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**PERCEIVED IMPORTANCE OF THE PERSONALITY
CHARACTERISTICS OF A SUCCESSFUL MANAGER: THE
RELEVANCE OF THE CPI THE 16PF AND THE CONCEPT OF
ANDROGYNY.**

A thesis completed in partial fulfilment for the requirements of the
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ABSTRACT

The present study investigated the perceptions surrounding managers in New Zealand. Traits from the Sixteen Personality Factor Questionnaire (16PF) and the California Psychological Inventory (CPI) were used to determine if managers perceived these traits differently for successful male and female managers. Subjects' gender role identity, and the perceived gender role identity of a successful manager were determined using the Bem Sex Role Inventory (Short Form). One hundred and forty three managers received one of three questionnaire versions. They rated either a successful manager, a successful female manager, or a successful male manager on the above traits. Results showed that successful male and female managers were perceived differently on six traits from the 16PF and CPI. Unexpectedly 41.5% of managers in the sample identified themselves on the BSRI as undifferentiated. Thirty five percent of respondents rated a successful manager as androgynous. These results are contrary to overseas research where managers predominantly rate successful managers as masculine. Only half the personality traits from the 16PF and CPI were actually considered important for managers. This supports research concerned with the use of general personality measures in selection.

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OVERVIEW

Selecting the right person for a job can be a difficult process with many factors influencing the decision outcome. The managerial role with its wide-ranging variety of responsibilities, changing demands, and differing role requirements makes selecting the appropriate person even more difficult. Assessing the necessary skills, experience and knowledge of potential managerial applicants can be further complicated by stereotypes surrounding the characteristics, or socially defined characteristics of men and women, and by the differing perceptions of the characteristics viewed as necessary for managers.

Notwithstanding these potential problems, selection of the appropriate manager is an important activity necessary to the cost effectiveness of an organisation. However, it is often overlooked as a function requiring the investment of time, skill, and money. Because of this, factors other than the applicant's suitability for the job are considered, and therefore invalid selection is likely to occur. The use of personality inventories that measure a wide range of personality characteristics, not necessarily relevant to the job, also increases the likelihood of selecting the wrong person for the job. Such general inventories measure a variety of personality characteristics for a 'normal' (ie not clinical or abnormal) population. Although providing information about one's personality, much of the information gained is not directly related to the job being selected for. Therefore, a wealth of information is generated from a general inventory, that may or may not be predictive of successful performance on the job.

Gender stereotypes can affect decisions relating to equivalent males and females, especially in a situation which is ambiguous or lacks specific information. The use of general personality tests in job selection, merely adds more information that is not necessarily job related. When a large array of personality traits are assessed that are not all relevant to the position applied for, the importance placed on these traits may differ for male and female applicants. Gender stereotypes surrounding males and females, may cause bias to be manifested in a selection situation which uses non-job-relevant

information. Collinson, Knights, and Collinson (1990), report that a key and consistent finding in the literature on selection is that informality in selection is a major mechanism in sex discrimination.

Even within a formal selection process, a personality profile (or report generated from one) containing a large range of personality traits not all necessary for the job, can be weighted differently for male and female applicants. This is likely due to the selector's stereotypes surrounding males, females, and the position applied for. The influence of gender stereotypes and personality assessment in organisations are two important phenomena that can impact on the selection process and possibly lead to invalid decisions which cost the organisation in time, money, and skill base.

This thesis will bring together the issues of gender stereotypes, and personality testing to investigate the possible biases which could be expressed in the selection situation. Managers will be asked to rate characteristics from the California Psychological Inventory, (CPI) and the Sixteen Personality Factor Questionnaire (16PF) in terms of their importance for either a successful manager, a successful female manager, or a successful male manager. Traits from these inventories will be examined to determine whether or not they are rated differently for male or female managers. Additionally, the Bem Sex Role Inventory (BSRI) - Short Form, will be used to examine the gender identity of the managers in the sample, and to determine the managers' perception of the gender identity of a successful manager.

INTRODUCTION

GENDER STEREOTYPES: A DEFINITION

Olson and Zanna (1993) in their review of attitudes suggest that there is no universally agreed upon definition of attitudes. However, they state that most attitude theorists agree: evaluation is a central aspect of attitude, because once formed, attitudes predispose evaluative responses when the attitude object is subsequently encountered. Olson and Zanna (1993), go on to state that stereotypes have been defined both as shared consensual beliefs about a group, and as individual perceivers' beliefs about a group.

Gender or sex stereotypes are the stereotypes that the present study is concerned with in relation to managers, and the likely effect on the selection of managers. Many researchers use the terms sex differences, gender differences, or sex stereotypes and gender stereotypes interchangeably. When examining the determinants of the differences between men and women, sex implies biological causes, while gender involves explanations based on socialisation. The consensus, that sex is a biologically based category for males and females, while gender refers to the psychological features frequently associated with these biological states, is widely accepted (eg Deaux, 1985; Lenney, 1991; Olsson, 1992; & Powell 1988). Therefore, if one is studying two groups based on biological characteristics the word sex is used, while if judgements are made on non-biological characteristics or social categories then the terms gender, gender identity, gender stereotypes, gender roles are used, (Deaux 1985). Powell (1988), further clarifies this distinction by stating that gender is the term used in social contexts. He suggests that some gender differences represent beliefs that have been stable over time and held by a large proportion of the population. For example, males are independent while females are sensitive.

SOCIALISATION

Maccoby and Jacklin's (1974) landmark review of sex differences, concluded that convincing evidence for sex differences could be found in only four areas: verbal ability, mathematical ability, visual-spatial ability, and aggression. They also concluded that there is more variation within the sexes than between, and that research has tended to focus only on the differences. So although there are minimal differences between the sexes, perceptions are such that males and females are seen as possessing different, and often opposite or complementary characteristics.

Olsson (1992), states that gender roles, stereotypes, and identities are learned through socialisation and educational processes. She states that they are both parallel to, and associated with a child's acquisition of language which encodes cultural values. It is the case then, that children are not born with gender stereotypes but acquire them as they grow older. These stereotypes can then form an attitude and become the basis for behaviour. It may be that these stereotypes serve to justify and maintain the status-quo.

Interestingly, Biernot (1991), reports that at ages 2 to 3, most children learn to label themselves as boys or girls and can classify themselves with others of the same sex. By age 3, American children generally know traditional stereotypes relating to toys, clothing, tools, household objects, games, and work. When told only the sex of a target, adults and children are quite willing to make a wide range of sex differentiated inferences about that person's personality and physical attributes.

Another perspective on the acquisition of stereotypes is put forward by Eagly and Steffen (1984), who state that stereotypes may relate to perceived distribution into social roles. They suggest that various attributes associated with social roles may reflect ingrained personality traits, abilities and characteristics of the typical occupants of the roles. This endorses their framework, which suggests that the main cause of gender stereotypes is the differing distribution of men and women into social roles. This was supported by one of their experiments, in which the hypothesis was that observed sex

differences of distribution into homemaker and employee occupational roles account for stereotypical beliefs in female communal (eg nurturing) qualities, and male agentic, (eg instrumental) qualities. In their study, male and female homemakers were perceived as high in communion and low in agency, while male and female employees were perceived as low in communion and high in agency.

Eagly and Steffen (1984) propose that gender stereotypes reflect perceivers' observations of what people do in daily life. If perceivers often perceive a particular group of people engaging in a particular activity, they are likely to believe that the abilities and personality attributes required to carry out that activity are typed to that group of people.

SEX ROLES AND ANDROGYNY

Powell (1988) identifies the source of what has come to be known as "traditional sex roles" in society. Through examining American society prior to 1900, Powell discusses how sex roles developed within white middle class families that could afford to have the women not earn wages. This, Powell suggests, provides an ideal that was supposed to apply to all families. Additionally, Powell points out that the label of "traditional" is misleading, in that it implies a constancy of actual economic roles of women and men that has never really existed.

Powell (1988) states that masculinity and femininity refer to traditional beliefs about the personal attributes of men and women, they are not necessarily held by all members of society and at any given time. Although they are unguided by the facts about sex differences, most members of society have been exposed to such beliefs and have been expected to live up to them at some time in their lives.

Bem (1974) writes that masculinity and femininity have traditionally been viewed as bipolar ends of a single continuum, therefore necessitating that a person is either masculine or feminine, and not both. Bem (1974) suggests that individuals may

be "androgynous", that is, both masculine and feminine depending on the situational appropriateness of the behaviours. Bem also proposes that because the androgynous person has a balance of masculine and feminine-typed traits they have both forms of responses in their repertoire of behaviour, and are therefore likely to have more behavioural flexibility.

According to Anastasi (1988), the term androgyny as it is currently used in personality research characterises the individual who has the favourable traits ascribed to both sexes. For example, combining assertiveness and competence with compassion, warmth and emotional expressiveness. This means that the androgynous person should be more flexible and more capable of adapting to varying situational demands than the traditionally sex-typed person. Anastasi (1988) in discussing masculinity and femininity, reports that androgyny is hypothesised as being associated with effective interpersonal behaviour and psychological well being.

SEXTYPED AND NON-SEXTYPED PERSONS

Reed (1982), states that the need to organise information is universal, and that in order to retrieve information from long term memory, memory must be organised. Much of this organisation is schematic - that is, it is based on the meaning of the information. Bem (1981a), proposes that a schema is a cognitive structure that organises an individual's perception. She suggests that the distinction between male and female serves as a basic organising principle for every human culture. Bem (1981a) puts forward a gender schema theory which proposes that the phenomenon of sex typing derives, in part, from a general readiness to process information on the basis of the sex-linked associations that constitute the gender schema. Thus Bem suggests that strongly sex-typed individuals might be seriously limited in the range of behaviours available to them as they move from situation to situation.

Bem (1981a) further proposes that individuals organise information and their self-concept in terms of gender, because of society's "insistence on the functional importance of the gender dichotomy,

from its insistence that an individual's sex makes a difference in virtually every domain of experience", (p362). Bem developed the Bem Sex Role Inventory (BSRI), on the basis of the concept that the sex-typed person is someone who has internalised society's sex-typed standards of desirable behaviour for men and women. Sex-typed individuals are more likely to process information on the basis of gender, and because of their stereotypical views about women, women may be discriminated against. Those not sex-typed would not be likely to process information in this way and should not be influenced by stereotypical assumptions.

MANAGERIAL STEREOTYPES

Studies that encompassed the relationship between sex, and managerial stereotypes were initiated in the early 1970s by Schein (1973). She investigated whether successful middle managers were perceived to possess the characteristics and traits more commonly ascribed to men in general, than to women in general. Schein developed a 92 item Descriptive Index on which men, women, and managers in general were rated. Using 300 male middle line managers throughout the United States and using canonical coefficients she found a large and significant ($p < .01$) similarity ($r' = .62$) between the ratings of men and managers. In contrast, a near zero and non-significant ($r' = .06$) resemblance between the ratings of women and managers was found.

Schein concluded that the perceived similarity between men and successful middle managers would increase the likelihood of a male rather than a female being selected or promoted for a managerial position. So how do female managers perceive men, women and managers in general? In 1975 Schein replicated her 1973 study, this time using 167 female middle managers. Using the same experimental design, she also found a significant resemblance ($p < .01$) between men and managers ($r' = .54$), and a smaller but significant ($p > .05$) resemblance between women and managers ($r' = .30$).

Schein (1975) states that her results confirmed the hypothesis that successful middle managers are seen as having the characteristics and traits more commonly ascribed to men in general than to women in general. However, the female managers did perceive women in general as being closer to successful managers than did the male managers. Schein draws several conclusions. First, that female managers are as likely as male managers to make selection and promotion decisions in favour of men. Second, that for women to succeed in management they have to accept and adopt stereotypical male characteristics.

This research was carried out in the seventies, almost twenty years ago. Since then many factors such as Equal Employment Opportunities (EEO) legislation, affirmative action, and the women's movement have meant that an increasing number of women are entering the workforce and aspiring to managerial levels. The issue of interest is whether such attitudes/stereotypes still exist, and therefore still provide a likely barrier to women attaining managerial positions? Does a bias still exist that would serve to preclude women from management, or devalue them with respect to their possessing the perceived attributes and traits required for a managerial role? A series of studies similar to Schein's have been undertaken that attempt to assess whether her findings are still applicable in the eighties and nineties.

Massengill and Marco (1979), replicated Schein's work on sex role stereotypes between men, women and managers, in general. However, they compared the responses of male and female managers obtained at the same point in time. Overall Massengill et al's., results supported those of Schein's (1973, 1975). Managers and men were perceived as being most similar ($r'=.67$). Females did perceive similarities between managers and women ($r'=.35$), but the overall conclusion of Massengill and Marco was that sex role stereotypes between men, women and managers still prevail. Their results show that males and females perceive the role of the manager similarly, but differ in their perception of women, and in perceiving women in relation to the managerial role. According to Massengill and Marco this explains the differences in the perceived similarity between women and managers. It seems that the male's

perception of women, precludes them from seeing feminine traits as necessary or desirable for the managerial role. This bias could easily become prejudicial if put into practice, for example through selection, evaluation, or promotion.

Rosen and Jerdee (1978) conducted a study using 884 male managers and supervisors, who were asked to compare men and women on 64 vocationally relevant items. On the basis of their content these items were grouped into four scales: 1) aptitudes, knowledge, and skills; 2) interest and motivation; 3) temperament; and 4) work habits and attitudes. They found that "every perceived difference between male and female employees was unfavourable to women aspiring to higher level occupations" (p843). Women were viewed less favourably on all four scales. Rosen and Jerdee concluded that negative perceptions of women still prevail among male managers in a variety of organisations and industry.

These studies support Schein's work by highlighting the fact that women are viewed, with respect to work attributes in an entirely different way than are men. As demonstrated so far, women are not seen as possessing the traits and characteristics required for managerial or higher level work roles. This devaluation surely stems from a traditional sex role stereotyping of women.

ANDROGYNY AND THE MANAGER: CAN THE EFFECTIVE PERSON ALSO BE THE EFFECTIVE MANAGER?

Androgynous management is defined by Alice Sargaent (1983) as a style that blends behaviours previously deemed to belong exclusively to men or women.

The concept of androgyny may be a significant way in which the sex-typing of the managerial role can be overcome. The research reviewed so far suggests that the stereotypical views about men and women affects judgements of their traits and characteristics in relation to the managerial role. Men are viewed as being more similar to a manager than are women. Therefore the characteristics of men are perceived as being required for carrying out the managerial role. The fact that women in general are not viewed as

possessing these traits indicates that they are not viewed as being 'like managers'. Subsequently this can lead to discrimination in terms of selection, promotion, and training.

Androgyny in its effort to progress away from sex typing, is relevant to women in management. As managers are generally viewed as needing to possess masculine characteristics, and generally women are not viewed in this light, androgyny can serve to empower women in management. Because androgyny involves possessing both masculine and feminine traits, a manager could more effectively deal with a variety of situations by having this blend of traits.

Powell and Butterfield (1979) have reasoned that the changing views toward traditional sex role stereotypes would cause a decrease in the sex-typing of the managerial role as masculine. They contend that the more effective person is androgynous, and so the more effective manager may also be androgynous. Powell and Butterfield (1979), therefore hypothesised that the good manager would be perceived as androgynous in sex role identification.

Six hundred and eighty four business studies students completed the BSRI (the BSRI is explained in more detail in the method section), for themselves and for a good manager. Sixty five percent ($p < .001$) described a good manager in definite masculine terms, thereby supporting Schein's work, in that managerial characteristics are seen to be masculine by both males and females. They also found that over 50% of subjects ($p < .001$) preferred a masculine manager, despite their own sex role identification. Despite Bem's androgynous concept which suggests that the non-sex typed person (androgynous or undifferentiated) can respond more effectively to a variety of situations and roles, an effective manager was not perceived as needing to possess this combination of characteristics, but rather was still viewed as needing to possess masculine traits.

RESEARCH IN THE 80s

Brenner, Tomkiewicz, and Schein (1989) investigated whether the association between sex role stereotypes and requisite management characteristics discovered by Schein (1973, 1975), still existed 15 years later. They do! Brenner, et al., (1989), hypothesised that both male and female managers would perceive successful middle managers as possessing characteristics, attitudes and temperaments more commonly ascribed to men in general than to women in general. Interclass correlation coefficients were computed to determine the degree of similarity between the descriptions of men and managers, and between the descriptions of women and managers. For male managers the hypothesis was confirmed. They perceived a significant resemblance between managers and men ($r'=.72$) in general, while a non-significant resemblance was obtained ($r'=.01$) between women and managers.

However, for the female managers a significant resemblance was found between both men and managers ($r'=.59$), and women and managers ($r'=.52$). This negated the hypothesis with respect to female managers. Brenner et al., (1989), suggest that this is a result of the changed view of women, as the women in the study perceived women in general to hold the same characteristics and traits as successful managers in general. They suggest that today's (then) female manager would be expected to treat men and women equally in selection, promotion and placement decisions. The results for men, however are not so encouraging, as the same stereotypes have prevailed for at least 15 years. Brenner et al., (1989) suggest that structural and legal changes are needed to ensure equality of opportunity at senior management levels for women.

THE EFFECT OF LABELLING

A further extension of Schein's work was conducted by Heilman, Block, Martell, and Simon, (1989). They asked subjects to rate men, women, and successful managers in general, as well as men managers, women managers, successful men and women managers. They reasoned that the sex bias literature suggests that when given unambiguous information, the under-evaluation of women and

their work does not occur. Heilman et al., (1989) hypothesised that the defining label attached to the target individual (eg successful manager), would have far more impact on the characterisations of women than of men. They expected that women would be perceived as less lacking in managerial characteristics when depicted as successful managers, and most lacking when only gender information was given.

In support of Schein (1973, 1975), Heilman et al., (1989) found that descriptions of women in general were less congruent with successful managers than were descriptions of men in general. However, their results also showed that the correspondence between descriptions of women, and successful managers sharply increased when women were depicted as managers, and increased even more so when they were depicted as successful managers. Heilman et al., (1989) suggest that their findings lend support to the idea that there is not one global stereotype of women, and with the provision of defining information about women, traditional stereotypes diminish.

Deaux (1985) points out that it is possible to negate the influence of a gender stereotype by providing information that is closely linked to the judgement being requested, so in such an instance the influence of stereotypical beliefs should be weak. When judgements of individuals are based on little data - as is often the case when organisations make hiring decisions these judgements are likely to be influenced by stereotypes. Subsequently in a selection situation if there is little information about competence or specific job requirements, then decisions may be based on gender stereotypes - while those presented with more information do not rely on stereotypes, (Powell 1988).

It seems that a common stereotype of women is what prevents them from being perceived as possessing the stereotypical masculine traits of a manager. However, when labelled as a 'successful manager', a female is more likely to be seen as possessing these traits. While this may be a breakthrough in one sense for female managers, it does nothing to remedy the fact that a manager's characteristics are

essentially viewed as being masculine. Further to this, in order to be perceived as having the required traits of a manager, one needs to possess masculine traits, or already be perceived as a successful manager.

ANDROGYNY IN THE EIGHTIES

Because their 1979 study found that a good manager was described as masculine, Powell and Butterfield (1984), attempted to determine the characteristics of a "bad manager". Using 1,368 first year management students Powell and Butterfield administered the BSRI and calculated subjects' self-scores, and their scores for a good manager and a bad manager. Again, a good manager was viewed as masculine in sex role identity by 73% of subjects. However, a bad manager was described as undifferentiated by over 90% of subjects and was seen as significantly lower on both masculinity and femininity scores than the good manager. The bad manager was also described in significantly more feminine than masculine terms. According to Powell and Butterfield (1984), sex role stereotypes seem to apply less to descriptions of the bad manager than to descriptions of the good manager.

Sargent (1983) in an article on the movement of women into managerial work stated that "We are moving slowly toward an androgynous identity for managers. The androgynous manager can deal with power and control in a balanced way; is comfortable with the full range of emotions; can seek support and give it to others; can be independent without becoming isolated; and can acknowledge attraction and choose whether to act on it or not. Such a person is better equipped to face the challenges of these complex, ambiguous times", (p 76).

This consideration, that androgyny is becoming more accepted as effective managerial behaviour led Powell and Butterfield (1989), to replicate their earlier study in which they examined the applicability of the androgyny concept to management. This time they used the revised Short Form BSRI (1981b). This is reviewed in the Method Section.

From their replication Powell and Butterfield found that subjects in all categories (eg feminine, masculine, androgynous and undifferentiated) described a manager in predominantly masculine terms. Powell and Butterfield re-analysed their 1979 data with the revised Short Form version of the BSRI. They still found that the good manager was described as similar in masculinity, but higher in femininity. This resulted in a good manager being described as more androgynous and less masculine, but overall a good manager was still described as masculine. Powell and Butterfield (1989) therefore suggested that the earlier results exaggerated the preference for a masculine manager. However, they say a good manager was still described as masculine by over half of the individuals in each group on the revised Short Form BSRI. They concluded that "the managerial identity remains as masculine as it ever was" (p230).

MANAGERIAL STEREOTYPES IN THE 90s

Smith and Schellenberger (1991), in continuing the work on stereotypes in management, posed a different question. They examined whether, regardless of stereotyping, the perception of the actual required managerial role is the same for men and women. One hundred and eight School of Business students rated one sentence descriptors of the management roles as defined by Mintzberg (an authority on managerial roles) to indicate whether the role was essential, necessary or unnecessary for managerial success. Only one role was statistically significantly differently perceived by men and women. The figurehead role for sales management was rated more highly for women than men. The authors assumed this one significant finding to be of little consequence as 39 were non-significant.

In light of the research reviewed so far, it would seem that although men and women perceive the role of a manager similarly, the characteristics and traits required to perform this role are perceived to be masculine. As females are not viewed as generally possessing these traits, they are therefore not likely perceived as being good managers.

This result is reflected in the study by Sachs, Chrisler, and Devlin (1992). They studied the personal and biographic characteristics of 95 women managers, and using the BSRI found that 52% were masculine and 37% were androgynous in their gender-role orientation. Eleven percent were feminine and 4% undifferentiated. The authors comment that although there are more women in management in the 90s, it may be that these particular women are self selected to fit the masculine characteristics of the job. While there persists a perception that masculine characteristics are required for a managerial role, it may be that females need to identify as masculine or at least as androgynous, to do well.

Schein and Mueller (1992) state that the globalisation of management is an accepted fact, yet the barriers to women in management appear to be strong. They further state that more research examining the state of women in management worldwide is called for. Schein and Mueller examined the relationship between sex role stereotypes and requisite management characteristics for management students in Great Britain and Germany, to compare with their 1989 US sample. They hypothesised that males and females in both countries would perceive successful middle managers as having the characteristics and attitudes more commonly ascribed to men in general than to women in general.

Their results showed that males in all three countries perceived successful middle managers as possessing the characteristics, attitudes and temperaments more commonly ascribed to men in general than to women in general. The German sample displayed the greatest male-manager similarity, and the least female-manager similarity. Interestingly, female management students in Germany - where Schein and Mueller report there being a negligible number of women in management, sex-type the managerial position nearly as strongly as the male students. Schein and Mueller (1992) suggest that the study of the relationship between sex role stereotypes and

requisite management characteristics, may assess the degree to which women perceive opportunities for themselves in management. They further suggest that women may perceive a need to exhibit masculine characteristics in order to succeed.

Internationally then, between the US, Britain and Germany, the country with the fewest number of females in management displayed the more stereotypical attitude toward requisite management characteristics.

GENDER IN THE WORKPLACE

According to Powell (1988), even though work and its rewards are not distributed equally, enough change has occurred to make traditional gender roles no longer an appropriate guideline for workplace behaviour. However, Powell states that gender stereotypes applied to workplace peers, bear little relation to the people being stereotyped, but have more to do with the people doing the stereotyping and the situations in which stereotypes are made. He states that individuals who hold traditional attitudes toward females and their role in society, are more likely to see men and women in stereotypical terms than individuals with less traditional attitudes. This endorses the research on gender stereotypes, and more specifically Bem's (1981a), gender schema theory which suggests that sex-typing is partly due to gender based schematic processing. That is, a general readiness to process information on the basis of the sex-linked associations that form the gender schema.

Powell (1988), proposes that for manager subordinate relationships to work best, each party needs to understand the other's needs, attitudes, skills and goals. Without such understanding communication is distorted, arriving at consensus solutions is difficult, and establishing a sense of teamwork is nearly impossible. In the same vein, Levanthal and Herbert (1990), suggest that stereotypical perceptions in the workplace affect personal interactions between the female manager and other colleagues.

Interestingly, Powell (1988) suggests that sex differences influence how people actually behave in work settings while gender differences influence how people react to others in such settings. This is evident in the research conducted by Bartol and Butterfield (1976), who in a study of sex effects in the evaluation of leaders, found that managers and graduate students ranked the same behaviour displayed by men and women managers, as exhibiting differing effectiveness. A male manager was rated as highly effective when he entered an organisation, interviewed employees, and then developed a plan that dictated how employees would operate. When a female manager carried out exactly the same process, she was rated as ineffective for being too directive and pushy. Powell (1988) concludes in his chapter on whether male and female managers differ, that the research evidence answers, "they differ in some ways and at some times but for the most part they do not differ" (p165).

It becomes clear that the influence of gender stereotypes can affect entry into, and the perception of behaviour in the workplace itself. Women as a group, are still breaking into the realms of management and others' perceptions of them affects behaviour toward them. In applying the concept of androgyny in the workplace, Bem (1981b) states that the concept of psychological androgyny implies that it is possible for an individual to be both compassionate and assertive, both expressive and instrumental, both feminine and masculine depending on the situation, and which behaviour is called for. She further, states that it is possible for an individual to blend these complementary behaviours into a single act, such as the ability to dismiss an employee, if the circumstances warrant it, but to be able to do so, with sensitivity.

Powell (1988) sums up the research on managerial stereotypes by stating "despite the increase in female managers and no matter what the questionnaire or study design has been used to investigate stereotypes of managers, people have described men as more like good managers than women, and good managers as higher in stereotypically masculine traits than stereotypically feminine traits. Men and women at all career stages examined, including practising

managers, part-time MBA students on the verge of their careers as managers and undergraduate business students, share the same biases about management." (p148).

Despite the minimal actual differences between the sexes (eg Deaux, 1985; & Maccoby & Jacklin, 1974), Pringle (1992) reports that research has clearly established that men and women are perceived differently - the interesting question is does this matter even if they do not behave differently? As the poem below depicts, the same behaviour displayed by a man and a woman can be interpreted differently. Here, gender stereotypes cause a different interpretation to be placed on the behaviour of two people merely on the basis that they are of a different sex. Because women managers are frequently viewed as representing a category rather than as an independent individual, all the stereotypes associated with that category may be used to judge a woman manager's performance. This is one way in which gender stereotypes in the workplace affect women.

IMPRESSIONS FROM AN OFFICE

*The family picture is on **HIS** desk.
Ah, a solid, responsible family man.
The family picture is on **HER** desk
Umm, her family will come before her career.*

***HIS** desk is cluttered.
He's obviously a hard worker and a busy man.
HER desk is cluttered.
She's obviously a disorganised scatterbrain.*

***HE** is talking with his co-workers.
He must be discussing the latest deal.
SHE is talking with her co-workers.
She must be gossiping.*

*HE'S not at his desk.
He's meeting customers.
SHE'S not in the office.
She must be out shopping.*

*HE'S having lunch with the boss.
He's on the way up.
SHE'S having lunch with the boss.
They must be having an affair.*

*The boss criticised HIM.
He'll improve his performance.
The boss criticised HER.
She'll be very upset.*

*HE got an unfair deal.
Did he get angry?
SHE got an unfair deal.
Did she cry?*

*HE'S getting married.
He'll get more settled.
SHE'S getting married.
She'll get pregnant and leave.*

*HE'S having a baby.
He'll need a raise.
SHE'S having a baby.
She'll cost the company money in maternity benefits.*

*HE'S going on a business trip.
It's good for his career.
SHE'S going on a business trip.
What will her husband say?*

*HE'S leaving for a better job.
He knows how to recognise a good opportunity.
SHE'S leaving for a better job.
Women are not dependable.*

(Natasha Josefowitz, 1983, cited in Powell, 1988).

NEW ZEALAND'S WOMEN MANAGERS: WHERE ARE THEY?

Of particular interest and relevance to the present research, is the situation in New Zealand. Women in New Zealand are largely excluded from positions of power in organisations despite the increasing number of women entering administration and management since the 1970s. Only 2.4% of New Zealand's fulltime female labour force are in administrative or management positions, and women make up only 17.5% of the administrative and managerial labour force (James & Saville-Smith, 1992). Furthermore, Gilbertson, Fogelberg, and Boswell (1987), in an analysis of personnel and industrial relations staff in New Zealand business organisations employing 100 or more staff, found that 90.5% of the policy makers were male.

Julian (1992), states that women in business organisations are underrepresented at all managerial levels, and highlights a survey of 221 top companies in New Zealand undertaken by the women's business group Zonta. Zonta (1986), found that within the 221 top companies only 15 women held directorships, compared with 1,046 male-held positions.

In New Zealand then, it is clear that at management level women are severely underrepresented. In terms of the effect on women entering management, or gaining promotion, this lack of women may perpetuate stereotypical views of women, and therefore sustain their exclusion from management. Indeed, Gatenby and Humphries (1991), found that attitudes toward the role of women in management in New Zealand reflect a stereotypical view of women in relation to management. They interviewed 96 managers from a range of private sector organisations, 87 were male and 9 were female. Forty nine of the managers said that there were no women managers, or not many women managers within their organisations. In explanation of these low figures one manager stated that "women get married and so don't become managers", (p33).

Gatenby and Humphries also found that many explanations for the low numbers of women in management were linked to "characteristics attributed to men in general" (p33). This supports Marco and Massengill's (1979) reasoning that males' perception of women in general precludes them from seeing feminine traits as desirable for the managerial role. Gatenby and Humphries (1991), were concerned at some of the comments made during the interviews in their study. They found comments such as "if I can choose from equivalent males and females, I choose the male every time" (p36), quite disturbing and concluded from their study that "many attitudes have not changed as much as we would like to think they have" (p36).

James and Saville-Smith (1992), suggest that New Zealand is a gendered culture and that there is a tendency to regard gender as a natural rather than a cultural construct imposed on the natural. Julian (1992), proposes that discriminatory attitudes toward women as managers can sometimes underlie the formation of structural barriers within organisations. As seen in Gatenby and Humphries' (1991) research, the attitudes toward women in management make it extremely difficult for women to be seen as competent managers in their own right.

PERSONALITY ASSESSMENT IN THE WORKPLACE

"Somebody once said that what makes a dancing bear so impressive is not that it dances well, but that it dances at all. I am impressed by human judgements of personality for roughly the same reason - not because judgements are perfect, but because in the face of enormous difficulties it seems remarkable they manage to have any accuracy at all"

(Funder, 1989, cited in Wiggins & Pincus 1992).

Guion and Gottier (1965), in a widely cited review of personality assessment concluded that, "it is difficult in the face of this summary to advocate with a clear conscience the use of personality measures in most situations as a basis for making employment decisions about people" (p162). Despite the pessimism surrounding

personality assessment it is still practised for the purpose of personnel selection.

Hogan, Carpenter, Briggs and Hansson (1985), report that personality tests were used in personnel decisions as far back as the early 1900s. They note that the large Army recruit screening programme during World War I legitimated personality measurement in the public eye. They suggest that for research which has been well designed and competently conducted, measures of normal personality have worked reasonably well.

However, much assessment for the purpose of selection is with popular personality inventories. Often these inventories have not necessarily been well researched as selection tools, nor validated for use with the particular job being selected for. Consequently, traits that are not directly relevant to the job in question, may have an influence on the selection outcome. This could enhance the possibility of stereotypical biases being displayed, and the possibility of their influencing the selection decision is likely to increase.

Butcher (1985a), outlines several reasons why personality evaluation in corporate settings is increasing in importance. Firstly, Butcher suggests that psychological factors may play an important role in competent performance. Second, he suggests that personality assessment can now enable the assessor to obtain information on "typical" normal-range personality attributes, and on psychological adjustment problems quickly at a fairly low cost.

Together, these reasons for personality testing suggested by Butcher, indicate that the use of personality tests could easily become entrenched in the personnel selection procedure, despite the fact that they may not be efficient predictors of successful performance.

In a literature review of selection methods Smith and George (1992), state that despite the poor validity of personality tests over the years, their popularity is largely undiminished. They suggest that the confidence in personality testing stems from the belief that personality is a critical feature of carrying out many jobs well - especially at the managerial level. However, they say that non job

related personality tests have not shown much evidence of being able to predict work related behaviours. They argue for a point to point correspondence between selection devices and the job.

The point to point principle is highlighted by Day and Silverman (1989), who suggest that personality variables are significant predictors of job performance when carefully matched with the appropriate occupation and organisation. Day and Silverman (1989) when investigating personality variables as predictors of job performance, found scores on specific job relevant personality scales were related to important aspects of job performance in accountants. They found three personality scales (orientation towards work, degree of ascendancy, and degree and quality of interpersonal orientation) significantly related to relevant aspects of job performance. They concluded that choosing work related personality measures based on information gathered through a thorough job analysis will improve employee selection.

Supporting this line of research, Tett Jackson and Rothstein (1991) conducted a meta-analytic review of the validity of personality measures as predictors of job performance. They concluded that the use of personality traits in personnel selection will only reach its full potential when personality-oriented job analyses become the standard for determining which traits are relevant to predicting performance on a given job.

PERSONALITY ASSESSMENT FOR MANAGEMENT IN NEW ZEALAND

The fact that personality tests are used despite their lack of validity is a cause for concern. So too, is the different way in which their usefulness is expounded by consultants in the same profession.

Smith and George (1986), in their article 'Stupid Personality Tests Who's Conning Who?', report that personality tests are widely used in managerial selection in New Zealand. Smith and George question their accuracy in determining how well a candidate will perform on the job. They suggest that the popularity of tests like the 16PF is due to the fact that management consultants require a

general test that can be applied to a wide range of jobs. Smith and George state though, that "the truth is that no quick and easy way of measuring personality has shown itself to be consistently predictive of work-related success" (p50).

In contrast, Sisley and Boxall (1990) in their article, 'Psychological Tests: A Headstart When Recruiting' suggest that most managers realise the cost of bad hiring decisions, and see psychological testing as a way of improving the hit rate. Their report gives an overview of the tests available in New Zealand and ranks their reliability in terms of 'High', 'OK', and 'Low'; and their validity in terms of 'High', 'Good', 'OK', and 'Poor'. They conclude their article by suggesting that hired expertise in conducting psychological testing is called for. It seems that although there is some question as to the usefulness of personality testing in selection, it is still advocated by some consultants. Additionally it is in demand by many managers who may view it as a means of an easy way to make a hiring decision.

Taylor, Mills, and O'Driscoll (1993), recently surveyed a sample of New Zealand organisations (employing over 300 personnel), and management consultants. They were questioned as to which personnel selection methods they used and why. Taylor et al., (1993) found that the personality tests most frequently used by consulting firms were: the 16PF, by 53% of firms, the CPI and Saville-Holdsworth, by 13% of firms, and the Motivation Analysis Test by 10% of firms.

When giving reasons for why they used a test, 27% of the organisational respondents said that they gained a measure of a particular trait/aptitude/ability that was related to job success. Nineteen percent said that the test provided additional, unique information not gained through other selection methods used by the organisation. Seventy four percent of the human resource executives from the organisations sampled, were unaware of any research literature on the specific tests they used. Taylor, et al., (1993), comment that although research evidence is strong in

suggesting that general personality tests are poor predictors of job performance, their use in New Zealand appears quite prevalent, especially among consulting firms.

Despite their poor validity, or even their lack of direct relevance to a particular job, it is clear that general measures of personality are being used in New Zealand for selection, and are viewed as a proficient or useful predictor in the selection process. Two of the most common personality tests are the 16PF and the CPI. It is likely that the information from these tests is open to interpretation in terms of its appropriateness for a particular job. It is clear that personality traits can be predictive, but only when based on a thorough job analysis (eg Tett et al., 1991). Moreover, given the research on managerial stereotypes, items from the 16PF and CPI could be given different weightings for male and female managers. Stereotypes of men and women in general, may cause a different emphasis to be placed on the importance of these traits, especially when used in a selection situation.

How do so-called objective personality tests fare then, if traits required for a managerial role are deemed to be masculine? How are the general traits interpreted for males and females, especially as many consulting firms or assessors generate a report from the profile that discusses performance on the various traits? These traits may be differentially perceived by the readers of the report, depending upon whether the traits are relating to a male or female manager.

THE PRESENT STUDY

Currently there are an increasing number of women entering (or attempting to enter) management positions. Selection and assessment procedures for managerial positions often include an assessment of one's personality traits. In New Zealand two of the most commonly purchased personality inventories from the New Zealand Council for Educational Research (NZCER) are the 16PF and CPI (Croft, personal communication). Additionally, they are among the most commonly used tests by consultants and organisations. However, research reviewed earlier, has consistently

concluded that the managerial role is perceived as requiring masculine traits. It may be that the CPI and 16PF traits are viewed with differing importance for males and females in light of these perceptions.

This study is interested in the specific stereotypes of, and about managers in New Zealand. As women are a minority in management, it is important to investigate whether successful managers are seen as possessing mainly androgynous or masculine characteristics. This is important because research shows that perceptions of managerial characteristics, describe managers as being unlike women. Therefore many women may not be viewed as possessing the appropriate characteristics suitable for a managerial position. Additionally, frequent use of the CPI and 16PF in managerial selection may mean that equivalent males and females are assessed for positions differently according to a varying importance placed on the same characteristics for men and women.

Gatenby and Humphries' (1991) study highlighted the fact that many managers in New Zealand have difficulty perceiving a female in the managerial role. The nature of these perceptions and stereotypes need to be pin-pointed. For example, do managers perceive a successful manager as requiring masculine or androgynous traits? Do managers perceive traits to be of differing importance for males and females? If so is this related to gender role identity? Which traits from general personality inventories are perceived as necessary for successful managers?

This study will use 20 CPI items (Gough 1987), and 32 items from the 16PF (Cattell, Eber, & Tatsuoka 1970), in likert-type scales to determine which traits are rated as most important for a successful manager. Traits receiving a different rating for male and female managers will also be investigated. The Short Form BSRI will be used to determine the subjects' sex role identification, and whether they perceive a successful manager as masculine, (Powell & Butterfield, 1989). Whether subjects' gender identity affects their ratings of a successful manager's gender identity, and the importance ratings of personality traits for successful male and female managers will also be investigated.

The following research questions and hypotheses will be examined:

PRIMARY HYPOTHESES

- * Identify **which traits** from the 16PF and the CPI are rated differently for successful male and female managers.
- * Determine the number of personality traits which are rated as important for a successful male manager, a successful female manager, and a successful manager.
- * Determine the gender-role identity of the managers in the sample.
- * Determine the perceived gender-role identity of a successful manager.
- * That non-sextyped managers (androgynous and undifferentiated) will rate successful managers as androgynous.
- * That sextyped managers (feminine and masculine) will rate successful managers as masculine.

SECONDARY HYPOTHESES

- * Examine the differences between ratings of successful female managers and successful managers, compared to the differences between successful male managers and successful managers.
- * That sextyped managers (masculine and feminine) will rate successful male and female managers differently on the 16PF and CPI items.
- * That non-sextyped managers (androgynous and undifferentiated) will not rate successful male and female managers differentially on the 16PF and CPI items.

The secondary hypotheses have been reported in full in the results section. However, for reasons of brevity and clarity, they are only briefly discussed in the discussion section.

METHOD

SAMPLE COMPOSITION

The subjects comprised a sample of 143 managers within New Zealand. They were approached through a letter sent to a cross section of organisations listed in the Universal Business Directories for eight regional areas of New Zealand. Introductory letters (presented in Appendix 1), inviting managers in these organisations to participate in the research were sent out, with a return form and pre-paid return-addressed envelope. From these letters, 57 forms were received indicating that 194 managers were willing to participate. To try and increase the sample size managers attending the Professional Women's Conference, and the District Rotary Conference in Palmerston North were also invited to participate through an information sheet in their conference folders.

Altogether 202 questionnaires were mailed to managers with return envelopes, and 143 were completed and returned, resulting in a response rate of 70%. Altogether 57 participants completed the 'successful manager' version of the questionnaire, 46 the 'successful female manager' version, and 40 the 'successful male manager' version. Table 1 displays the composition of the sample.

TABLE 1: Characteristics Of New Zealand Managers In the Sample

	<i>Mean</i>	<i>SD</i>	<i>Range</i>
Age	41.4	8.2	22-66
Years of Managerial Experience	10	7.4	1-35
Size of Organisation (by number of employees)	389	390.3	5-2,500
Number of Managers	38	47.3	1-300
Number of Female Managers	6	11.92	0-100

Altogether there were 143 managers comprising 117 males (82%), and 26 (18%) females. Sixty two point two percent of managers had 10 years or less managerial experience, 30.1% of managers had between 11 and 20 years managerial experience, and 7.7% of had between 21 and 35 years managerial experience.

Twenty one percent of organisations had 100 or less employees, 61.5% had between 110 and 600 employees, 9.8% of organisations had between 670 and 900 managers, and 7.7% had between 1,000 and 2,500 employees.

Thirty three point eight percent of organisations had 10 or less managers, 29.4% of organisations had between 11 and 40 managers, 34.6% of organisations had between 45 and 150 managers, and 2.2% of organisations had between 200 and 300 managers. In these same organisations 44.5 % of organisations had 2 or less female managers, 43.1% of organisations had between 3 and 10 female managers, 10.2% of organisations had between 11 and 40 female managers, and 2.2% of organisations had between 50 and 100 female managers.

QUESTIONNAIRE

Rationale

The questionnaire was designed to measure individual subjects' gender identity and the perceived gender identity of a successful manager. Additionally, the importance of the 16PF and CPI personality traits for a successful male manager, a successful female manager and a successful manager, was also determined. Any differences in the importance ratings of the personality traits between these managers were also investigated. There were three versions of the questionnaire. The difference being that subjects were asked to rate personality traits for either a: 'successful male manager', a 'successful female manager' or a 'successful manager'. Each subject received one version of the questionnaire only. A copy of the questionnaire is located in Appendix 1.

Content

Eighty two personality traits were included for subjects to rate the importance of these for either a successful male manager, a successful female manager, or a successful manager. These traits comprised of 20 CPI items, 32 16PF items, and 30 BSRI items. The importance scale was anchored in the following way:

- 7 **Essential**
- 6 **Very Important**
- 5 **Important**
- 4 **Sometimes important**
- 3 **Useful**
- 2 **Of some benefit**
- 1 **Not required**

The 30 BSRI items were used again to assess the respondents' gender-role identity.

The Bem Sex Role Inventory

Bem developed the Bem Sex Role Inventory (BSRI), on the basis of the concept that the sex-typed person is someone who has internalised society's sex-typed standards of desirable behaviour for men and women. The items were selected as masculine if they were judged by both males and females to be significantly ($p < .05$) more desirable (in American society) for men than women, and items were judged feminine by both males and females if they were significantly more desirable ($p < .05$) for a woman than a man.

The BSRI also includes a Social Desirability Scale whose items are neutral with respect to sex. This scale was included in the development of the BSRI in order to control a general tendency to endorse socially desirable items. This scale also provides a neutral context for the masculinity and femininity scales. Items qualified for being neutral if they were independently judged by males and female to be no more desirable for one sex than the other, and if the male and female judges did not differ significantly in their overall desirability judgement of a trait. Bem (1981b), in her updated manual states that analyses have cast doubt on the adequacy of the

social desirability scale as a means of measuring an individual's tendency to respond in a socially desirable way, and she suggests that its items should only function as a context for the feminine and masculine items.

Lippa (1985), in a review of the BSRI reported that in order to increase the internal consistency of the BSRI scales, Bem developed a Short Form (1981b) containing only 30 items. Items which showed poor item pool correlations with the Femininity and Masculinity scales were discarded. Lippa reports that the Short Form scales correlate strongly (.90) with the corresponding longer scales of the original BSRI. Socially undesirable items (eg. gullible, flatterable, and childlike) were deleted from the femininity scale. Payne (1985), in reviewing the Short Form BSRI states that it is a "psychometrically superior, and factorially purer index" (p179). Overall both reviewers agree that the Short Form is a superior version of the BSRI and is quicker to administer and more reliable.

The Short Form BSRI (1981b) was used twice within the questionnaire. First as a measure of each subject's gender role identification, and secondly to assess the subjects' perception of the gender role identity required of a successful manager. The Short Form BSRI contains 30 items each rated on a seven point scale. The 30 BSRI items were intermingled with 20 CPI and 32 16PF items, using the seven point scale of importance. A seven point likert scale was used so that the importance ratings for the BSRI would correspond with Bem's seven point scale in order to facilitate scoring, and calculation of the appropriate median.

For the subjects' own gender role identity Bem's (1981b) original rating scale was used, where subjects are asked to rate how true of them each characteristic is.

- 1 **Never or almost never true**
- 2 **Usually not true**
- 3 **Sometimes but infrequently true**
- 4 **Occasionally true**
- 5 **Often true**
- 6 **Usually True**
- 7 **Always or almost always true.**

The 30 Short Form BSRI items to be rated were:

Masculine	Feminine
Defend my own beliefs	Affectionate
Independent	Sympathetic
Assertive	Sensitive to needs of others
Strong personality	Understanding
Forceful	Compassionate
Have leadership abilities	Eager to soothe hurt feelings
Willing to take risks	Warm
Dominant	Tender
Willing to take a stand	Love children
Aggressive	Gentle

Scoring The BSRI

Subjects were classified on The Short Form BSRI through the median split method. This method divides subjects into gender role groups according to whether their scores fell above or below the median masculine and feminine scores. This resulted in a fourfold classification in which subjects were designated as feminine or masculine (sex-typed), androgynous or undifferentiated (non-sex-typed). This method is outlined in Table 2.

Table 2: Classification For The Bem Sex Role Inventory

	MASCULINITY SCORE	
	Below Median	Above Median
Below Median	Undifferentiated (low fem - low masc)	Masculine (low fem - high masc)
	FEMININITY SCORE	
Above Median	Feminine (high fem - low masc)	Androgynous (high fem - high masc)

The median split method can be derived from either Bem's (1981b) medians which were based on a 1978 normative sample of 476 male, and 340 female Stanford University Undergraduates, or from a researcher's median obtained through their own sample. Bem (1981b), recommends that for investigators working with large samples of subjects, containing both males and females, it would be

desirable to use that sample's median. Alternatively, for samples that are small or containing one sex only she recommends using the medians of the normative sample.

For the present study, the median values from Powell and Butterfield's 1984-1985 sample (1989), were used rather than Bem's, 1979 normative sample (1981b). Powell and Butterfield's sample is closer in norm characteristics to the present sample than is Bem's, and was therefore more suitable.

Undifferentiated as a type, was only instigated when Bem (1977), changed her method of classifying gender role identity. Previously on the BSRI a person was characterised as masculine, feminine or androgynous as a function of the difference between his/her endorsement of the masculine and feminine traits. Consequently a person was sextyped as masculine or feminine according to the extent that the difference score was high, and androgynous to the extent that this difference was low. This method was criticised by Spence, Helmreich, and Stapp (1975), who pointed out that Bem's definition of androgyny obscured the distinction between individuals who score high on both masculine and feminine items, and individuals who score low on both. They therefore recommended the median split method which was adopted by Bem after research into which of the two definitions of androgyny was likely to be more useful for further research (Bem, 1977).

Bem (1977), then concurred with Spence et al., (1975), by stating that the term androgyny should be reserved for those who score high on both the masculine and feminine items. She further stated that the BSRI should be scored so as to give four distinct groups; masculine, feminine, androgynous and undifferentiated. However, she points out that neither the androgynous nor the undifferentiated person partitions their self concept into the two categories of masculine and feminine. They are both alike in not being sex-typed.

California Psychological Inventory

According to Gough (1987), the CPI attempts to assess constructs which are among those likely to be used by people in evaluating typical social interaction. Baucom (1985), in reviewing the CPI reports that the concepts chosen for assessment on the CPI are "folk concepts of aspects and attributes of interpersonal behaviour. These are to be found in all cultures and societies, and they possess a direct integral relationship to all forms of social interaction" (p182). Overall Baucom (1985), reports that the CPI scales generally measure what their titles suggest.

The 20 CPI items are listed below. Because subjects were not likely to be conversant with psychological test terms, some trait names were reworded slightly (using the CPI administration manual as a guide), but retained their original meaning.

The alterations were as follows

(* indicates no alteration)

Do - Dominance	*
Cs - Capacity for status	*
Sy - Sociability	*
Sp - Social presence	*
Sa - Self acceptance	*
In - Independence	*
Em - Empathy	*
Re - Responsibility	*
So - Socialisation	Maturity
Sc - Self control	*
Gi - Good impression	Concerned with making a good impression
Cm - Communality	Acts like most other people
Wb - Well being	Sense of well being
To - Tolerance	*
Ac - Achievement via conformance	Conforms in order to facilitate teamwork
Ai - Achievement via independence	Independent in order to facilitate achievement
Ie - Intellectual efficiency	*
Py - Psychological mindedness	Responsive to needs of others
Fx - Flexibility	Flexible in thinking and social behaviour
F/M - Femininity/Masculinity	Sensitivity

Sixteen Personality Factor Questionnaire

Cattell, Eber and Tatsuoka (1970), state that the 16PF is designed to make available in a practicable testing time, information about an individual's standing on the majority of primary personality factors. Butcher (1985b), in reviewing the 16PF states that it is most valuable as a personality measure in settings such as personnel selection, guidance and counselling or personality research. Interestingly, Zuckerman (1985), reports in his review of the 16PF, that there needs to be a distinction between the applied use of tests and their use in research, with criterion validity being more important in applied use, and construct validity for research.

Although the 16PF measures 16 factors, both pole items for each trait were included in order to assess their perceived importance. Therefore 32 personality descriptors from the 16PF were included. Rather than using their scientific labels, the popular terms as outlined in Cattell et al.'s (1970) handbook have been used:

On the left, are the low scoring items (-) and on the right are the high scoring items (+), as displayed on the 16PF profile sheet. Again, some of the terms have been changed in order to make them more meaningful to respondents. The changed items are in brackets.

	-	+
A	Reserved	vs outgoing
B	Dull	vs Bright (Concrete thinker vs abstract thinker).
C	Affected by feelings	vs Emotionally stable
E	Humble	vs assertive
F	Serious	vs enthusiastic
G	Expedient	vs conscientious
H	Shy (Threat sensitive)	vs venturesome
I	Toughminded	vs sensitive
L	Trusting	vs suspicious
M	Practical	vs imaginative
N	Unpretentious	vs socially aware
O	Self-assured	vs apprehensive
Q1	Conservative	vs liberal
Q2	Group dependent	vs self sufficient
Q3	Follows own urges	vs socially precise
Q4	Tranquil	vs driven

Altogether subjects rated 112 traits. Thirty for themselves (BSRI), and 82 for a successful male/female/manager - 30 BSRI, 20 CPI, and 32 16PF. The items for the successful male/female/manager were ordered so that the first item was the low scoring trait from the 16PF, then the first Bem characteristic, then the first CPI item. Thereafter every third item was 16PF, Bem and CPI until the 20 CPI items were displayed. The series then became 16PF and Bem occupying every second item, with the last two items being 16PF traits. All low scoring 16PF traits from A - Q4 were listed before the high scoring items from A - Q4.

Ratings on the importance scales for managers were used to calculate whether there were significant differences in the importance ratings for the variable of interest. For example, whether the twenty characteristics from the CPI were rated differently for successful male managers, and successful female managers.

Additional information was obtained on subjects' sex, age, years of managerial experience, the number of employees in subjects' organisations, the number of managers in subjects' organisations, and the number of women managers in subjects' organisations. These items were placed at the end of the questionnaire after subjects had completed the ratings. This was to minimise any distortion of responses through subjects trying to guess the true purpose of the study.

PROCEDURE

The questionnaire contained an information sheet that gave a brief outline of the study without detailing the different conditions. A consent form was also provided for both subjects and experimenter to sign. In signing the consent form the subjects acknowledged that they had sufficient information on the experiment and understood that they would not be told which version of the questionnaire they were receiving. Any problems that resulted from this could be discussed with the researcher. Subjects were informed that a summary of results would be sent out when the study was completed.

The subjects were assigned one of three versions of the questionnaire. Differing versions of the questionnaire were not sent to one organisation in order to ensure that respondents did not compare questionnaires with other respondents, as this could have jeopardised the study. The first part of the questionnaire involved subjects rating the importance of personality traits for either a successful male manager, a successful female manager or a successful manager, depending on which version of the questionnaire they received. All subjects were assigned a gender identity category of either masculine, feminine, androgynous, or undifferentiated, depending upon their self-ratings on the (BSRI). This category was used as an independent variable. Additionally, the four gender identity groupings were used to form the two groups of sextyped and non-sextyped subjects.

The independent variables for this study were subject gender identity: masculine or feminine (sex typed), androgynous or undifferentiated (non sex typed), and questionnaire version eg. successful manager, successful female manager, and successful male manager. The dependent variables were the personality ratings for the three types of managers, and the gender identity rating of a successful manager.

STATISTICAL CONSIDERATIONS

Multi-variate analyses were not performed on the data due to the small sample size and the division of data into numerous categories.

Grove and Andreasen (1982), point out that although many statistical approaches to data analysis assume a relatively simple situation in which the investigator is testing a single hypothesis much research is exploratory and involves testing many hypotheses. As is the case with this thesis, significant differences are being examined between two groups on fifty two variables, thereby necessitating the testing of multiple hypotheses. Testing multiple hypotheses as in this instance leads to the risk of a Type I error -

stating that there is a statistically significant result when there isn't one. However, avoidance of the Type I error, increases the risk of a Type II error - which involves not finding a statistically significant result when one does exist.

According to Grove and Andreasen (1982) the way in which Type I and II errors are conventionally avoided when subjects are not in unlimited supply, is by an appropriated decision about the level of significance used. This level is arbitrarily followed by most researchers at the .05 level, for considering results to be significant and therefore reportable. Grove and Andreasen suggest that it is the responsibility of the researchers to set the level of significance themselves, and include a discussion of their rationale for their statistical approach in their data analysis section.

Statistical tables have been developed in order to control the risk involved when examining many variables simultaneously, The Bonferroni Inequality Method is an example of such a technique used for situations when one is testing a group of hypotheses simultaneously. In such a case an overall error risk is set for the group of hypotheses considered together. So if one is examining a family of 10 variables or hypotheses at once, a significance level is set for those variables as a group. This is called the familywise or overall error rate. It is the probability that at least one hypothesis is found significant when the null is in fact true for all 10 variables.

Expressing a contrary opinion is Rothman (1986), who states that it is not clear that the solutions to multiple testing of hypotheses (eg. inflating calculated p values depending on the number of comparisons), are an improvement. Rothman questions whether it is worthwhile to reduce false positives at the expense of false negatives, and states that this cannot be answered generally but depends on the consequences in context of the research setting. Rothman does state though that no matter what the arguments are for reducing the chance of a false positive in favour of a false negative, it has nothing to do with multiple comparisons but also applies equally well to a single comparison. Rothman further states that adjusted values are impossible to interpret as they divulge even less about the actual association; changing the criterion for

"significance" just produces a smaller Type I error at the expense of a greater Type II error. Rothman says that each finding should be reported as if it alone were the sole focus of the study.

THE PRESENT STUDY

For the analyses in the present study the 16PF and CPI traits were divided into clusters or families which made sense conceptually. That is, the clusters related to relevant personality characteristic groupings, that could be considered useful for managers. The significance level was set at .05, and was not recalculated as suggested by Grove and Andreasen (1982). As this study was mainly exploratory, and there was no likelihood of harmful consequences from a Type I error, it was seen as more desirable to make the Type I error, rather than the Type II error as would be the case with recalculating the p value.

Division Of Traits Into Relevant Families

CPI

The CPI profile is divided into four clusters of scales which McAllister (1988) states are based on conceptual rather than statistical similarity.

Class I scales consist of Dominance, Capacity for Status, Social Presence, Self Acceptance, Independence and Empathy. These characteristics measure self confidence, poise, ascendancy and overall social expertise and effectiveness.

Class II scales consist of Responsibility, Socialisation, Self Control, Good Impression, Communality, Well Being, and Tolerance. These scales measure maturity, personal values, self control and sense of responsibility.

Class III scales consist of Achievement via conformance, Achievement via Independence, and Intellectual Efficiency. These scales measure instrumental and intellectual stance and style, as well as the extent and kind of achievement oriented behaviour.

Class IV scales consist of Psychological mindedness, Flexibility and Femininity/Masculinity. These scales represent conceptual and intellectual interest modes or styles.

16PF

The 16PF scales were similarly divided into families according to the second order source traits outlined in the handbook (Cattell et al., 1970). Cattell et al., (1970), propose that psychologically, the second order factors may be viewed as broader organisers contributing to the main scale items. They suggest that knowledge of the second order factors supplements information regarding the first order factors. So that simultaneous t-tests could be applied to the 32 traits, the 16PF items have been organised into families, according to their groupings on the second order factors. The '+' or '-' in brackets denotes that the trait is either the highscoring or lowscoring end of the bipolar trait.

QI: Introversion vs Extroversion. Outgoing (A+), Assertive (E+), Enthusiastic (F+), Venturesome (H+), Group Dependent (Q2-).

QII: Adjustment vs Anxiety. Affected by feelings (C-), Threat sensitive (H-), Suspicious (L+), Apprehensive (O+), Follows Own Urges (Q3-), Driven (Q4+).

QIII: Tough Poise. Reserved (A-), Toughminded (I-), Practical (M-), Assertive (E+), *Suspicious (L+).

QIV: Subduedness vs Independence. *Assertive (E+), *Suspicious (L+), Imaginative (M+), Liberal (Q1+), Self Sufficient (Q2+).

QV: Naturalness vs Discreetness. Socially Aware (N+) *Outgoing (A+) *Practical (M-) Self Assured (O-).

QVI: Cool Realism vs Prodigious Subjectivity. Sensitive (I+) *Imaginative (M+) Trusting (L-).

QVII: Low Intelligence vs High Intelligence. Abstract Thinker (B+).

QVIII: Low Superego vs High Superego Strength. Conscientious (G+), Socially Precise (Q3+) Serious (F-).

There were 7 primary source traits that did not load highly enough onto the second source traits, these traits were clustered together. Additionally, some first order traits fall into more than one second order category (denoted '*'). These traits were included just once in the first occurring second order cluster.

RESULTS

SCREENING

Before analysis of the data, variables were examined through a variety of SPSS programmes to check for outliers, normality, linearity, missing data and residuals. Demographic variables (as described in the method section) although examined were not of concern as they were not used in further analyses. The characteristics of the sample have also been described in the method section.

All data were screened and checked before analyses commenced. Internal consistency reliability for the BSRI Short Form scales were obtained using Cronbach's Alpha. The values for the various scales were as follows: The masculine scale for individual managers (ie the subjects) (.82), and feminine scale for individual managers (.86); the masculine scale for a successful male manager (.69), and the feminine scale for a successful male manager (.80); the masculine scale for a successful female manager (.67), and the feminine scale for a successful female manager (.81); the masculine scale for a successful manager (.70), and feminine scale for a successful manager (.83). The internal consistency reliability values were considered satisfactory.

TRAITS RATED DIFFERENTLY FOR SUCCESSFUL MALE AND FEMALE MANAGERS

Successful male and female managers were perceived differently in terms of the importance of six personality traits for them as successful managers. Two traits from the CPI, and 4 traits from the 16PF were rated significantly differently. Table 3 presents the means, standard deviations and *t* statistics.

Capacity for status (CPI), was rated as more important for a successful female manager, than for a successful male manager ($t(81)=-2.13, p<.05$). **Flexibility** (CPI), was rated as more important for a successful male manager than for a successful female manager ($t(84)=2.07, p<.05$).

Table 3 Means, Standard Deviations, And *t* Statistics For The CPI And 16PF Traits Rated Significantly Differently For Successful Male Managers And Successful Female Managers.

TRAIT	Successful Male Manager		Successful Female Manager		<i>t</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
CPI						
CLASS I SCALE: Social Expertise						
C2	3.79	1.61	4.52	1.50	-2.13	.036
CLASS II SCALE: Maturity and Responsibility						
C19	5.93	.89	5.52	.91	2.07	.042
16PF						
Q1: Introversion vs Extroversion						
S23	5.03	1.07	4.48	1.19	2.23	.029
QVI: Cool Realism vs Prodigious Subjectivity						
S9	5.65	1.29	5.07	1.27	2.11	.038
Primary factors not loading onto second factors						
S6	3.93	1.75	4.93	1.22	-3.14	.002
S19	6.13	.65	5.63	1.18	2.36	.021

p<.05

C2 Capacity for status
 C19 Flexibility
 S23 Venturesome
 S9 Trusting
 S6 Expedient
 S19 Emotionally Stable

Expedient was rated as more important for a successful female manager than for a successful male manager ($t(84)=-3.14, p<.05$). **Trusting** was rated as being more important for a successful male manager than for a successful female manager ($t(84)=2.11, p<.05$). **Emotionally stable** was rated as more important for a successful male manager than for a successful female manager ($t(84)=2.36, p<.05$). **Venturesome** was rated as more important for a successful male manager than for a successful female manager, ($t(84)=2.23, p<.05$).

Table 4: Characteristics From The CPI Rated As Important For Managers

Successful Male Manager	Successful Female Manager	Successful Manager
CLASS I SCALES: Social Expertise		
Sociability	Sociability	Self Acceptance
Self Acceptance	Self Acceptance	Empathy
Empathy	Empathy	
CLASS II SCALES: Maturity and Responsibility		
Responsibility	Responsibility	Maturity
Maturity	Maturity	Self Control
Self Control	Self Control	
	Sense of Well Being	
#Tolerance	Tolerance	
CLASS III SCALES: Instrumental Style and Achievement Behaviour		
Intellectual	Intellectual	Intellectual
Efficiency	Efficiency	Efficiency
CLASS IV SCALES: Conceptual and Intellectual Styles		
Responsive to needs of others	Responsive to needs of others	Responsive to needs of others
*Flexibility	Flexibility	Flexibility

* Traits rated significantly differently for successful male and female managers.

Traits rated significantly differently for successful managers and successful male managers.

THE RELEVANCE OF THE CPI AND 16PF

To develop a profile of the traits rated as important for a successful male manager, a successful female manager, and a successful manager an arbitrary cut-off rating, of a mean of 5 or greater was used. Since '5', '6' and '7' on the likert-type scale of importance denoted that a trait was considered important, very important and essential respectively, 5 was considered as the minimum point at where a trait was perceived as important for a manager.

Table 5: Characteristics From The 16PF Rated As Important For Managers.

SMM	SFM	SM
QI: Introversion vs Extroversion		
Enthusiastic *Venturesome	Enthusiastic	Enthusiastic
QVIII: Tough Poise		
#Practical	Practical	Practical
QIV: Subduedness vs Independence		
Imaginative	Imaginative	Imaginative
QV: Naturalness vs Discreetness		
Self Assured	Self Assured	Self Assured
QVI: Cool Realism vs Prodigious Subjectivity		
*Trusting	Trusting	Trusting
QVIII: Low Superego vs High Superego Strength		
Conscientious	Conscientious	Conscientious
Primary factors not loading onto secondary factors		
*#Emotionally Stable	Emotionally Stable **#Concrete Thinker	Emotionally Stable

* Traits rated significantly differently for male and female managers.

** Traits rated significantly differently for successful managers and successful female managers.

Traits rated significantly differently for successful managers and successful male managers.

Altogether almost half the traits from both the 16PF and CPI were rated as important for successful managers. Ten traits out of 20 from the CPI were considered as being important for a successful male manager, 11 for a successful female manager, and 8 for a successful manager, see Table 4.

Seven traits from the 16PF were rated as important for a successful male manager, 9 for a successful female manager, and 7 for a successful manager, see table 5. An interesting finding was that two of the traits rated as important for both a successful female and male manager were opposing bipolar items from the 16PF. **Practical** and

Imaginative were both rated a mean of 5 or more for both male and female managers, despite the fact that they are bipolar opposites on the 16PF.

As can be seen in Tables 4 and 5 a notable number of traits rated as important for managers, are also perceived significantly differently between successful male managers, successful female managers and successful managers.

THE GENDER IDENTITY OF NEW ZEALAND MANAGERS

Using the Short Form BSRI at the end of the questionnaire the gender identities of the sample managers were determined using the median-split method as explained in the Method section.

Forty one point five percent of the managers in the sample were undifferentiated, and 31% were masculine. Sixteen point two percent of the managers rated themselves as androgynous and 11.3% rated themselves as feminine. The percentages of sample managers within each category, plus the male and female groupings are presented in Table 6. Additionally, figures are given for the sextyped and non-sextyped groupings.

Table 6: The Gender Identity And Sextype of Managers in The Present Sample

	Male		Female		Total	
	N	%	N	%	N	%
Masculine	37	32	7	27	44	31
Feminine	13	11.2	3	11.5	16	11.3
Androgynous	20	17.1	3	11.5	23	16.2
Undifferentiated	46	39.7	13	50	59	41.5
		116		26		142
Sextyped	50		10		60	42.3
Non-sextyped	66		16		82	57.3
					142	

$\chi^2(3) = 1.16$ $p < ns$.

THE PERCEIVED GENDER IDENTITY OF A SUCCESSFUL MANAGER

Using the successful manager questionnaire version only, the gender identity of a successful manager was calculated using the BSRI. The percentage data are reported in Table 7.

Table 7: Perceived Gender Identity Of A Successful Manager.

	Successful Manager	
	N	%
Masculine	13	23
Feminine	8	14
Androgynous	20	35
Undifferentiated	16	28
	57	

$\chi^2(3)=1.0$ *p* ns

Thirty five percent of the New Zealand manager respondents to the successful manager questionnaire, rated successful managers as androgynous.

RATINGS OF PERSONALITY TRAITS BY SEXTYPED MANAGERS

Using only the sextyped managers (ie those managers who were determined as masculine and feminine on the BSRI), ratings on the 16PF and CPI were compared for successful male and successful female managers. The traits that were significant are presented in Table 8. The means, standard deviations and *t* statistics for the remaining non-significant traits are displayed in Appendix 2.

Sextyped managers rated **tolerance** (CPI) ($t(30)=2.26$, $p<.05$), and **sensitivity** (CPI) ($t(30)=2.50$, $p<.05$) as more important for a successful male manager than for a successful female manager.

Table 8: Personality Traits Rated Differently For Successful Male and Successful Female Managers By Sextyped Managers

TRAIT	Successful Male Manager		Successful Female Manager		<i>t</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
CPI						
CLASS II SCALE: Maturity and Responsibility						
C14	5.46	.88	4.79	.79	2.26	.031
CLASS IV SCALE: Conceptual and Intellectual Interest Style						
C20	5.08	1.19	4.00	1.2	2.50	.018
<i>p</i> < .05						
C14	Tolerance					
C20	Sensitivity					

RATINGS OF PERSONALITY TRAITS BY NON-SEXTYPED MANAGERS

Using only the non-sextyped managers (ie those who were determined as androgynous and undifferentiated on the BSRI), ratings on the 16PF and CPI were compared for successful male and successful female managers. The traits that were significant are listed in Table 9. The means, standard deviations and *t* statistics for the non-significant traits are reported in Appendix 2.

Non-sextyped managers rated five traits significantly differently for successful male and female managers. Non-sextyped managers rated **well being** (CPI) ($t(51)=-2.37, p<.05$) and **expedient** (16PF) ($t(51)=-3.81, p<.05$) as more important for successful female managers than for male successful managers. **Flexibility** (CPI) ($t(51)=2.28, p<.05$), **venturesome** (16PF) ($t(51)=2.16, p<.05$), and **liberal** (16PF) ($t(51)=3.12, p<.05$), were rated as more important for successful male managers than for successful female managers.

Table 9: Personality Traits Rated Differently For Successful Male And Successful Female Managers by Non-sextyped Managers

TRAIT	Successful Male Manager		Successful Female Manager		<i>t</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
CPI:						
CLASS II SCALE: Maturity and Responsibility						
C13	4.63	1.55	5.50	1.07	-2.37	.021
CLASS IV SCALE: Conceptual and Intellectual Interest Style						
C19	5.93	.96	5.35	.89	2.28	.027
16PF:						
QI: Introversion vs Extroversion						
S23	5.04	.94	4.35	1.36	2.16	.035
QIV: Subduedness vs Independence						
S29	4.41	1.25	3.31	1.32	3.12	.003
Primary factor not loading onto second factors						
S6	3.56	1.8	5.11	1.03	-3.81	.000

p < .05

C13	Well Being	S6	Expedient
C19	Flexibility	S23	Venturesome
		S29	Liberal

SEXTYPED AND NON-SEXTYPED MANAGERS' PERCEPTION OF THE GENDER IDENTITY OF A SUCCESSFUL MANAGER

Using only the questionnaire version requiring respondents to rate a successful manager, the gender identity scores for successful managers were calculated as rated by sex-typed and non-sextyped managers. Table 10 shows the groupings.

Table 10: Gender Identity of a Successful Manager As Rated By Sextyped And Non-sextyped Managers

	Sextyped Managers		Non-sextyped Managers	
	N	%	N	%
Masculine	11	39.3	2	6.9
Feminine	3	10.7	5	17.2
Androgynous	10	35.7	10	34.5
Undifferentiated	4	14.3	12	41.4
	<hr/>		<hr/>	
	28		29	

$$\chi^2(3) = 11.53^*$$

* $p < .01$
(.00917)

Thirty nine point three percent of sextyped managers rated a successful manager as masculine. Forty one point four percent of non-sextyped managers rated a successful manager as undifferentiated.

SUCCESSFUL MANAGERS AND SUCCESSFUL MALE MANAGERS VERSUS SUCCESSFUL FEMALE MANAGERS

The significant differences for the trait ratings between successful managers and successful female managers are listed in Table 11. The means, standard deviations and t statistics for the non-significant traits are reported in Appendix 2.

Well being (CPI) ($t(101) = -2.46, p < .05$), **concrete thinker (16PF)** ($t(100) = -2.92, p < .05$), and **expedient (16PF)** ($t(101) = -2.69, p < .05$), were rated as more important for a successful female manager than for a successful manager.

Table 11 Significant Differences In Ratings Of Importance Between Successful Female Managers And Successful Managers On The CPI And 16PF Traits

TRAIT	Successful Manager		Successful Female Manager		<i>I</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
CPI:						
CLASS II SCALE: Maturity and Responsibility						
C13	4.84	1.08	5.37	1.08	-2.46	.016
16PF						
Primary factors not loading onto second factors						
S2	4.05	1.48	5.00	1.71	-2.92	.004
S6	4.21	1.46	4.93	1.22	-2.69	.008

p < .05

C13 Well being
S2 Concrete Thinker
S6 Expedient

Successful managers and successful male managers were compared on the CPI and 16PF traits. It was found that there were more perceived differences between successful managers and successful male managers than there were between successful female managers and successful managers.

Four traits were rated significantly differently for successful male managers and successful managers. **Tolerance** (CPI) ($t(95)=2.20$, $p<.05$); **practical** (16PF) ($t(95)=2.55$, $p<.05$); and **emotionally stable** (16PF) ($t(95)=2.58$, $p<.05$) were rated as being more important for a successful male manager than for a successful manager. **Concrete thinker** (16PF) ($t(95)=-2.60$, $p<.05$) was rated as more important for a successful manager than for a successful male manager. The means, standard deviations and *t* statistics of the non-significant findings are also in Appendix 2.

Table 12: Significant Differences In Ratings Of Importance Between Successful Male Managers And Successful Managers On The CPI And 16PF Traits

TRAIT	Successful Manager		Successful Male Manager		<i>t</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
CPI:						
CLASS II SCALE: Maturity and Responsibility						
C14	4.7	1.0	5.1	.97	2.20	.030
16PF						
QIII: Tough Poise						
S10	4.9	1.1	5.5	.93	2.55	.012
Primary factors not loading onto second factors						
S19	5.7	.89	6.1	.67	2.58	.012
S2	2.0	1.0	1.5	.85	-2.60	.011

p < .05

C14 Tolerance
 S10 Practical
 S19 Emotionally Stable
 S2 Concrete Thinker

DISCUSSION

The results provided support for some of the hypotheses, and not for others. The majority of New Zealand managers in the sample identified themselves on the Short Form BSRI as undifferentiated, and a successful manager was described as androgynous. This is contrary to overseas research, but may be a positive trend for New Zealand. However, ratings of the 16PF and CPI personality traits revealed that differing importance was placed on certain traits for male and female managers. Furthermore, only half of the traits from the 16PF and the CPI were considered important for managers.

The results relating to each hypothesis will now be discussed in more detail and considered in terms of their likely implications. The limitations of the present study will be reviewed and some suggestions for future research outlined.

THE NEW TYPE OF MANAGER: UNDIFFERENTIATED

Unexpectedly, 41.5% of the managers in this sample identified themselves as undifferentiated. This goes against previous findings of Powell and Butterfield (1979, 1984, 1989). The managers in their samples predominantly identified themselves as masculine.

The finding that a majority of New Zealand managers were undifferentiated was unexpected in two ways. First, in that managers were not predominantly identified as masculine. Second, it was expected that the managers in the sample if non-sextyped, would be androgynous. Androgyny has been portrayed (eg Bem, 1981a) as the supreme combination of masculine and feminine traits, thus providing the person with a healthy repertoire of behavioural styles. Undifferentiated, in contrast to androgyny refers to a low propensity for endorsing either masculine or feminine traits as typical of oneself. The undifferentiated person has an equal blend of the masculine and feminine traits, but s/he is not as intense in displaying them.

Undifferentiated people (and managers) may not be so concerned with constantly displaying favourable masculine and feminine typed traits. Rather, they have an equal combination of both which are displayed less frequently. In the New Zealand context there may be a move away from the 'typical' manager as masculine, and therefore as sextyped. Instead, as identified from this sample there is a prevalence of non-sextyped managers.

THE PERCEIVED GENDER IDENTITY OF A SUCCESSFUL MANAGER

A successful manager was rated as androgynous by 35% of the respondents to the 'successful manager' questionnaire version. This supports the possibility that managers are coming to view a successful manager as equally needing to possess masculine and feminine typed traits. The successful manager can then have at their disposal a range of behaviours that are appropriate for situations in which assertiveness and understanding are called for. This result also demonstrates a move away from the masculine sextyping of the managerial role (eg Schein, 1973, 1975; Schein & Mueller 1992).

Again this finding contrasts with Powell and Butterfield's (1989) study. They found with their 1984-85 North American sample using the Short Form BSRI, that 73.4% of undergraduates described a good manager as masculine. Only 22.1% described a good manager as androgynous. At that time their study did not support Sargent's (1983) view that we are moving toward an androgynous identity for managers.

The present study though, does support Sargent (1983), who argued that practitioners and students of management are increasingly recognising that focussing on task alone produces ineffective management. She stated that managers are learning to deal with relationships among people and to foster cooperation across bureaucratic levels.

Androgynous management which blends a combination of masculine and feminine typed behaviour and is aptly exhibited in

Bem's (1981b), description of an important role every manager may have to perform - dismissing an employee. Bem suggested that a blending of masculine and feminine typed characteristics enhances the means of dealing with this situation - by being assertive enough to carry it out, (rather than delegating) yet sensitive enough to be diplomatic.

It is likely be that New Zealand's business environment which is dominated by small business (eg Love 1990), affects the characteristics perceived to be required by a successful manager. New Zealand's unique business environment may predispose an androgynous management style to be viewed as desirable.

SUCCESSFUL FEMALE MANAGERS VERSUS SUCCESSFUL MALE MANAGERS: THE DIFFERING IMPORTANCE OF THE CPI AND 16PF TRAITS

Altogether six personality traits were rated significantly differently for successful male and female managers. This provides support for the possibility that males and females although described equivalently as a "successful manager", are still rated differently with respect to characteristics considered important for a successful manager. This supports the research which has found that managerial stereotypes are still prevalent, (eg Schein & Mueller, 1992).

The traits **capacity for status** (CPI), and **expedient** (16PF), were rated as being more important for a successful female manager, than for a successful male manager. Gough (1987) describes one who has a high **capacity for status** as ambitious, wanting to be successful and independent. Since this was rated as more important for successful female managers, then it is likely viewed as a quality that successful female managers do not as a group currently possess. Because women are generally considered of lower status (eg Myers, 1988), even when portrayed as a "successful manager", it still may be perceived as important for them to be concerned with, and to achieve **status**. Indeed, the respondents may have been aware of women's lower status and so have rated **capacity for status** as a more important quality for successful female managers to have.

As **capacity for status** was not rated as more important for successful male managers, it is possible that successful male managers are already perceived as having this drive for status. Alternatively, because males are generally accorded a higher social status, it may not be viewed as important for them to have. It is also likely that people are aware that women have to work harder than men to achieve promotion in management, and therefore require ambition to do this.

The trait **expedient** is the low-scoring bipolar opposite of conscientious and behavioural examples include a disregard of rules (Cattell, et al., 1970). **Expedient** was rated as more important for successful female managers. It is possible that successful female managers are generally viewed as too rule-abiding and should therefore have more of a tendency to be independent in certain situations. Even though it was stereotypical for **expedient** to be rated as more important for a successful female manager, it may have been a prescription that women should be more like successful male managers. That is, that they need more masculine typed traits to succeed as managers.

The personality traits of **flexibility** (CPI), **trusting** (16PF), **emotionally stable** (16PF), and **venturesome** (16PF) were rated as more important for a successful male manager than for a successful female manager. A person high in **flexibility** is described by Gough (1987), as someone who is flexible, and who likes change and variety. The person may also be easily bored by routine life and experience. Because **flexibility** was rated more importantly for successful male managers, it may be that they are viewed as not always being as flexible as their female counterparts. Females are believed to be conforming (eg Myers 1988) so are possibly not perceived as needing to be flexible.

Trusting is the low scoring bipolar opposite to suspicious. Characteristic behaviour is described as 'accepting conditions', (Cattell, et al., 1970). **Trusting** was rated as more important for a successful male manager than for a successful female manager. This likely implies that for males to be perceived as successful managers it is considered more important for them to be trusting. Male managers are likely to be stereotypically perceived as less trusting,

since trusting is a feminine typed trait (Myers, 1988). Because management is traditionally male dominated it may be that **trusting** is seen as a general weakness, (eg as a quality that is lacking in management) and therefore needs to be enhanced. As **trusting** was rated more importantly for successful male managers it could signify a shift towards including more feminine-typed traits in those required by a manager. This could demonstrate a move toward androgyny (eg masculine and feminine typed traits).

In a traditional business environment it may not of course pay to be too trusting. Now though, there are trends away from competitiveness within organisations to a more cooperative management style. For example, the current trend for Total Quality Management includes in its main principles, listening to employee suggestions, so that help and participation from all sectors of the workforce can be encouraged, (Chase, 1988). This then serves to stimulate and inspire a more trusting environment.

The trait **emotionally stable** is the high scoring bipolar opposite of emotionally less stable. Characteristic behaviours include, maturity, facing reality and calmness (Cattell, et al., 1970). It is interesting that being **emotionally stable** was rated as more important for a successful male manager than for a successful female manager. Generally females are believed to be neurotic or emotionally less stable (eg Myers 1988). However, in terms of being a successful manager, males may be perceived as emotionally aggressive. Indeed, males are believed to be more instrumental and competitive (Maccoby & Jacklin, 1974). Therefore to be viewed as a successful manager it may be perceived as important for male managers to be emotionally stable by not being as stereotypically aggressive or competitive. In contrast, for females to be successful managers this may not be an issue.

Venturesome is the high scoring bipolar opposite of shy (listed as threat sensitive in the questionnaire). Key behaviours include adventurous, thickskinned and socially bold, (Cattell, et al., 1970). **Venturesome** was rated as more important for successful male managers. This may indicate that successful male managers are seen as too conservative, and that to be perceived as successful

should be bolder. **Venturesome** may not have been rated as important for successful female managers, because they are already in an occupation that is traditionally male, and definitely masculine-typed (eg Julian 1992; & Schein 1973 & 1975). Female managers may be perceived as possessing this trait by the mere fact of having 'made it' into management! Alternatively, it could be a prescription for stereotypical behaviour, in that successful male managers should be more socially bold and adventurous, while in contrast, successful female managers should not. This could be purely because they are female and it is not considered as within a female's 'traditional role', to be **venturesome** despite the fact that in the present study females were depicted as successful managers. Altogether six traits were rated significantly differently for successful male and female managers, as outlined in Table 3. This has to be considered in light of the fact that altogether 52 traits were rated, and 46 traits were not rated significantly differently for either successful male/female managers. However, the differences do give cause for concern in terms of personality assessment within selection, and the possibility of stereotyping leading to bias. This theme is further explored in section to follow titled 'The Relevance of the CPI and 16PF For Managers'.

The fact that overall, the managers in the sample rated a successful manager as androgynous (and were themselves undifferentiated), indicates a conception of a manager as equally needing to possess masculine and feminine typed characteristics. It is possible that the traits rated differently for successful male and female managers reflect a concern for a successful manager as needing to have a more balanced collection of traits. Thus, rather than being potentially stereotypical the managers are emphasising an ideal type of manager. However, in doing so they are making assumptions about the characteristics of the managers based on their sex. This still results in the traits from the personality inventories being accorded with different importance for different sex managers. These different ratings though, may be for the overall prescription of having a more balanced androgynous manager.

Stereotyping of course can work both ways. In terms of this thesis which is concerned with managers, an occupation in which females are underrepresented, there is the possibility that stereotypes will work against females. Research suggests that in occupations which are sex-typed, eg nurses and the police force, stereotypes can work against the sex that is not commonly found in that occupation, (Glick 1991).

SUCCESSFUL MALE MANAGERS, SUCCESSFUL MANAGERS AND SUCCESSFUL FEMALE MANAGERS: SAME OR DIFFERENT?

Tables 11 and 12 present the 16PF and CPI traits rated significantly differently for successful managers and female managers, and for successful managers and successful male managers respectively.

Massengill and Marco (1979), supporting Schein (1973, 1975), concluded from their research that men and managers are perceived as being much more similar than women and managers. In the present study however, there were more significant differences in the importance ratings of traits between successful male managers and successful managers, than there were between successful managers and successful female managers. In fact, that there were a number of differences between successful male managers and managers was unexpected in itself.

It was expected that successful female managers and successful managers would receive more divergent ratings than those for successful male managers and successful managers (Brenner et al., 1989; & Schein & Mueller, 1992). As this was not found, respondents have indicated that there may be a tendency to see masculine characteristics as being 'overprescribed' for management. Conceivably there may be a move toward the demasculisation of management in, New Zealand anyway, thus accounting for the lack of trait differences found between successful female managers and successful managers.

The description of "male manager" may conjure up a wealth of stereotypes surrounding the masculinity of management, so that male managers are perceived with traits stereotypically associated with males. It may be that when conceptualised as both "male" and a "manager" the stereotyping surrounding the masculinity of management may occur more strongly. That is, a successful male manager may be more likely to be perceived as far more stereotypically masculine than is a successful manager. This association is exemplified by Gatenby and Humphries (1991). In their survey, one respondent perceived the management within a male dominated industry as "all men (who are) chauvinist conservative, traditional, male older managers" (p22).

This type of perception may cause one to view management as needing to move away from its masculine typology. It is possible that masculine traits are now being viewed with less importance for a successful manager. This may be happening. As noted earlier in this study, a successful manager was described as androgynous, and the managers within this study identified themselves as predominantly undifferentiated. Consequently, a successful male manager may be viewed as needing to possess certain traits that would serve to make a more androgynous-type manager.

In New Zealand there may be a trend away from the manager being viewed as stereotypically masculine. Successful male managers, by being rated differently on certain traits to successful managers may signify a move towards decreasing the similarity between successful male managers and successful managers - therefore move towards a more androgynous management style.

It is worth noting that certain traits still elicit stereotypical assumptions for different sex managers. It could be construed as positive though, if these assumptions are being directed toward a more balanced type of manager, namely, androgynous.

THE RELEVANCE OF THE CPI AND 16PF FOR MANAGERS

Just on half the traits from the 16PF and the CPI were considered as important for successful managers. Overall, eleven traits from the CPI and nine from the 16PF were rated as important. In the present study these ratings were just for a general description of either a successful male manager, a successful female manager or a successful manager. In an applied setting however, when using the CPI containing at least 20 traits, and the 16PF containing 16 bipolar traits, the majority of these traits would likely be redundant for use in a selection situation. In a selection situation with specifying information about the particular work-role requirements of the manager, it is highly probable that even less traits would be considered as important, and therefore relevant to successful performance on the job.

Considering the time and cost involved in administering, scoring and interpreting a CPI or 16PF profile for selection purposes, and, that only half or less of the traits may be relevant to the job, - this effort may be better directed towards a thorough job analysis. The job analysis could determine which specific personality traits are job relevant, and only these need be assessed. In Day and Silverman's (1989) study of accountants, only three personality variables were found to be related to job performance. It is likely that use of the CPI or 16PF as an aid in selection is an obvious waste of resources. As Zuckerman (1985) stated in his review of the 16PF, narrower trait tests addressed at behaviour in a situational context are more highly predictive of behaviour in that situation than broader trait tests.

Taylor et al., (1993), reported that, at best, empirical support for the use of personality tests in selection is weak. They said that continued use of such tests by organisations and consulting firms is of questionable value. Smith and George (1992), stated that Asher and Sciarrino's (1974), principle of a point to point correspondence between predictor and job content can be extended to explore the success and failure for all selection methods. This should provide a guide to the techniques used in personnel selection.

If job applicants are to be assessed on the same traits, but traits which are perceived in differing terms of importance according to sex, then how is information in a selection situation used validly?

Applicants of either sex may score highly on a given trait, but if that trait is perceived as more important for the manager of one sex to possess than the other, then there may be a tendency to treat the information differently. Traits may be generally viewed as deficient in one sex, and applicants for a position who are of that sex may be discriminated against or considered unfavourably.

Ideally in a selection situation though, there would be specific job knowledge and criteria to use for the assessment of applicants. Adhering only to job related criteria would limit the possibility of irrelevant details having an effect. Indeed, Heilman et al., (1989) suggested (and found in her own study) that increased specificity and relevance of information provided about women reduces the degree to which traditional stereotypes are used to characterise them.

It is possible that the trait words used in the questionnaire were perceived differently by respondents of the questionnaire. Nevertheless, these traits are used in the actual inventories, and in report writing and psychological feedback in applied settings. Any misinterpretations are likely to occur during these processes as well. This may well lead to similar discrepancies as found in the present study.

Of particular concern is that a large proportion of the traits which were rated as important for managers were rated differently between successful female and male managers, and successful managers. This indicates that sex related stereotypes can surround the role of a manager. Being either a male or female manager may elicit different stereotypes about, and unequal emphasis to be placed on these traits. This is surely a precursor to bias. Inappropriate interpretation of personality inventories and their reports, could ultimately lead to invalid selection.

AN UNUSUAL FINDING

Both **practical** and **imaginative** (16PF) were rated as being important for all versions of a successful manager, yet this trait exists as a single dimension on the 16PF. The **practical** person is described as having 'down to earth' concerns, conventional, and as being alert to immediate interests and issues (Cattell, et al., 1986). In contrast, the **imaginative** person is described as unconventional, fanciful absorbed in ideas and generally enthused. If both opposing characteristics of a bipolar trait are considered important for managers, then a personality inventory that imposes a distinction between the two is likely to be more misleading than helpful. Furthermore this attests to the importance of obtaining and using job analysis information to determine the actual traits required for successful performance on the job. This further attests to the limited use of general measure personality tests for specific purposes such as personnel selection.

SEXTYPED AND NON-SEXTYPED MANAGERS: THEIR PERCEPTIONS OF THE 16PF AND THE CPI TRAITS

Managers who were sex-typed (eg masculine or feminine) rated two traits as being significantly different for a successful male manager than for a successful female manager, as displayed in Table 8.

It was expected that sextyped managers would view successful female managers and successful male managers in a gender-typed way and thus rate them differently on the personality traits. The fact that sex typed managers only rated 2 out of 52 traits significantly differently for successful female and male managers was unexpected. As sextyped individuals tend to process information in a gender schematic way (Bem 1981a), it was expected that their ratings for successful male and female managers would have been discrepant for many traits.

It is possible that sex typed managers do not rate traits differently because they view current management styles as being adequate. Therefore they are generally contented with the traditional stereotypical view of management culture as being male sextyped.

Non-sextyped managers (eg undifferentiated and androgynous) rated successful female managers and successful male managers significantly differently on five traits from the 16PF and the CPI. These are presented in Table 9.

Considering that non-sextyped individuals (generally) do not process information in a stereotypically gender oriented manner (Bem, 1981a), it is unexpected that five traits were rated by non-sextyped managers as being of significantly different importance for successful female managers and successful male managers.

Non-sextyped managers may view management overall as not being 'outgoing' or innovative enough, as it is predominantly a male dominated profession, and perceived as conservative. In an effort then, to move towards a more androgynous-typed management style, non-sextyped managers may be ascribing their view of the characteristics successful male managers should have, in order to achieve a more balanced management style.

Non-sextyped managers are possibly more sensitive to the inequalities that exist at management levels. Consequently, a concern for women managers may have led non-sextyped managers to endorse certain traits as being more important for successful female managers to possess. Likewise, certain traits could have been rated as more important for successful male managers in order that they become more androgynous.

Rather than being negatively stereotypical non-sextyped managers may have placed their personal values on a group that they may perceive as lacking in androgynous characteristics. However, one must consider whether it is permissible for supposedly non-sextyped people to impose their conceptions, even if it enhances a move towards a lessening of the masculinity of management, in a sort of reverse stereotype. This may be a necessary step, beyond that of affirmative action.

SEXTYPED AND NON-SEXTYPED MANAGERS' PERCEPTION OF THE GENDER IDENTITY OF A SUCCESSFUL MANAGER

Thirty nine percent of sextyped managers rated a successful manager as masculine. This confirmed the hypothesis, and supported studies of Powell and Butterfield (1979, 1984, 1989), in which good managers were described as masculine, and Schein's (1973 & 1975) work in which males, in general, are seen as being like managers. Those who think in a gender oriented way (sextyped) followed the stereotypical view of a manager by rating a successful manager as requiring masculine-typed traits.

Considering that sextyped managers rated successful male and female managers differently on only two traits, it is of particular interest that they view a successful manager as masculine. This is a conflicting finding if one considers that different ratings of traits may reflect stereotypes. As already discussed, differential trait ratings may have been directed towards achieving a more balanced management style, as management is currently viewed as masculine-typed (eg Gatenby & Humphries 1991; & Schein & Mueller 1992.). Rating certain traits differently could be a way of balancing the traits of a manager. Sextyped managers though, by perceiving successful managers as masculine do not rate the traits differently as they would not perceive a need for a more balanced combination of traits in a manager.

NON-SEXTYPED MANAGERS AND THE CONCEPT OF UNDIFFERENTIATED

Forty one percent of non-sextyped managers rated a successful manager as undifferentiated. This failed to support the hypothesis that they would rate a successful manager as androgynous. Although the hypothesis was negated, non-sextyped managers still rated a successful manager as non-sextyped. However, rather than being high in masculinity and femininity, a successful manager was rated as being low in masculinity and femininity. It is possible that non-sextyped managers may be over-"politically correct", so that when rating traits from the BSRI (although buried amongst 62 other traits) they were sensitive to their stereotypical nature (eg "affectionate" -

feminine, and "independent" - masculine), (Bem 1981b), and made a conscious effort not to stereotype. Thus these trait items were not highly endorsed but still were accorded equal importance, thereby resulting in a classification of undifferentiated. Another possibility is that the majority of sextyped managers were undifferentiated, and may see a successful manager as possessing similar traits to the same extent that they themselves do.

People who are androgynous are high in both stereotypical favourable masculine and feminine traits. This may increase their chances of being socially acceptable as both styles of masculine and feminine typed behaviour are deemed socially desirable. Displaying either of these styles in varying situations may be a way of managing one's impression. Thus the androgynous person is more likely to be politically correct or to behave appropriately and socially desirably whatever the situation.

Undifferentiated individuals are low in both stereotypical masculinity and femininity. They are not necessarily as frequently displaying society's most desirable modes of behaviour for males and females. In terms of being a successful manager, perhaps it is that successful managers are viewed by non-sextyped managers as not having to concede to prescriptions of appropriate behaviour. Rather, that they should use a balance of traits only when required, and not necessarily as often.

The undifferentiated category evolved mainly as a means of classifying those who scored low on both masculinity and femininity - it wasn't really conceptualised as part of Bem's original gender theory. Undifferentiated is nevertheless part of the fourfold classification of the BSRI, and should be given as much consideration as the concept of androgyny. Because it has been considered important to be androgynous, undifferentiated is in effect 'the poor relative'. It appears that the classification of undifferentiated should be researched more carefully.

LIMITATIONS

The sample of managers in the present study was not large, and so results may not be as robust as one would expect with a larger sample. The fact that managers agreed to participate in a study labelled "Personality Traits and the Manager", may signify that as a group they are distinct from managers overall in New Zealand, in that they were willing to volunteer. The sample was also predominantly male. With a more even representation of males and females the results may be quite different. However, the sample reflects the current balance of males and females in management (eg Julian 1992) where males do largely outnumber women. Therefore this sample reflects reality.

The personality traits used in the questionnaire may have been interpreted in a manner that was not the meaning of the trait as intended by the test developer. However, this would parallel real-life situations in which personality profiles and reports used for selection (or other purposes eg staff development) use these same trait names, thereby eliciting differential interpretations and possible biases.

Research often assumes that differences exist, therefore questionnaires perpetuating the focus or concentration on differences are likely to find such differences. However, questionnaires which are obviously measuring stereotypes may find fewer than would exist in everyday unstructured situations where people are more likely to exhibit biases - and be unaware that they are doing so. On the other hand these findings could be even more robust outside a research setting, as many people are unaware of their biases, until they are brought to attention.

The running of multiple t-tests increased the possibility of a Type I error, so significant findings should be treated tentatively. Some chi squares were also not significant at $p < .05$, so need to be interpreted with caution. Nevertheless, the findings provide clear direction for future research in New Zealand.

FURTHER RESEARCH

To extend and advance from the research in the present study three different avenues could be explored.

Gender Roles and Androgyny

One initiative would be to re-examine the gender role identity of the managers in New Zealand, and their prescription of the gender role identity of a successful manager. A larger and more evenly distributed sample between the sexes could replicate and therefore enhance the findings of the present study. Exploratory research could investigate whether the use of androgynous behaviour styles is a means of improving the effectiveness of managers to deal with certain situations. For example, as part of a training programme, managers could be taught to use a balance of masculine and feminine typed behaviour when necessary. With appropriate evaluation of the training programme it could be determined if an androgynous style of behaving is a more effective means of management style.

The Use of Personality Tests in Selection

Although there is abundant literature to attest to the futility of using personality tests in personnel selection, they continue to have a role (eg Smith & George, 1993). To instil this in those working in the field (who are not necessarily aware of the more academic type studies), a more applied or practical demonstration is needed.

A statistical or mathematical model using utility analysis (Landy, 1989), could be demonstrated within an organisation using two types of selection procedures at which gain different validities and account for different amounts of variance in successful work performance. A general personality test and a work sample test could be used. The dollar cost from these two differing validities can be calculated with utility analysis to emphasise in monetary terms (which businesses will listen to rather than a 'point to point theory'), the gains that can be made from increasing the validity of selection. This could be held as an example to other organisations

in New Zealand, of the cost incurred from invalid selection procedures especially when using non-relevant personality tests.

Stereotypes

There are still stereotypes surrounding the role of a manager especially when described as a successful female manager or as a successful male manager. This is highlighted by the fact that there are differences between the perceptions of a successful female manager and a successful male manager, and that of a successful manager (all else being equal). Further research could possibly investigate further the specific discrepancies that are perceived to exist between successful managers and successful female managers. This could be developed further by directly questioning managers as to what specific qualities they perceive as being essential for a successful male manager, a successful female manager and a successful manager.

This could provide a summary of the qualities that managers perceive as differing between male and female managers. This could accommodate a means of focussing on the particular biases and stereotypes that managers currently have, and could become a catalyst for addressing these biases through further training.

IMPLICATIONS AND SUMMARY

Findings from the present study indicate that only a small proportion of traits from two popular personality inventories are considered important for managers. A notable proportion of these traits were considered differently for successful female managers, successful male managers, and successful managers. There is a role for personality traits to be considered within selection - but only job-related personality traits that differentiate between poor and successful performance on the job. The rest of the traits are superfluous. General personality measures may have a function in other areas such as personal development, or career guidance but for the purpose of prediction of job performance they are clearly not worthwhile.

Managers in New Zealand, according to the present study are not sex-typed- they do not process information in a gender-schematic way, unlike managers in the previously described overseas research who were predominantly sex-typed. A possible conclusion from this is that although much research is conducted within Western culture, and although New Zealand is a Western culture it is very unique. Consequently, many overseas research findings need to be replicated within the specific New Zealand context before they can be considered as meaningful for our population. Of course, certain limitations of the study may have contributed to the present findings.

It is possible that stereotypes may be causing a backlash against males in management, in that males are not viewed as possessing a balance of appropriate traits for an androgynous style of management. The traits that were rated significantly differently though, may still indicate a tendency to assign certain traits to either sex. However, these discrepancies may have been directed towards a more ideal manager - androgynous. The fact that a successful manager was rated as androgynous is a positive step for management in New Zealand.

The present study has also contributed towards the research on managerial stereotypes by pin-pointing which characteristics were from the CPI and 16PF were perceived differently between successful male and female managers. Additionally, support was provided for the notion that standard personality tests are not particularly efficient sources of information for selection.

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APPENDIX 1:

30 April 1993

Dear Sir/Madam

I am a Graduate Student at Massey University undertaking a Masters Thesis in Industrial and Organisational Psychology, and I am writing to enquire about the possibility of using managers in your organisation as participants for my research.

I am investigating the personality traits that are associated with managerial work. Specifically I am interested in how managers view this work, and in how importantly they rate various personality traits for a managerial role.

Being a participant in this research would involve answering a questionnaire that takes up to 20 minutes. Participants remain completely anonymous as they do not identify themselves or who they work for. The questionnaire requires the participant to read a series of personality traits, and then to rate how important they consider those traits to be for a successful manager. The participants are also asked to describe themselves using some of these traits.

This study is being conducted under the supervision of Dr Ross St George, and is in accordance with the standards set by the Massey University Ethics Committee.

Managers are likely to enjoy being a part of this study, and will find it interesting. I would be very grateful if the managers in your organisation would be willing to take part. I have enclosed a return form and envelope, if you would like to be involved in this research please fill out the form and return to me. I will send you the appropriate number of questionnaires with return envelopes. If you would like further information you can contact me on 06 3574865 (home), or leave a message at 06 3569099 extension 8404, (Psychology Department, Massey University), and I will return your call.

Thank you for your time, and I look forward to your participation.

Yours sincerely

JULIE HODGSON

PERSONALITY AND THE MANAGER

MASTERS THESIS CONDUCTED BY JULIE HODGSON (Psychology Department, Massey University).

If any managers in your organisation are willing to participate please indicate the number below so the correct number of questionnaires can be sent.

Yes we have _____ (please specify amount) managers who would be willing to participate in this research.

Please give the name of your organisation and a contact person so that the questionnaires and return envelopes can be sent directly. This information is not required on individual questionnaires.

NAME:

ORGANISATION

BOX NO/STREET

SUBURB

CITY

INFORMATION SHEET

"PERSONALITY TRAITS AND THE MANAGER": STUDY CARRIED OUT BY JULIE HODGSON FOR COMPLETION OF A MASTERS DEGREE IN PSYCHOLOGY

Please read this sheet before completing the questionnaire.

The selection of staff is often a complex business, and can be further complicated when selecting people for the managerial role. A manager's job requires a diverse range of skills and attributes. The availability of wide ranging personality tests, many of which are used in the personnel selection process further increases the complexity of selecting managers. The main aim of this study is to narrow down the traits that are considered important by managers (those in middle management and above) for the managerial role.

Being a participant in this research involves answering a questionnaire that will take up to 20 minutes. You do not have to identify yourself or your organisation, and so will remain completely anonymous.

The questionnaire requires you to read a series of typical personality traits. Rating scales are provided for you to rate how important you consider it that successful managers possess the specified personality traits. You are also asked to describe yourself on a sample of these traits.

This study contains three different variations of the questionnaire, and you will not know which version you are given. After completing the questionnaire you may discuss with me any questions you may have regarding the allocation of questionnaires, responses to questions, or whatever you wish to know. You have the right to withdraw from this study at any time. A summary of results will be sent to you when the study is completed.

This study is being completed as part of a Masters Degree in Occupational Psychology, and is carried out under the supervision of Dr Ross St George. It is being conducted in accordance with the ethical standards set by the Massey University Ethics Committee.

Your participation is greatly appreciated.

PERSONALITY TRAITS AND THE MANAGER:**INFORMED CONSENT FORM:**

Please read this carefully and sign it.

This is to certify that I agree to participate as a volunteer in the study carried out by Julie Hodgson, a graduate student in the Psychology Department at Massey University.

- * I have read the information sheet for this study and I understand what is involved.
- * I understand that I do not have to identify either myself or my organisation, and so my answers are completely confidential.
- * I understand that there are three different forms of the questionnaire, and I will not know which version of the questionnaire I am answering.
- * I understand that I am free to withdraw my consent to participate at any time.
- * I understand that after completing the questionnaire I am able to discuss with the researcher any questions I may have regarding the outcome of this study.
- * I understand that a summary of results will be sent to me when the research is completed.

Subject's signature _____

Date _____

I have defined and explained the study to the above participant

Investigator's signature _____

Date _____

(Return this form with your questionnaire)

PERSONALITY TRAITS AND THE MANAGER:

INSTRUCTIONS

I am interested in determining which characteristics and personality traits are viewed by managers as important for a **SUCCESSFUL MANAGER**.

You are required to rate the importance of a series of personality traits and characteristics (using the scale provided), according to how important you feel it is for a SUCCESSFUL MANAGER to possess these traits and characteristics for a managerial role.

For example, using the rating scale below you would assign a value to indicate how important you consider it that a **SUCCESSFUL MANAGER** should be **polite**

- | | |
|---|---------------------|
| 7 | Essential |
| 6 | Very Important |
| 5 | Important |
| 4 | Sometimes important |
| 3 | Useful |
| 2 | Of some benefit |
| 1 | Not required |

_____ Polite

The value for polite indicates that it is considered an important trait for the job.

There are no right or wrong answers, just record what you consider appropriate. Do not discuss this questionnaire with anyone else, it is important that the ratings you give are your own.

Turn the page and rate the following personality traits.

- 7 Essential
- 6 Very Important
- 5 Important
- 4 Sometimes important
- 3 Useful
- 2 Of some benefit
- 1 Not required

Now using the above scale rate these traits according to how important you think it is for a **SUCCESSFUL MANAGER** to possess them.

- _____ Reserved
- _____ Defends own beliefs
- _____ Dominance
- _____ Concrete thinker
- _____ Affectionate
- _____ Has capacity for status
- _____ Affected by feelings
- _____ Conscientious
- _____ Sociability
- _____ Humble
- _____ Independent
- _____ Social presence
- _____ Serious
- _____ Sympathetic
- _____ Self acceptance
- _____ Expedient
- _____ Moody
- _____ Independence
- _____ Threat-sensitive
- _____ Assertive

- 7 Essential
- 6 Very Important
- 5 Important
- 4 Sometimes important
- 3 Useful
- 2 Of some benefit
- 1 Not required

Use this scale and rate these traits according to how important you think it is for a **SUCCESSFUL MANAGER** to possess them.

- _____ Empathy
- _____ Toughminded
- _____ Sensitive to needs of others
- _____ Responsibility
- _____ Trusting
- _____ Reliable
- _____ Maturity
- _____ Practical
- _____ Strong personality
- _____ Self control
- _____ Unpretentious
- _____ Understanding
- _____ Concerned with making good impression
- _____ Self assured
- _____ Jealous
- _____ Acts like most other people
- _____ Conservative
- _____ Forceful
- _____ Sense of well being

- 7 Essential
- 6 Very Important
- 5 Important
- 4 Sometimes important
- 3 Useful
- 2 Of some benefit
- 1 Not required

Use this scale and rate these traits according to how important you think it is for a **SUCCESSFUL MANAGER** to possess them.

- _____ Group-dependent
- _____ Compassionate
- _____ Tolerance
- _____ Follows own urges
- _____ Truthful
- _____ Conforms in order to facilitate teamwork
- _____ Tranquil
- _____ Has leadership abilities
- _____ Independent in order to facilitate achievement
- _____ Outgoing
- _____ Eager to soothe hurt feelings
- _____ Intellectual efficiency
- _____ Abstract thinker
- _____ Secretive
- _____ Responsive to needs of others
- _____ Emotionally stable
- _____ Willing to take risks

- 7 Essential
- 6 Very Important
- 5 Important
- 4 Sometimes important
- 3 Useful
- 2 Of some benefit
- 1 Not required

Use this scale and rate these traits according to how important you think it is for a **SUCCESSFUL MANAGER** to possess them.

- _____ Flexibility
- _____ Assertive
- _____ Warm
- _____ Sensitivity
- _____ Enthusiastic
- _____ Adaptable
- _____ Conscientious
- _____ Dominant
- _____ Venturesome
- _____ Tender
- _____ Sensitive
- _____ Conceited
- _____ Suspicious
- _____ Willing to take a stand
- _____ Imaginative
- _____ Loves children
- _____ Socially aware
- _____ Tactful
- _____ Apprehensive
- _____ Aggressive

- 7 Essential
- 6 Very Important
- 5 Important
- 4 Sometimes important
- 3 Useful
- 2 Of some benefit
- 1 Not required

Use this scale and rate these traits according to how important you think it is for a **SUCCESSFUL MANAGER** to possess them.

- _____ Liberal
- _____ Gentle
- _____ Self sufficient
- _____ Conventional
- _____ Socially precise
- _____ Driven

I would also like to know something about how you **describe yourself**.

Next you will find a range of personality traits that are often used to describe people. In order to describe yourself use the scale below, (from 1 - 7), to indicate how true of you these characteristics are. Please do not leave any characteristics unmarked.

- 1 **Never or almost never true**
- 2 **Usually not true**
- 3 **Sometimes but infrequently true**
- 4 **Occasionally true**
- 5 **Often true**
- 6 **Usually True**
- 7 **Always or almost always true.**

For example, if you considered yourself as **often being carefree** then you would rate it with number 5.

EG _____ carefree.

Turn the page and using the same scale indicate **how true of you** the following characteristics are.

- 1 Never or almost never true
- 2 Usually not true
- 3 Sometimes but infrequently true
- 4 Occasionally true
- 5 Often true
- 6 Usually True
- 7 Always or almost always true.

Use this scale and indicate how true of you the following characteristics are.

- _____ Defend my own beliefs
- _____ Affectionate
- _____ Conscientious
- _____ Independent
- _____ Sympathetic
- _____ Moody
- _____ Assertive
- _____ Sensitive to needs of others
- _____ Reliable
- _____ Strong personality
- _____ Understanding
- _____ Jealous
- _____ Forceful
- _____ Compassionate
- _____ Truthful
- _____ Have leadership abilities
- _____ Eager to soothe hurt feelings
- _____ Secretive
- _____ Willing to take risks

- 1 Never or almost never true
- 2 Usually not true
- 3 Sometimes but infrequently true
- 4 Occasionally true
- 5 Often true
- 6 Usually True
- 7 Always or almost always true.

Use this scale and indicate **how true of you** the following characteristics are.

- _____ Warm
- _____ Adaptable
- _____ Dominant
- _____ Tender
- _____ Conceited
- _____ Willing to take a stand
- _____ Love children
- _____ Tactful
- _____ Aggressive
- _____ Gentle
- _____ Conventional

I am now interested in knowing a little more **about you as a manager**. Please complete the following information in order to provide a profile of managers in this study.

Please tick the appropriate answer.

Are you? Male _____

 Female _____

What is your age? _____

Please indicate the number of years of managerial experience you have had

How many employees does the organisation you work for (within New Zealand) contain?

How many managers are there in your organisation?

How many **women** managers are there in your organisation?

THANK YOU FOR YOUR HELP

Please return the questionnaire (return envelope included) as soon as possible.

APPENDIX 2

TABLE 13 Means, Standard Deviations And *t* Statistics For Nonsignificant Ratings Of CPI And 16PF Traits For Successful Male Managers And Successful Female Managers

TRAIT	Successful Male Manager		Successful Female Manager		<i>t</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
CLASS I SCALES: Social Expertise						
C1	2.78	1.31	3.11	1.40	-1.13	ns
C3	5.25	.95	5.17	.95	.37	ns
C4	4.28	1.26	4.47	1.11	-.71	ns
C5	5.52	1.09	5.56	1.24	-.12	ns
C6	4.53	1.09	4.67	1.14	-.62	ns
C7	5.40	1.41	5.11	1.27	1.00	ns
CLASS I: Social Expertise						
C1 - Dominance						
C2 - Capacity for status						
C3 - Sociability						
C4 - Social presence						
C5 - Self acceptance						
C6 - Independence						
C7 - Empathy						
<hr/>						
TRAIT	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>
CLASS II SCALES: Maturity and Responsibility						
C8	6.38	.74	6.26	.68	.74	ns
C9	5.90	1.06	5.78	1.00	.53	ns
C10	5.90	.87	5.65	.97	1.24	ns
C11	2.90	1.45	3.20	1.54	-.91	ns
C12	2.70	1.68	2.13	1.53	1.63	ns
C13	4.90	1.42	5.37	1.08	-1.73	ns
C14	5.13	.97	5.00	.89	.62	ns
CLASS II: Maturity and Responsibility						
C8 - Responsibility						
C9 - Socialisation						
C10 - Self control						
C11 - Good impression						
C12 - Communality						
C13 - Well being						
C14 - Tolerance						
<hr/>						
CLASS III SCALES: Instrumental Style and Achievement Behaviour						
C15	4.45	1.15	4.26	1.58	.62	ns
C16	4.55	1.45	4.89	1.21	-.19	ns
C17	5.50	.91	5.33	1.19	.75	ns
CLASS III: Instrumental Style and Achievement Behaviour						
C15 - Achievement via conformance						
C16 - Achievement via independence						
C17 - Intellectual efficiency						
<hr/>						
CLASS IV SCALES: Conceptual and Intellectual Interest Styles						
C18	5.40	.93	5.02	1.20	1.62	ns
C20	4.79	1.15	4.46	1.19	1.33	ns
CLASS IV: Conceptual and Intellectual Interest Styles						
C18 - Psychological mindedness						
C19 - Flexibility						
C20 - Sensitivity						
<hr/>						
16PF						
Q1: Introversion vs Extroversion						
S14	3.25	1.45	2.80	1.63	1.33	ns
S17	4.95	.93	4.65	1.02	1.41	ns
S20	4.93	1.07	5.09	1.17	-.67	ns
S21	6.08	.92	5.87	.93	1.03	ns
Q1: Introversion vs Extroversion						
S14 Group-dependence						
S17 Outgoing						
S20 Assertive						
S21 Enthusiastic						
S23 Venturesome						

QII: Adjustment vs Anxiety						
S3	3.43	1.24	3.41	1.42	.04	ns
S7	2.85	1.72	2.87	1.44	-.06	ns
S15	3.85	1.17	3.89	1.23	-.16	ns
S25	1.48	.85	1.67	.97	-1.01	ns
S28	1.83	.93	1.93	1.20	-.47	ns
S32	4.77	1.46	4.62	1.75	-.41	ns

QII: Adjustment vs Anxiety
 S3 Affected by Feelings
 S7 Threat-sensitive
 S15 Follows own urges
 S25 Suspicious
 S28 Apprehensive
 S32 Driven

QIII: Tough Poise						
S1	2.40	1.15	2.40	1.42	.02	ns
S8	4.10	1.34	4.39	1.13	-1.10	ns
S10	5.50	.93	5.24	1.16	1.14	ns

QIII: Tough Poise
 S1 Reserved
 S8 Toughminded
 S10 Practical

QIV: Subduedness vs Independence						
S26	5.50	.68	5.15	1.12	1.71	ns
S29	4.28	1.28	3.5	1.55	2.51	ns
S30	4.65	1.03	4.87	1.44	-.80	ns

QIV: Subduedness vs Independence
 S26 Imaginative
 S29 Liberal
 S30 Self Sufficient

QV: Naturalness vs Discreetness						
S12	5.48	.96	5.35	1.04	.59	ns
S27	4.63	1.17	4.15	1.25	1.81	ns

QV: Naturalness vs Discreetness
 S12 Self Assured
 S27 Socially Aware

QVI: Cool Realism vs Prodigious Subjectivity						
S24	4.25	1.37	4.02	1.40	.76	ns

QVI: Cool Realism vs Prodigious Subjectivity
 S24 Sensitive
 S9 Trusting

QVII: Low Intelligence vs High Intelligence						
S18	4.65	.97	4.28	1.47	1.34	ns

QVII: Low Intelligence vs High Intelligence
 S18 Abstract Thinker

QVIII: Low Superego vs High Superego Strength						
S5	3.65	1.23	3.51	1.14	.54	ns
S22	6.13	.88	6.02	.77	.58	ns
S31	2.93	1.29	3.17	1.27	-.90	ns

QVIII: Low Superego vs High Superego Strength
 S5 Serious
 S22 Conscientious
 S31 Socially Precise

Primary Factors not loading onto second factors						
S2	4.47	1.56	5.00	1.71	-1.39	ns
S4	3.70	1.59	3.46	1.30	.78	ns
S11	4.50	1.60	4.46	1.38	.14	ns
S13	2.60	1.19	2.39	1.24	.79	ns
S16	3.43	1.34	2.87	1.47	1.82	ns

p < .05

Primary factors not loading onto secondary factors

S2 Concrete Thinker
 S4 Humble
 S6 Expedient
 S11 Unpretentious
 S13 Conservative
 S16 Tranquil
 S19 Emotionally Stable

Table 14 Means, Standard Deviations and T Statistics for Nonsignificant Ratings Of CPI And 16PF Traits For Successful Male And Female Managers By Sextyped Managers.

TRAIT	Successful Male Manager		Successful Female Manager		t	p
	M	SD	M	SD		
CPI						
CLASS I SCALES: Social Expertise						
C1	3.46	1.27	3.42	1.12	.10	ns
C2	3.83	1.64	4.44	1.69	-.98	ns
C3	5.38	1.04	4.95	.78	1.36	ns
C4	4.23	1.17	4.63	1.07	-1.01	ns
C5	5.62	1.27	5.11	1.24	1.13	ns
C6	4.62	1.04	4.84	1.26	-.53	ns
C7	4.77	2.01	4.63	1.42	.23	ns
CLASS I:						
C1 - Dominance						
C2 - Capacity for status						
C3 - Sociability						
C4 - Social presence						
C5 - Self acceptance						
C6 - Independence						
C7 - Empathy						
CLASS II SCALES: Maturity and Responsibility						
C8	6.46	.66	6.32	.58	.66	ns
C9	6.23	.73	5.63	1.01	1.83	ns
C10	5.85	.80	5.53	.84	1.08	ns
C11	3.31	1.49	3.79	1.51	-.89	ns
C12	2.38	1.12	2.21	1.51	.35	ns
C13	5.46	.97	5.21	1.13	.65	ns
CLASS II SCALES:						
C8 - Responsibility						
C9 - Socialisation						
C10 - Self control						
C11 - Good impression						
C12 - Communalilty						
C13 - Well being						
C14 - Tolerance						
CLASS III SCALES: Instrumental Style and Achievement Behaviour						
C15	4.38	1.12	4.32	1.17	.13	ns
C16	4.77	1.17	4.95	1.31	-.39	ns
C17	5.69	.75	5.21	1.03	1.44	ns
CLASS III SCALES:						
C15 - Achievement via conformance						
C16 - Achievement via independence						
C17 - Intellectual efficiency						
CLASS IV SCALES: Conceptual and Intellectual Interest Styles						
C18	5.46	.97	5.00	1.16	1.18	ns
C19	5.92	.76	5.74	.93	.60	ns
CLASS IV SCALES:						
C18 - Psychological mindedness						
C19 - Flexibility						
16PF						
Q1: Introversion vs Extroversion						
S14	3.62	1.19	3.11	1.63	.96	ns
S17	5.31	.63	4.79	.98	1.68	ns
S20	4.77	1.01	5.42	.9	-1.84	ns
S21	6.23	.73	6.11	.81	.45	ns
S23	5.00	1.35	4.68	.95	.78	ns
Q						
S14 Group-dependent						
S17 Outgoing						
S20 Assertive						
S21 Enthusiastic						
S23 Venturesome						
QII: Adjustment vs Anxiety						
S3	3.77	1.24	3.16	1.30	1.33	ns
S7	2.54	1.45	3.05	1.51	-.96	ns
S15	4.08	.86	4.05	1.18	.06	ns
S25	1.85	1.14	1.89	.94	-.13	ns
S28	1.85	.99	2.42	1.35	-1.31	ns
S32	4.92	1.24	4.89	1.79	.04	ns

QII
 S3 Affected by Feelings
 S7 Threat-sensitive
 S15 Follows own urges
 S25 Suspicious
 S28 Apprehensive
 S32 Driven

QIII: Tough Poise						
S1	2.31	1.11	3.00	1.37	-1.50	ns
S8	4.08	1.04	4.32	1.06	-.63	ns
S10	5.54	.78	4.95	1.27	1.50	ns

QIII:
 S1 Reserved
 S8 Toughminded
 S10 Practical

QIV: Subduedness vs Independence						
S26	5.54	.78	5.26	1.28	.69	ns
S29	4.00	1.35	3.89	1.73	.18	ns
S30	4.85	.80	4.63	1.71	.42	ns

QIV
 S26 Imaginative
 S29 Liberal
 S30 Self Sufficient

QV: Naturalness vs Independence						
S12	5.77	.73	5.16	1.17	1.68	ns
S27	4.38	1.19	4.00	1.05	.96	ns

S12 Self Assured
 S27 Socially Aware

QVI: Cool Realism vs Prodigal Subjectivity						
S9	5.69	1.11	5.21	1.44	1.02	ns
S24	4.31	1.11	3.95	1.22	.85	ns

QVI
 S9 Trusting
 S24 Sensitive

QVII: Low Intelligence vs High Intelligence						
S18	4.54	1.20	4.26	1.45	.57	ns

QVII
 S18 Abstract Thinker

QVIII: Low Superego vs High Superego Strength						
S5	3.92	1.19	3.95	.91	-.07	ns
S22	6.38	.65	6.00	.88	1.34	ns
S31	3.08	1.12	3.21	1.18	-.32	ns

QVIII
 S5 Serious
 S22 Conscientious
 S31 Socially Precise

Primary Factors not loading onto second factors						
S2	4.85	1.07	4.89	1.63	-.09	ns
S4	3.92	1.75	6.68	1.06	.48	ns
S6	4.69	1.32	4.84	1.30	-.32	ns
S11	4.69	2.06	4.53	1.02	.30	ns
S13	2.77	1.24	2.74	1.33	.07	ns
S16	3.54	1.39	2.58	1.31	1.99	ns
S19	6.08	.86	5.47	1.35	1.42	ns

p <.05

Primary factors not loading onto secondary factors
 S2 Concrete Thinker
 S4 Humble
 S6 Expedient
 S11 Unpretentious
 S13 Conservative
 S16 Tranquil
 S19 Emotionally Stable

Table 15: Means, Standard Deviations And *t* Statistics For Nonsignificant Ratings Of CPI And 16PF Traits For Successful Male And Female Managers By Non-Sextyped Managers.

TRAIT	Successful Male Manager		Successful Femal Manager		<i>t</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
CPI						
CLASS I SCALES: Social Expertise						
C1	2.44	1.22	2.85	1.57	-1.04	ns
C2	3.78	1.63	4.56	1.41	-1.84	ns
C3	5.19	.92	5.35	1.06	-.59	ns
C4	4.30	1.33	4.31	1.16	-.03	ns
C5	5.48	1.01	5.88	1.14	-1.36	ns
C6	4.81	1.12	4.54	1.07	-.19	ns
C7	5.70	.91	5.50	1.07	.75	ns
CLASS I: Social Expertise						
C1 - Dominance						
C2 - Capacity for status						
C3 - Sociability						
C4 - Social presence						
C5 - Self acceptance						
C6 - Independence						
C7 - Empathy						
CLASS II SCALES: Maturity and Responsibility						
C8	6.33	.78	6.19	.78	.67	ns
C9	5.74	1.16	5.85	1.01	-.35	ns
C10	5.93	.92	5.73	1.08	.71	ns
C11	2.70	1.41	2.73	1.49	-.07	ns
C12	2.85	1.90	2.00	1.56	1.76	ns
C14	4.96	.98	5.12	.95	-.57	ns
CLASS II						
C8 - Responsibility						
C9 - Socialisation						
C10 - Self control						
C11 - Good impression						
C12 - Communality						
C13 - Well being						
C14 - Tolerance						
CLASS III SCALES: Instrumental Style and Achievement Behaviour						
C15	4.48	1.19	4.15	1.52	.88	ns
C16	4.44	1.58	4.81	1.17	-.95	ns
C17	5.41	.97	5.38	1.33	.07	ns
CLASS III						
C15 - Achievement via conformance						
C16 - Achievement via independence						
C17 - Intellectual efficiency						
CLASS IV SCALES: Conceptual and Intellectual Interest Styles						
C18	5.37	.93	5.00	1.27	1.22	ns
C20	4.65	1.13	4.77	1.11	-.37	ns
CLASS IV						
C18 - Psychological mindedness						
C19 - Flexibility						
C20 - Sensitivity						
16PF						
Q1: Introversion vs Extroversion						
S14	3.07	1.54	2.65	1.62	.97	ns
S17	4.78	1.01	4.54	1.07	.84	ns
S20	5.00	1.11	4.88	1.28	.35	ns
S21	6.00	1.00	5.69	1.01	1.11	ns
Q						
S14 Group-dependent						
S17 Outgoing						
S20 Assertive						
S21 Enthusiastic						
S23 Venturesome						
QII: Adjustment vs Anxiety						
S3	3.26	1.23	3.69	1.44	-1.18	ns
S7	3.00	1.84	2.81	1.39	.43	ns
S15	3.74	1.29	3.77	1.31	-.08	ns
S25	1.30	.61	1.42	.86	-.62	ns
S28	1.81	.92	1.62	.98	.76	ns
S32	4.70	1.56	4.44	1.76	.57	ns

QII
 S3 Affected by Feelings
 S7 Threat-sensitive
 S15 Follows own urges
 S25 Suspicious
 S28 Apprehensive
 S32 Driven

QIII: Tough Poise

S1	2.44	1.19	1.96	1.31	1.40	ns
S8	4.11	1.48	4.46	1.21	-.94	ns
S10	5.48	1.01	5.38	1.02	.35	ns

QIII: Tough Poise

S1 Reserved
 S8 Toughminded
 S10 Practical

QIV: Subduedness vs Independence

S26	5.48	.64	5.12	.99	1.60	ns
S30	4.56	1.12	5.04	1.25	-1.48	ns

QIV

S26 Imaginative
 S30 Self Sufficient

QV: Naturalness vs Discreetness

S12	5.33	1.04	5.50	.95	-.61	ns
S27	4.74	1.16	4.23	1.39	1.45	ns

QV

S12 Self Assured
 S27 Socially Aware

QVI: Cool Realism vs Prodigal Subjectivity

S9	5.63	1.39	4.96	1.18	1.88	ns
S24	4.22	1.50	4.04	1.56	.44	ns

QVI: Cool Realism vs Prodigal Subjectivity

S9 Trusting
 S24 Sensitive

QVII: Low Intelligence vs High Intelligence

S18	4.70	.87	4.35	1.52	1.06	ns
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QVII: Low Intelligence vs High Intelligence

S18 Abstract Thinker

QVIII: Low Superego vs High Superego

S5	3.52	1.25	3.16	1.21	1.05	ns
S22	6.00	.96	6.00	.69	.00	ns
S31	2.85	1.38	3.08	1.32	-.61	ns

QVIII

S5 Serious
 S22 Conscientious
 S31 Socially Precise

Primary Factors not loading onto second factors

S2	4.28	1.75	5.00	1.83	-1.43	ns
S4	3.59	1.53	3.27	1.46	.79	ns
S11	4.41	1.37	4.38	1.63	.06	ns
S13	2.52	1.19	2.08	1.09	1.41	ns
S16	3.37	1.33	3.00	1.55	.93	ns
S19	6.15	.53	5.77	1.07	1.64	ns

p < .05

Primary factors not loading onto secondary factors

S2 Concrete Thinker
 S4 Humble
 S6 Expedient
 S11 Unpretentious
 S13 Conservative
 S16 Tranquil
 S19 Emotionally Stable

Table 16: Means, Standard Deviations, And, *t* Statistics For The CPI And 16PF Traits Rated For Successful Managers, And Successful Female Managers.

TRAIT	Successful Manager		Successful Female Manager		<i>t</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
CLASS I SCALES: Social Expertise						
C1	3.21	1.40	3.11	1.40	.37	ns
C2	4.07	1.42	4.52	1.50	-1.55	ns
C3	4.92	1.42	5.17	.95	-1.20	ns
C4	4.40	1.15	4.47	1.11	-.24	ns
C5	5.33	1.24	5.56	1.24	-.90	ns
C6	4.53	1.21	4.67	1.14	-.63	ns
C7	5.49	1.02	5.11	1.27	1.68	ns
CLASS I: Social Expertise						
C1 - Dominance						
C2 - Capacity for status						
C3 - Sociability						
C4 - Social presence						
C5 - Self acceptance						
C6 - Independence						
C7 - Empathy						
CLASS II SCALES: Maturity and Responsibility						
C8	6.39	.77	6.26	.68	.86	ns
C9	5.79	.94	5.78	1.00	.04	ns
C10	5.89	.99	5.65	.97	.04	ns
C11	3.05	1.48	3.20	1.54	-.48	ns
C12	2.21	1.39	2.13	1.53	.27	ns
C14	4.67	1.04	5.00	.89	-1.72	ns
CLASS II: Maturity and Responsibility						
C8 - Responsibility						
C9 - Socialisation						
C10 - Self control						
C11 - Good impression						
C12 - Communitary						
C13 - Well being						
C14 - Tolerance						
CLASS III SCALES: Instrumental Style and Achievement Behaviour						
C15	4.04	1.55	4.26	1.58	-.73	ns
C16	4.74	1.30	4.89	1.21	-.62	ns
CLASS III: Instrumental Style and Achievement Behaviour						
C15 - Achievement via conformance						
C16 - Achievement via independence						
C17 - Intellectual efficiency						
CLASS IV SCALES: Conceptual and Intellectual Interest Styles						
C17	5.11	1.20	5.33	1.19	-.93	ns
C18	5.02	.95	5.02	1.20	-.02	ns
C19	5.63	.99	5.52	.91	.58	ns
C20	1.19	.49	4.46	1.19	.49	ns
CLASS IV: Conceptual and Intellectual Interest Styles						
C18 - Psychological mindedness						
C19 - Flexibility						
C20 - Sensitivity						
QI: Introversion vs Extroversion						
S14	3.40	1.70	2.80	1.63	1.81	ns
S17	4.59	1.07	4.65	1.02	-.35	ns
S20	5.19	1.09	5.09	1.17	.47	ns
S21	5.95	.79	5.87	.93	.46	ns
S23	4.68	1.02	4.48	1.19	.95	ns
Q1: Introversion vs Extroversion						
S14 Group-dependence						
S17 Outgoing						
S20 Assertive						
S21 Enthusiastic						
S23 Venturesome						
QII: Adjustment vs Anxiety						
S3	3.74	1.22	3.41	1.42	1.24	ns
S7	2.88	1.71	2.87	1.44	.02	ns
S15	3.86	1.27	3.89	1.23	-.13	ns
S25	1.98	1.01	1.67	.97	1.57	ns
S28	2.04	1.21	1.93	1.20	.42	ns
S32	4.81	1.72	4.62	1.75	.54	ns

QII: Adjustment vs Anxiety

S3 Affected by Feelings
 S7 Threat-sensitive
 S15 Follows own urges
 S25 Suspicious
 S28 Apprehensive
 S32 Driven

QIII: Tough Poise

S1	2.61	1.17	2.40	1.42	.81	ns
S8	4.12	1.45	4.39	1.13	-1.03	ns
S10	4.95	1.13	5.24	1.16	-1.29	ns

QIII: Tough Poise

S1 Reserved
 S8 Toughminded
 S10 Practical

QIV: Subduedness vs Independence

S26	5.54	1.05	5.15	1.12	1.83	ns
S29	3.81	1.29	3.50	1.55	1.10	ns
S30	4.81	1.26	4.87	1.44	-.24	ns

QIV: Subduedness vs Independence

S26 Imaginative
 S29 Liberal
 S30 Self Sufficient

QV: Naturalness vs Discreetness

S12	5.33	1.06	5.35	1.04	-.07	ns
S27	4.49	1.04	4.15	1.25	1.51	ns

QV: Naturalness vs Discreetness

S12 Self Assured
 S27 Socially Aware

QVI: Cool Realism vs Prodigal Subjectivity

S9	5.32	1.33	5.07	1.27	.97	ns
S24	3.75	1.34	4.02	1.40	-.98	ns

QVI: Cool Realism vs Prodigal Subjectivity

S9 Trusting
 S24 Sensitive

QVII: Low Intelligence vs High Intelligence

S18	4.58	.96	4.28	1.47	1.23	ns
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QVII: Low Intelligence vs High Intelligence

S18 Abstract Thinker

QVIII: Low Superego vs High Superego Strength

S5	3.80	1.20	3.51	1.14	1.19	ns
S22	6.09	.79	6.02	.77	.43	ns
S31	3.09	1.24	3.17	1.27	-.35	ns

QVIII: Low Superego vs High Superego Strength

S5 Serious
 S22 Conscientious
 S31 Socially Precise

Primary Factors Not Loading Onto Second Factors

S4	3.61	1.66	3.46	1.30	.53	ns
S11	4.28	1.40	4.46	1.38	-.64	ns
S13	2.50	1.12	2.39	1.24	.43	ns
S16	3.11	1.48	2.87	1.47	.80	ns
S19	5.70	.89	5.63	1.18	.35	ns

$p < .05$

Primary Factors Not Loading Onto Second Factors

S2 Concrete Thinker
 S4 Humble
 S6 Expedient
 S11 Unpretentious
 S13 Conservative
 S16 Tranquil
 S19 Emotionally Stable

Table 17: Means, Standard Deviations, And *t* Statistics For the Nonsignificant CPI And 16PF Traits Rated For Successful Managers, And Successful Male Managers.

TRAIT	Successful Manager		Successful Male Manager		<i>t</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
CLASS I SCALES: Social Expertise						
C1	3.21	1.4	2.78	1.3	-1.55	ns
C2	4.07	1.4	3.79	1.6	-.88	ns
C3	4.93	1.1	5.25	.95	1.50	ns
C4	4.40	1.1	4.27	1.3	-.52	ns
C5	5.33	1.2	5.53	1.1	.79	ns
C6	4.53	1.2	4.53	1.1	-.01	ns
C7	5.49	1.0	5.40	1.4	-.37	ns
CLASS I: Social Expertise						
C1 - Dominance						
C2 - Capacity for status						
C3 - Sociability						
C4 - Social presence						
C5 - Self acceptance						
C6 - Independence						
C7 - Empathy						
CLASS II SCALES						
C8	6.39	.78	6.38	.74	-.07	ns
C9	5.79	.94	5.90	1.1	.54	ns
C10	5.89	.99	5.90	.87	.03	ns
C11	3.05	1.5	2.90	1.4	-.50	ns
C12	2.21	1.4	2.70	1.7	1.57	ns
C13	4.84	1.08	4.90	1.4	.23	ns
CLASS II:						
C8 - Responsibility						
C9 - Socialisation						
C10 - Self control						
C11 - Good impression						
C12 - Communalilty						
C13 - Well being						
C14 - Tolerance						
CLASS III SCALES						
C15	4.03	1.5	4.45	1.2	1.44	ns
C16	4.74	1.3	4.55	1.4	-.66	ns
C17	5.10	1.2	5.50	.91	1.77	ns
CLASS III						
C15 - Achievement via conformance						
C16 - Achievement via independence						
C17 - Intellectual efficiency						
CLASS IV SCALES						
C18	5.02	.95	5.40	.93	1.97	ns
C19	5.63	.99	5.93	.89	1.49	ns
C20	4.56	1.0	4.79	1.15	1.06	ns
CLASS IV						
C18 - Psychological mindedness						
C19 - Flexibility						
C20 - Sensitivity						
16PF						
Q1: Introversion vs Extroversion						
S14	3.40	1.70	3.25	1.44	-.47	ns
S17	4.58	1.07	4.95	.93	1.77	ns
S20	5.19	1.09	4.93	1.07	-1.20	ns
S21	5.43	1.23	4.95	1.00	1.40	ns
S23	4.68	1.02	5.03	1.07	1.58	ns
Q1: Introversion vs Extroversion						
S14 - Group-dependence						
S17 - Outgoing						
S20 - Assertive						
S21 - Enthusiastic						
S23 - Venturesome						

QII: Adjustment vs Anxiety							
S3	3.74	1.22	3.43	1.24	-1.23	ns	
S7	2.88	1.71	2.85	1.72	-.08	ns	
S15	3.86	1.27	3.85	1.17	-.04	ns	
S28	2.04	1.21	1.83	.93	-.92	ns	
S32	4.81	1.72	4.77	1.46	-.11	ns	
QII: Adjustment vs Anxiety							
S3	Affected by Feelings						
S7	Threat-sensitive						
S15	Follows own urges						
S28	Apprehensive						
S32	Driven						
QIII: Tough Poise							
S1	2.61	1.17	2.40	1.15	-.86	ns	
S8	4.12	1.45	4.10	1.34	-.08	ns	
QIII: Tough Poise							
S1	Reserved						
S8	Toughminded						
QIV: Subduedness vs Independence							
S26	5.54	1.05	5.50	.68	-.23	ns	
S29	3.80	1.29	4.28	1.28	1.77	ns	
S30	4.81	1.26	4.65	1.03	-.65	ns	
QIV: Subduedness vs Independence							
S26	Imaginative						
S29	Liberal						
S30	Self Sufficient						
QV: Naturalness vs Independence							
S12	5.33	1.06	5.48	.96	.67	ns	
S27	4.49	1.04	4.63	1.17	.59	ns	
QV: Naturalness vs Independence							
S12	Self Assured						
S27	Socially Aware						
QVI: Cool Realism vs Prodigal Subjectivity							
S9	5.32	1.33	5.65	1.29	1.24	ns	
S24	3.75	1.4	4.25	1.37	1.78	ns	
QVI: Cool Realism vs Prodigal Subjectivity							
S9	Trusting						
S24	Sensitive						
QVII: Low Intelligence vs High Intelligence							
S18	4.58	.96	4.65	.97	.36	ns	
QVII: Low Intelligence vs High Intelligence							
S18	Abstract Thinker						
QVIII: Low Superego vs High Superego Strength							
S5	3.79	1.21	3.65	1.23	-.56	ns	
S22	6.09	.79	6.13	.88	.22	ns	
S31	3.09	1.24	2.93	1.29	-.63	ns	
QVIII: Low Superego vs High Superego Strength							
S5	Serious						
S22	Conscientious						
S31	Socially Precise						
Primary Factors Not Loading Onto Second Factors							
S4	3.61	1.66	3.70	1.59	.26	ns	
S11	4.28	1.40	4.50	1.60	.72	ns	
S13	2.49	1.12	2.60	1.19	.46	ns	
S16	3.11	1.48	3.43	1.34	1.09	ns	
<i>p</i> < .05							
Primary factors not loading onto secondary factors							
S2	Concrete Thinker						
S4	Humble						
S6	Expedient						
S11	Unpretentious						
S13	Conservative						
S16	Tranquil						