wh t)	nat you	1 2	3 4 5	6 7	Has a close difficult to re	d communication ead	style - they are
130	Has a high level of to stop partying as	self control (i.e., kno their work will be at	ows when fected)	1 2	3 4 5	6 7		evel of self control en though their w	(i.e., keeps ork will be effected)
131	Assesses people ar	nd situations objecti	vely	1 2	3 4 5	6 7	which distor	per of stereotypes tts their ability to b eople and situatio	e objective when
132		tanding of their role what is required of th		1 2	3 4 5	6 7		understanding of n and what is requ	
133	Has an outgoing a style	nd expressive interp	ersonal	1 2	3 4 5	6 7	Has an intro	verted and flat in	terpersonal style

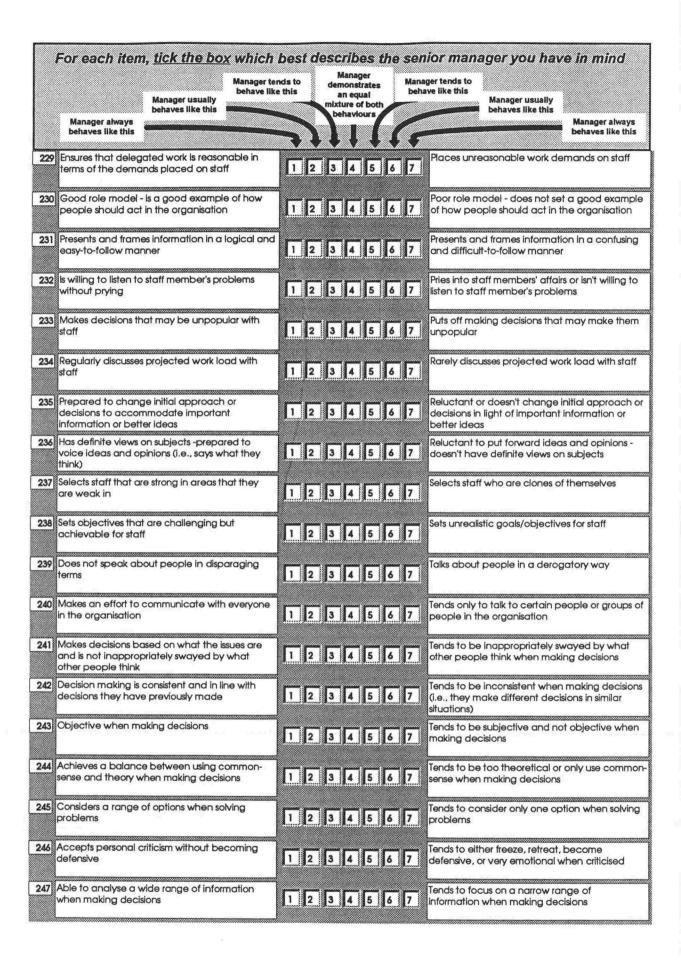
	For each item, tick the box which best describes the senior manager you have in mind											
		ger tends to ve like this	Manager demonstrates an equal mixture of both behaviours		ger tends to ve like this	Manager usu behaves like						
	Manager always behaves like this	-7	MIL	F				Manager always behaves like this				
134	Able to analyse conflicting or incomplete information	1 2	3 4 5 6	7		ty analysing o information		ing or				
135	Can quickly establish rapport with people	1 2	3 4 5 6	7	Has difficul	ty establishin	g rapp	ort with people				
136	Able to generate new solutions to old proble	ems 1 2	3 4 5 6	7	Has difficul problems	ty generating	new s	olutions to old				
137	Can pick-up and learn things quickly	1 2	3 4 5 6	7	Has difficul	ty learning ne	ew info	rmation quickly				
138	Able to make small talk and engage people conversation	in 1 2	3 4 5 6	7	Has difficul conversation		d enga	aging people in				
139	Able to make decisions in the absence of guidelines or rules	1 2	3 4 5 6	7	Has difficul of guideline		cisions	in the absence				
140	Able to make decisions in time pressured situations	1 2	3 4 5 6	7	Has difficul situations	ty making de	cisions	in time pressured				
141	Can make decisions independently without deferring to others	1 2	3 4 5 6	7	Has difficul to others	ty making de	cisions	without deferring				
142	Can make links between issues or patterns thate are not obvious	nat 1 2	3 4 5 6	7		ty making link at are not ob		een issues or				
143	Effectively manages their time	1 2	3 4 5 6	7	Has difficul			ne effectively				
144	Able to persuade or influence people to gai co-operation	1 2	3 4 5 6	7	Has difficul to gain co-	ty persuading		uencing people				
145	Able to predict or plan expenditure and wor within budgets	k 1 2	3 4 5 6	7	Has difficul and often	ty predicting exceeds bud	or plan geted l	ning expenditure imits				
146	Able to think like a customer	1 2	3 4 5 6	7		ty putting the shoes and thi		s in the ke a customer				
147	Able to relate well to a wide range of people (i.e., Managing Directors, clerical staff, etc)	1 2	3 4 5 6	7	Has difficul	ty relating to	a wide	range of people				
148	Can relate to people from cultures different t their own	1 2	3 4 5 6	7	Has difficul different to	ty relating to their own	people	from cultures				
149	Relates to the opposite sex as an equal. Abl relate to the opposite sex as a peer or as a b	e to poss 1 2	3 4 5 6	7	Has difficul equal	ty relating to	the op	posite sex as an				
150	is good at selecting the right people for positions in the organisation	1 2	3 4 5 6	7	Has difficult positions in	ty selecting the the organisa	ne right tion	people for				
151	Able to solve complex or new problems	1 2	3 4 5 6	7	Has difficul	ty solving cor	nplex c	or new problems				
152	Can think quickly on their feet	1 2	3 4 5 6	7	Has difficul	ty thinking qu	ickly or	n their feet				

	For each iten	n, <u>tick the bo</u>	which b	est de	scribes t	he sen	ior mana	ager you ha	ive in mind		
		Manager usually behaves like this	Manager tends behave like th	nis	Manager demonstrates an equal mixture of both		ger tends to ve like this	Manager usually behaves like this			
	Manager always behaves like this			3)	behaviours	6			Manager always behaves like this		
153	Is perceptive to te	am dynamics	ı	1 2	3 4 5	6 7	Has difficult	y understanding	team dynamics		
154	ls a team player - team	can work as a mem	ber of a	1 2	3 4 5	6 7		difficulty working in a team - is a /individualistic			
155	Able to work on a time	range of issues at th	ne same	1 2	3 4 5	6 7	Has difficult same time	y working on a r	ange of issues at the		
156	Treats people fairly	/	I	1 2	3 4 5	6 7	Has favourites and therefore does not treat all staff fairly				
157	ls open and hones doesn't have hidd	t when communica en agendas	ating,	1 2	3 4 5	6 7	Has hidden	agendas when	communicating		
158	ls computer literate	9	Į.	1 2	3 4 5	6 7	Has limited	computer know	ledge		
159	Has an in-depth knowledge of what is happening in other parts of the organisation			1 2	3 4 5	6 7	Has little knowledge of what is happening other parts of the organisation				
160	Has comprehensiv the organisation is	e knowledge of the in	industry	1 2	3 4 5	6 7	Has superfic organisatio		of the industry the		
161	Has well develope	d financial manage	ement skills	1 2	3 4 5	6 7	Has very lim and implica	nited knowledge ations of financia	of financial systems al decisions		
162		vay up from the bot ork of those they m	tom and anage	1 2	3 4 5	6 7	the organise		from the bottom of 't understands the		
163		n audience's attenti teresting presentation	on due to on style	1 2	3 4 5	6 7			n audience's otonous or boring		
164		sational and persor staff confidential (i.)	nal e., doesn't	1 2	3 4 5	6 7		ately discloses inf confidence	formation about staff		
165	Takes time to build understand their st		J	1 2	3 4 5	6 7	Invests little	time building rel	ationships with staff		
166	ls consultative with	staff	ſ	1 2	3 4 5	6 7	ls dictatoria	l toward staff			
167	Is focused on the st organisation	trategic direction o	fthe	1 2	3 4 5	6 7		on day-to-day as c direction of the	ctivities rather than e organisation		
168		on's interests first - is goals of the organis	focused ation	1 2	3 4 5	6 7			onal agenda or own isation's agenda		
169	ls decisive and time	ely when making de	ecisions	1 2	3 4 5	6 7	ls indecisive	when decisions	are required		
170	Able to think conc	eptually	ſ	1 2	3 4 5	6 7	ls more of a	concrete thinke	or .		
171	Assertive when cor what they think)	mmunicating (i.e., th	ney say	1 2	3 4 5	6 7		ive when comm want to hear	unicating - they say		

	For each iten	n, tick the box	Manager ter behave like	nds to	Manage demonstr an equ	er ates ai	Manag	ior mana ger tends to ve like this	Manager us	ually	e in mind	
	Manager always behaves like this	Delicaes like this		£	behavior	urs/	7			e this	Manager alway behaves like thi	
172	ls calm in stressful s	ituations		1 2	3 4	5 6	7	ls not calm	in stressful si	tuation	s	
173	ls compassionate	when dealing with	staff	1 2	3 4	5 6	7	ls not comp	assionate w	hen de	ealing with staff	
174	ls creative/innovat	ive when problem	solving	1 2	3 4	5 6	7	ls not creat	ve/innovati	ve whe	n problem solv	ing
175	ls firm and direct w	hen communicatin	g	1 2	3 4	5 6	7	ls not direct communic	or is confro	ntation	al when	
176	Effective at represe outside groups	enting the organisa	tion to	1 2	3 4	5 6	7	Is not effect to outside (tive at repre groups	senting	the organisation	on
177	Is logical, and clea	ır thinking		1 2	3 4	5 6	7	ls not logico	al, and clear	r thinkin	g	
178	Has a strong loyalt support or defend management's vie	the organisation's		1 2	3 4	5 6	7	always supp		nd the	and will not organisation's d disions	or
179	ls open to ideas the view on an issue	at are different from	their own	1 2	3 4	5 6	7		to ideas or p n differ from		who have viev wn	v
180	ls open to new ideo place	as and change in t	ne work	1 2	3 4	5 6	7	work place			change in the oblems created	d
181	Planned and orgar	nised in their work o	pproach	1 2	3 4	5 6	7		ed and orgo takes each			
182	Is proactive and op with their staff so th what is happening	ey are fully informe	d about	1 2	3 4	5 6	7	with their sto		ften do	communicatin not know who	
183	is relaxed when co	mmunicating		1 2	3 4	5 6	7	ls not relaxe	d when cor	nmunic	cating	
184	Is trustworthy - they right thing by you	can be relied on to	do the	1 2	3 4	5 6	7	ls not trustw you	orthy - will n	ot do tt	ne right thing b	У
	ls politically aware their behaviour is p		ea of how	1 2	3 4	5 6	7		of how the		d does not hav aviour is	/e
186	Takes an interest in work	staff members' life	outside	1 2	3 4	5 6	7				aff spend at wo o outside of wo	
	Keeps up to date w in the organisation'		opments	1 2	3 4	5 6	7		ch with the I ation's area		evelopments ir ness	1
	Has the ability to tro complicated issues be understood by r	into simple terms th	1000	1 2	3 4	5 6	7	ls overly cor complicate		hnical	when explainin	g
189	Selects people into of their skills	the organisation o	n the basis	1 2	3 4	5 6	7	whether the		ke a pe	they focus on erson - not on at skills	
190	Is flexible when mai	king decisions		1 2	3 4	5 6	7	ls rigid wher	making de	cisions	_	Ohmon.

	For each item, <u>tick the box</u> whic	ch best	describes t	he sen	ior mana	iger you hav	e in mind
		er tends to e like this	Manager demonstrates an equal mixture of both		ger tends to ive like this	Manager usually behaves like this	
	Manager always behaves like this		behaviours	6			Manager always behaves like this
191	Analyses information objectively	1	2 3 4 5	6 7	ls subjective	when analysing i	nformation
192	Strikes a balance between being a perfection and producing results in the required time fra	nist me	2 3 4 5	6 7	ls too much	of a perfectionist	
193	Can laugh at themselves, and doesn't take se too seriously	elf 1	2 3 4 5	6 7	ls too seriou heartedly	s, doesn't take an	ything light
194	is honest about their own strengths and weaknesses	1	2 3 4 5	6 7		of or dishonest ab nd weaknesses	out their own
195	is street-wise and not overly trusting when negotiating	1	2 3 4 5	6 7	ls very trustin	ng and naive whe	n negotiating
196	is a self starter and can identify what needs to be done and does it without being told	1	2 3 4 5	6 7	lsn't a self st	arter - needs guid	ance to get going
197	ls accessible to their staff	1	2 3 4 5	6 7	lsn't accessi	ble to their staff	
198	s accountable - takes responsibility for what happens in own work area (i.e., for their own actions and the actions of their staff)	1	2 3 4 5	6 7		table - is not prep for what happer	ared to take ns in own work area
199	Shares ideas with their peers so those individu can benefit from them	als 1	2 3 4 5	6 7		to self and doesn ers so they can b	n't share their ideas enefit from them
200	Has a good general knowledge	1	2 3 4 5	6 7	Lacks a goo	d general knowle	dge
201	Has a good sense of humour		2 3 4 5	6 7	Lacks a sens	se of humour	
202	Has a strong drive to succeed		2 3 4 5	6 7	Lacks a stro	ng drive to succe	ed
203	Has an appreciation of how and where the organisation fits into the wider environment (i.e NZ context)	a., [T]	3 4 5	6 7		preciation of how fits into the wider	and where the environment (i.e.,
204	Has an in-depth knowledge of what is happening in their own area of the organisati (e.g., their staff concerns)	on 1 2	3 4 5	6 7		depth knowledge in their own area	of what is of the organisation
205	Has business or commercial acumen - can understand what is required for a business to b successful	ре [1]	3 4 5	6 7	Lacks busine	ess or commercial	acumen
206	Demonstrates confidence and conviction who dealing with people and does not falter when questioned	en 1 2	3 4 5	6 7		dence and convic - tends to falter w	tion when dealing then questioned
207	Has a high level of drive and energy to achiev results	1	3 4 5	6 7	Lacks drive	and energy to ac	nieve results
208	Empathetic when dealing with staff	1 2	3 4 5	6 7	Lacks empa	thy when dealing	with staff
209	Inspires/motivates people because of their enthusiastic style - can generate enthusiasm ir others	ī	3 4 5	6 7	Lacks enthu people	siasm and doesn't	inspire/motivate

	For each item	n, <u>tick the bo</u>	Manager ter	nds to	Manager demonstrates	Mana	nior mana ager tends to ave like this	nger you hav	re in mind	
		Manager usually behaves like this	behave like	this	an equal mixture of both behaviours	3	ave like this	Manager usually behaves like this		
	Manager always behaves like this			5)) I (6			Manager always behaves like this	
210	ls enthusiastic and	passionate about	their work	1 2	3 4 5	6 7	Lacks enth	usiasm or passion t	for their work	
211	Enthusiastic when others	persuading or influe	encing	1 2	3 4 5	6 7	Lacks enthu influencing	usiasm when persu others	uading or	
212	Sensitive when de	aling with staff		1 2	3 4 5	6 7	Lacks sensit	g with staff		
213	Has strategic vision organisation need	n - able to see wher s to go in the future		1 2	3 4 5	6 7	Lacks strate here-and-n	egic vision - tends t ow	o focus on the	
214	Does not make pro an individuals' abil		ts about	1 2	3 4 5	6 7	Makes pren individuals'	nature judgement ability to perform	s about an	
215	Aggressive, forcefu negotiating - take	ul, and hard-hitting s a no compromise	when s approach	1 2	3 4 5	6 7	Not aggress negotiating	sive, forceful, or ho	ard-hitting when	
216	Prepared to muck complete work in p	in to help out their pressure situations	staff	1 2	3 4 5	6 7	Not prepare pressure situ	ed to muck in to h uations	elp their staff in	
217	Strong at establish with people	ing/maintaining rel	ationships	1 2	3 4 5	6 7	Not strong at establishing/maintaining relationships with people			
218	Thorough in their fi monitoring of their		nd the	1 2	3 4 5	6 7	Not thoroug monitoring	gh in their financia of their budgets	I planning and the	
219	Thorough in their w detail (i.e., crosses	ork approach and their Ts and dots the		1 2	3 4 5	6 7	Not thoroug short cuts	gh in their work ap	proach and takes	
220	Thorough and focu issue	used when research	ning an	1 2	3 4 5	6 7	Not thoroug	gh or focused whe	n researching an	
221	Makes an effort to when talking to the		at ease	1 2	3 4 5	6 7	Not very go when talkin	od at making peo g to them	pple feel at ease	
222	Open to others ide to their beliefs or vi	as even if they are ews	different	1 2	3 4 5	6 7		erant of other peo are different from		
223	Takes an interest in peers' areas of resp		ers (i.e.,	1 2	3 4 5	6 7		lers own area of re n their peers' areas	esponsibility. Is not s of responsibility	
224	Gives informal feed performance and performance appr	doesn't wait until	rt their	1 2	3 4 5	6 7	Only gives f appraisal tir	eedback to staff one	at performance	
225	Technically very co area (e.g., marketi etc)	empetent in own sp ng, financial mana		1 2	3 4 5	6 7	Only has a superficial or shallow knowledge own technical area (e.g., marketing, financimanagement, etc)			
226	Does not over-com they can't deliver o		oilities that	1 2	3 4 5	6 7		nits self to achievin fore unable to del		
227	Work priorities are o life - they are able the back burner	of prime importance to put personal pric		1 2	3 4 5	6 7		d life outside of w - work priorities ar r		
228	Can manage own	personal finances		1 2	3 4 5	6 7	Personal fine	ances are not in o	rder	



	For each item, <u>tick the box</u> (which bes	t de:	scribes the	sen	ior mana	ager you ha	ve in mind			
	Manager usually behaves like this	lanager tends to behave like this		Manager demonstrates an equal nixture of both behaviours		ger tends to ve like this	Manager usually behaves like this				
	Manager always behaves like this		\mathcal{J}	1111	5			Manager always behaves like this			
248	Perseveres in the face of adversity and r to be beaten	efuses	2	3 4 5 6	7	Tends to giv	ve up when the g	oing gets tough			
249	Has a positive approach to all work the	^{rdo}	2	3 4 5 6	7		ative - tends to th	of the world and is nink of the things			
250	Doesn't have real highs or lows - is on an keel	even 1	2	3 4 5 6	7	Tends to ho seems to be	ave real highs or lo e on an even kee	ws and never			
251	Can adapt style to meet audience need they are communicating	ds when	2	3 4 5 6	7	Tends to have the same approach when dealing with people, regardless of who they ar talking to					
252	Develops and implements solutions to re staff performance problems	solve	2	3 4 5 6	7	Tends to igr performand	nore problems wit ce	h staff			
253	Able to talk on a wide range of topics w socialising with people	hen 1	2	3 4 5 6	7	Tends to jus	t talk about work	when socialising			
254	Strives to do things better in the work pla work practices) and improve on the stat	ce (i.e., us quo	2	3 4 5 6	7		Tends to stick with the status quo rather than look for ways to do things better in the work place				
255	Uses a range of approaches to motivate staff which reflects their staff members n	their eeds 1	2	3 4 5 6	7		e the same appro embers regardles h				
256	Can deal with conflict situations	1	2	3 4 5 6	7	Tends to wo involved	alk away from cor	nflict, avoids getting			
257	Gives a consistent and stable performan pressure situations	ce in	2	3 4 5 6	7	The quality pressure situ	of their performar uations	nce drops off in			
258	Their actions reflect the direction of the organisation's strategic plan	1	2	3 4 5 6	7		s do not reflect th n's strategic plan	e direction of the			
259	Their behaviour demonstrates their comr to EEO principles	nitment	2	3 4 5 6	7		riour does not der nt to EEO principle				
260	Their own agenda doesn't inappropriate influence their decision making	ly 1	2	3 4 5 6	7	Their own a their decisio	genda inappropr on making	iately influences			
261	Their own individual goals are aligned wi organisation's goals	th the	2	3 4 5 6	7		ndividual goals are ation's goals	not aligned with			
262	Their personal presence demands attent	ion 1	2	3 4 5 6	7	Their person attention	nal presence does	sn't demand			
263	Their planning reflects the organisation's and long term goals	short	2	3 4 5 6	7	Their planni and not the	ng focuses purely organisation's lo	on short term goals ng term goals			
264	Their staff are clear about what is expect them	ed of	2	3 4 5 6	7	Their staff a of them	ren't clear about	what is expected			
265	Their staff members' development plans balance the short and long term needs of individual with those of the organisation	of the	2	3 4 5 6	7	achieve a g		ment plans do not tween needs of the on			
266	They create plans to develop each of th individual staff members	eir 1	2	3 4 5 6	7		create plans to de aff members	evelop each of their			

	For each item, tick the box which best describes the senior manager you have in mind										
		Manager usually behaves like this	Manager ten behave like		Manager demonstrates an equal mixture of both behaviours		ger tends to ve like this	Manager usually behaves like this			
	Manager always behaves like this			3)	111	65			Manager always behaves like this		
267	Able to achieve a on long and short strategic plan	balance between term goals when d		1 2	3 4 5	6 7	short term (goals when devel	e between long & oping strategic er short or long term		
268	Able to anticipate when presenting in by their questions	the likely reaction nformation and is no	of people of thrown	1 2	3 4 5	6 7		anticipate the like en presenting info	ly reaction of rmation and is likely		
269		the organisation's st aff know how they organisational vision	can	1 2	3 4 5	6 7	staff are un	articulate the strat sure of the part th n's strategic vision			
270	Able to attract clie strategy of the org		future	1 2	3 4 5	6 7		attract clients who the organisation	reflect the future		
271	Able to close a de service	al and sell a produ	ct or	1 2	3 4 5	6 7	Unable to d service	close a deal and s	ell a product or		
272	is adaptable to ch	ange in the work e	nvironment	1 2	3 4 5	6 7		deal with or adapt or change in the	to work environment		
273	Can develop reali:	stic solutions to prol	olems	1 2	3 4 5	6 7	Unable to d	develop realistic so	olutions to problems		
274	Encourages staff to organisation - (1.e., organisation)	adopt a holistic vi to see all aspects o		1 2	3 4 5	6 7	the organis	get staff to adopt o ation - (i.e., staff to ivision or area)			
275	Able to accurately weaknesses of the	judge the strength other party when n	s and egotiating	1 2	3 4 5	6 7		udge the strengths r party when nego			
276		ns even in the face decisions are well re	of searched	1 2	3 4 5	6 7		ustify decisions in t due to the lack of			
277		teams and get peo or a common purpo	ople ose	1 2	3 4 5	6 7		ead/build teams - king together to c			
278	Manages the char resistance or nega	nge process so as to tive impact on staff	minimise	1 2	3 4 5	6 7		nanage the chan imise resistance o	ge process so r negative impact		
279	Able to motivate a strong personality	nd lead people du	e to their	1 2	3 4 5	6 7	Unable to n their person	notivate and lead nality	people through		
280	Able to plug into in organisation to obt		he	1 2	3 4 5	6 7		olug into informal r n to find out what			
281	Able to put themse and see where the		others	1 2	3 4 5	6 7		out themselves in c difficulty seeing w n			
282	Able to respond ar staff member's feel	nd deal appropriate ings (e.g., depressio	ely with on, anger)	1 2	3 4 5	6 7			appropriately with depression, anger)		
283	Able to see a situat perspective	ion from the other p	oerson's	1 2	3 4 5	6 7	Unable to se perspective		n the other person's		
284	Can sell their ideas	approaches to oth	ners	1 2	3 4 5	6 7	Unable to s	ell ideas/approac	hes to others		
285	Able to sell the stra them to buy into it	tegic vision to staff	and get	1 2	3 4 5	6 7	Unable to se buy in	ell the strategic vis	ion to staff or get		

	For each iten	n, <u>tick the box</u>	which be		he senior	mana	ger you hav	ve in mind
		Manager usually	Manager tends to behave like this	Manager demonstrates an equal mixture of both	Manager te behave lik		Manager usually	
	Manager always behaves like this	behaves like this		behaviours	6		behaves like this	Manager always behaves like this
286	Can take a back s what is most appro	seat or lead depend opriate for the situat	ding on ion	2 3 4 5	6 7 Und		ake a back seat - t situations	tends to want to
287	organisational are	oply their skills across as (i.e., is able to wa er areas of the orga	ork 1	2 3 4 5	6 7 Und		ansfer their skills o nal areas	ICIOSS
288	Understands the su process	ubtleties of the nego	otiating 1	2 3 4 5	6 7 Una	ware of cess	the subtleties of t	he negotiating
289	Understands what members	motivates their indi	vidual staff	2 3 4 5	6 7 Una	ware of mbers	what motivates t	heir individual staff
290	Able to identify bu organisation could competitive advar	get into to give it o	the 1	2 3 4 5	6 7 Una		unable to identit s the organisation	
291	Realistic and accu resources required	rate when estimatir to achieve objectiv	ng the yes	2 3 4 5	6 7 Unre		nd inaccurate wh quired to achieve	nen estimating the e objectives
292	Willing to tackle di problems	fficult or long standi	ng 1	2 3 4 5	6 7 Unw prob	villing to to olems	tackle difficult or	long standing
293	Willing to take resp their decisions	onsibility or ownersh	nip for	2 3 4 5	6 7 Unw		take responsibility ns - passes the bu	
294	ls prepared to say	what they think	1	2 3 4 5	6 7 Very and	/ cautiou doesn't	is/guarded when always say what	communicating they think
295	Able to see the big information	picture when anal	/sing	2 3 4 5	6 7 Very big		d on the detail ar when analysing in	
296	Is concise and succ	cinct when commun	nicating 1	2 3 4 5	6 7 Waf	fly, and r nmunica	not concise and s ting	succinct when
297	Able to analyse an information in a sho		range of	2 3 4 5	6 7 ana	lysing an	sing information had synthesising a within a short time	wide range of
298	When communical people know when	ting is up front and o e they are coming f	direct, rom	2 3 4 5	6 7 Whe	ple don'	nunicating is not u t know where the	up front and direct, by are coming from
299	When negotiating I move forward to re	knows how to make each an agreement	things	2 3 4 5	6 7 Whe	en negot gs move	iating does not ki forward to reach	now how to make an agreement
300	When negotiating v solutions for both p		n-win	2 3 4 5	6 7 Whe	solutions	iating does not tr for both parties -	
301	When negotiating i from other people's holding their own v	perspectives while	ituation still	2 3 4 5	6 7 situa	ation from	iating is unable to n other people's p on their own pos	perspective - tends
302	When negotiating, early	doesn't show their h	and too	2 3 4 5	6 7 Whe	n negot	iating shows their	hand too early
	When presenting po always suggest pos problems	roblems to superiors sible solutions to res	they olve the	2 3 4 5	6 7 Whe		nting problems to cossible solutions	superiors they do
304	Accepts the need to initiatives that they	to implement organ may not agree with	isational 1	2 3 4 5	6 7 the r		d whines and is un do something tho	

For each item, tick the box	which best o	lescribes the	e senior man	ager you have	in mind
Manager usually behaves like this	Manager tends to behave like this	Manager demonstrates an equal mixture of both	Manager tends to behave like this	Manager usually behaves like this	
Manager always behaves like this	→	behaviours	(F		Manager always behaves like this
305 s consistent in what they say and do	1 2	3 4 5 6	7 Will say one	e thing and do anoth	ner
Researches information before making	decisions 1 2	3 4 5 6	Willing to make information	nake decisions based n or research	d on little or no
307 Puts in long hours to achieve results	1 2	3 4 5 6	Works the s	standard hours	
Written communication is clear, logical can be understood by the reader	, and 1 2	3 4 5 6	Written cor and not ec	mmunication is confu asily understood by th	
309 Written communication is focused so the is clear about the purpose of their communication	e reader 1 2	3 4 5 6	Written cor unsure abo communic	mmunication is vague out the purpose of the ation	

PLEASE TURN THE PAGE

Please rate the ma	anager's <u>OVERALL</u> performanc	e by placing a tick in	the box that best describes
Extremel Effective	y Effective		Not Effective
This information will be question that asks you h	FORMATION: Please tick the for used to identify whether the various man low long you have been in your current reffected by how long you have been in you	nagerial positions in KPMG ole will identify whether yo	require different skills. The our perception of what it
Are you a:	Partner	How long have	Up to one year
	Director/Associate Director	you been in your current role?	1 -2 years
n	Senior Manager		2 -3 years
	Manager		3 -4 years
	Assistant Manager		4 -5 years
	Senior Consultant	441 18	5 -6 years
or other			6 years & over
(Please w	rite in the title of your position)		
Was the manager	Partner		
	Director/Associate Director		
	Senior Manager		
	Manager		
anagers need.	y additional skills not mention		•
	Thanks for y	our holo	

Appendix 8: The Loadings of Questionnaire Items on the First Six Factors

Questionnaire						
Item	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
item	ractor 1	ractor 2	ractor 3	Factor 4	ractor 5	Pactor 6
80	0.84376	0.02604	0.07191	0.07876	0.07306	0.06471
221	0.83621	0.02004	0.07191	0.07676	0.07300	-0.07379
166	0.83414	0.11228	0.07220	0.20717	0.03099	0.02898
212	0.83293	0.15911	0.19070	0.09313	0.08055	0.02898
208	0.83121	0.15911	0.00909	0.13663	0.08033	0.10900
197	0.81092	0.10804	0.11247	0.01398	0.14927	-0.01875
114	0.80327	0.10004	0.03010	0.03328	-0.04625	-0.01675
14	0.79751	0.07300	-0.06253	0.07180	0.09676	-0.00908
165	0.78693	0.03372	0.15336	0.00773	0.08936	0.07830
222	0.77898	0.17473	0.13330	0.17449	-0.03028	-0.05119
36	0.77468	0.10878	0.02226	0.08296	0.04465	-0.03119
240	0.77224	0.10078	0.02220	0.00290	0.20544	0.04009
126	0.76875	0.09033	0.23103	0.07200	0.20344	POWER MICROSOLIS
173	0.76411	0.21608	0.11213	0.06073	-0.01760	-0.10662
193	0.75646	-0.04494	0.13613	0.07369	0.08810	0.16720
147	0.75645	0.01558	0.08004	0.25241	0.08810	-0.06417 -0.04323
282	0.74626	0.01556	0.12294	0.17903	0.10090	0.15905
154	0.74288	0.12391	0.15613	0.10390	0.09394	
30	0.74288	0.16554	0.13613	0.07024	0.21467	0.00011 0.07151
79	0.73762	0.10554	0.04818	0.03975	-0.01066	-0.01474
72	0.73737	0.11437	-0.04763	-0.03666	0.17658	IDDIES WIRE KING
10	0.73737	0.03469	0.13950	0.11185		0.19004
31	0.73276	0.01002	-0.06912	0.11165	0.09514	0.12822
156	0.73276	0.02229	0.16574	0.09590	0.22103	0.16180
186	0.73143	0.19095	0.15574	0.00316	0.10695	0.11714
157	0.73037	0.05220	0.10778	0.11526	0.10487 0.10190	0.04835 0.08639
135	0.72678	0.20307	0.10778	0.10403	0.05309	0.00039
194	0.72481	0.07203	0.20182	0.20474	0.05309	-0.09151
52	0.72413	0.22933	0.14945	0.20474	0.00936	0.07671
129	0.71552	0.08769	0.00508	0.11105	0.00936	0.07671
92	0.71272	0.25648	0.00508	0.24213	0.10446	0.02277
277	0.71215	0.23048	0.13004	0.14393	0.09613	0.05318
283	0.71059	0.24877	0.18569	0.20396	0.06651	0.03303
90	0.70993	0.14034	0.28552	0.16724	0.14864	0.11008
301	0.69611	0.21940	0.18073	0.18126	0.07798	-0.00994
118	0.69315	0.18908	0.15219	-0.00132	0.26911	0.31747
77	0.69200	0.14643	0.21624	-0.02799	0.02533	0.18446
201	0.69093	-0.00022	0.09904	0.28720	0.10127	-0.07568
182	0.68968	0.24105	0.21633	0.13422	0.22299	0.03518
183	0.68574	0.11601	0.08973	0.25215	0.09544	0.01123
232	0.68528	0.16108	0.23294	0.21317	0.06022	0.10361
50	0.68335	0.20489	0.00268	0.11677	0.05628	0.09443
11	0.68317	0.05838	0.06037	0.07183	0.07228	0.19761
117	0.68065	0.24778	0.33838	0.10119	0.16806	-0.06238
246	0.68012	0.11949	0.11603	0.16230	-0.00182	0.04363
230	0.67892	0.34215	0.15437	0.16355	0.21732	0.06401
110	0.67847	0.11412	0.29152	0.12473	0.13789	-0.05131
184	0.67588	0.21427	0.22106	0.16624	0.09660	0.03093
217	0.67293	0.11651	0.01290	0.10024	0.03000	0.03525
12	0.66780	0.11482	0.03112	-0.05105	0.08640	0.03325
14	0.00700	0.11402	0.03112	-0.05105	0.00040	0.01196

Questionnaire Item	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
153	0.66236	0.17940	0.25179	0.17602	0.10461	0.11997
179	0.66147	0.16490	0.24473	0.18741	-0.07666	0.08709
3	0.66093	0.06349	-0.05372	0.07950	0.06554	0.02656
61	0.65883	0.21539	0.18661	0.16042	0.02175	0.12354
76	0.65641	0.13630	0.15928	0.20817	0.06430	0.23759
54	0.65592	0.05815	0.10633	-0.05349	0.00826	0.27668
279	0.65295	0.24501	0.14216	0.26220	0.38528	0.12692
199	0.65039	0.16441	0.18732	0.08373	0.19793	0.09948
111	0.64663	0.19251	0.33316	0.14777	0.21364	-0.07316
25	0.64654	0.12718	0.18681	0.06787	0.16988	0.16774
278	0.64577	0.21086	0.30125	0.30795	0.10724	0.03248
149	0.64426	0.06247	0.29348	0.02442	0.10841	0.01421
281	0.64062	0.28671	0.22977	0.17898	0.10581	0.03026
97	0.63612	0.16744	0.23669	-0.00695	0.15174	0.36482
190	0.63412	0.14640	0.17211	0.23356	0.05795	-0.05061
49	0.63066	0.16802	0.03622	0.14143	0.09823	0.03037
300	0.62956	0.22481	0.26885	0.14683	0.11434	0.03222
224	0.62487	0.14198	0.19102	0.01639	0.09459	0.43334
1	0.61959	0.09656	-0.03595	0.19779	0.04681	0.11024
144	0.61894	0.36206	0.05036	0.33512	0.21310	0.00742
289	0.61694	0.19566	0.31655	0.17506	0.22034	0.22002
209	0.61522	0.21819	0.18636	0.10643	0.47062	0.15091
78	0.60934	0.12066	0.32800	0.12530	0.00446	0.11457
98	0.60923	0.17399	0.18537	0.01055	0.18978	0.36711
133	0.60505	-0.10072	-0.01853	0.23631	0.29893	-0.01778
286	0.59555	0.14244	0.27898	0.14202	-0.18849	0.03474
216	0.59405	0.14055	0.06977	0.17132	0.35122	0.06057
131	0.59082	0.26177	0.27084	0.17152	0.33122	0.10126
255	0.58998	0.09322	0.23475	0.23032	0.13718	0.10126
150	0.58903	0.23050	0.23707	0.14732	0.09449	0.37636
19	0.58816	0.18646	0.11467	0.08267	0.04457	0.17721
148	0.58304	0.04467	0.28999	0.04902	0.03789	0.12075
44	0.57416	0.13371	0.15091	0.04860	0.03769	0.10030
235	0.57398	0.15881	0.13031	0.24828	0.10813	-0.00547
123	0.57060	0.13001	0.20542	0.27975	0.18804	0.03967
223	0.56900	0.23320	0.20342	0.15650	0.18804	0.06925
13	0.56489	-0.08951	0.04160	0.15950	-0.20154	-0.11213
180	0.56251	0.15719	0.32751	0.13330	-0.20134	-0.00296
252	0.56223	0.23523	0.21151	0.12815	0.23310	0.41703
109	0.55555	0.09197	0.13313	0.12313	0.20427	0.06478
189	0.55514	0.27582	0.15515	0.19301	0.06050	0.05385
60	0.55485	0.26157	0.21392	-0.00205	0.26135	0.03363
138	0.55236	0.04760	0.01954	0.27808	0.16338	-0.06964
71	0.53936	0.22346	0.22806	0.10401	0.16916	0.15965
69	0.53844	0.28604	0.26255	0.10401	0.10916	0.15965
41	0.53637	0.17959	0.28233	0.13733	0.22046	-0.00043
96	0.52494	0.17939	0.28708	0.12400		
284	0.52454	0.33762	0.18380		0.27806	0.08158
260	0.52256	0.23123		0.34749	0.29975	0.07824
115		the second secon	0.40016	0.11881	0.01869	0.00310
	0.51959	0.26012	0.19844	0.18888	0.25937	-0.00044
229	0.51331	0.24798	0.21437	0.17888	-0.02791	0.20185

Questionnaire Item	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor (
100	0.50997	0.27626	0.23276	0.27418	0.11264	0.21971
191	0.50877	0.27626	0.23276	0.27418	0.11264	
		0.36361				0.07822
82	0.50772		0.13972	0.11139	0.16722	0.05694
272	0.50032	0.17650	0.26564	0.24727	0.18779	0.15990
83	0.49707	0.36215	0.12457	0.11415	0.18898	0.03849
273	0.49022	0.30249	0.22221	0.44380	0.26665	0.10850
32	0.48996	0.27746	0.26570	0.00388	0.08018	0.18612
43	0.48963	0.17303	0.22607	0.18358	0.15992	0.2301
274	0.48911	0.15169	0.47122	0.13541	0.21219	0.25324
204	0.48879	0.18705	0.40960	0.19131	0.15639	0.00588
39	0.48618	0.27655	0.23201	-0.00406	0.22552	0.25111
46	0.48253	0.19095	0.28859	0.27931	0.07971	0.26822
298	0.47739	0.22810	0.10456	0.44503	0.28502	0.1162
285	0.47582	0.22450	0.37753	0.19743	0.21101	0.04086
68	0.47434	0.26026	0.24916	0.17394	0.13039	0.3797
6	0.47364	0.23931	0.14554	0.41124	0.18921	0.11742
116	0.47022	0.36144	0.36806	0.38513	0.13934	0.0238
251	0.46923	0.20361	0.23323	0.28127	0.22668	0.18353
101	0.46792	0.35331	0.29475	0.28037	0.12952	0.03614
198	0.46750	0.32923	0.24681	0.29156	0.38091	-0.0702
136	0.46634	0.22148	0.27189	0.34790	0.24058	0.2407
18	0.46398	0.08341	0.18076	0.20183	0.24272	0.15290
51	0.45752	0.22114	0.34101	0.30249	0.05186	0.21963
268	0.44528	0.20170	0.26041	0.41640	0.16742	0.0573
266	0.44380	0.30879	0.24949	0.08266	0.20439	0.40990
238	0.43717	0.20381	0.24545	0.08200	0.20439	0.40990
102	0.43777	0.20821	0.31623	0.28924	The second secon	
253	0.43144	0.20021	0.24733	0.20924	0.28063	0.0163
244		0.09617	- 14- F- 15- 15- 15- 15- 15- 15- 15- 15- 15- 15		0.14636	0.0911
	0.43004	100000000000000000000000000000000000000	0.27295	0.36911	0.12570	0.02878
57	0.42675	0.30438	0.15020	0.17073	0.15792	0.2170
299	0.42267	0.32402	0.20902	0.24680	0.25183	0.1142
249	0.41353	0.32289	0.27621	0.33326	0.36858	0.08742
259	0.41319	0.11262	0.38200	-0.00485	0.14406	-0.0745
146	0.41172	0.20783	0.39324	0.10483	0.06340	0.0836
185	0.40958	0.25634	0.31909	0.18964	-0.01096	0.17029
128	0.40403	0.14384	0.19763	0.37744	0.34255	0.14682
256	0.40342	0.22872	0.17714	0.35396	0.36796	0.17399
287	0.39695	0.37168	0.37439	0.26627	0.06172	0.08326
162	0.38804	0.31811	0.26272	0.34422	0.24837	0.01248
65	0.38544	0.34484	0.14586	0.09782	0.15006	-0.0072
239	0.38502	0.35463	0.35660	0.01776	0.00934	0.06103
188	0.38309	0.28405	0.26538	0.33031	0.15296	0.03701
103	0.38303	0.30202	0.09506	0.23198	0.32778	0.34648
234	0.37385	0.35410	0.26338	0.08716	0.23565	0.16757
288	0.36421	0.35758	0.28506	0.22440	0.19973	0.08081
56	0.34902	0.33471	0.28070	0.29822	0.04113	0.18186
181	0.12803	0.83517	0.17854	0.08192	0.18439	0.02573
143	0.13568	0.78036	0.04420	0.10129	0.11940	0.00571
219	0.04046	0.73442	0.27283	0.00901	0.24139	0.14569
75	0.15293	0.70836	0.13308	0.20642	-0.03395	0.10007
40	0.12904	0.63964	0.13300	0.15928	0.04741	-0.08018

Questionnaire						
Item	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
66	0.10167	0.63884	0.21133	0.06082	0.23144	0.17743
121	0.21585	0.59958	0.27125	0.35479	0.18682	0.04740
306	0.20952	0.57920	0.42412	0.24624	0.16094	-0.02522
220	0.09940	0.57716	0.35827	0.20764	0.25573	0.04830
4	0.26047	0.56218	0.01901	0.11372	0.03460	0.19169
37	0.28414	0.56183	0.13485	0.06417	0.08282	0.09743
226	0.26663	0.55980	0.15974	0.15793	-0.08436	0.19575
169	0.17170	0.55688	0.18396	0.41355	0.25573	0.18751
308	0.23506	0.55139	0.22441	0.24883	0.27697	0.04287
231	0.27942	0.53993	0.33305	0.31918	0.14144	0.04372
305	0.35321	0.53146	0.33423	0.16888	0.14569	0.02709
242	0.27310	0.52983	0.33734	0.23605	0.17026	-0.03993
257	0.40902	0.51626	0.18913	0.25268	0.24870	-0.00343
309	0.32544	0.51363	0.25889	0.30494	0.25009	0.05763
243	0.41125	0.49879	0.34475	0.25788	0.10226	-0.04940
64	0.32450	0.48098	0.23766	0.18581	0.08762	0.23901
21	0.18364	0.48020	0.25100	0.19360	0.20890	0.27101
74	0.23293	0.47443	0.40076	0.18063	0.31713	0.06940
130	0.31603	0.47164	0.18447	0.10376	0.20736	-0.04387
155	0.22710	0.46959	0.20356	0.28694	0.24880	0.02162
264	0.43821	0.45802	0.41987	0.20235	0.21152	0.14883
120	0.30580	0.45717	0.41889	0.40031	0.00904	0.05971
241	0.19584	0.44912	0.33318	0.41238	0.21790	0.07522
145	0.09501	0.44724	0.34609	0.29544	0.27719	-0.03325
122	0.39522	0.44720	0.32821	0.29771	0.08554	0.02081
177	0.35157	0.44191	0.23106	0.41357	0.27987	0.05054
35	0.09790	0.43574	0.26868	0.21369	0.34304	0.04890
67	0.02805	0.42806	0.35787	0.07313	0.28272	0.22122
94	0.19198	0.42754	0.18615	0.27486	0.32590	0.39912
250	0.38595	0.42281	0.29759	0.12986	0.12321	-0.12792
119	0.31220	0.41819	0.33501	0.14576	0.13710	0.27821
296	0.33750	0.41809	0.23302	0.27699	0.11621	0.08735
292	0.21418	0.41670	0.25740	0.39035	0.39020	0.13086
125	0.34276	0.40781	0.33134	0.32783	0.11077	0.02247
247	0.28658	0.40616	0.32227	0.36370	0.18117	-0.02977
91	0.28468	0.39427	0.29997	0.11902	0.25655	-0.05023
291	0.36971	0.38962	0.33338	0.19943	0.26645	0.20256
167	0.16307	0.25497	0.70629	0.12618	0.21608	0.13129
263	0.24026	0.36245	0.66396	0.23289	0.21634	0.10675
168	0.29531	0.26817	0.65584	0.11870	0.19669	0.15899
203	0.19074	0.19404	0.65396	0.24163	0.08152	0.03893
258	0.20954	0.36924	0.63430	0.09728	0.35721	0.04681
124	0.32721	0.28867	0.62485	0.12590	0.17272	0.01499
267	0.27602	0.22678	0.61229	0.33614	0.14749	0.07036
187	0.10166	0.37086	0.59090	0.23428	0.24054	0.02736
29	0.15334	0.24845	0.55769	0.26510	0.08621	0.10260
213	0.21147	0.15153	0.54559	0.41943	0.18289	0.09296
269	0.29196	0.23532	0.54551	0.15706	0.16707	0.10064
254	0.34974	0.17035	0.53807	0.23327	0.22681	0.18491
261	0.28949	0.34586	0.53501	0.09489	0.19258	-0.05950
159	0.25761	0.25524	0.53280	0.27293	0.10541	0.11361

Questionnaire Item	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
160	0.14985	0.22650	0.52891	0.23912	0.17530	-0.12110
178	0.22388	0.21896	0.51842	0.23312	0.17330	-0.00451
304	0.21466	0.36920	0.51808	0.23258	0.05698	-0.00934
86	0.29958	0.13791	0.50507	0.17956	0.11353	0.13622
16	0.19972	0.42911	0.48122	-0.03801	0.15617	0.01613
200	0.26053	0.30650	0.45864	0.21781	0.13186	-0.08955
214	0.45112	0.24667	0.45844	0.13263	0.08675	0.06105
47	0.36987	0.24435	0.45557	0.24857	0.16778	0.11820
265	0.42009	0.36295	0.42784	0.13552	0.18468	0.19103
23	0.32467	0.22755	0.41641	0.14526	0.16651	0.02954
24	0.38361	0.11487	0.40788	0.13417	0.23681	0.22450
164	0.31660	0.38611	0.40107	0.03280	0.09008	0.16789
245	0.38641	0.34440	0.40003	0.31834	0.21225	0.02518
176	0.37752	0.21606	0.39365	0.24899	0.24814	0.02750
99	0.24761	0.23601	0.37893	0.17957	0.26947	0.28743
141	0.20542	0.16437	0.13241	0.81908	0.15682	-0.03583
139	0.23803	0.16549	0.14939	0.80243	0.18886	0.01972
140	0.22913	0.21868	0.12890	0.77870	0.24221	-0.02882
152	0.36498	0.24894	0.20091	0.54999	0.22440	0.15109
142	0.32412	0.31473	0.32281	0.54150	0.01858	0.06106
134	0.37573	0.37337	0.31397	0.53908	0.04518	0.10000
297	0.27659	0.37908	0.29287	0.53430	0.16999	0.10000
170	0.25952	0.23298	0.36852	0.50321	0.10333	0.01092
295	0.27960	0.19958	0.48913	0.49131	0.10720	0.01092
151	0.28554	0.1333	0.26621	0.46643	0.16273	0.10387
195	0.22233	0.03870	0.20021	0.46500	0.03719	0.15029
171	0.12362	0.20183	0.17568	0.45276	0.30923	0.13079
276	0.34950	0.44559	0.17300	0.45053	0.30923	0.22559
303	0.33218	0.32872	0.23932	0.43086	0.13264	
5	0.36098	0.32072	0.19273	0.42918	0.10037	0.09047
174	0.38984	0.18371	0.24100	0.42832	0.10007	0.04015
206	0.39047	0.10371	0.29817	0.42652		0.10358
275	0.34539	0.23233	0.24476	0.35491	0.32528	0.10610
175	0.13443	0.27547	0.24470		0.29698	0.16653
207	0.19346	0.28963	0.10709	0.34310 0.36121	0.27854 0.70339	0.20782 0.13304
210	0.19340	0.24749	0.30756	0.30121	0.70339	0.13304
202	0.05346	0.26077	0.30730	0.12072	0.66387	0.03797
211	0.38844	0.25077	0.21598	0.29139	0.63073	0.03797
95	0.41498	0.13042	0.21590	0.21462	0.60430	0.14972
112	0.30848	0.20509	0.13431	0.21462		
84	0.28135	0.20309	0.20770	0.14466	0.59983 0.51714	0.12750
106	0.22538	0.50677	0.16614	0.18492		0.09068
236	0.06140	0.03226	0.16021		0.51418	0.04589
105	0.12157			0.32774	0.51322	0.11217
293	0.12137	0.47780	0.15997	0.18312	0.47794	0.02344
70		0.31062	0.12994	0.42566	0.45236	-0.00045
	0.42432	0.18524	0.25632	0.00181	0.45153	0.02511
132	0.27056	0.28618	0.44018	0.10702	0.44922	-0.00734
62	0.18034	0.27559	0.18131	0.13000	0.44389	0.06407
196	0.23838	0.35794	0.27554	0.36583	0.44249	-0.02001
87	0.22950	0.42350	0.19843	0.26532	0.42383	0.10607
248	0.17531	0.37647	0.25579	0.33195	0.42075	0.08519

Questionnaire						
Item	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
307	0.22499	0.31750	0.22966	0.18067	0.41668	0.06200
26	0.28156	0.13706	0.11623	0.09802	0.17074	0.75531
20	0.42553	0.12358	0.08953	0.14570	0.24415	0.45149
163	0.47254	0.21681	0.14787	0.26357	0.21679	0.02830
161	0.09646	0.24712	0.17465	0.20984	0.10775	0.02830
8	0.07260	0.17800	0.23604	0.26436	0.15637	0.09720
218	0.07643	0.49255	0.32091	0.10982	0.06739	0.11135
85	0.19962	0.35976	0.27111	0.18360	0.26067	0.07398
137	0.34997	0.28769	0.25502	0.41402	0.20131	0.07997
45	0.48576	0.13282	0.13774	0.11063	0.10885	0.01903
53	0.11471	0.32089	0.14388	0.26559	0.16951	0.17628
192	0.31510	0.15444	0.20278	0.32107	0.07012	-0.00225
262	0.36239	0.12186	0.15253	0.23404	0.27651	0.08469
215	-0.18383	0.07062	0.04084	0.26616	0.28118	0.28169
58	0.49087	0.14701	0.19121	0.18376	0.09872	0.01232
22	0.47754	0.16894	0.19227	0.01894	0.14452	0.06035
63	0.31219	0.33692	0.10203	0.04973	-0.00871	0.04697
172	0.41837	0.35410	0.15799	0.21456	0.09712	0.04824
2	0.25324	-0.04631	0.08994	0.28247	0.15659	0.11507
108	0.25613	0.37772	0.19052	0.15998	0.21954	-0.03622
15	0.06074	0.40123	0.11036	0.23839	0.14299	0.12142
9	0.34692	0.22595	0.24917	0.35467	0.10034	0.13396
59	-0.01548	0.12853	0.26345	0.21792	0.25045	0.14188
17	0.32296	0.20369	0.06025	-0.02775	-0.04947	0.03423
158	0.10609	0.12346	0.17969	-0.04213	0.00930	-0.00560
302	0.18318	0.30479	0.29716	0.17538	0.28774	0.06566
48	0.45668	0.16934	0.10938	0.13802	0.15033	0.14199
237	0.32265	0.04869	0.17045	0.17362	0.10051	0.11716
73	0.30915	0.14276	0.12724	0.22099	0.35765	0.05641
33	0.20293	0.48107	0.26896	0.20170	0.19437	0.09091
34	0.24654	0.21657	0.43194	0.34073	0.12274	0.16950
27	0.02228	0.24136	0.20020	0.32600	0.22137	0.16023
55	0.33307	0.24078	0.26785	0.12359	0.16164	0.08828
227	0.02883	0.32991	0.19232	0.08184	0.31144	0.07298
89	0.36014	0.32617	0.17897	0.12091	0.11665	0.09184
28	0.11995	0.24919	0.50798	0.25289	0.02904	0.11810
88	0.22477	0.14978	0.42456	0.07538	0.21984	0.05411
42	0.13804	0.37277	0.22702	0.26588	0.09159	-0.07705
294	0.17494	0.14086	0.20097	0.40862	0.42902	0.06573
38	0.36038	0.37919	0.13538	0.14551	0.10106	0.02106
107	0.34563	0.28137	0.21049	0.13991	0.24492	0.06321
127	0.46676	0.34779	0.20657	0.06125	0.08421	0.01698
104	0.51684	0.21105	0.06694	-0.09693	0.16980	0.23825
7	0.33677	0.14801	0.07802	0.44203	0.18568	0.06120
113	0.25976	0.32705	-0.01436	-0.00138	0.28144	0.09280
280	0.37152	0.14574	0.08362	0.27640	0.30589	0.06879
233	-0.01206	0.24628	-0.01518	0.32997	0.19649	0.25377

Appendix 9: The Factors That Contributed one Percent or More of the Variance for the Police and KPMG Data

The 18 Police Factors That Contributed one Percent or More of the Variance

Factor	Eigenvalue	Pct of Var	Cum Pct
1	132.1107	43.9	43.9
2	26.33402	8.7	52.6
3	12.79672	4.3	56.9
4	10.85669	3.6	60.5
5	9.89735	3.3	63.8
6	7.58719	2.5	66.3
7	7.09953	2.4	68.7
8	6.16335	2.0	70.7
9	5.49999	1.8	72.5
10	4.74302	1.6	74.1
11	4.42909	1.5	75.6
12	4.17204	1.4	77.0
13	3.92753	1.3	78.3
14	3.70711	1.2	79.5
15	3.37320	1.1	80.6
16	3.26313	1.1	81.7
17	3.19595	1.1	82.8
18	3.09568	1.0	83.8

The 22 KPMG Factors That Contributed one Percent or More of the Variance

Factor	Eigenvalue	Pct of Var	Cum Pct
1	113.65654	36.8	36.8
2	39.48242	12.8	49.6
3	20.42506	6.6	56.2
4	13.50055	4.4	60.5
5	11.85162	3.8	64.4
6	10.65256	3.4	67.8
7	9.37728	3.0	70.9
8	8.72646	2.8	73.7
9	8.38400	2.7	76.4
10	7.57945	2.5	78.8
11	6.51006	2.1	81.0
12	6.17147	2.0	83.0
13	5.9058	1.9	84.9
14	5.61839	1.8	86.7
15	5.36855	1.7	88.4
16	5.10726	1.7	90.1
17	4.49539	1.5	91.5
18	4.26701	1.4	92.9
19	4.12972	1.3	94.3
20	3.75778	1.2	95.5
21	3.27295	1.1	96.5
22	3.20710	1.0	97.6

Appendix 10: The Loadings of the Questionnaire Items on the Police and KPMG's First Five Factors

Factor One's Highest Loading Questionnaire Items for the Police Data

Positive Questionnaire Item	Factor Loading	Questionnaire Item
Makes an effort to make people feel at ease when talking to them	.88066	221
Achieves the right balance between being inclusive and exclusive of others when consulting	.84752	117
Empathetic when dealing with staff	.84356	208
Knows when and how to consult people to gain acceptance of ideas	.83352	90
Is compassionate when dealing with staff	.82955	173
Open to other's ideas even if they are different to their beliefs or views	.82854	222
Is consultative with staff	.82607	166
Is open and honest when communicating, doesn't have hidden agendas	.82358	157
Understands customers - knows how to maintain customer relationships and satisfy or service customer needs	.82294	115
Able to relate well to a wide range of people	.82018	147
Sensitive when dealing with staff	.80997	194
Takes time to build relationships and understands their staff	.80886	212
Is trustworthy - they can be relied on to do the right thing by you	.80587	165
Can quickly establish rapport with people	.80559	184
Is accessible to their staff	.80377	135
Has a basic respect for all staff in the organisation	.80324	197
Treats people fairly	.80193	79
Is relaxed when communicating	.80115	156
Able to see a situation from the other person's perspective	.80107	183
Has an open and natural style (ie what you see is what you get)	.79469	283

Factor Two's Highest Loading Questionnaire Items for the Police Data

Positive Questionnaire Item	Factor Loading	Questionnaire Item
Thorough and focused when researching an issue	.90430	220
Researches information before making decisions	.88320	306
Can identify main and important issues when analysing information	.83545	120
Thoroughly researches topic area before conducting presentations on the topic area	.80343	40
Knows where they are going, and knows how far they have progressed in relation to their end goal at any point in time	.77494	35
Able to analyse and synthesise a wide range of information in a short time frame	.77027	297
Written communication is clear, logical, and can be understood by the reader	.73813	308
Presents and frames information in a logical and easy-to-follow manner	.73493	231
Thorough in their work approach and attends to detail	.72861	219
Has a strong results orientation and delivers on what they commit themselves to in the required time frame	.72675	66
Able to see the big picture when analysing information	.71779	295
Makes decisions based on what the issues are and is not inappropriately swayed by what other people think	.71597	241
Able to analyse a wide range of information when making decisions	.70823	247
Able to predict or plan expenditure and work within budgets	.70519	145
Has a grasp of the issues facing the organisation	.70413	29
Able to analyse conflicting or incomplete information	.70182	134
Focuses on the work that needs doing	.69948	121
Understands how the wider environment impacts on the organisation	.69760	28
Sticks to decisions once they make them	.69758	42
Able to look at both the big picture as well as the detail when analysing information. Can achieve a balance between the two	.69604	122

Factor Three's Highest Loading Questionnaire Items for the Police Data

Positive Questionnaire Item	Factor Loading	Questionnaire Item
Has an energetic approach which motivates others	.82004	95
Enthusiastic when persuading or influencing others	.73426	211
Has a high level of drive and energy to achieve results	.72638	207
They set high standards for themselves to achieve	.69944	106
Has a strong drive to succeed	.63919	202
Is enthusiastic and passionate about their work	.63561	210
Has the capacity for a high work load (ie can churn through the work and achieve quality outputs)	.63513	87
Inspires/motivates people because of their enthusiastic style - can generate enthusiasm in others	.62037	209
Makes and implements the tough/hard decisions in the appropriate time frame (eg counselling people out)	.59001	94
Can deal with conflict situations	.57379	256
Anticipates problems and develops strategies to resolve/minimise them	.56592	21
Has a strong work ethic (ie dedicated and hard working)	.56367	84
Encourages people in the organisation to work together to achieve the best results	.54840	69
Able to plug into the informal networks in the organisation to obtain information	.52582	280
Takes into account a wide range of information when contributing to the development of the strategic plan	.52263	23
Establishes current and future priorities so as to meet deadlines/goals	.51630	74
Can see the bigger picture and rise above the detail	.50792	5
Proactive in passing on to peers, staff, and superiors, information that will impact on them, or is of interest or of use to them	.49557	39
Encourages active staff participation at meetings	.49361	70

Factor Four's Highest Loading Questionnaire Items for the Police Data

Positive Questionnaire Item	Factor Loading	Questionnaire Item
Has the ability to control extreme emotions (eg anger, passion)	.80597	63
Doesn't have real highs or lows - is on an even keel	.73955	250
Has a high level of self control (ie knows when to stop partying as their work will be affected)	.71506	130
Does not speak about people in disparaging terms	.58941	239
Gives a consistent and stable performance in pressure situations	.43776	257
Gets on with their work - does not get too involved in the politics of the organisation	.39873	127

Factor Five's Highest Loading Questionnaire Items for the Police Data

Positive Questionnaire Item	Factor Loading	Questionnaire Item
Can make decisions independently without deferring to others	.68834	141
Able to make decisions in time pressured situations	.67169	140
Able to make decisions in the absence of guidelines or rules	.53919	139

Factor One's Highest Loading Questionnaire Items for the KPMG Data

Positive Questionnaire Item	Factor Loading	Questionnaire Item
Has a strong work ethic (ie dedicated and hard working)	.92808	84
Has a high level of drive and energy to achieve results	.91888	207
Has a clear understanding of their role in the organisation and what is required of them	.91217	132
Willing to take responsibility or ownership for their decisions	.90354	293
Is prepared to say what they think	.90214	294
Is decisive and timely when making decisions	.89519	169
Takes personal responsibility for making things happen in the organisation	.899153	112
Has a strong drive to succeed	.88917	202
is a self starter and can identify what needs to be done without being told	.87599	196
Written communication is clear, logical, and can be understood by the reader	.87529	308
When communicating is up front and direct, people know where they are coming from	.87436	298
Perseveres in the face of adversity and refuses to be beaten	.87143	248
Demonstrates confidence and conviction when dealing with people and does not falter when questioned	.85550	206
When negotiating knows how to make things move forward to reach an agreement	.85394	299
Has the capacity for a high workload (ie can churn through the work and achieve quality outputs)	.85309	87
Written communication is focused so the reader is clear about the purpose of their communication	.85296	309
Their actions reflect the direction of the organisation's strategic plan	.84451	258
Puts the organisation's interests first - is focused on achieving the goals of the organisation	.84433	168
Able to analyse a wide range of information when making decisions	.83748	247
Decision making is consistent and in line with decisions they have previously made	.83533	242

Factor Two's Highest Loading Questionnaire Items for the KPMG Data

Positive Questionnaire Item	Factor Loading	Questionnaire Item
Takes a genuine interest in people	.92558	80
Makes an effort to make people feel at ease when talking to them	.90619	221
Takes an interest in staff members' life outside work	.89546	186
Uses a range of approaches to motivate their staff which reflects their staff member needs	.89109	255
Sensitive when dealing with staff	.87896	212
Is consultative with staff	.87647	166
Empathetic when dealing with staff	.85964	208
Is compassionate when dealing with staff	.84610	173
Listens to people and takes in what they are saying	.84449	92
Gives credit to staff for the work they do	.84216	77
Able to respond and deal appropriately with staff members feelings (eg depression, anger)	.83983	282
Knows when and how to consult people to gain acceptance of ideas	.83748	90
Can laugh at themselves, and doesn't take self too seriously	.83677	193
Makes an effort to communicate with everyone in the organisation	.83640	240
Gives regular positive feedback to staff	.83396	118
Takes the time to build relationships and understand their staff	.82888	165
Treats all people as their equal	.81404	114
Encourages staff members to come and see them if they have a problem	.81080	72
Able to relate well to a wide range of people	.80785	147
Achieves the right balance between being inclusive and exclusive of others when consulting	.79914	117

Factor Three's Highest Loading Questionnaire Items for the KPMG Data

Positive Questionnaire Item	Factor Loading	Questionnaire Item
Has strategic vision - able to see where the organisation needs to go in the future	.86280	213
Able to see the big picture when analysing information	.85923	295
Able to achieve a balance between focusing on long and short term goals when developing the strategic plan	.81007	267.
Can make links between issues or patterns that are not obvious	.77789	142
Able to analyse conflicting or incomplete information	.69789	134
Can see the bigger picture and rise above the detail	.67850	5
Prepared to question information - doesn't take information at face value	.63828	53
Able to look at both the big picture as well as the detail when analysing information. Can achieve a balance between the two	.63183	122
Can identify main and important issues when analysing information	.62463	120
Able to think conceptually	.62190	170
Able to analyse and synthesise a wide range of information in a short time frame	.61146	297
Can identify future trends that will impact on the organisation	.60202	34
Able to solve complex or new problems	.57893	151
Has a good appreciation of all the functions of the organisation, what the different areas do and how they interact	.57671	86
Is flexible when making decisions	.57319	190
Analyses information objectively	.53354	191
Contributes to a range of organisational initiatives over and beyond the requirements of their position	.52722	24
Can read between the lines and form an accurate picture of what is not being said	.50882	9
Has an appreciation of how and where the organisation fits into the wider environment (ie NZ context)	.50643	203
Can make decisions independently without deferring to others	.46516	141

Factor Four's Highest Loading Questionnaire Items for the KPMG Data

Positive Questionnaire Item	Factor Loading	Questionnaire Item
Focuses on tasks at hand and doesn't go off on tangents or lose track of their priorities	.80483	75
Thorough in their work approach and attends to detail (ie crosses their T's and dots their I's)	.68407	219
Thorough and focused when researching an issue	.67967	220
Puts in long hours to achieve results	.66425	307
Demands high work standards for work colleagues	.63411	67
selects people into the organisation on the basis of their skills	.60658	189
Does not overcommit self to responsibilities they can't deliver on	.55639	226
Focuses on the work that needs doing	.54670	121
Can be relied upon to follow through on what they promise	.50460	4
They create plans to develop each of their individual staff members	.46642	266

Factor Five's Highest Loading Questionnaire Items for the KPMG Data

Positive Questionnaire Item	Factor Loading	Questionnaire Item
Achieves a good balance between their work and their personal life	.73584	17
Is calm in stressful situations	.71996	172
Has a controlled sense of urgency	.70502	15
Has the ability to control extreme emotions (eg anger, passion)	.69314	63
Has a good mix of entrepreneurial and financial skills (ie knows what will make money and what won't)	.66855	81
Ensure that delegated work is reasonable in terms of the demands placed on staff	.60904	229
Keeps both organisational and personal information about staff confidential (ie doesn't break confidence)	.56109	164
They take into account the development needs of their staff when delegating work to them	.50444	43
Monitors tasks that have been delegated without getting too hands on	.44763	38