
A model of interpersonal styles in the work context

M. Werbeloff



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LIST OF ABBREVIATIONS NOT FULLY EXPLAINED IN TEXT

alien	alienation
aut	autonomy
dep	dependence
J.s.	Job satisfaction
loc	locus of control
Mach	Machiavellian
pow others	powerful others

OPSOMMING

Die doel van hierdie ondersoek was om interpersoonlike style in die werkskonteks in terme van selfagting en interpersoonlike vertroue te bestudeer. Die laasgenoemde twee is gekies omdat heelwat teorie en navorsing aangedui het dat hulle fundamentele aspekte van interpersoonlike verhoudings is.

'n Interpersoonlike styl word gedefinieer as 'n persoon se kenmerkende manier van interaksie met ander mense. Tot op hede het integrasie in die domein van interpersoonlike style ontbreek, omdat die style hoofsaaklik in isolasie bestudeer is. Ten einde hierdie probleem te probeer oorkom, is 'n tweedimensionele model van interpersoonlike style wat op die selfagting- en vertrouekonstrukte gegrond is, voorgestel. 'n Oorsig van die sielkundige literatuur het aan die lig gebring dat vier style wat die kwadrante van die model die beste tipeer afhanklikheid, Machiavellianisme, outonomie en vervreemding is. Die oorsig het ook aangetoon dat die domein van interpersoonlike style goed deur hierdie vier style verteenwoordig word.

Die oogmerk van die navorsing was om te bepaal of mense wat volgens die model geklassifiseer word as gekenmerk deur die verskillende style, punttellings op onafhanklike metings van hierdie style het wat in ooreenstemming met die voorspellings van die model is. Meervoudige onafhanklike metings van die style sowel as metings van die selfagting- en vertroueveranderlikes is in 'n vraelys ingesluit. Hierdie vraelys is toegepas op twee steekproewe van wit manlike Staatsdienswerkers. Die data is volledig ontleed met komponent-analise, variansieanalise en trosanalise as die belangrikste ontledings.

Die resultate het die kruisgeldigheid en konstrukgeldigheid van die model ondersteun. Daar is tot die gevolgtrekking gekom dat die model verskeie positiewe kenmerke het. Dit verskaf byvoorbeeld 'n geïntegreerde benadering tot die studie van die domein van interpersoonlike style. Die model se indirekte metode van meting deur

gebruikmaking van klassifiseerderveranderlikes oorkom bowendien vervalsing en ander responssydighede wat met onafhanklik metings van die style geassosieer word. Die model verskaf dus 'n nuttige nuwe instrument vir die taksering van interpersoonlike style veral as in ag geneem word dat daar gevind is dat baie van die bestaande onafhanklike meetinstrumente psigometries onbevredigend is.

SUMMARY

The purpose of this research was to study interpersonal styles in the work context in terms of self-esteem and interpersonal trust. These two constructs were chosen as much theory and research has shown them to be fundamental aspects of interpersonal relationships.

An interpersonal style is defined as a person's characteristic way of interacting with other people. To date the interpersonal styles domain has lacked integration as the styles have been studied largely in isolation. In an attempt to overcome this problem, a two-dimensional interpersonal styles model was proposed based on the self-esteem and trust constructs. A review of the psychological literature revealed that the four styles that best typified the quadrants of the model were dependence, Machiavellianism, autonomy and alienation. The review also showed that the interpersonal styles domain is well represented by these four styles.

The aim of the research was to determine whether people classified according to the model as characterized by the various styles had scores on independent measures of those styles which were in keeping with the predictions of the model. Multiple independent measures of the styles as well as measures of the self-esteem and trust variables were incorporated into a questionnaire. This was administered to two samples of White male Government workers. The data were analysed comprehensively, the most important analyses being component analysis, analysis of variance and cluster analysis.

The results showed support for the cross-validity and construct validity of the model. It was concluded that the model has several positive features. For example, it provides an integrated approach to the study of the interpersonal styles domain. Moreover, its indirect method of measurement through the use of classifier variables overcomes fakability and other response biases associated with independent measures of the styles. The model thus provides a useful new tool for the assessment of interpersonal styles, particularly in view of the fact that many of the existing independent measures were found to be psychometrically unsatisfactory.

1. INTRODUCTION

The appropriateness of any behaviour or attitude depends upon the circumstances and the situation in which the behaviour is taking place or in which the attitude is being formed. While it may be appropriate to be suspicious of an opponent who offers one a favour, it may be equally appropriate to be trusting of a friend who offers the same service. Similarly, trust in oneself, or one's self-evaluation, may vary as a function of one's perceived competency relative to that of other people in one's environment. Thus, trust in others and in one's self are situation-bound and capable of altering in response to environmental circumstances. It does appear, however, that certain people are generally suspicious and mistrusting of other people, while others generally hold other people in high regard. In the same way, some people appear to evaluate themselves more positively than do others. Hence, it should be possible to make broad statements as to a person's general levels of trust in others and trust in himself.

A substantial amount of theory and research supports the notion that trust in others (interpersonal trust) and trust in oneself (intrapersonal trust or self-esteem) are fundamental aspects of personality functioning and interpersonal relationships. Trust in oneself has been proposed as one of the chief building blocks of a healthy personality (Erikson, 1950; Golembiewski and McConkie, 1975, p.155; Kegan and Rubenstein, 1972). Interpersonal trust has similarly been conceptualized as a basic ingredient of human association, one which facilitates interpersonal acceptance, friendship, effective communication and constructive feedback (Gibb, 1964; Zand, 1972). Furthermore, it has been proposed that psychosocial well-being is affected by beliefs in both one's own competencies and expectations of the trustworthiness of other people (Gibb, 1964; Tyler, 1978).

The relationship between interpersonal and intrapersonal trust has been examined in a variety of contexts: for example, the clinical setting (Rogers, 1955), the school setting (Smith, Tedeschi, Brown and Lindskold, 1973), the work context (Lillibridge and Lundstedt, 1967) and the political context (Michener and Zeller, 1972). However, none of these studies show these two aspects of trust to be highly intercorrelated.

In spite of the importance of both interpersonal and intrapersonal trust to interpersonal relationships and personality growth, these two aspects of trust have never been used together as the basis of a model of personality types or styles. While several personality theorists (for example, Adler, 1925; Horney, 1950) have proposed their own classifications of personality types, none has based his classification system on interpersonal and intrapersonal trust.

Although it is common practice in personality theory to classify types of people, not all personality theorists feel equally positive towards the classification approach. For example, Sarason (1972, pp. 213-214) cautions that typologies or classification systems may present an oversimplified picture of personality, as personality types may come to be recognised as discrete natural phenomena instead of the products of human theorizing, which they actually are. Nevertheless, he acknowledges that efficient classification schemes, or explanatory models, are often of practical use for the empirical investigation of behavioural patterns.

Research that is conducted in the absence of such models may however, in itself, be deficient for various reasons. For example, many of the styles of interpersonal conduct and personality dimensions which are described in the literature are not related to any other constructs in the domain. Personality types such as Machiavellianism, alienation, authoritarianism, dependence and autonomy have largely been examined individually and in isolation from other types.

Researchers of these types approach them as syndromes or patterns of personality characteristics which they associate with different styles of interpersonal relationships. For example, the person characterized as the Machiavellian type is described in terms of his manipulative, exploitative interpersonal relationships, whereas the person characterized as the autonomous type is often described in terms of his interdependent and mature relationships. However, there has been no attempt to attain any integrative clarity by interrelating these syndromes, or the interpersonal styles they represent, into a conceptual model.

In the literature on each style, researchers seem intent on identifying those people who are strongly represented by the syndrome in question and those whose representation in terms of that syndrome is weak. For example, on the basis of scales designed to tap Machiavellianism (Christie and Geis, 1970), people are classified as either high or low Machiavellians, usually on the basis of whether their scores fall above or below the median score for a particular referent group. Similar high-low classifications are made in alienation, dependence and autonomy research. Furthermore, researchers merely assume that the development of a personality syndrome at one end of the continuum for some individuals necessitates an opposite but equivalent development at the other end. However, this may not be so. For example, a strong Machiavellian syndrome may well characterize some individuals, whereas weak or low Machiavellianism may not constitute a particular pattern of personality characteristics in the same way. Specifically, people with low Machiavellian tendencies may well be very different from each other, some being self-fulfilled and autonomous, and others being uncertain of themselves and dependent. Similarly, highly alienated people may all be characterized by the same set of personality traits, while others low in alienation may manifest numerous individual differences.

It appears hence that the study of personality types without relating them in some way to other personality types may obscure

several important and interesting relationships. The attempt has therefore been made in the present research to relate some of the previously unrelated personality types or interpersonal styles in terms of a conceptual model.

In the present study, an interpersonal style is defined as a person's characteristic way of interacting with other people. As such an interpersonal style is more than just a personality trait. It is a person's characteristic disposition towards other people which influences his interpersonal behaviour: an interpersonal style is a specific pattern of personality characteristics or traits, and is considered in the present research as synonymous with a personality syndrome.

It is also more convenient to refer to intrapersonal trust as self-esteem, as is frequently done in the psychological literature. The term 'interpersonal trust' can then be shortened to 'trust' without any confusion in terminology.

In view of what appears to be the fundamental importance of self-esteem and trust in styles of interpersonal relationships, a model of interpersonal styles is proposed based on these two dimensions. The four combinations of self-esteem and trust are illustrated in Figure 1.1

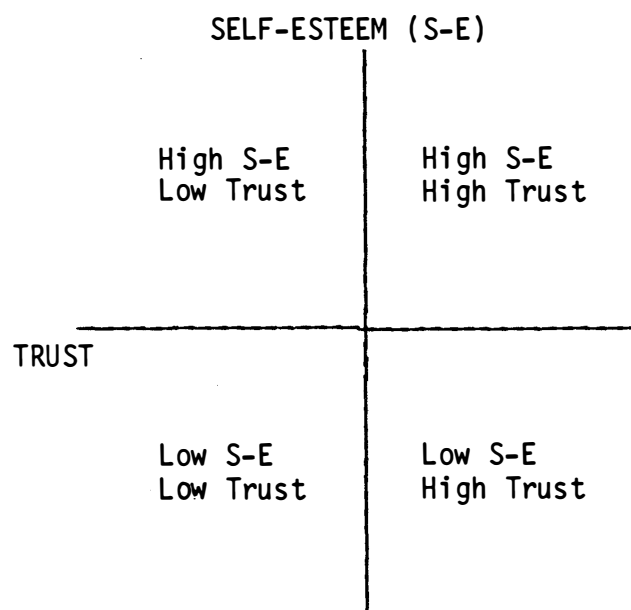


Figure 1.1: The four combinations of self-esteem and trust

A review of the psychological literature reveals that the four interpersonal styles that best typify the quadrants of the model appear to be autonomy, dependence, Machiavellianism and alienation. These styles may be briefly described as follows:

- i) The style of autonomy appears to be characterized by both high self-esteem and high trust. The autonomous person recognizes the value of his own ideas and attitudes as well as those of other people.
- ii) The person with a dependent interpersonal style feels incapable of conducting his life without the support and aid of others. He thus has a high level of trust in others, but his self-esteem is likely to be low.
- iii) A person characterized by a Machiavellian interpersonal style views others as objects to be manipulated to further his own ends. While his level of trust in others appears to be low, his level of self-esteem is likely to be high.
- iv) Finally, the alienated person has a low level of trust in others and feels isolated from them. He is resigned to submitting to situations which he may not like, but over which he feels he has no control. His self-esteem level is thus likely to be low.

These four interpersonal styles may be incorporated into the two dimensional model in Figure 1.1 as shown in Figure 1.2.

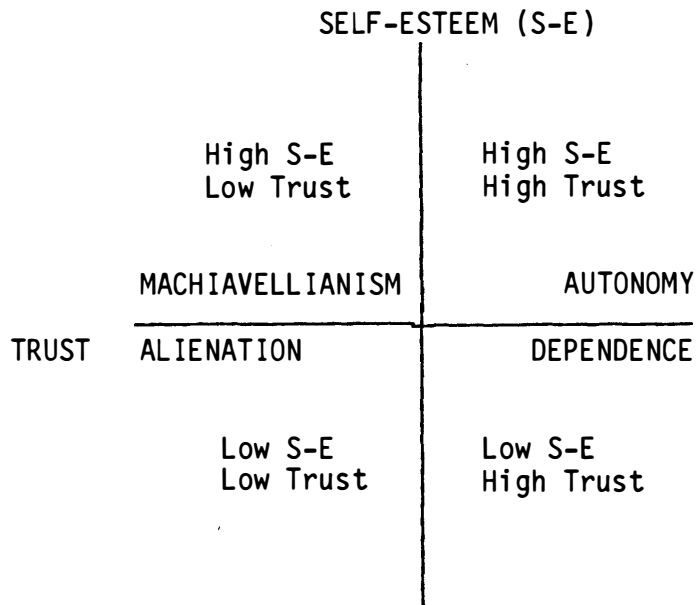


Figure 1.2 : A model of four interpersonal styles based on self-esteem and trust

The model presented in Figure 1.2 is a 2 x 2 conceptual framework of interpersonal styles. It will henceforth be referred to as the "Interpersonal Styles Model". According to this model, the interpersonal styles are classified on the basis of self-esteem and trust. The term "classifier variables" will frequently be used to refer to self-esteem and trust.

The study of interpersonal styles is of obvious relevance in an organizational setting, where large groups of people work together. Workers characterized by different interpersonal styles are likely to be more effective in certain roles than others. For example, it would be inappropriate to place a dependent person in a decision-making role; it would likewise be inappropriate to select a Machiavellian person for a personnel function. An autonomous person, would be unmotivated and unlikely to stay in a job which did not offer him the potential for decision-making and assuming responsibility for his own actions. Management's appreciation of the different interpersonal styles among workers could lead to appropriate selection and placement of workers, and thereby contribute towards certain important organizational goals: a high level of productivity on the one hand, and satisfied workers on the other.

The Interpersonal Styles Model has other possible applications in the work context. Given that self-esteem and trust are fundamental to interpersonal styles and that they are both subject to change through external influences, it may be possible for management to bring about positive changes in the interpersonal styles of workers. There is evidence in the literature to show that changes in self-esteem and trust can be brought about. For example, some researchers (Brockner and Blethyn-Hulton, 1978; Gergen, 1971) hold that low levels of self-esteem may be heightened through external events. It has also been shown that enhancement of employee trust is associated with a worker's commitment to the organization and positive attitudes towards management (Barnes, 1981; Driscoll, 1978; Ouchi, 1982) and with job satisfaction (Driscoll, 1978). It may, for example, be possible to control negative, counter-productive influences in the organization by reducing the proportion of alienated workers. This could be achieved through programmes and courses designed to enhance the self-esteem of workers with low self-evaluations, and through positive attempts by management to establish and foster an organizational climate of trust.

In spite of the relevance of interpersonal styles in the work context, little attention has been paid to the actual measurement of these styles. By contrast, much effort is channelled into the construction of cognitive tests for the selection and placement of people in industry. A possible reason for the relative lack of emphasis on non-cognitive aspects of the work context is the problem of social desirability. In previous unpublished research by the author, an attempt was made to construct a scale for the direct measurement of the four interpersonal styles. The results of these measures were found to be confounded with social desirability: certain of the style measures incorporated a greater social desirability component than others. Items designed to tap autonomy had the strongest social desirability component and were endorsed most frequently. The indirect approach of the Interpersonal Styles Model overcomes the problem to some extent as the underlying purpose of the measurement

instrument is less obvious to the respondent. For example, the respondent may be unsure whether positive endorsement of high self-esteem items would portray him as boastful or as self-assured. Responses indicating low self-esteem may be interpreted by him as indicating either insecurity or modesty. The respondent would be similarly unaware of the desirability or undesirability of the polar extremes of the trust scales.

The first step in the investigation of the present model was to research its reliability and validity. The original intention was to compare the results of the categorization of the Interpersonal Styles Model with the results of existing reputable measures of the four styles. In this way, it could have been established whether the model was tapping the four interpersonal styles as proposed. However, as measures of the styles were not always available, it became necessary to adopt an indirect approach in the measurement of the styles: measures of personality and job-related variables shown in the psychological literature to be associated with the styles were included in the study. These measures and the available direct measures of the styles, were used to investigate the construct validity of the Interpersonal Styles Model.

In the subsequent theoretical sections, surveys of the literature are presented on the classifier variables, the interpersonal styles, and the personality and job-related variables included in the research. Thereafter the aims, methodology and results of the present research are described. In the final sections, an evaluation of the conceptual model of interpersonal styles is presented.

2. A REVIEW OF THE CLASSIFIER VARIABLES

The present section is devoted to a review of the classifier variables (self-esteem and trust) of the proposed Interpersonal Styles Model. Special attention is paid to measurement scales of these variables as their review is the basis for the selection of the scales used in the present research.

2.1 Self-esteem

A variety of different names has been used by different theorists and researchers to denote aspects of psychological functioning which can be described either as self-evaluation, self-affection or a combination of the two. Such terms include self-concept, self-esteem, self-love, self-confidence, self-respect, self-acceptance, self-satisfaction, self-evaluation, self-appraisal, self-worth and sense of competence (Wells and Marwell, 1976, pp. 6-7). In Wylie's (1974) extensive review of measures of the self-concept, she uses the term "self-regard" as an all-inclusive label to subsume some of these concepts (p.127).

All of these concepts involve some process of "reflexive" activity - that is, thoughts, feelings or actions in which the agent and the object of the behaviour are the same person (Wells and Marwell, 1976, p.229). Reflexive activities, like attitudes, may be considered to have three key components - cognitive (the psychological content of the attitude), affective (a valuation attached to this content) and conative (behavioural responses to the attitude object) (Secord and Backman, 1964, p.579; Wells and Marwell, 1976, p.231). Self-esteem is commonly identified as the evaluation or affective aspect of self-attitudes (Gecas, 1982, p.4; Shavelson, Hubner and Stanton, 1976, pp.414-415; Wells and Marwell, 1976).

Most research in the area of self-esteem focuses on this dimension; for example, Wylie's (1974, 1979) reviews deal almost exclusively with self-evaluation (Gecas, 1982, p.4). Self-esteem is the most popular term used to describe self-evaluative behaviours and their underlying conceptual rationale (Wells and Marwell, 1976, p.7). It is therefore adopted as a general label in the current research.

2.1.1 Definitions and conceptions

Self-esteem definitions may be grouped into four categories: self-esteem as an attitude, self-esteem as an attitude

discrepancy function, self-esteem as a psychological response and self-esteem as a personality function (Wells & Marwell, 1976). The first three categories will be discussed in turn. The fourth category is by far the least common and will not be discussed here.

Self-esteem as conceptualized as a particular kind of attitude, or as an aspect of all self-attitudes, constitutes the simplest approach. This approach is evident in self-esteem theories which involve the sense of competence (Dittes, 1959; Fitts, 1965; Janis and Field, 1959; White, 1959, 1963; Woodworth, 1958; and Ziller and Golding, 1969). All these theorists stress the person's self-evaluation of abilities and capacities associated with the sense of self-confidence, success and failure. In terms of the attitudinal approach, self-esteem may be conceptualized in either a global or a specific context. A person may attach different evaluations to different qualities which may be added in some way to form an overall evaluation or "collection" of specific attitudes (for example, Diggory, 1966; James, 1890, both cited by Wells and Marwell, 1976, p.65). Rosenberg (1965a) regards self-esteem as a linear combination of individual, specific self-estimates each weighted according to its importance to the person.

The attitudinal approach to self-esteem has been adopted in the present research. Self-esteem is seen as a global index composed of a person's self-evaluations in a variety of different contexts.

A second type of definition depicts self-esteem as an arithmetic function of two sets of attitudes - the way the person actually perceives himself to be and the way he aspires to be. Examples of definitions of this type are those of James (1890, as cited by Wells and Marwell, 1976, p.65) and Cohen (1959). Discrepancy descriptions generally treat self-esteem from a global point of view. For example, Cohen sees the general experience of self-esteem as encompassing feelings of success and failure in all situations.

According to definitions of the third type, self-esteem is not depicted directly as a discrepancy between attitudes, but as the feelings or reactions a person attaches to this discrepancy. The process underlying this conceptualization is self-acceptance. Theorists such as Rogers (1950), Berger (1955) and Silber and Tippett (1965) all adopt this approach without dealing explicitly with the self-esteem construct. These writers all conceptualize self-esteem as a person's feelings of satisfaction about himself which reflect the relationship between the real self-image and the ideal self-image.

Although these definitional distinctions may seem slight, they can have meaningful operational implications. For example, Bill's (1951) Index of Adjustment and Values is a popular self-esteem measure which uses the same item set and yields three different self-esteem scores: a real self-score based on the respondent's honest self-rating, an ideal self-score based on the respondent's desired or projected self-rating, and a self-satisfaction score based on the respondent's feeling of acceptance of the real self-rating. These different methods do not always produce the same results and may conflict with each other (Wells and Marwell, 1976, p.68).

2.1.2 Contentious issues

There are at least three contentious issues in the theoretical literature on self-esteem. These concern the stability of self-esteem, the "optimal" level of self-esteem necessary for healthy personality functioning and the dimensionality of self-esteem.

There are two points of view on the stability of adult self-esteem. The one view envisages the adult person's level of global self-esteem as a relatively stable personality trait formed by the end of adolescence, susceptible to change only through major life changes such as divorce, or traumatic events in the work environment such as losing one's job (Cohn, 1978,

cited by Tharenou, 1979, p.318). The other view emanates from experimental social psychology and proposes that the global self-esteem level of adults can be altered through less traumatic events such as the acceptance of others, social comparisons with others etc.(Gergen, 1971, Kaplan, 1982).

The approach adopted in the present research is that each person has a characteristic or basic level of self-esteem which can be influenced by dynamic factors in the environment as well as by changing personal factors (for example, ill health). The interpersonal styles model proposed in Section 1 is thus a dynamic one, based on the self-esteem of a person at a given time. The model allows for a person to have a variable interpersonal style by taking into account that self-esteem is prone to change. The introduction of constructive intervention programmes by management may enhance employee self-esteem and lead to improved interpersonal relationship styles in the organization.

The second contentious issue in the literature concerns the optimal level of self-esteem. There are three different theoretical standpoints, known as the high, medium and low models of self-esteem (Wells and Marwell, 1976, pp.69-74).

The high self-esteem model is the most common position. It asserts that high self-esteem is associated with desirable personality characteristics and adjustment. Several studies support this view (for example, Coopersmith, 1967; Rosenberg, 1965b; Tharenou, 1979). Furthermore, the "classic" theorists (Adler, 1925; Rogers, 1950, 1951; Sullivan, 1953) all hold that self-esteem and psychological adjustment are positively related.

According to the low self-esteem model, low self-esteem may sometimes, although not always, be healthier than high self-esteem. The model is most frequently identified with the defensive-style characterizations of self-esteem proposed by Cohen (1959) and Byrne (1961). High self-esteem people tend to

use denial defenses (Cohen, 1959) or repression (Byrne, 1961) to avoid negative information about themselves. On the other hand, low self-esteem people opt for more projective or expressive defenses (Cohen, 1959) and are more sensitized to negative information about themselves. According to the model, low self-esteem persons are more flexible, able to admit personal shortcomings and less authoritarian.

The medium self-esteem model holds that a moderate amount of self-esteem is optimum for healthy personality functioning. Authors who adopt this position (see Wells and Marwell, 1976, p.71 for a list of these authors) believe that people at the extremes of self-esteem are seldom well adjusted. They suggest that the relationships between self-esteem and healthy adjustment is curvilinear, rather than linear; people with moderate amounts of self-esteem represent a balance between self-criticism and self-enhancement (Wells and Marwell, 1976, pp.72-73, p.234).

Although the evidence of research studies relating self-esteem to adjustment is generally weighted in favour of the high self-esteem model, no clear-cut decision can be made. Findings of several studies (see Wells and Marwell, 1976, p.72) suggest that there may be interactions between self-esteem levels and several aspects of adjustment. In terms of the present study, the proposed relationship between autonomy and high self-esteem is consistent with the high self-esteem model, since the autonomous person is associated with healthy or desirable personality characteristics (see Section 3.3). The proposed relationship between Machiavellianism and high self-esteem is also consistent with the high self-esteem model: although the high Mach does not have desirable or healthy personality attributes, he generally gives researchers and others the impression of being well-adjusted by his use of impression management techniques (see Section 3.2.2).

The third issue of contention concerns the dimensionality of the self-esteem construct. The most frequent description of

self-esteem is as an overall or global property of the person's self-evaluation (Wells and Marwell, 1976, p.93). Hence, measurement scales are generally designed to yield single self-esteem total scores. However, not all conceptual approaches depict self-esteem in unitary, homogeneous terms; others prefer to use specific rather than global estimates of esteem in predicting specific behaviour. For example, Wylie (1974, pp.180-181) proposes that the use of a global index may obscure important individual differences. Other researchers (Akeret, 1959; Shavelson, Hubner and Stanton, 1976) also think of the individual's self-concept in terms of various dimensions of the self which the person can evaluate in different ways. The results of factor analytic research (for example, Moran, Michael and Dembo, 1978; see Marsh and Smith, 1982, p.431) generally favour a multidimensional conception of self-esteem. However, the derived factor structures are often inconsistent across different samples and difficult to interpret.

In the present research, the approach adopted is that each person has a core of self-esteem. This core is composed of the common elements of his levels of self-esteem in different contexts. Examination of these self-esteem levels in different contexts contributes towards a better understanding of this underlying self-esteem core. Levels of self-esteem in various contexts are thus not expected to be independent of one another; indeed, a particularly high or low level of self-esteem in a specific context (for example, the work situation) is likely to influence self-esteem in other contexts owing to a "carry-over" or "halo" effect.

2.1.3 Empirical research

Experimental studies have investigated self-esteem in a number of areas. Research on persuasibility (Cohen, 1959; Janis and Field, 1959; McGuire, 1968) shows self-esteem to be one of the most important variables in explaining individual persuasibility differences. Self-esteem has also been examined in research on

personality adjustment (for example, Brockner and Blethyn-Hulton, 1978), locus of control (Lloyd, Chang and Powell, 1979), task performance (Ryckman, Gold and Rodda, 1971), interpersonal attraction (Hendrick and Page, 1970), and group dynamics (for example, Morse and Gergen, 1970).

It has been positively correlated with moral behaviours such as altruism and helping others (Darlington and Macker, 1966), and negatively associated with immoral behaviours such as cheating (Aronson and Mettee, 1968). Wylie (1979) provides a comprehensive review of self-esteem research.

Low self-esteem individuals, as compared to high and medium, are more likely to exhibit anxiety, depression and neurotic behaviours, lack initiative and be more persuasible and conforming, have lower aspirations and perform less effectively under stress and failure, exhibit poorer social skills and less sociability (Tharenou, 1979, pp.316-317). These findings are consistent with the model of high self-esteem described previously.

Results of research investigating the relationships between self-esteem and locus of control are conflicting: some studies (Epstein and Komorita, 1970; Fish and Karabenick, 1971; Fitch, 1970) have provided evidence for a positive association between high self-esteem and an internal orientation, whereas others (Platt, Eisenmann and Darbes, 1970) have found no relationship.

One possible explanation of these seemingly contradictory findings is that these studies have employed various measures of self-esteem that differ both in methodology and in the aspect of self-esteem that they measure (Lloyd, Chang and Powell, 1979). Alternatively, the apparent contradictions may be due to the use of inappropriate correlational techniques in data analysis. This issue is discussed at length in Section 8.4.

Reviews of the literature on employee self-esteem (Tharenou, 1979; Tharenou and Harker, 1982) illustrate that when there is a "fit" between the person (in terms of his abilities, traits and needs) and the job (in terms of intrinsic characteristics such as worker autonomy, type of job content), feelings of competence increase (Tharenou, 1979, pp.323-326). Job characteristics which are extrinsic to the task (for example, recognition and evaluation, co-worker support, etc.) are less important to global self-esteem, though variables such as supervisor's support and pay are associated with work-specific self-esteem, or competence (Tharenou, 1979, pp.326-331). In general, work performance is positively associated with feelings of competence at work but not with global self-esteem (Tharenou, 1979; Tharenou and Harker, 1982).

On the other hand, both global and work-specific self-esteem are positively correlated with satisfaction with the job, the organization and the work role. High self-esteem employees are also generally healthier, less depressed, less anxious and more satisfied with life than low self-esteem employees (Tharenou, 1979, pp.332-338.)

2.1.4 Measurement scales

There are several reviews and critiques of the multitude of self-concept measures (Crandall, 1973; Wells and Marwell, 1976; Wylie, 1974, 1979). These reviews give a bleak picture of the serious methodological problems hampering the accumulation of valid knowledge in the area of self-esteem. Wylie (1974, pp.124-127) provides detailed descriptions and criticisms of several instruments which have been used in attempts to measure aspects of the self-concept. She sees one of the main problems to be the enormous number of instruments lacking adequate information about the methods of construction, reliability or construct validity. Several scales have been devised for one or two studies only, and subsequently abandoned without much attempt to assess the adequacy of the measure employed. Wylie also

points out that no instrument purporting to measure self-concept variables has been developed based on rigorous psychometric principles and explicit construct definitions. She recommends the abandonment of a number of self-concept instruments and a concerted effort to develop from anew reliable and valid instruments using all available conceptual and methodological refinements. In this way measurement of the self-concept would be limited to a relatively small number of "good" instruments. These recommendations are supported by Wells and Marwell (1976).

Tharenou (1979) cites as a major problem the appropriateness of the type of self-esteem measure chosen. Frequently, global measures of self-esteem are chosen when it would be more appropriate to measure a specific type of self-esteem, and vice versa. Unfortunately the more specific measures are not as well validated as the global measures.

Wylie (1974) and Crandall (1973) describe a number of self-esteem scales. The two most popular measures are the Tennessee Self-Concept Scale (Fitts, 1965) and the Janis-Field Feelings of Inadequacy Scale (Eagly, 1967). These two scales are also strongly advocated by Crandall.

The Tennessee Self-Concept scale has been used in hundreds of research studies (Garrison and Stanwyck, 1978; Stanwyck and Garrison, 1982). However, little attention has been paid to the scale's susceptibility to response falsification such as faking (Stanwyck and Garrison, 1982) and social desirability effects (Crandall, 1973).

The Janis-Field Feelings of Inadequacy Scale was originally designed to tap feelings of inadequacy associated with a person's persuasibility (Janis and Field, 1959, pp.55-68). In the original scale, 20 of the 23 items are keyed in the same direction. Eagly (1967) balanced the scale for response bias and reduced the number of items to 20. The original and revised versions of the scale have been widely used despite the minimal

amount of psychometric attention that has been paid to it. Crandall (1973) reports satisfactory reliability and validity statistics for the revised version.

Scales in common usage that measure self-esteem in terms of self-ideal discrepancy functions are discussed by Crandall (1973, pp.88-96) and Hoge and McCarthy (1983). However, several authors (Hoge and McCarthy, 1983; Wells and Marwell, 1976) caution against the use of discrepancy measures on the grounds that these discrepancies reflect abstract, ideal standards rather than personally salient ones. Furthermore, there are inherent validity, reliability and interpretation difficulties.

A number of personality inventories measure self-esteem as well as several other personality variables. These are the Jackson Personality Research Form and the Jackson Personality Inventory (Jackson 1967 and 1970 both cited by Crandall, 1973, pp.97-98), the California Psychological Inventory (Gough, 1957) and the Gough Adjective Check List (Gough and Heilbrun, 1980). For a number of less frequently used measures of self-esteem, see Crandall (1973, pp.104-168).

A measure of self-esteem in the work setting is that of Wagner and Morse (1975). This scale is based on White's (1959, 1963) theory of competence*. Wagner and Morse emphasize that the scale

* White (1959, 1963) proposes that inherent in each individual is a biological drive or "effectance". By means of this "effectance drive", the individual develops "competence" or the capacity for effective interaction with the environment. The cumulative results of the individual's life history of interactions with the outside world, including his work environment, is his competence. The individual's own sense of competence is the subjective aspect of his actual competence. It is thus his subjective assessment of his own abilities and is a reflection of any confidence he has built from all his interactions with the environment. White claims that the individual's self-esteem and the esteem afforded him by others are contingent upon the person's ability to master the environment and hence, on his sense of competence.

taps the worker's subjective assessment of his own competence in the work environment rather than a more objective assessment of how competent he really is. The scale consists of 23 Likert-type items. Wagner and Morse provide evidence for the scale's satisfactory internal consistency, test-retest reliability, and predictive validity. The scale was also shown to have satisfactory internal consistency by Tharenou and Harker (1982). It is discussed in greater detail in Section 6.1.1.

2.2 Interpersonal Trust

Interpersonal trust is a basic dimension of all social situations that demand co-operation and interdependence. Both ancient and modern observers generally agree that trust plays a vital role in interpersonal behaviour. Deutsch (1973, p.143) observes: "If we examine the writings of learned men throughout the ages, we find that, while they often disagreed whether to trust or not they did agree that the topic was important." In spite of its obvious relevance, the topic does not have a long history in psychology. Apart from the work of Erikson (1950), it has not been the subject of much theory-building in psychology; indeed the construct was generally neglected in psychological research up until about 1967. Deutsch (1958) noted the inattention of psychologists to the trust phenomenon, and Giffin (1967) renewed the plea for systematic research (Chun and Campbell, 1974). Rotter's (1967) work on the topic awakened the interest and enthusiasm of a number of researchers and today trust has been examined in a host of different contexts: personality development, the communication process, therapist-client relationships, parent-child interactions, public management, managerial problem solving, professional interactions, effective labour relations and intergroup conflict (see Golembiewski and McConkie, 1975).

As Chun and Campbell (1974) note, the initial high enthusiasm that accompanies research interest in an area such as trust often results in insufficient attention of researchers being paid to

the establishment of a substantive theory, the refinement of measures, and the theoretical bases of these measures. It is shown in the following review that this is generally the case in the research on trust.

2.2.1 Definitions and conceptions

Several definitions of interpersonal trust are put forward in the psychological literature. Trust has been variously defined depending on the theoretical orientation adopted. Personality theorists, whose concern is with individual differences, have stressed the nature of the construct, while behaviourists have generally favoured operational definitions. Researchers investigating intragroup and intergroup relationships have examined trust in terms of the characteristics of the participants. There are also several definitions of various aspects of trust in the work setting, such as trust of a subordinate in his superior, mutual trust between subordinates and superiors, and organizational trust climates.

Perhaps the most widely used definition of general interpersonal trust is that of Rotter (1967, 1971). From a social learning perspective, Rotter defines interpersonal trust as "an expectancy held by an individual or a group that the word, promise, verbal or written statement of another individual or group can be relied upon" (Rotter, 1967, p.651). In other words, trust is a generalized expectancy developed from an individual's past history of reinforcement (Rotter, 1971). Wrightsman (1964) also defines trust in expectancy terms. He assumes that everyone develops a philosophy of human nature, a combination of positive and negative expectancies about the trustworthiness and usefulness of people in general. He defines trustworthiness as the extent to which people are seen as moral, honest and reliable. Both Rotter and Wrightsman have developed measures of their conceptualizations of trust (see Section 2.2.3).

Definitions of trust that are essentially operational generally concentrate on the behaviour of a person in situations of risk, that is, behaviour that exposes the individual to the possibility of a painful experience (see, for example, the definitions of Deutsch, 1958; Giffin, 1967, p.105; Schlenker, Helm and Tedeschi, 1973, p.419; Solomon, 1960; and Zand, 1972, p.230).

The issue of the stability of trust, unlike the stability of self-esteem, has not received attention in the literature. The view of trust adopted in the present research is that each person has a characteristically high or low level of trust. This level of trust can, however, be influenced by situational and personal factors. For example, a person who enters a new job is not expected to have the same level of trust in colleagues he hardly knows as he has in colleagues of his previous job who were well-known to him.

2.2.2 Empirical research

One of the main approaches adopted in empirical research on trust is the use of self-report scales to investigate the relationships between personality measures and trust behaviour in social interactions. This line of research has received its major impetus from the work of Rotter (1967), using his Interpersonal Trust Scale (see Section 2.2.3). Studies using this scale have shown that high trust individuals as compared to low trust individuals are generally better adjusted and less likely to cheat or lie (see Gurtman and Lion, 1982, for a list of these studies). Unfortunately, Rotter's Interpersonal Trust Scale has been criticized extensively (see Chun and Campbell, 1974). A few other studies (Deutsch, 1960; Lindsold and Tedeschi, 1971; Wrightsman, 1966) have successfully used other personality measures (for example, the F-scale: Adorno, Frenkel-Brunswik, Levinson and Sanford, 1950) to predict trusting behaviour in various situations. In general, however, studies that have successfully used personality measures to predict trusting

behaviour are more the exception than the rule (Worchel, 1979, p.178).

Another approach in trust research is to specify the factors which contribute to the development of individual differences in trust. Such research has been based largely on Erikson's (1950) theory; since the publication of his book "Childhood and Society" (1950), many developmental psychologists have viewed trust and mistrust as the cornerstones of human development.

The development of trust has also been studied in connection with differences in child-rearing practices. Katz and Rotter (1969) have generally found that high-trusting subjects, as opposed to low-trusting subjects, report that they had highly trusting parents who taught them trust and trustworthiness. Other studies have investigated the relationship of trust to age, race, sex and other biographical variables (see Worchel, 1979, pp.180-181 for a description of these studies).

A third type of trust research is into the development of mutual trust between two parties. Results of a study by Bennis, Schein, Berlew and Steele (1964) shows that the more voluntary a person's actions are perceived to be by another person, the more influence they have on the other person's level of trust. Attribution theory also supports this conclusion (Jones and Davis, 1965). The establishment of mutual trust has also been found to be important in clinical settings (Rogers, 1961), as well as in leadership situations, political situations and among college students (see Worchel, 1979, p.183).

A fourth line of trust research involves the creation of a situation in which the development of trust between or within groups is essential to the performance of a prescribed task, and the level of performance is taken as an index of the degree to which trust has developed. This approach is adopted in

experiments using the Prisoner's Dilemma Game* (see for example Deutsch, 1960) and other matrix games.

Trust in the work environment is another important area of concern in trust research. High levels of trust between employees and management have been linked to productivity and efficient work group functioning (Dwivedi, 1983; Ouchi, 1982; Savage, 1982), and long-term organizational effectiveness (Barnes, 1981; Melohn, 1983).

Research by Dwivedi (1983) reveals that effective and ineffective organizations differ in their adherence to trust-based and distrust-based managerial approaches respectively. Friedlander (1970) has related employee trust in management to the willingness of people to make adaptations to organizational change. Trust has also been shown to be associated with a person's willingness to share meaningful information, commitment to take action and satisfaction in interpersonal relationships (Gibb, 1965 as cited by Scott, 1982, p.11). Trust appears to be essential for open, accurate communications in organizations (Mellinger, 1956; Ouchi, 1982) and group problem-solving and decision-making (Boss, 1978; Gamson, 1968; Zand, 1972).

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- * The Prisoner's Dilemma Game and other matrix games have been used to study both individual measures which correlate with co-operative behaviour. (Deutsch, 1960) and situational factors which promote co-operation (Rubin and Brown, 1975). For a review of early studies, see Vinacke (1969). In the Prisoner's Dilemma game, two people must make dichotomous choices. Numerical values describe the outcome for each and are so arranged that the outcome for each depends upon the choice made by both. Each person has a high-risk option (i.e. he may lose a lot or gain only a little) and a low-risk option (i.e., may gain a lot or lose only a little). The "dilemma" stems from the fact that if both choose the high-risk option, both receive positive outcomes; if both choose the low-risk option, both received negative outcomes; but if one chooses the high-risk option and the other the low, the former receives a very high negative outcome and the latter a very high positive outcome. Despite modifications of the game paradigms to approximate real-world situations, game theory research has limited applicability. Individuals have implicit notions about game playing that need not necessarily reflect their attitudes in real-life situations (Johnson-George and Swap, 1982).

Furthermore, it has been shown to be a necessary ingredient for the establishment of positive employee attitudes towards management and the organization in general (Barnes, 1981; Driscoll, 1978; Ouchi, 1982) and overall job satisfaction (Driscoll, 1978).

2.2.3 Measurement scales

Rotter's (1967) Interpersonal Trust Scale dominates the research literature on trust. Other measures include Wrightsman's (1964) Philosophy of Human Nature Scale, the Faith in People Scale (Rosenberg, 1957), the People in General Scale (Banta, 1961), the Erikson Psychological Stage Inventory (EPSI: Rosenthal, Gurney and Moore, 1981), the Specific Interpersonal Trust Scales (Johnson-George and Swap, 1982), and the Trust versus Defensiveness subscale of the Comrey Personality Subscales (Comrey, 1970).

Rotter has developed the Interpersonal Trust Scale as a measure of generalized expectancy. It is a Likert-type scale consisting of 25 scorable items and 15 filler items. The items deal with the trust variable in a wide range of situations, for example, with regard to political figures, news media, parents, salesmen and people in general. Rotter's original research (1971) demonstrated that the scale has satisfactory internal and test-retest reliability (0,76 and 0,68 respectively). He and his colleagues have conducted numerous studies (for example, Hamsher, Geller and Rotter, 1968; Katz and Rotter, 1969, Rotter, 1971) which, they claim, demonstrate the construct validity of the scale.

Although the scale has stimulated much research (for example, Chun and Campbell, 1974; Fitzgerald, Pasewark and Noah, 1970; Gurtman and Lion, 1982; Kaplan, 1973; Pasewark, Fitzgerald, Sawyer and Fossey, 1973; Schlenker, Helm and Tedeschi, 1973; Walker and Robinson, 1979), it is not without its critics.

Numerous researchers (Chun and Campbell, 1974; Kaplan, 1973; Wright and Tedeschi, 1975; Tedeschi and Wright, 1980) have found the scale to be multidimensional rather than unidimensional as suggested by Rotter.

The most serious criticisms of the scale are those of Chun and Campbell (1974). In their investigations of the dimensionality of the scale, they found the scale to be composed of four dimensions, only two of which are interpersonal in nature. They therefore propose that the items comprising the other two dimensions can only be considered relevant to interpersonal trust, and Rotter's definition thereof, through an extension or modification of his definition. Moreover, they claim that one of the interpersonal dimensions really deals with interpersonal exploitation, a Machiavellian trait, rather than trust per se. While the attribution of Machiavellian traits may conceivably lead to low interpersonal trust, this kind of causal chain is not a part of Rotter's definition. Chun and Campbell (1974) further criticize the scale for its failure to recognise that levels of trust can vary across contexts. For example, low trust in the political sphere does not logically preclude high levels of trust in other spheres. Hence the scale may blur important differences in the various spheres of trust. Their final criticism levelled at the scale is that it is inefficient; it appears that the scale could be shortened considerably without seriously affecting its psychometric properties.

Overall, the results of studies of the Interpersonal Trust Scale sound a warning to researchers - it appears that the scale measures a generalized expectancy and hence is inapplicable in situations where specific behaviours are to be predicted. Particular dimensions of Rotter's scale that have been isolated as a result of factor analytic research may be more successful in predicting specific criteria than the general trust scale.

Wrightsman's (1964) Philosophies of Human Nature Scale has also been frequently used (Chun and Campbell, 1974; Robinson and Shaver, 1973, p.588). The 14 item "trustworthiness" subscale has

been shown to have satisfactory split-half and test-retest reliabilities: 0,74 in both cases (Wrightsman, 1964). Robinson and Shaver (1973, p.604) cite the findings of Wrightsman's study which have shown the scale to have construct validity. Chun and Campbell (1975) analyzed the trustworthiness subscale using the same techniques which they used in the investigation of Rotter's Interpersonal Trust Scale. Their factor analytic investigation revealed two interpretable dimensions each consisting of four items; they named these "global morality" and "specific acts of honesty". Chun and Campbell therefore suggest that the scale be shortened to an 8-item set.

Extensive research was devoted to the development of the Comrey Personality Scales (Comrey, 1970). The trust versus defensiveness subscale appears to be one of the best measures of trust. It contains 20 Likert-type items, which are balanced to control for possible acquiescence response set. The subscale has a corrected split-half reliability of 0,91. A more detailed discussion of the subscale is presented in Section 6.1.1. For further information on Comrey's scale, the manual by Comrey (1970) should be consulted.

Rosenberg's (1957) Faith in People Scale, alternatively called the "misanthropy scale" is frequently used in self-esteem studies. It purports to measure a person's general confidence in the trustworthiness, honesty, goodness, generosity and brotherliness of people in general (Robinson and Shaver, 1973, p.612). The scale contains only five items and, not surprisingly, has fairly low reliability. However, evidence of the validity of the scale is encouraging (see, Rosenberg, 1956, 1957).

The items of Banta's (1961) lesser used "People in General" scale were drawn directly from the Mach IV scale of Christie and Geis (1970). The scale attempts to tap the extent to which people act in an exploitative or manipulative manner toward others and therefore taps Machiavellianism rather than trust.

The Erikson's Psychosocial Stage Inventory (Rosenthal, Gurney and Moore, 1981) was designed to examine the first six of Erikson's psychosocial stages. The authors report that their investigations into the reliability and validity of the scale are encouraging, but recommend further validation studies.

Another recent scale is that of Johnson-George and Swap (1982). These researchers claim that we need to deal with specific trust, both trust in a specific other person and a specific type of trust. For this purpose, they have constructed the Specific Interpersonal Trust Scales. The authors have provided some evidence of the construct uniqueness, discriminability and validity of the scale. Despite their encouraging results, the authors claim that considerable research is required to refine the scales and to develop a thorough understanding of interpersonal trust and its measurement.

Some researchers have designed measurement scales specifically for their own studies of trust in an organizational context. Roberts and O'Reilly (1974) have developed a scale intended to measure trust in one's superior, the perceived influence of the superior, and the mobility aspirations of the respondent. The subscales appear to have adequate validity and test-retest reliability estimates. Cook and Wall (1980) have constructed a scale to measure interpersonal trust at work for use with blue-collar workers in the United Kingdom. Jones, James and Bruni (1975) have developed a scale to measure employees' confidence and trust in their leader. Friedlander (1970) has devised a scale for measuring trust versus competitiveness within one's work group. Likert's (1967) questionnaire has also been used to tap organizational trust. Lastly, Hrebiniak and Alutto (1972) use a six-item work-related trust scale in their research.

Unfortunately, none of these instruments have been adequately researched or validated. Furthermore some of the scales are not available in the literature (for example, the scales of Jones et al., 1975 and Hrebiniak and Alutto, 1972).

3. A REVIEW OF THE FOUR INTERPERSONAL STYLES

The present section provides a review of the four interpersonal styles selected for the study. It is thus composed of four subsections, each devoted to one of the four styles. Within each subsection, the literature pertaining to one interpersonal style is surveyed in terms of theories, conceptions and empirical research. As in the previous section, fairly detailed reviews of measurement scales of the styles are presented as the reviews are critical to the selection of the measurement scales of the present study.

The order in which the styles are discussed does not reflect any stage-developmental conception on the part of the author.

3.1 Dependence

From before birth to adulthood, the individual is dependent in varying degrees on others for the satisfaction of emotional and material needs. However, a review of the literature reveals that dependence is often presented as a highly undesirable characteristic (Bauermeister, 1982). The dependent person is generally conceptualized as one who cannot form his own goals independently. Uniqueness is unbearable to him and he thus conforms to the views and standards of others, living his life in the reflection of others. Bauermeister observes that research populations of studies on dependence are generally composed of children, women, the aged, the institutionalized and minority groups. Perhaps because Western cultures idealize independence and self-reliance, the healthy adult male is conspicuous by his absence from dependence research.

Dependence has been discussed by personality theorists (for example, Angyal, 1965; Harvey, Hunt and Schroder, 1961; Horney, 1945, 1950). Their conceptions are now presented.

3.1.1 Theories and conceptions

As aspects of the theories of Angyal (1965), Harvey, Hunt and Schroder (1961) and Horney (1945, 1950) are discussed throughout the review of the four styles, their complete theories will be briefly presented here, with the greatest amount of attention being paid to aspects relevant to dependence.

Angyal (1965) views human behaviour in terms of two basic complementary trends - autonomy and homonomy. He sees the person on the one hand, as struggling toward self-assertiveness, freedom and mastery (autonomy), while on the other hand, striving to participate in, or belong to, part of a larger unit or "superordinate whole" (homonomy). Angyal conceives of this larger unit as either a social unit - a family, clan or nation - or as an ideology or meaningfully ordered universe.

According to Angyal, the autonomous or homonomous trends are complementary rather than contradictory in the well-integrated person. Such a person has established a balance between self-surrender and self-reliance. If, however, the homonomous attitude is more powerful than the autonomous one, the imbalance results in dependency relationships and the person is excessively concerned with being of service to others. The dependent person wishes above all else to avoid isolation and to be part of larger wholes or units he regards as extending beyond his individual self.

Dependence characterizes the first stage of Harvey, Hunt and Schroder's (1961) model of conceptual development. According to this model, cognitive development progresses through a series of stages towards greater abstractness. This process results in the modification of the interaction of the individual and his world.

The first stage as described by Harvey et al. bears strong resemblance to the other notions of dependence presented in this section. Once again for the sake of completeness, the other stages of the model will be mentioned.

The individual at the first stage (unilateral dependence) relies maximally on external control. His conceptual systems are derived from external authorities, rather than from experience. He is thus capable only of conforming to the values of others. He thinks on a highly concrete level. Because he is merely concerned with external constraints, time limits and absolute standards of right and wrong, his behaviour lacks foresight.

Stages 2, 3 and 4 are referred to as the stages of 'negative independence', 'conditional dependence and mutuality', and 'interdependence' respectively. Individuals at these stages are briefly described as follows:

The individual at the second stage strongly opposes the attempts of others to help or control him. He interprets the aid and advice of others as violations of his independence, an independence which he often uses destructively. At the third stage, the individual perceives the needs and standards of others and is able to develop truly mutual relationships. The fourth stage individual is able to think at an abstract level. He shows increased tolerance of views that are different from his own.

The dependent person in this theory is characterized as being externally controlled, capable only of conforming to the values of others. He is incapable of abstract thought; in fact, he is incapable of thinking for himself.

The third theory to be discussed which involves the notion of dependence is that of Horney (1945, 1950). She posits that there are three basic attitudes that a person can have towards others. According to Horney these attitudes are necessary as well as desirable for human development. Only in a neurotic framework do these attitudes become rigid and compulsive, indiscriminate and mutually exclusive (Horney, 1945, p.89).

The first of these basic attitudes is termed "moving towards people" (Horney, 1945, p.49). In moving towards people, a person tries to create a friendly relationship with other people in his

world. This type of person needs and desires human intimacy and a sense of belonging. Horney writes, "In sum, this type needs to be liked, wanted, desired, loved; to feel accepted, welcomed, approved of, appreciated; to be needed, to be of importance to others, especially to one important person; to be helped, protected, taken care of, guided." (Horney, 1945, p.51).

A person characterized by this description is viewed in the present research as typical of the dependent person. He tries to live up to the expectations of others to whom he tends to subordinate himself. He is generally dependent on others, rating himself by what others think of him (Horney, 1945, p.54).

The other basic attitudes proposed by Horney are "moving against people" and "moving away from people". These trait patterns also have positive value in human development, for in moving against people, the person equips himself for survival in a competitive society; in moving away from people, he strives towards a certain integrity and serenity (Horney, 1945, p.89). Excessive amounts of these basic attitudes are typical of Machiavellian and alienated personalities respectively and will be described in greater detail in subsequent sections (see Sections 3.2 and 3.4).

3.1.2 Empirical research and measurement scales

Dependence research, like research on autonomy, is sparse in comparison with research on Machiavellianism and alienation. Research on dependence has been hampered by a lack of consensus about how to assess dependent behaviour, the notion of dependence itself lacking conceptual and theoretical clarity. Researchers have variously characterized dependence as a set of responses applied to goal-oriented and help-seeking behaviour (for example, Cotler, Quilty and Palmer, 1970,), or alternatively as person-oriented behaviour such as attention, proximity and approval-seeking (for example, Parker and Lipscombe, 1980).

Zuroff, Moskowitz, Wielgus, Powers and Franko (1983) found that men who scored high on dependence received scores in the external direction on Rotter's (1966) scale of locus of control, indicated feelings of helplessness, and reported experiencing guilt in relation to feelings of hostility. Other findings of Zuroff et al. (1983) were that dependence in males was negatively related to aspects of task leadership such as dominance, group leadership, influence and effort expended. The correlation between dependence and general self-esteem was negative but low.

Several attempts have been made to measure dependence behaviourally (Diener, 1967; Heathers, 1953; Shilkret and Masling, 1981; Zuckerman, 1958). Dependent behaviour is often assessed in terms of the frequency of acceptance of offered help (for example, Heathers, 1953). Some researchers (for example, Diener, 1967) consider also the number of self-debasing and deferent comments made by the subject to be a part of dependent behaviour. Dependent behaviour has also been measured in terms of "unnecessary" help-seeking (Cotler, Quilty and Palmer, 1970), help-seeking behaviour being termed "unnecessary" when the help-seeker relies on others even when capable of carrying out the activity on his own.

Help-seeking behaviour can also be examined in terms of the recipient's reactions to help. A review of such research (Fisher, Nadler and Witcher-Alagna, 1982) reveals that help is often experienced as a mixed blessing - recipients may view aid as a positive, supportive act that reflects donor caring and concern; alternatively, aid may elicit feelings of failure and inferiority in the recipient. It is probable that the different reactions to aid may be viewed in terms of a 'threat-to-self-esteem' model (Fisher et al., 1982). Briefly stated, the model predicts that recipients who are threatened by aid experience negative affect and engage in defensive attempts to restore positive feelings about themselves. For example, they derogate the donor and the aid, and engage in self-help to prevent subsequent help being necessary. In contrast, a recipient of aid who is not concerned with restoring self-esteem does not perceive

aid as threatening. He therefore trusts the donor, evaluates the aid positively and engages in low self-help and high help-seeking, probably because he has experienced his past dependence as pleasant and expects future dependence to be the same (Fisher et al., 1982, pp.46-47). Such a reaction is characteristic of the dependent person as conceived in this research. A significant positive relationship between levels of trust and dependence has also been shown by Robinson (1980).

Several scales have been developed to measure dependency. These include Edwards Personal Preference Schedule (EPPS: Edwards, 1959), Rhode's (1957) Sentence Completion Test, and also the Thematic Apperception Test and Rorschach projective test (see Zuckerman, Levitt and Lubin, 1961). Zuckerman et al. (1961) administered these scales to a sample of student nurses and found fairly low intercorrelations among these scales. A factor analysis yielded four interpretable factors, namely, general dependency, dominance versus abasement, autonomy versus deference and succorance. They also found that the projective tests were uncorrelated with the EPPS measure, while the other more direct measure was significantly correlated with the EPPS measure.

Projective measures of dependence have, however, been shown to be related to overt behavioural indices of dependence as rated by trained judges (Fitzgerald, 1958). Results of these two studies suggest that different scales are using different conceptual definitions and that the term "dependence" has several different references across researchers. Moreover, several researchers (Comrey and Jamison, 1966; Jamison and Comrey, 1968; Shilkret and Masling, 1981; Zuckerman et al., 1961) view dependence as a complex constellation of different aspects, rather than as a simple unidimensional trait.

A more recent scale which taps dependence is the Depressive Experience Questionnaire (DEQ) of Blatt, D'Afflitti and Quinlan (1976). The scale includes 66 Likert-type items that, in spite of the name of the overall scale, do not tap primary symptoms of

depression but rather a broad range of feelings about the self and interpersonal relations. Blatt et al. administered the DEQ to two samples of college students and factor analysed the results. They extracted three orthogonal factors, which they showed to have high levels of temporal stability. They named these factors dependency, self-criticism and efficacy. Thus Blatt et al. consider dependence to be a unidimensional factor of their questionnaire. The scale, however, has not been compared to other scales of dependence nor validated by independent researchers.

3.1.3 Core characteristics of the dependent person

The following description constitutes the core conception of the dependent person as conceived in this research and is based on the dependence literature reviewed.

The dependent person wishes to avoid isolation. He needs and desires to be accepted by others. By adopting the attitudes and views of others, he feels he may win their acceptance. He trusts that others will give help when necessary and evaluates these donors and the help they give positively. His self-evaluation, however, is low and he often expresses self-debasing comments about himself.

3.2 Machiavellianism

The Machiavellian personality is derived from the writings of one man, Machiavelli, and operationalized by Christie and Geis (1970). In contrast to the other interpersonal styles, there are no diverse underlying theoretical points of view of the style, nor are there several different measurement scales. Indeed, almost all studies of Machiavellianism are based on the Mach IV and V scales of Christie and his associates. Consequently, the section on Machiavellian research reviews mainly the findings of studies of Machiavellianism that use these two scales. In view of the importance of these scales to the literature on

Machiavellianism, a separate subsection is devoted to their description.

The concept of Machiavellianism is based on the writings of Machiavelli (1469-1527), an Italian statesman and writer. Machiavelli possessed an acute understanding of contemporary politics and profound insight into human nature. In his writings, he reduced human actions to scientific forms and rules, thereby establishing universal motives and a political science based on the study of man. "The Discourses" (1514/1975), written in the form of notes and short essays, is essentially a theoretical treatise on republics.

Machiavelli was devoted to his dream of the redemption of Italy. In his work "The Prince" (1523/1975), he attempted to indicate to this redeemer or "new prince" some guiding principles based on his own experience of government, his deductions from observing the government of others, and his own analysis of history. In "The Discourses" and "The Prince", he emphasized maintaining a public appearance of virtue while practising whatever means are required to achieve political success and other goals. His empirical, pragmatic and practical writings were taken too literally by contemporaries and by posterity, and he was misjudged as a cynic and an advocate of wicked and immoral actions. Ironically his longing was for a society of good and pure men (Jay, 1967, pp.32-33; Ridolfi, 1967).

3.2.1 Theories and conceptions

Christie and Geis' (1970) interpretation of Machiavellianism as interpersonally manipulative behaviour constitutes the main psychological view of Machiavellianism. Their work is therefore examined closely; only brief mention is made of Horney's (1945) writings in which the portrayal of the 'aggressive' personality type appears to be similar to the description of the Machiavellian.

Christie (1970) first conceived of the idea of the Machiavellian, or interpersonally manipulative personality during the years 1954-1955. At this time, Christie and his fellow researchers were investigating the topic of leaders who manipulated their followers. They were reluctant to accept the premise implicit in contemporary literature that pathology and power were key aspects of the manipulator. Instead, they attempted to discover common assumptions about the nature of man and the most efficient ways to control other men. In examining the writings of both ancient and modern power theorists, Christie was impressed by the explicit statements about human nature in Machiavelli's writings. Christie and his associates compiled psychometric scales based on Machiavelli's statements (Mach IV and Mach V scales to be described in Section 3.2.3). These scales purport to measure the degree to which respondents believe that people in general can be manipulated, that is, the degree to which respondents have a Machiavellian orientation.

Horney's (1945, 1950) theory of personality was presented in Section 3.1.1. Her portrayal of the person who characteristically "moves against" other people bears comparison with the description of the Machiavellian personality: the person who moves against others is described as having a facade of *sauf* politeness and good fellowship that is purposely designed to facilitate satisfaction of his need for control and power. His interpersonal behaviour is actually aggressive, for he needs to excel by exploiting others. Exerting power and dominance over others provides him with a sense of recognition and self-worth.

3.2.2 Empirical research

In their book, "Studies in Machiavellianism", Christie and Geis (1970) published and interpreted about 38 studies on the Machiavellian concept. Comprehensive reviews of more recent research on Machiavellianism are provided by Vleeming (1979) and Hanson and Vleeming (1982).

On the basis of the studies reviewed, Geis and Christie (1970) claim that certain situational characteristics either mask or enhance the personal or dispositional characteristics of people with high Machiavellian tendencies (high Machs) and those with relatively low Machiavellian tendencies (low Machs). They conclude that high Machs are most different from lows in the following experimental conditions:

- i) when subjects interact face-to-face with others;
- ii) when subjects can initiate behaviour or responses of their own free will, that is, when the situation allows for "latitude for improvisation"; and
- iii) when subjects can become affectively involved with their partners and thus distracted from achieving success in the experiment.

The research of Christie and Geis (1970) illustrates a number of personality differences between high and low Machs. A selected set of these differences is presented in the following five subsections: 'Machiavellian dispositions', 'trust in others and views of others', 'self-esteem', 'leadership and work situations' and 'ingratiating behaviour'.

Machiavellian dispositions

Geis and Christie (1970) label the dispositions of high and low Machs that occur under the aforementioned situational conditions, the "cool syndrome" for high Machs and the "soft touch" for low Machs.

The former term derives from the observation that the high Mach remains relatively unmoved by emotional involvement with others, even in the face of social pressure and in high-dissonance conditions. By contrast, the low Mach is affectively involved with his own beliefs and those of others. He is inclined to do or accept what someone wants of him simply because that person wants it, and readily changes his opinions in high dissonance conditions. Low Machs "touch others softly", regarding others personally, so as not to infringe upon their intentions; high

Machs "use others coolly" regarding others as objects to be manipulated for their own purposes (Geis and Christie, 1970, pp.305-309).

It is interesting to relate the "impression management" theory of Tedeschi, Schlenker and Bonama (1971) to the observation that the high Mach does not change his views in high-dissonance conditions. According to Tedeschi et al., subjects in dissonance experiments are actually manipulating the experimenter and the experimental situation by the use of a facade of consistency in order to impress the experimenter. These subjects are extremely concerned with appearing to be consonant in word and deed, and attitude and behaviour. They fear that any inconsistency would lower their credibility and reduce their ability to influence others. This impression management perspective may account for the apparent consistency in the views and behaviour of the Machiavellian personality.

The Machiavellian's trust in others and views of others

A general conclusion of Christie and Geis (1970, pp.359) is that high Machs, in contrast to low Machs, distrust others. Other research studies support the view that high Machs have cynical, unflattering and generally negative attitudes towards others (Jones, Nickel and Schmidt, 1979; Okanes, 1974; Skinner, 1982, 1983). Indeed, Rotter (1967) cites the literature on Machiavellianism as indirectly dealing with trust (p.652).

Geis and Christie stress that high Machs do not appear as if they are unconcerned about others. They often express more interest and concern than lows but are not personally or emotionally involved in these concerns (Geis and Christie, 1970, pp.301-302). In addition, they never appear to be "obviously manipulating": on the contrary, their cool, cognitive, situation-specific strategy often results in getting others to help them achieve their goals and making these helpers feel grateful for the opportunity. However, Geis and Christie (1970, pp.306-307) claim that high Machs are exploitative rather than

behaviourally hostile, vicious or punitive toward others. Their observation contradicts the findings of Wrightsman and Cook (1965 as cited by Christie, 1970, pp.45-47), who obtained correlations ranging from 0,41 to 0,60 between Mach IV and scales of hostility. The association between scales of Machiavellianism and aggression has also been shown by Russell (1974) and Touhey (1971). Geis and Christie (1970, pp.307) admit that the absence of overt hostility in their experiments could have been due to the limited range of observed laboratory situations. However, they are more inclined to believe that the high Mach, consistent with the "cool syndrome" uses hostility instrumentally, rather than overtly, to achieve his goals.

The Machiavellian's self-esteem

The only study found which has investigated the relationship between Machiavellianism and self-esteem is that of Hunter, Gerbing and Boster (1982). These researchers predicted that people endorsing a large number of Machiavellian beliefs (high Machs) would be highly competitive and confident in their social interaction. The results of their study conducted on 351 students are consistent with expectation: they found a positive association ($r=0,28$)* between scores on the Mach IV scale and positively keyed scores on Rosenberg's (1965b) scale of self-esteem.

The impression gained from the literature is that the self-esteem of the high Mach is likely to be high. The high Mach who perceives others as objects to be manipulated, should evaluate himself more positively than those whom he considers worthy only of exploitation for his own ends.

Furthermore his self-esteem is likely to be enhanced relative to the number of successful manipulations he achieves. Hence the

* The correlation is positive if Rosenberg's (1965b) scale is positively keyed, that is, high scores indicate high self-esteem. The scale is often keyed negatively.

self-esteem of the highly Machiavellian person is likely to be high.

The Machiavellian in leadership and work situations

Christie and Geis (1970, pp.309-311) have shown that high Machs tend to emerge as leaders in small groups. Other research has indicated that Machiavellianism is correlated with emergent leadership (Geis, 1968) and team effectiveness (Jones and White, 1983). Skinner (1981) showed that among high Machs with business-orientated occupational preferences, achievement motivation was high. In a later study, Skinner (1983) found that high Machs with preferences for business occupations, as compared to high Machs with preferences for non-business occupations, showed significantly more sociability or skill in interpersonal relations as measured by the extraversion (E) subscale of Eysenck's Personality Questionnaire (EPQ: Eysenck and Eysenck, 1975).

In studies of Machiavellianism among management personnel (Heisler and Gemmill, 1977; Hollon, 1983), Machiavellianism was found to be negatively correlated with job satisfaction. Hollon (1983) further found significant negative correlations between Machiavellianism and job involvement in a sample of 75 managers ($r=-0,28$). However, the negative association between Machiavellianism and job involvement seems counter-intuitive. Status and prestige are important to the Machiavellian's self-image; hence it would seem that achieving success in his work would also be important to him and he should be job involved. It is possible that misuse of the correlational method may have resulted in Hollon's findings (see Section 8.4 for a discussion on the correlation coefficient). Furthermore, studies need to be conducted on both management and non-management personnel before it can be claimed that Machiavellianism is negatively related to job involvement and job satisfaction.

The ingratiating behaviour of the Machiavellian

Ingratiation, as conceptualized by Jones (1963) refers to a class

of strategic behaviour designed to elicit increased attraction from another person in order to obtain a specific benefit. It is a form of impression management or self-presentation with manipulative intent (Jones, 1963, pp.2-11). Ingratiating tactics must be distinguished from help-seeking behaviour which, as opposed to ingratiating behaviour, do not involve illicit, devious intent. (Help-seeking behaviour is discussed in relation to the dependent person in Section 3.1.2).

Ingratiating behaviour has been associated with Machiavellianism (Blumenstein, 1973; Jones, Gergen and Davis, 1962; Jones, 1963; Lefebvre, 1973; Pandey, 1981; Pandey and Rostogi, 1979). The results of this research are contradictory - some researchers (Blumenstein, 1973; Pandey, 1981; Pandey and Rostogi, 1979) have found that high Machs use ingratiating tactics more than low Machs do, while others (Jones et al., 1962; Lefebvre, 1973) have found no clear evidence of a positive association between Machiavellianism and frequency of ingratiating behaviour.

It is likely that these inconsistencies can be explained in terms of the subjectivity of researchers, since there are no objective measures of ingratiation.

3.2.3 Measurement scales

The Mach IV and V scales (Christie, 1970) are the most commonly accepted and widely used scales in research on Machiavellianism.

The Mach IV scale

The Mach IV scale consists of 20 items in the Likert format. These are counterbalanced to reduce agreement response set biases - half are worded in a pro-Machiavellian direction and the other half in the opposite direction. However, this counterbalancing has not controlled the scale's association with social desirability: there are moderate-to-high negative correlations between scores on Edward's (1957) Social Desirability scale and scores on the Mach IV scale (correlations range between -0,35 and -0,75) (Christie, 1970, pp.18-19). It may, however, be realistic

to have a social desirability component in the scale since a social desirability element may actually constitute an aspect of the Machiavellian personality.

The Mach V scale

The Mach V scale was designed to overcome the social desirability "problem". This scale consists of 20 triads; each triad contains one statement which taps Machiavellianism (the keyed or Mach item), a second statement unrelated to the Mach item but matched in social desirability (the matched item), and a third statement (the buffer). The social desirability of the buffer is low if that of keyed and matched items is high, and vice versa.

Respondents are required to indicate the one statement with which they are in most agreement and the one with which they are in least agreement, leaving a third statement unmarked.

An example of one of the Mach V scale's triads is:

- a) Never tell anyone the real reason you did something unless it is useful to do so.
- b) The well-being of the individual is the goal that should be worked before anything else.
- c) Since most people don't know what they want, it is only reasonable for ambitious people to talk them into doing things.

In this triad, statement (a) is the keyed or Mach item, (b) is the buffer and (c), the matched item. Both statements (a) and (c) are matched in terms of low social desirability; statement (b) has high social desirability.

Christie (1970) developed a scoring system for the Mach V scale. This scoring procedure has been severely criticized by several authors (Rogers and Semin, 1973; Shea and Beatty, 1983; Williams,

Hazelton and Renshaw, 1975). An alternative scoring system was proposed by Rogers and Semin (1973) which has also received criticism (Shea and Beatty, 1983). In Table 3.1 Christie's method of scoring is presented.

Table 3.1: Christie's (1970) item scoring procedure for the Mach V scale

Endorsement of:			Score	
Mach item	Matched item	Buffer	(+)a	(-)b
Most agree	Least agree	Omitted	7	1
Most agree	Omitted	Least agree	5	3
Omitted	Least agree	Most agree	5	3
Omitted	Most agree	Least agree	3	5
Least agree	Omitted	Most agree	3	5
Least agree	Most agree	Omitted	1	7

- a) The (+) column is used for scoring triads when the Mach item is worded in a pro-Machiavellian direction
- b) The (-) column is used for scoring triads when the Mach item is worded in an anti-Machiavellian direction.

According to Christie's item scoring procedure (Table 3.1), an item score of 1,3,5 or 7 is assigned to each triad based on which one of the six possible combinations of statements is selected. On addition of a constant of 20 points, total scores can range from 40 to 160 with 100 as the theoretical neutral point.

Christie's method has been criticized by Williams, Hazelton and Renshaw (1975) on the grounds that it is biased towards item scores of 3 and 5. Because scores of 3 and 5 are each assigned to two combinations of statements, whereas scores of 1 and 7 are assigned to only one combination each, there is not an equal probability of all the item values. Williams et al. (1975, p.157) further observe that using Christie's method, a respondent can receive a score as high as 120 without once responding to any of the statements keyed for Machiavellianism!

Rogers' and Semin's (1973) criticism of Christie's scoring procedure is twofold. Their first objection is that the method introduces random error by taking into account the subject's discrimination between two non-Mach items in computing his score on Machiavellianism. Secondly, they object that the success of the method is dependent on the social desirability matching - if this matching is for any reason invalid (for example, in the case of certain populations), the scoring procedure is entirely inappropriate. The scoring procedure of Rogers and Semin is presented in Table 3.2.

Table 3.2: Rogers and Semin's (1973) alternative item scoring procedure for the Mach V scale

Endorsement of the Matched item	Score	
	(+)a	(-)b
Most agree	7	1
Omitted	4	4
Least agree	1	7

- a) The (+) column is used for scoring triads when the Mach item is worded in a pro-Machiavellian direction
- b) The (-) column is used for scoring triads when the Mach item is worded in an anti-Machiavellian direction.

Rogers and Semin's method of scoring correlates highly with Christie's ($r=0,8$; Shea and Beatty, 1983). According to this alternative method, only a subject's response to the Mach item in each triad is considered. Instructions to the subject remain the same as those of Christie's method, as do the range of total scores and theoretical neutral point.

Although Rogers and Semin claim improved part-whole correlations (the Mach items to the total Mach score), Shea and Beatty (1983) claim that regardless of the scoring method used, the Mach V scale is not a reliable instrument. In their study (Shea and Beatty, 1983) on 123 business managers, the reliability estimates

of the Mach V scale based on Christie's scoring method were far below those previously reported in the literature; the scoring method of Rogers and Semin resulted in only slightly improved estimates.

Shea and Beatty (1983, p.509) have surveyed several studies, all of which have shown that the reliability of the Mach V scale can be unacceptably low: reliability estimates are as low as 0,22 (Kuder-Richardson estimates of internal consistency) and 0,27 (Spearman-Brown corrected split-half reliability coefficients). Shea and Beatty stress that little faith can be placed in the validity of a scale of unacceptable reliability, and advocate caution in the use of the Mach V scale. Williams, Hazleton and Renshaw (1976) regard the Mach IV scale as superior to the Mach V in terms of its factor structure, reliability and validity.

The structure of the Machiavellian scales

Christie classified the 20 items of the Mach IV scale "a priori" into three groups:

- i) items concerned with the nature of an individual's interpersonal tactics (9 items);
- ii) items concerned with views of human nature (9 items); and
- iii) items concerned with abstract or generalized morality (2 items).

His categorization of the items was based purely on an impressionistic analysis - no factor analysis was computed at the time. Christie and Lehmann (1970) were satisfied that the scale as a whole was tapping an overall unidimensional Machiavellian construct for two reasons: firstly, the overall scale reliability was "reasonably high" (Christie and Lehmann, 1970, p.359); secondly, the results of an item analysis showed that the part-whole correlation between each item and the subscale to which it had been assigned were lower than between the items and

the total score. Thus, these results did not predict the presence of the predicted discriminable dimensions. Christie and Lehmann therefore decided not to pursue the scale structure any further and instead to direct attention to the relationship between the Mach IV total scores and external criteria. However, the results obtained on a student sample surprised them. One of these results was the unexpectedly high correlation between Mach IV total scores and anomia (correlations ranged between 0,34 and 0,40). They therefore decided to formally investigate the internal structure of the Mach IV scale. The results of two factor analytic studies (Christie and Lehmann, 1970) revealed that there are at least four factors underlying the Mach IV and V scales. These factors, however, seem to be based largely upon the direction of the keying of items, the item format and the item response format. The results also showed a moderate correlation between anomia and Mach IV total scores ($r=0,51$) but a low correlation between anomia and Mach V ($r=0,16$). Christie and Lehmann explain the former correlation on the grounds that both positively worded anomia and Mach items have low social desirability in common, and that both scales incorporate pessimistic views of others.

The findings of factor analytic studies of the Mach IV scale (Ahmed and Stewart, 1981; Hunter, Gerbing and Boster, 1982; Kuo and Marsella, 1977; Williams, Hazelton and Renshaw, 1975) have supported the conclusion that the scale is multidimensional. The findings of Hunter et al. (1982), Kuo and Marsella (1977), and Williams et al. (1975) all support the "a priori" distinction made by Christie between Machiavellian tactics and views. In spite of these findings of multidimensionality, almost all studies of Machiavellianism are based on subjects' total scores on the Mach IV and V scales. Williams, Hazelton and Renshaw advocate the use of scores on the separate factors instead. The view of Hunter et al. is even stronger: they claim that total Mach scores are meaningless and have led to confusing, weak and haphazard relationships between Machiavellianism and many traits and attitudes.

3.2.4 Core characteristics of the Machiavellian

The Machiavellian person protects himself by a facade of politeness and well-meaning. Although he regards others as objects to be exploited and manipulated for his own purposes, he tries not to give this impression to others. He uses his hostility and aggression instrumentally, rather than overtly, to exploit others. He knows what he wants and will use deceit, cynicism and ingratiation tactics to achieve it. He has cynical, unflattering views of others and generally distrusts others. He is likely to emerge as a leader in work and other situations.

3.3 Autonomy

The term "autonomy" as applied to a person, means the quality or state of being self-directing, independent and free (Webster's, 1961).

Implicit in this definition of autonomy are two separate ideas: the first is concerned with individual human rights, and the second is the notion of the person being completely independent of others.

3.3.1 Theories, conceptions and definitions

Autonomy has been conceptualized in several different ways in the psychological literature. Gail Sheehy in her book "Passages" (1976) writes of autonomy as follows:

"There is a ... highly refined dimension of growth that is only possible and appropriate after we have had time to profit by years of life and experience. It is called by Jung 'individuation', by Maslow 'self-actualization', by others 'integration' or 'autonomy'. I speak of it ... as 'gaining our authenticity'...that felicitous state of inner expansion in which we know of all our potentialities and

possess the ego strength to direct their full reach."
(pp.48-49).

Jung (1957) proposes that the person is continually developing and progressing towards future goals and self-realization. He sees this movement towards actualization as a spontaneous, natural process of maturation. This process is often beset by difficult periods and crises, the resolution of which helps the person to move towards an accurate perception of what he is capable of becoming as a human being. The person, having achieved this full understanding of himself, becomes individuated. The present author views the autonomous person as having achieved the state of individuation.

Angyal's (1941, 1965) theory has been mentioned in Section 3.1.1. According to Angyal, human behaviour may be explained in terms of two opposite directional trends, "autonomy" and "homonomy". Autonomy or "self-determination" refers to the expansion of the organism by assimilating and mastering the environment. This trend may be expressed through the autonomous person's desire for superiority, achievement, exploration, and other such self-expanding activities.

Other theories (for example, Fromm, 1941; Maslow, 1968) also involve contradictory forces (Fromm's theory is discussed in Section 3.4.1). According to Maslow (1968, p.46), every human being has two sets of forces in him: on the one hand, the set of defensive forces drives him to cling to the security of the past, to be afraid to take chances, to be afraid of freedom and independence; on the other hand, growth forces impel him toward full functioning of his capacities and confidences to face the external world. Maslow conceives of "healthy" growth as the growth towards "self-actualization" (Maslow, 1968, p.197).

Self actualization is proposed as the highest basic human need. Human needs, according to Maslow (1943, 1970), may be categorized

into five basic needs which are hierarchically structured according to their prepotency and probability of appearance. The term "prepotency" means that higher needs cannot emerge until lower ones have first been satisfied. Gratification of the lower basic needs (for example, trust) is a prerequisite for a person to be able to move towards self-actualization.

Maslow claims that self-actualizers are healthy people whose continued growth and development derives from their own latent resources and potentialities. Such people are realistically oriented and accepting of themselves. They are independent but also concern themselves with undertaking tasks that will benefit others.

Autonomy has been conceptualized in various other ways. Some theorists and researchers (Edwards, 1957; Gough and Heilbrun, 1980; Jackson, 1970; Murray, 1938; Strümpher, 1976) have conceptualized autonomy as a socially undesirable characteristic. According to Murray, autonomous people defy conventions, are concerned only with going their own way uninfluenced by others, are defiant, rebellious and irresponsible (Murray, 1938, pp.156-157). Edward's definition of autonomy is modelled on Murray's need theory but includes the avoidance of responsibility and obligations as characteristics of the autonomous person. The definitions of Gough and Jackson similarly emphasize egotistical, irresponsible attributes.

Autonomy has also been described as a dimension of moral character (Hogan, 1973; Hogan, Johnson and Emler, 1978; Kurtines, 1973, 1974). These authors emphasize the socially desirable aspects of autonomous individuals such as independence and strong-will. For example, Kurtines (1974) describes an autonomous person as one who is capable of making decisions and judgements without being influenced by social and other external pressures. Karni and Levin (1979) have borrowed Kurtines' (1974) definition of autonomy and adapted it to the industrial setting. They see the autonomous worker as a person who has initiative

and is able to cope with problems and decisions at the level of his own work.

A few writers (for example Chickering, 1969, cited by Lewis, 1978, p.155) extend the socially desirable aspects of autonomy to include other apparently mature elements such as interdependence. In the present research, autonomy will be conceived of as incorporating mature interdependence as defined by Chickering (1969, cited by Lewis, 1978, p.155).

"Mature autonomy requires both emotional independence - freedom from continual and pressing needs for reassurance and approval - and instrumental independence, the ability to carry on activities and cope with problems without seeking help from others and the ability to be mobile in relation to one's needs. Simultaneously, the individual must accept interdependence, recognising that one cannot receive benefits from a social structure without contributing to it, that personal rights have a corollary social responsibility."

3.3.2 Empirical research and measurement scales

Autonomy, as applied in psychological research, has been used in various ways. It has been used to refer to one of the dimensions of the job characteristic model of Hackman and Lawler (1971) and Hackman and Oldham (1976). It has also been used to refer to the increased responsibility and decision-making afforded to workers (for example, Carnall, 1982; Gardell, 1977). Autonomy in the present research is used to refer to person characteristics rather than job characteristics.

Dickstein and Hardy (1979) have found that autonomous men and women (as measured by Kurtines' (1973) autonomy scale) have high self-esteem. Research on self-esteem shows that high self-esteem individuals, as compared to lows, are better adjusted both psychologically and socially and are generally associated with "healthy" personality attributes (see Section 2.1.3).

The autonomous person, as depicted in the present research, is generally described in these terms. Such a person engages in interdependent relationships and is willing to share knowledge and ideas with others. His behaviour and attitudes are such that he does not feel threatened by others. Hence, it is not necessary for him to resort to defensive tactics. His self-esteem is thus likely to be high.

It is likely too, that the autonomous person would engage in altruistic behaviour. When helping behaviour is elicited by the perceived need for aid of a dependent person, it is defined as altruistic (Krebs, 1970, p.277). The personality characteristics of the altruistic person are indeed consistent with those of the autonomous person. For example, self-perceived competence has been related to altruism (Midlarsky, 1968); altruistic people tend to be well adjusted, sociable and unassuming, and to think that they are in control of their own fates (Krebs, 1970, pp. 285-298). Autonomy has also been associated with moral conduct and judgement (Hogan, 1973).

Scales of autonomy are included in several personality inventories, for example, The Personal Preference Schedule (Edwards, 1957), The Adjective Check List (Gough and Heilbrun, 1980), The Personality Research Form (Jackson, 1970). As previously stated, all these inventories measure the immature, socially undesirable aspects of independence.

Attempts to measure autonomy have also been made by Karni and Levin (1979) and Kurtines (1973, 1974, 1978). Kurtines (1974) describes the difficulties inherent in operationalizing the concept of autonomy. For example, it is often difficult to judge whether a noncompliant act reflects autonomy in the form of independence, or simply antisocial tendencies. Compliance, on the other hand, is relatively easy to determine.

Kurtines developed two scales designed to measure individual differences with regard to autonomous rule compliance. His first

scale (Kurtines, 1973, 1974) emerged as the accepted measure of autonomy for the model of moral development of Hogan, Johnson and Emler (1978: Lifton, 1983). Kurtines (1978) then went on to develop a second autonomy scale without any mention or citation of his previous scale, and has since given no indication of his own preference!

Lifton (1983) has pointed out the confusion that this has caused in the psychological literature. He has also cited several problems associated with the development of these scales and criticized them for measuring the narrow construct of autonomous rule compliance rather than independence. He further criticizes the scales for failing to tap rule defiance and any other socially undesirable attributes of autonomy.

The autonomy inventory developed by Karni and Levin (1979) similarly taps only the socially desirable aspects of autonomy. Lifton has indicated that a valid measure of autonomy should include both socially desirable and undesirable aspects of independence. In such measurement scales, it is important that socially desirable characteristics be considered separately from socially undesirable ones.

Karni and Levin's (1979) vocationally based autonomy scale and Strümpher's (1976) autonomy scale are two autonomy inventories that have been constructed in South Africa. Unfortunately no published validation information is available on Karni and Levin's scale apart from their own article on the construction and analysis of the instrument. They view their results as indicating adequate internal validity of the autonomy construct, but advocable that further work be done to improve the items and refine the concept.

Based on items adapted from existing inventories tapping both positive and negative personality characteristics, Strümpher's "Personal Autonomy Inventory" contains three factorially independent scales, namely, "Independence of Judgement", "Moral

Relativism" and "Adventurousness". The first factor, on which the scoring is reversed, is similar to authoritarianism and dogmatism; the second is an index of the absence of conservatism; while the third factor taps interest in new ideas and activities. Strümpher (1976) reports that his scale shows satisfactory psychometric properties. In a validation exercise of his scale, Strümpher demonstrated the scale to have both convergent and discriminant validity (Strümpher, Hotz and Tilley, 1977).

3.3.3 Core characteristics of the autonomous person

The autonomous person is a well-adjusted person who has achieved self-growth, and continues to grow and to develop his own latent potentialities. He is realistically orientated and generally positive towards himself and others. He is capable of making decisions without being swayed by external pressures. He requires freedom to carry out his activities independently, but still recognises that he has the responsibility of contributing to society. He thus has the characteristic of interdependence as well. His self-esteem is likely to be high and he is likely to engage in altruistic behaviour. He is what most ethical theorists would regard as a moral person.

3.4 Alienation

Of the four styles discussed, alienation has received the greatest amount of attention in the theoretical and research literature. Its review is therefore more comprehensive than those of the other styles.

The alienation concept has been variously used by theologians, philosophers, sociologists and psychologists. It has received a considerable amount of attention, and several bibliographies, literature surveys and books have been compiled on the subject (see Perkins, 1982). The major reviews of alienation are those of Schacht (1971), Israel (1971) and Johnson (1973). However,

there is still much confusion surrounding the meaning of alienation, its measurement and usage (Johnson, 1973; Perkins, 1982; Seeman, 1975; Schweitzer, 1981).

As Johnson states, "Alienation is an atrocious word.... Few concepts have been subjected to as long a history of association with diverse disciplines, each contributing its own emphasis and meanings" (Johnson, 1973, p.3).

One of the earliest applications of alienation was in an economic context to describe a psychological state created by the modern conditions of labour. Since then, alienation has been discussed in several contexts - for example, work, family, social institutions, the self and other people (Maddi, Kobasa, and Hoover, 1979). A vast amount has been written on the work alienated person. The present review gives a picture of both global or general alienation and work alienation.

3.4.1 Views and conceptions of alienation

General alienation

The concept alienation has been used in two different contexts: the rational and the empirical. The former has been the field of activity of theologians and philosophers; sociologists and psychologists have been active in the empirical field (Kanungo, 1979, p.120). In the present research, the main focus of attention will be on the work done in the empirical context. A brief review of the sociological, psychological and socio-psychological approaches is presented.

Alienation is a central theme in the classics of Marx, Weber and Durkheim (Kanungo, 1979; Seeman, 1959). Marx (1844/1963) focuses on alienation in the context of the industrial system. He views alienation as resulting primarily from the workers' perceived lack of freedom and control at work (Kanungo, 1979; Marx 1844/1963).

Weber also considers alienation as a consequence of working conditions which restrict individual autonomy, responsibility and achievement at work (Kanungo, 1979, p.122). Unlike Marx and Weber however, the French sociologist Emile Durkheim (1893/1947, 1897/1951) views alienation as a consequence of a condition of "anomie". He used the term "anomie" to describe a societal condition in which there is absence of socially approved means and behavioral norms necessary for the achievement of culturally prescribed goals. Anomie has been discussed by several other theorists (MacIver, 1950; Merton, 1938; Mannheim, 1950; De Grazia, 1948).

It must be emphasized that anomie refers to a property of a social system and not of an individual. Individuals are confronted by a systemic condition of anomie. Hence anomie as such cannot be directly measured by individual attitudes. The terms "anomia" and "anomy" have been coined to distinguish the psychological concept from its sociological counterpart "anomie" (Robinson and Shaver, 1973; Teevan, 1975). Srole (1956) has attempted to study the subjectively felt socio-psychological effects of anomie. He views anomia as the interpersonal integration of the individual with his social environment.

Personality theorists such as Fromm (1941) and Horney (1945) view alienation from a socio-psychological perspective. The essence of Fromm's (1941) writings is that a person feels lonely and isolated because he has become separated from nature and other people. Over the ages, as people have gained more freedom, they have felt more alone, and their freedom has become a negative condition from which they have tried to escape. Man today has achieved freedom from tyranny, superstition and tradition, but this freedom is really a negative form, for he has not yet achieved positive freedom to realise spontaneously his capacities and potentialities. Hence man feels isolated, powerless and dissatisfied. He can overcome the anxiety of his moral aloneness and lack of direction in one of two ways - he can either use his freedom positively to unite with other people in the spirit of

love and shared work, or he can use his freedom negatively to acquire a new bondage by submitting to authority and conforming to society.

Horney's (1945) theory of personality has been described previously (Section 3.1.1). It was stated that the person who characteristically "moves away from people" bears strong resemblance to the alienated person. Such a person is determined never to be dependent on anyone nor get emotionally involved with anyone. He has a resigned, detached attitude and a "don't care" demeanour, all of which contributes to his total lack of achievement motivation. Such a person desires "to be free from all demands, rather than to be free for the pursuit of desirable activities" (Monte, 1977, p.225).

The contemporary sociologist, Seeman (1959, 1972, 1975) has had perhaps the greatest influence on contemporary alienation research. Seeman has attempted to organize traditional sociological thinking and to thereby render the concept of alienation more amenable to empirical investigation. He has proposed five variants or basic ways in which the concept has been used. He later added a sixth variant to his categorization (Seeman, 1972). From a socio-psychological viewpoint, Seeman proposes that each variant refers to a subjectively felt psychological state of the person, is caused by different environmental conditions and results in different behavioural consequences (Seeman, 1959, p.784). His pioneering conceptual work has stimulated a proliferation of research and empirical results (Schweitzer, 1981, p.530). Comprehensive discussion of these studies as well as developments in alienation research may be found in Seeman's (1975) publication. His revised categorization is now briefly presented.

- i) Powerlessness is defined as the sense of low control versus mastery over events. This type of alienation has been related to Rotter's (1966) notion of internal/external locus of control.

- ii) Meaninglessness is defined as the sense of incomprehensibility versus understanding of personal and social affairs. Seeman sees Srole's (1956) anomia scale as having a strong meaninglessness component as well as a weaker powerlessness component.
- iii) Normlessness is defined in terms of high expectancies for (or commitment to) socially unapproved means rather than conventional means for the achievement of given goals (Seeman, 1975, p.93). This variant of alienation is derived from Durkheim's description of anomia.
- iv) Cultural estrangement (called value isolation in Seeman's (1959) categorization) is defined as the individual's rejection of commonly held values in the society (or subsector) versus commitment to the going group standards (Seeman, 1975, p.93).
- v) Self-estrangement refers to the individual's engagement in activities that are not intrinsically rewarding versus involvement in a task for its own sake (Seeman, 1975, p.94). Seeman regards this version of alienation as the master theme of alienation rather than as a variant of it (Seeman, 1975, pp. 104-105). Analysts from Marx to Sartre have focused on the ways in which a person comes to experience and adopt self-estranged life styles. This version of alienation has also received extensive discussion by Fromm in "The Sane Society" (1955).
- vi) Social isolation is defined by Seeman (1975, p.94) as the sense of exclusion or rejection versus social acceptance. This form of alienation relates to feelings of loneliness and rejection from a collectivity or community and has often been associated with minority groups.

Another categorization that has been used in alienation research is that of Maddi, Kobasa and Hoover (1979). Based on a review of the literature, their categorization is conceptually comprehensive. It is composed of four types and five contexts of alienation (see Maddi et al., 1979, for details of the

researchers and theorists who discuss these types and contexts). The types are briefly described as follows:

- i) Powerlessness is used to describe the person who still believes in the importance of certain goals but feels impotent to bring them about.
- ii) Adventurousness refers to the interest in extreme and dangerous activities because everyday experiences have lost their meaning.
- iii) Nihilism is the active attempt to discredit everything that appears to have meaning to others. It is similar to Seeman's (1975) component of social isolation.
- iv) Vegetativeness is the inability to believe in the truth, importance or interest value of anything one is doing. It bears similarity to Seeman's (1975) meaninglessness component.

The contexts in which these types of alienation can be expressed are the person's relationship to work, social institutions, family, other persons and self (Maddi et al., 1979). The Alienation Test developed by Maddi et al. is described in Sections 3.4.2 and 6.1.2.

Although many researchers (Aiken and Hage, 1966; Blauner 1964; Burbach, 1972; Clark, 1959; Maddi et al., 1979; Seeman, 1975) support the view that alienation occurs in specific contexts, other researchers (Hajda, 1961; Nettler, 1957; Pearlin, 1966) have a global view of alienation. They view alienation as occurring in the framework of the total society or its major social institutions. The individual is viewed as being alienated from all interpersonal relationships and all social institutions.

The view adopted in the present study is that alienation may occur in varying degrees in several different contexts of a person's life. However, all these aspects of alienation are

viewed by the author as contributing to an individual's overall or general level of alienation.

We turn now to a discussion of conceptions of alienation in the work context.

Work alienation

In spite of general acknowledgement of Marxist influence on the concept of work alienation, views of alienation in the work context vary greatly among theorists and researchers (Schacht, 1971, pp.160-161). Several authors (Aiken and Hage, 1966; Pearlin, 1966; Shepard and Panko, 1974) consider work alienation to reflect the worker's dissatisfaction with the limitations associated with his position in the organizational hierarchy. Other authors (Middleton, 1963; Seeman, 1967) consider work alienation to be related to the degree to which the worker finds his work intrinsically rewarding. Blauner (1964) considers alienation from work to be a function of the degree to which the individual's work is self-directed, meaningful to him and self-expressive.

The picture of the work alienated individual that emerges from these three conceptions, is of a worker who feels powerless within the organization and who feels that his work lacks intrinsic rewards, meaningfulness and self-expression. There are several other definitions of work alienation (see for example, Gould, 1969; Pearlin, 1966; Perkins, 1982).

At this point, work alienation should be distinguished from job dissatisfaction. Although both connote negative attitudes, the concepts are not synonymous (Korman, Wittig-Berman and Lang, 1981, p.343; Schacht, 1971,p.162; Seeman, 1975,p.108). While job satisfaction/dissatisfaction is concerned with the way in which an individual views his job, work alienation constitutes one of the processes by which this view can occur (Korman et al., 1981, p.343).

Authors who have attempted to investigate the relationship between work alienation and alienation in society have been guided by two theoretical views, referred to respectively as the "generalized" and the "compensatory" alienation approaches.

The generalized approach stems from the Marxist view that work experience is central to the worker's life and that alienation from work is the essence of all alienation (Kaufman, 1965; Schaar, 1961 both cited by Wahba, 1980, p.393). Gardell (1971) and Wahba (1980) support this approach. The compensatory approach is advocated by Seeman (1967), who claims that people compensate for their experiences of alienation at work by seeking gratification from other sources.

Alienation in the present research is conceived of as a general personality orientation that is influenced or coloured by alienation in the work context. However, work alienation has often been considered separately in the psychological literature; hence it is reviewed separately from alienation in general in the present research.

3.4.2 Empirical research and measurement scales

General alienation

The general picture of the alienated individual that emerges from studies on alienation is of a person who harbours hostile attitudes and aggression towards others (Brookings, 1980; McClosky and Schaar, 1965; Maddi, Kobasa and Hoover, 1979; Naik, 1978; Wolfe, 1972). He has a very low need for achievement and is generally dissatisfied with his job (Naik, 1978). He generally distrusts and devalues others and distances himself emotionally from them. He adopts a defensive pattern of behaviour of non-concern towards events over which he feels he has no control (Gould, 1969; Horney, 1945). Certain authors (Fisher, Nadler and Witcher-Alagna, 1982; Gould, 1969) interpret this defensive type of behaviour in terms of the alienated person's defensive attempt to protect his already low and vulnerable self-esteem.

Comprehensive reviews of alienation scales are available (Knapp, 1976; Robinson and Shaver, 1973). Robinson and Shaver review scales of alienation and anomia together, drawing a distinction between the concepts in terms of the sociological and psychological interpretations. They criticize most of these scales, especially the most widely used scales of McClosky and Schaar (1965) and Srole (1956), for their lack of control over agreement response set.

Srole's five-item anomia scale has received much criticism on this issue, since all items are keyed in the same direction (Carr, 1971; Lenski and Legett, 1960; Putney and Middletown, 1962). It has been further criticized on the grounds of questionable construct validity (see, for example, Putney and Middletown, 1962; Teevan, 1975). Meier and Bell (1959) propose that the scale taps despair and despondency. Researchers (Dodder, 1967; Dodder and Astle, 1980) have investigated the factor structure of Srole's nine-item anomia scale (four new items having been added by Srole to the original five). Their results showed that whereas the original five items were reasonably unidimensional, the nine items loaded on two factors interpreted as valuelessness and cynicism. The lengthened scale appeared to be the more reliable instrument. Despite the criticisms of Srole's scale, it has been used in a vast number of research studies (see Dodder and Astle, 1980; Robinson and Shaver, 1973, p. 249).

The alienation scales developed by Dean (1961) and Neal and Rettig (1963, 1967) have been severely criticised. The former has received criticism from Dodder (1969) and the latter, from several researchers (Cartwright, 1965; Maddi, Kobasa and Hoover, 1979; Schacht, 1971).

The Alienation Test developed by Maddi et al. (1979) appears to be one of the most promising measurement scales. Conceptualized on the basis of theoretical studies of alienation, and developed and refined using psychometric procedures, the scale shows

satisfactory reliability and construct validity (Maddi et al. 1979, 1982). Maddi et al. cite several correlates of alienation which are differentially related to the different types and contexts of alienation tapped by their scale. They claim that such findings illustrate the value of measuring various types and contexts of alienation (Maddi et al., 1979, p.75). The Alienation Test is described in more detail in Section 6.1.2.

The alienation research and measures described so far have been focused mainly on non-work-related aspects. The review is now turned to alienation in the work context.

Work alienation

A number of work-related factors have been associated with work alienation. Korman et al. (1981) and Poole and Rogoli (1983) cite several studies which show an association between increasing professionalism and work alienation. These studies also suggest a relationship between work alienation and a form of role conflict, that is, conflict between professional standards and the demands of the job. Researchers (Aiken and Hage, 1966; Pearlin, 1966; Poole and Regoli, 1983) have shown that the worker's belief in self-regulation is strongly related to role conflict, work alienation and anomia. Poole and Regoli advocate granting workers greater control in the definition and discharge of their duties. They also suggest stressing the intrinsic value of the work to the worker. However the results of research studies are not always in agreement (see, for example, Argyris, 1973; Farh and Scott, 1983; Hrebiniak, 1974).

The recommendations of Poole and Regoli are consistent with a recent research trend in Norway whereby workers are encouraged to adopt an active orientation toward their working life, to determine activities in their own jobs and to participate in company affairs (Gardell, 1971, 1977, 1982). Studies carried out in Norway (Dahlström, 1971 as cited by Gardell, 1977, pp. 515-516; Gardell, 1971) have shown that at workplaces where production technology and organization restrict the individual's

say in his own job performance, workers become alienated and passive, and regard their work as trivial and uninteresting. These feelings of alienation are accompanied by generally lower life satisfactions, lower self-confidence and higher anxiety levels.

Researchers have investigated the concept of democratic or "autonomous work groups" in an attempt to reduce alienation and release positive human resources of creativity and commitment (Gardell, 1977, 1982). Such groups decide on all matters related to work and take collective responsibility for production results. It has been shown (Gardell, 1977, 1982) that such a work organization has meant richer job content, increased dignity for workers and more effective use of productive resources in the company. However the concept of autonomous work groups is relatively new and much research is still necessary (Carnall, 1982).

Work alienation has also been associated with the concept of learned helplessness.* The learned helplessness model of Martinko and Gardner (1982) proposes that rigid organizational conditions allow the worker no control and thus inadvertently condition him to be passive. Such a worker will remain passive even after the situation and its contingencies have changed, rendering the passive behaviour inappropriate.

* Briefly described, learned helplessness is the notion that an organism, after repeated failure or punishment, becomes passive and remains so even after environmental changes occur that makes success possible. The learned helplessness concept was conceived by Overmier and Seligman (1967), who observed that dogs who were repeatedly exposed to inescapable electric shocks eventually discontinued their escape efforts even after the situation was changed to make escape possible. Their explanation for the dog's passive behaviour was that the dogs had learned that the shock was independent of their behaviour, and that this expectancy transferred to new situations thus inhibiting escape responses and learning. Support for the learned helplessness hypothesis in humans has been found in several studies (for example, Abramson, Garber and Seligman, 1980; Miller and Norman, 1979; Pasahow, 1980).

Martinko and Gardner cite several other theorists (for example, Argyris, 1957; Blauner, 1964) who share the same view. Argyris believes rigid organizational rules, formalization and standardization shape the individual in such a way that he is no longer able to demonstrate creative and mature behaviour. Similarly, Blauner (1964) links rigid organizational conditions to worker alienation. He found that workers in these conditions were generally passive, even when encouraged to show initiative.

Frankel and Snyder (1978) explain learned helplessness in terms of self-esteem. They propose that learned helplessness is experienced to the degree that failure (or unsatisfactory performance) threatens self-esteem. When self-esteem is threatened, individuals discontinue effort and protect their egos by explaining their behaviour in terms of reduced effort, changing environmental conditions, or task difficulty. This self-esteem hypothesis suggests that organizational induced learned helplessness can be avoided if management is careful to respect and protect employee self-esteem when failures do occur. It also suggests that work alienated people, who experience learned helplessness, are likely to suffer from low self-esteem.

Several researchers have attempted to measure alienation in the work setting (Aiken and Hage, 1966; Maddi et al., 1979; Seeman, 1967; Shepard and Panko, 1974; Tausky, 1968 as cited by Wahba, 1980).

Seeman's (1967) scale is based on a factor analysis of Blauner's (1964) questionnaire on alienation in the work situation. The scale has seven items which, according to Seeman, tap the degree to which the respondent finds his work engaging and rewarding.

Maddi's Alienation Test mentioned previously includes a 12-item measure of alienation in the work setting. It is described in detail in Section 6.1.2.

Shepard and Panko's (1974) scale is a measure of the discrepancy between the amount of power workers feel they are able to exercise in their present jobs and the amount they feel they should be able to exercise. Tausky's (1968) scale (as cited by Wahba, 1980, p.396) taps a person's "orientation toward work".

3.4.3 Core characteristics of the alienated person

The alienated person, as conceived in the present research, is emotionally distant from other people and is generally pessimistic, cynical and apathetic in his outlook. He harbours hostile attitudes towards others and discredits everything that other people say and do. He sees himself as powerless to control life's events but is resigned to this perceived lack of control. In the work context, the alienated person feels powerless within the rigidity of the organizational structure. He finds his work neither meaningful nor intrinsically rewarding, and thus lacks achievement motivation. He works solely for his paycheck, regarding work as a means to an end.

4. A REVIEW OF SELECTED PERSONALITY AND JOB-RELATED VARIABLES

In the literature, several generalized non-cognitive variables (apart from self-esteem and trust) and work-related variables have been associated with one or more of the four styles. As existing scales of the styles are often less than adequate (see Section 3), it was decided not to rely only on the direct assessment of the styles, but to use an indirect approach as well. Thus measures of the non-cognitive and work-related variables that were considered most pertinent to the four interpersonal styles, were included in the study for the indirect assessment of the styles. This section is restricted to a brief review of the literature on these variables. The availability of psychometric measurement scales was also a consideration in the selection of the variables. Accordingly, the psychological variables reviewed are locus of control, and Horney's (1945, 1950) three interpersonal orientations (compliance, aggression

and detachment); the work-related variables reviewed are job satisfaction and job involvement.

The present review is divided into two subsections: the first subsection is concerned with the theoretical and research literature on the generalized non-cognitive psychological variables; the second subsection deals with work-related variables that have been associated with the interpersonal styles.

4.1 Psychological Variables

The non-cognitive variables chosen for review are locus of control and Horney's (1945, 1950) three interpersonal orientations (compliance, aggression and detachment).

4.1.1 Locus of control

The concept of locus of control has received a tremendous amount of attention in the research literature since the publication of Rotter's (1966) monograph "Generalized expectancies for internal versus external control of reinforcement" (see for example, Erwee and Pottas, 1982; Joe, 1971; Lefcourt, 1976, 1981; Phares, 1976; Robinson and Shaver, 1973; Spector, 1982). The concept is basically an index of a person's generalized expectancy regarding his control over the outcomes of his behaviour. Generalizing from past experience, a person with an internal locus of control orientation typically expects events to be contingent upon his own actions and hence attributes his outcomes to his own behaviour; conversely, a person with an external locus of control orientation typically expects events to be noncontingent upon his actions and so attributes the causes of his outcomes to factors external to himself, such as fate, chance or the acts of others.

i) Conceptions of locus of control

Rotter (1966) has developed a scale to tap the dichotomous internal-external classification. However, he admits that there

are two distinct groups of externals: "genuine" or congruent externals whose external orientation accurately reflects their behavioural passivity and their true life experience, and "defensive" externals who do not genuinely ascribe to an external belief system. The latter merely verbalize an external orientation for its defensive functions against anticipated failure, but this orientation shows little relationship to their actual observed behaviour (Phares, Ritchie and Davis, 1968; Rotter, 1975, p.64). Several studies support this differentiation (Cellini and Kantorowski, 1982; Evans, 1982; Hersch and Scheibe, 1967; Lloyd and Chang, 1979).

Levinson (1972) has also proposed the existence of two kinds of external orientations, not in terms of defensiveness, but in terms of beliefs in the control of "chance or fate" elements on the one hand, and the control of "powerful others" on the other. Although the latter is an external attribution, the person can still perceive a potential for control if he feels he can adjust his behaviour in order to receive reinforcement from a powerful person. It has been suggested that Levenson's (1972) powerful others dimension measures defensiveness (Butler and Burr, 1980; Prociuk and Breen, 1975).

In his review of locus of control in the work environment, Spector (1982) alludes to the existence of two kinds of internals. While all internals tend to believe that they can control the work setting through their behaviour, some internals will attempt to exert more control than externals, **only if** they perceive such control as leading to desired outcomes or rewards. However, for some people..."control itself might be rewarding leading some individuals to attempt control for its own sake." (Spector, 1982, p.485). Unfortunately there is no measurement instrument which can discriminate between these two types of internal orientation. Rotter (1975, pp.60-61) comments that extreme internality may imply distorted perceptions of reality.

ii) Measurement scales

Rotter's (1966) locus of control scale is derived from the lesser known James-Phares (1957) Locus of Control Scale (as cited by Lefcourt, 1981, p.3). Rotter's scale has stimulated a tremendous amount of research in spite of its extensive criticism. It has been criticized in terms of: social desirability (Altrocchi, Palmer, Hellman and Davis, 1968; Feather, 1967; Nowicki and Duke, 1974); fakability (Davidson and Bailey, 1978; Deysach, Hiers and Ross, 1976); dimensionality (for example, Barling and Bolon, 1980; Collins, 1974; Duffy, 1978; Furnham and Henry, 1980; Gurin, Gurin and Morrison, 1978; Kaemmerer and Schwebel, 1976; Mirels, 1970); and forced-choice format (Collins, 1974; Duffy, 1978).

Levenson's (1972) tripartite locus of control scale has overcome many of the problems in Rotter's (1966) scale. Levenson's scale was originally designed as a reconceptualization of Rotter's scale; it is composed both of items adapted from Rotter's scale and items constructed specifically to tap beliefs about the operation of the three dimensions of control: internal, powerful others and chance.

The scale was designed to improve Rotter's scale in various ways: for example, the three subscales are presented in the Likert format, instead of the force-choice format of Rotter's scale. This provides more information about the respondent's perception of control. Furthermore, all items are worded in the first person singular; hence the scale measures the degree to which the respondent feels he or she has control over what happens rather than what he believes is true for "people in general". The scale thus overcomes the personal-ideological distinction inherent in Rotter's scale (see Gurin, Gurin, Lao and Beattie, 1969). Another improvement over Rotter's scale is that Levenson's subscales are virtually uncorrelated with social desirability (Levenson, 1972, 1981; Wallston, Wallston and DeVellis, 1978).

Levenson (1973) has found only low-to-moderate reliability estimates of internal consistency for the subscales (Kuder-Richardson reliabilities of 0,64, 0,77 and 0,78 for the internal, powerful others and chance subscales respectively). She explains that "since the items sample from a variety of situations, this is to be expected" (Levenson, 1974, p.378).

The two external subscales have generally been found to correlate positively with one another, correlations ranging from 0,54 (Levenson, 1973) to 0,61 (Wallston et al., 1978). Lefcourt (1981) maintains that correlations of this magnitude are to be expected since both these control orientations reflect a belief in a source of control that is external to the person.

Correlations between each external subscale and the internal subscale are generally small (Levenson, 1981, p.23). This finding is consistent with the results of Collins (1974) and Duffy (1978) who modified Rotter's scale of 23 forced-choice items to a Likert scale of 46 items. Collins and Duffy both found minimal correlations between items purporting to tap the perception of internal and external control. It thus appears that the internal-external dimension is not a bipolar one.

Russell (1982) developed a new scale known as the Behavioroid I-E Scale in an attempt to overcome the problem of defensive externality. This scale is designed to measure internal-external behaviour, rather than verbalized expectancies about control. Russell (1982) claims that the scale has high test-retest reliability and internal consistency reliability estimates. He has provided evidence of the validity and usefulness of his scale, but more research is necessary.

Other scales of locus of control are reviewed by Lefcourt (1976, 1981), and Robinson and Shaver (1973).

iii) Empirical research

Locus of control has been associated with a wide variety of concepts in the research literature (see, for example, Lefcourt, 1976, 1981; Spector, 1982). A comprehensive review of all these associations is not possible in the present research; hence only those most pertinent to the present study have been selected.

The association between locus of control and interpersonal trust is unclear: while the results of some studies (for example, Hamsher, Geller and Rotter, 1968; Leon, 1974) have shown there to be a positive relationship between internal locus of control and trust, the results of other studies (for example, Heretick, 1981) have shown no relationship. Internals have been shown to exhibit greater self-esteem than externals (Andrisani and Nestel, 1976; Lied and Pritchard, 1976; Spector, 1982).

Locus of control has been associated with several job-related variables; for example, externals have been shown to be less satisfied with their jobs (Butler and Burr, 1980; Kasperson, 1982; see Spector, 1982, p.490 for a review of these studies). Externals have also been shown to be less job involved (Kimmons and Greenhaus, 1976; Knoop, 1981; Reitz and Jewell, 1979; Runyon, 1973). Other variables that have been related to locus of control include conformity, job performance, supervisory style, motivation and effort (see Spector, 1982, for an excellent review of locus of control in organizations).

No studies were found which compared locus of control directly to the interpersonal styles of dependence and autonomy. However, the dependent person, who was shown to rely on others for help and support, would be expected to have an external control orientation. The autonomous person, on the other hand, is self-motivated and exhibits mature independence of judgement. The autonomous style appears to be consistent with an internal locus.

Research has shown Machiavellian tendencies to be positively related to external locus of control: correlations are in the region of 0,2 to 0,4 (Christie and Geis, 1970, pp.46-47; Duffy, 1978; Prociuk and Breen, 1975; Russell, 1974; Solar and Bruehl, 1971; Zenker and Wolfgang, 1982). Christie and Geis (1970, pp.46-47) rationalize this association by saying that Rotter's scale taps a generalized (rather than the respondent's own) view of man's control of his own destiny. That the high Mach regards others as externally controlled is consistent with his view of other people as objects to be manipulated. However this explanation fails to account for the association between Machiavellianism and Levenson's external dimensions, which do assess individualized views. The explanation of Solar and Bruehl (1971) is that high Machs manipulate others owing to a feeling of powerlessness, and hence endorse external control items. It may be, however that the apparent external orientation of the high Mach is merely defensive and not a true reflection of his control orientation at all.

Hunter, Gerbing and Boster (1982) examined the correlations between Levenson's subscales and component scores on the Mach IV scale (flattery, cynicism, deceit and immorality). They found that correlations between the flattery and cynicism components and Levenson's external control dimensions were moderate-to-high (correlations ranged between 0,40 and 0,70). They explain that people who perceive themselves as being under the control of powerful others and fate or chance, perceive others in a cynical way and engage in flattery. In contrast, correlations are low between the components of deceit and immorality, and the external dimensions.

In spite of all these explanations, however, the positive association between Machiavellianism and external locus of control seems counter-intuitive.

Finally, locus of control has been linked to one of Seeman's (1959) variants of alienation: powerlessness. The externally

oriented person is portrayed as perceiving that he has no power over his own life. Other researchers have supported this portrayal (Lefcourt, 1976; Reimanis, 1974 as cited by Reimanis and Posen, 1982, p.182). Researchers who have related alienation to external locus of control are Gould (1969), Maddi, Kobasa and Hoover (1979), Naik (1978), Wolfe (1972). Several researchers have shown that workers with external control orientations tend to be more work alienated than their internal colleagues (Knoop, 1981; Mitchell, 1975; Seeman, 1967; Wolfe, 1972).

4.1.2 Horney's three interpersonal orientations

Horney's (1945) tripartite model of personality has been referred to previously (Sections 3.1.1, 3.2.1, 3.4.1,). To recapitulate, Horney proposes that there are three basic interpersonal orientations or modes of response, each of which is necessary and desirable for human development. These orientations, termed by Horney "moving towards people" or compliance, "moving against people" or aggression, and "moving away from people" or detachment, are all fairly equally represented in the balanced personality - only in a neurotic framework do they become rigid and mutually exclusive. In Section 3.1.1 it was proposed that an excessive amount of one of these three interpersonal orientations is represented by dependent, Machiavellian and alienated people respectively. A measure of these three interpersonal orientations thus promised to be extremely useful for the investigation of the construct validity of three of the four categorizations of the interpersonal styles model.

People characterized by Horney's three interpersonal orientations are briefly described as follows:

Compliant-oriented people wish to be loved, wanted, appreciated and needed. They have a strong wish to be part of the activities of others and are extremely grateful to others for everything that is done for them. They tend to avoid conflict and subordinate themselves to the wishes of others. Rather than

criticize others if things go wrong, they are apologetic and willing to blame themselves. Central attributes associated with compliant people are humility, sympathy and unselfishness.

Aggressive-oriented people see other people as competitors. Their main wish is to achieve success, prestige, admiration and superiority. They attach great importance to their own power and strength, for they seek to manipulate others by achieving power over them. They value these other people only if they are of use to their goals.

Detached-oriented people seek to distance themselves from others. They wish to be free of obligations, influence and shared experiences. Being distrustful of others, they choose to be independent and self-sufficient. They are repelled by the idea of conformity. (For a more detailed discussion of the orientations, see Cohen, 1967).

A Likert-type instrument has been designed by Cohen (1967) to measure these orientations. Developed in a marketing research context, Cohen's 35-item scale is called the CAD, an acronym derived from the three orientation appellations. Its compliance, aggression and detachment subscales have 10, 15 and 10 items respectively. Unfortunately the scale is not without its problems: Cohen claims that the scale has adequate test-retest reliability and internal consistency reliability, and provides evidence of its validity (Cohen, 1967, pp.271-272), but the results of other research (Munson and Spivey, 1982; Noerager, 1979) are far less encouraging. Munson and Spivey failed to replicate the factor structure proposed by Cohen (1967), and thus questioned the internal structure of the instrument. Noerager (1979) obtained unacceptably low Kuder-Richardson reliability estimates for the CAD (0,60, 0,36, and 0,43 for the compliance, aggression and detachment subscales respectively). The split-half reliabilities were also low (0,58, 0,2 and 0,46 for the three subscales). He also questioned the factorial structure of the scale.

In spite of these criticisms of the CAD, the author considers it premature to abandon the only measurement instrument designed to tap Horney's tripartite model which appears to be of such relevance to the present study.

4.2 Job-related variables

The two job-related variables to be discussed are job satisfaction and job involvement.

4.2.1. Job satisfaction

The job satisfaction domain has been researched extensively. Locke (1976) conservatively estimated that there were over 3 000 studies on this topic; several more must have been published since his review.

i) Contentious issues: dimensionality and determinants

Hoppock (1935), who conducted the first scientific study of job satisfaction, viewed job satisfaction as a unitary construct. However, numerous empirical studies have shown that this is not the case (for example, Baehr, 1954; Dabas, 1958; Harrison, 1961; Roach, 1958; Smith, Kendall and Hullin, 1969). Other studies (for example, Ash, 1954; Wherry, 1954) have shown that there is one major or principal factor of job satisfaction and a number of smaller, more specific factors relating to particular aspects of the job situation. These different views of the factor structure of job satisfaction seem largely dependent on the type of analysis employed in research studies (Taylor, 1979). Most researchers, however, treat job satisfaction as a set of dimensions rather than as a single dimension (Vroom, 1964).

There are several views on the determinants of job satisfaction. Some researchers (for example, Ronan, 1970; Smith, Kendall and Hullin, 1969) oppose the popular assumption that job

satisfaction, conceived as a construct or group of constructs, is invariant across job situations. Locke (1976) and Taylor (1979) review studies which illustrate some of the effects which situational characteristics (for example, work group size and freedom of expression) can have on job satisfaction. In contrast, Seashore and Tabler (1975) cite personality attributes (for example, moods, abilities and perceptions) of the job incumbent himself as important determinants of job satisfaction. Other researchers (Herman and Hulin, 1973; Lawler and Suttle, 1972; Pinto and Davis, 1974) have investigated the influence of personal needs in the determination of job satisfaction: They propose, based on studies of Maslow's (1943, 1968) need hierarchy theory, that a worker's satisfaction depends largely or wholly on the extent to which the job fulfils needs at the worker's level on the need hierarchy. However, these researchers have found no empirical support for the speculation that different needs might be typical of individuals at different levels of the organizational hierarchy.

The role of personality factors in job satisfaction thus remains unclear. It seems likely that both personality and situational factors have an influence on the worker's job satisfaction. Cawsey, Reed and Reddon (1982) suggest that an explanatory model be built that would relate job satisfaction to job tasks, the person's personality or needs, and organizational characteristics.

ii) **Measurement scales**

In line with the unidimensional and multidimensional conceptions of job satisfaction, there are two approaches to the measurement of satisfaction in the organizational literature. The one approach is to use unidimensional measures to collect information about the worker's general satisfaction with the organization; the other approach is to use multidimensional measures to collect information about specific dimensions of satisfaction such as work, supervision and pay (Price, 1972, p.158).

Examples of unidimensional job satisfaction measures are those of Brayfield and Rothe (1951), the Hoppack Job Satisfaction Scale, and the Job-in-General Faces Scale (both cited by Scarpello and Campbell, 1983, pp.577-578).

Examples of multidimensional measures are those of Porter and Lawler (1968), the Job Descriptive Index (JDI) of Smith, Kendall and Hulin (1969), and the scale of Blake and Mackay (1980). Of the three scales, the JDI is the most popular. It has, however, been criticised for confounding job satisfaction with social desirability (Cawsey, Reed, and Reddon, 1982; Orpen, 1974; Wall, 1972). Another criticism is that it includes both evaluative and descriptive items in the same measure which may lead to numerous problems (Locke, 1976, pp.1334-1335).

The job satisfaction scale of Blake and Mackay (1980), covers ten major content areas including satisfaction with remuneration, supervisors and management, personnel practices, promotion, and job content. The scale shows satisfactory psychometric properties (Blake and Mackay, 1980).

Other job satisfaction measures may be found in Robinson, Athanasiou, and Head (1969).

Both unidimensional and multidimensional measures have their uses. For example, policy-makers may wish to make a summary judgement of the job satisfaction of workers and would thus use a measure of overall job satisfaction; on the other hand, a measure of the various aspects of job satisfaction is useful when management is interested in improving the job satisfaction of its employees or in trying to explain staff turnover, absenteeism, etc. In the latter case, a unidimensional index of job satisfaction may lead to neglect of major determinants of job satisfaction and dissatisfaction.

iii) Empirical research

Locke (1976, pp.1319-1334) surveys the major research findings of the effects of situational characteristics on job satisfaction. Conditions which engender job satisfaction may be summarized as follows: work which is varied, personally interesting and which allows freedom of expression; rewards such as pay, promotions and recognition which are administered fairly and which are congruent with the individual's personal aspirations; working conditions which are compatible with an individual's work goals and physical needs; supervisors who facilitate the worker to attain his work goals; work which involves a minimum of role conflict and ambiguity.

Seashore and Taber (1975) cite the following "personal" factors as important determinants of job satisfaction: demographical aspects (age, sex, education, etc.); "situation-bound" personality aspects (motivation, preferences, etc.); moods (anger, boredom, etc.); abilities (general intelligence, motor skills, etc.); perceptions, cognition and expectations.

The results of a study by James and Jones (1980) show that a job that is perceived as challenging, autonomous and important is also regarded as satisfying. These high-order job perceptions appear to convey opportunities to satisfy needs for mental challenge, recognition and self-determination.

Empirical evidence has shown job satisfaction to be generally low among alienated workers (see Section 3.4.2). The low job satisfaction of these workers, coupled with their characteristically negative, detached outlook, may adversely influence the outlook of other workers and affect general employee morale. It is thus important for managers to investigate the particular aspects of job dissatisfaction and the degree of the dissatisfaction among alienated workers. A measure of general job satisfaction was included in the present research as one of the scales used for the construct validation of the alienation category of

the model. Other aspects of job satisfaction were examined in order to investigate their relationships to the interpersonal styles.

There is no evidence in the job satisfaction literature to suggest that workers characterized by the other three interpersonal styles can be rank ordered in terms of the level of job satisfaction they are likely to experience. However, in view of the empirical evidence cited in Section 3.4.2, it is likely that the alienated worker is the most dissatisfied.

4.2.2 Job involvement

Job involvement has been closely associated with work alienation in the theoretical literature. Kanungo (1981), for example, regards the concepts as opposite ends of a continuum, alienation having developed from the sociological approach (see, for example, Seeman, 1971), and job involvement having developed from the psychological approach (see, for example, Lawler and Hall, 1970). Whereas sociologists with a clinical perspective have attempted to identify conditions and consequences of work alienation, psychologists have been concerned with identifying conditions and consequences of work involvement.

i) Contentious issues: definitions, conceptions and determinants

Job involvement has been variously defined in cognitive, evaluative and conative terms (Newton and Keenan, 1983). Empirical investigations of the nature of the concept are conflicting (Kanungo, 1979, 1981; Lawler and Hall, 1970; Saal, 1981; Saleh and Hosek, 1976).

According to researchers who stress the cognitive or identity component in their definitions of job involvement (Dubin, 1956; Guion, 1958; Kanungo, 1979; Lawler and Hall, 1970; Lodahl and Kejner, 1965), job involvement constitutes a cognitive stage of psychological identification with one's job whereby the job plays a central role in a person's life.

Lodahl and Kejner (1965) introduce two definitions of job involvement, and make no attempt to relate them. Their first definition is related to the cognitive or identity dimension, and describes job involvement as "... the degree to which a person is identified psychologically with his work, or the importance of work in his total self image" (p.24). Their second definition relates job involvement to the evaluative dimensions; job involvement is defined as "... the degree to which a person's work performance affects his self-esteem" (p.25). Other authors (French and Kahn, 1962; Iverson and Rauder, 1956; Saleh and Hosek, 1976; Siegel, 1969; Vroom, 1962) also base their definition in evaluative terms. They view the job involved person as someone whose feelings of self-esteem are derived, at least in part, from his work performance.

Definitions which focus on the conative or action dimension of job involvement (for example, Bass, 1965; Gurin, Veroff and Field, 1960; Wickert, 1951, all cited by Saleh, 1981, p.22) describe the extent of the employee's participation in his job.

There thus appears to be no clear integrative approach to the concept of job involvement. There is a general lack of consensus among researchers about the nature of job involvement and some (Lodahl and Kejner, 1965) even resort to double definitions, the use of which is indefensible. Until the controversy is resolved, the nature of the concept remains unclear.

Whether job involvement is primarily an attribute of the person or a response to the work environment is another controversial issue (Newton and Keenan, 1983).

Some researchers (Rabinowitz, Hall and Goodale, 1977) find personal and environmental variables of equal importance in explaining job involvement; others (Newton and Keenan, 1983; Saal, 1978) propose that the greatest effect on job involvement comes from the work environment. In contrast, McKelvey and

Sekeran (1977) demonstrate personal attributes to be the best predictors of job involvement. It appears hence that situation-free elements such as personal attributes, as well as responses to the work environment are both important in the prediction of job involvement. Job involvement is thus likely to depend to some extent on the personality characteristics of the job incumbent.

ii) Measurement scales

Despite the lack of clarity in Lodahl and Kejner's (1965) conceptualization of job involvement, their scale is the most popular measure (Saal, 1981). Lodahl and Kejner (1965, p.30) have shown that their 20-item scale has satisfactory split-half reliability: 0,72, 0,80 and 0,89 for samples of nurses, engineers and students respectively. They demonstrate the ability of the scale to discriminate between different groups of workers, and cite several other studies which show the scale to be valid (see Lodahl and Kejner, 1965, pp.30-31). Rabinowitz and Hall (1977) cite further studies which demonstrate the convergent and discriminant validity of the scale.

The most serious criticism of this scale, and indeed of all other job involvement scales (Blauner, 1964; Saleh and Hosek, 1976), comes from Kanungo (1979, 1981). Kanungo claims that these instruments combine measures of the cognitive state of alienation with measures of its presumed causes and effects. For example, Lodahl and Kejner's (1965) scale contains items such as "I live, eat and breathe my job", an item reflecting the cognitive state of involvement, but it also contains items which reflect both antecedent and consequent feeling states and behavioural tendencies, such as "I will stay overtime to finish a job, even if I am not paid for it" (Kanungo, 1981, p.10). She recommends that a measure should be developed which reflects only the nature of the cognitive state of psychological identification with work and one's job.

iii) Empirical research

Studies of job involvement show a generally positive association between job involvement and job satisfaction (Rabinowitz and Hall, 1977), and a negative relationship with employee turnover and absenteeism (Farris, 1971; Siegel and Ruh, 1973; Patchen, 1965, all cited by Newton and Keenan, 1983, p.169). Rabinowitz and Hall further show that the job involved individual has the following characteristics: he is a believer in the conventional work ethic; he is generally older and has an internal locus of control; he works on a stimulating job and participates in the decision-making process; he generally has a successful work history and is not very likely to leave the organization.

It was previously stated that both personality characteristics as well as factors in the work environment are important in the prediction of job involvement. Empirical research has been carried out on the relationship between job involvement and both Machiavellianism and alienation; however, the relationship between job involvement and the other two styles (dependence and autonomy) has not been investigated. The inclusion of the job involvement variable in the present research served as an aid for the construct validation of the model categories of Machiavellianism and alienation.

Hollon (1983) has shown Machiavellianism to be negatively correlated with job involvement. As discussed in Section 3.2.2, this association is inconsistent with the Machiavellian's striving for success and his high achievement motivation. It is likely that Machiavellians involve themselves in their jobs for their own ends rather than for the ends of their employers.

The association between job involvement and work alienation has been discussed earlier in this section. These concepts are viewed as opposite to one another in the research literature. The results of numerous studies suggest that the alienated worker is not involved with his job (see Section 3.4.2).

In line with the approach that job involvement is a personality attribute, the author expects dependent and autonomous people to be job involved. The dependent person is most concerned about pleasing other people. He is therefore expected to invest much energy in doing his work well (although relying on the help and support of others) in order to gain approval. He is thus likely to be job involved. The autonomous person is likely to approach his job in a mature way and to attempt to derive the maximum benefit from his work. He is thus also likely to be job involved.

4.3 Conclusions

A number of consistent trends emerge from the literature reviewed on the personality and job-related variables. The theoretical literature implies that the autonomous person is self-reliant, although not to the extent that he shuns other people. It is hence likely that the autonomous person has an internal locus of control based on realistic perceptions of causality. Contrary to expectation, however, empirical research shows that the highly Machiavellian person has an external locus of control. Numerous explanations of this finding have been proposed (see Section 4.1.1(iii)). There is a consistent trend in the theoretical and research literature that shows the alienated person to have an external control orientation. Theoretical research suggests that the dependent person is also likely to have an external locus of control.

The theoretical literature provides strong support for the association between Horney's three interpersonal orientations (compliance, aggression and detachment) and the interpersonal styles of dependence, Machiavellianism and alienation. This association has not, however, been the subject of empirical research.

The job satisfaction literature suggests that personality factors of the worker, as well as characteristics of the job itself

influence job satisfaction. There is clear empirical evidence that alienated workers have low levels of job satisfaction. The alienated worker has also been shown to have a low level of job involvement. Unfortunately, there are no clear empirical findings on the relationship between either job satisfaction or job involvement and the styles of Machiavellianism, autonomy and dependence. The theoretical literature, however, suggests that job satisfaction and job involvement, considered as personality or "situation-free" variables, are likely to be fairly high among people characterized by these three styles.

5. AREA OF CONCERN, HYPOTHESES AND ANALYSIS TECHNIQUES OF THE PRESENT STUDY

This section is devoted to three main aspects of the present study. Each one is dealt with in a separate subsection: in the first subsection the main area of concern of the study is set out and the aims are formally stated; in the second subsection the hypotheses are framed and justifications for each are presented. The third subsection deals with the analysis techniques used in the study.

5.1 The Main Area of Concern and Aims of the Study

In the previous sections, the author proposed a model of interpersonal styles based on two aspects of trust: trust in oneself or self-esteem, and trust in others or interpersonal trust. According to this model, four previously unrelated styles of interpersonal interaction (dependence, Machiavellianism, autonomy and alienation) can be related in terms of these two trust dimensions. A diagrammatic representation of the model was presented in Figure 1.2 of Section 1.

The aims of the present study can now be formally stated:

Aims

- a) To investigate the cross-validity of the model using different samples.
- b) To investigate the construct validity of the model via:
 - i) the results of direct and indirect measures of the interpersonal styles; and
 - ii) the results of cluster analysis techniques.

5.2 The Hypotheses of the Study

The hypotheses of the study are grouped into three different classes. Each class deals with an aspect of the validity of the interpersonal styles model. The first class is concerned with the cross-validity of the model; in the second and third classes, two different approaches are used to examine the construct validity of the model.

5.2.1 The hypothesis of the first class

The first class contains only one hypothesis. This hypothesis was framed in order to examine the consistency of various aspects of the model across different populations. As it is different in form from the other hypotheses of the study, it is stated separately.

Hypothesis 1: The relative orderings of the interpersonal styles in terms of the scores obtained for the personality and job-related variables are stable across different populations.

The test of this hypothesis is basically a check on whether the orders of the personality and work-related variables are consistent for different populations classified according to the Interpersonal Styles Model. The model would not be useful if its results were inconsistent from sample to sample. Hence the

establishment of the cross-validity of the model is extremely important.

5.2.2. The hypotheses of the second class

In the hypotheses of the second class, the expected orders are listed of the personality and job-related variables for the four groups of people **classified according to the Interpersonal Styles Model**. These hypotheses were framed to test whether the expected orderings would be the same as the orderings suggested by the theoretical literature for people **characterized by the four interpersonal styles**. The hypotheses are grouped into five categories concerned respectively with Horney's (1945, 1950) interpersonal orientations, Machiavellianism, locus of control, alienation and anomia, and work-related variables. They are formally stated in Table 5.1. In Figure 5.1, the hypotheses are presented graphically in terms of the model.

In the statement of these hypotheses, the names of the styles purportedly represented by the quadrants of the model appear between quotation marks. This is to emphasize that the hypotheses are tested in terms of the categories of the model, rather than on direct measures of the interpersonal styles. Thus, people high in both trust and self-esteem are referred to as "autonomous", people low in both trust and self-esteem are referred to as "alienated" and so on. However no quotation marks appear in the section on the justification of the hypotheses, since these justifications are based on the interpersonal styles reviewed in the previous chapters, rather than on the categories of the model.

Throughout the discussion of the hypotheses, Horney's three interpersonal orientations (compliance, aggression and detachment), the locus of control dimensions and the interpersonal styles variables will be collectively referred to as "the personality variables".

The statement and justification of these hypotheses are now presented.

The hypotheses on Horney's interpersonal orientations

Three hypotheses were proposed to test the association between Horney's orientations and the interpersonal styles categories. Hypothesis 2a proposes that dependent people are the most compliant, followed by autonomous people and then lastly by Machiavellian and alienated people. Machiavellian and alienated people are not expected to differ significantly on personality characteristics such as unselfishness, sympathy and humility. As the items of the compliance subscale of Cohen's (1967) scale appear to reflect a benevolent orientation as well as a compliant one, it is likely that the compliance scores of autonomous people will be fairly high, although probably not as high as those of dependent people. Consider, for example, the following two items of the compliance subscale which the subject must rate in terms of desirability: "Giving comfort to those in need of friends" and, "To give aid to the poor and the underprivileged".

Figure 5.1: Hypothesized orderings of the personality and job-related variables for each category of the model.

		HIGH SELF-ESTEEM	
		low	medium
Compliance	low	Compliance	medium
Aggression	high	Aggression	low
Detachment	medium	Detachment	low
Mach IV	high	Mach IV	low
Mach tactics	high	Mach tactics	low
Mach views	high	Mach views	low
Mach morality	high	Mach morality	low
Levenson's internal loc	medium	Levenson's internal loc	high
Levenson's pow others loc	medium	Levenson's pow others loc	low
Levenson's chance loc	fairly low	Levenson's chance loc	low
Russell's internal loc	medium	Russell's internal loc	high
Russell's external loc	medium	Russell's external loc	low
General alienation	fairly high	General alienation	low
Work alienation	fairly high	Work alienation	low
Anomia	fairly high	Anomia	low
Gen job satisfaction	high	Gen job satisfaction	high
Rank	high	Rank	high
Job involvement	high	Job involvement	high
LOW TRUST	MACHIAVELLIANISM	AUTONOMY	HIGH TRUST
ALIENATION		DEPENDENCE	
Compliance	low	Compliance	high
Aggression	medium	Aggression	low
Detachment	high	Detachment	low
Mach IV	medium	Mach IV	low
Mach tactics	medium	Mach tactics	low
Mach views	high	Mach views	low
Mach morality	high	Mach morality	low
Levenson's internal loc	low	Levenson's internal loc	low
Levenson's pow others loc	high	Levenson's pow others loc	high
Levenson's chance loc	high	Levenson's chance loc	fairly high
Russell's internal loc	low	Russell's internal loc	low
Russell's external loc	high	Russell's external loc	high
General alienation	high	General alienation	fairly low
Work alienation	high	Work alienation	fairly low
Anomia	high	Anomia	fairly low
Gen job satisfaction	low	Gen job satisfaction	high
Rank	medium	Rank	low
Job involvement	low	Job involvement	high
		LOW SELF-ESTEEM	

Table 5.1: Hypothesized orders of the Interpersonal style categories for each of the personality and job-related variables

Category		Hypothesis	Variable Name	Hypothesized Order* of the Interpersonal Styles			
	Name		Name	High			Low
A	Horney's three Interpersonal orientations	2a	Compliance	"Dependent"	"Autonomous"		"Machiavellian"
		2b	Aggression	"Machiavellian"	"Alienated"		"Dependent"
		2c	Detachment	"Alienated"	"Machiavellian"		"Dependent"
							"Autonomous"
B	Machiavellianism (Mach IV)	3a	Total score	"Machiavellian"	"Alienated"		"Dependent"
		3b	Tactics	"Machiavellian"	"Alienated"		"Autonomous"
		3c	Views	"Machiavellian"			"Dependent"
		3d	Morality	"Alienated"			"Autonomous"
				"Machiavellian"		"Dependent"	"Autonomous"
C	Locus of control	4a	Levenson's Internal	"Autonomous"	"Machiavellian"		"Dependent"
		4b	Levenson's powerful others	"Dependent"	"Machiavellian"		"Alienated"
		4c	Levenson's chance	"Alienated"	"Dependent"	"Machiavellian"	"Autonomous"
		4d	Russell's behavioroid Internal	"Autonomous"	"Machiavellian"		"Dependent"
		4e	Russell's behavioroid external	"Dependent"	"Machiavellian"		"Alienated"
			"Alienated"		"Autonomous"		
D	Alienation and Anomia	5a	Maddi's general alienation	"Alienated"	"Machiavellian"	"Dependent"	"Autonomous"
		5b	Maddi's work alienation	"Alienated"	"Machiavellian"	"Dependent"	"Autonomous"
		5c	Srole's anomia	"Alienated"	"Machiavellian"	"Dependent"	"Autonomous"
E	Work-related variables	6a	Job Satisfaction General	"Dependent"			"Alienated"
		6b	Rank	"Machiavellian"	"Alienated"		"Dependent"
		6c	Job Involvement	"Autonomous"			"Alienated"
				"Dependent"		"Machiavellian"	"Autonomous"

* The Interpersonal styles are merely rank-ordered on each of the variables: the scale of each variable is ordinal rather than equal-interval.

The hypothesis on aggression (hypothesis 2b) proposes that Machiavellian people have the highest amount of aggression, followed by alienated people, and then by dependent and autonomous people. In addition to the proposed association between Machiavellianism and Horney's aggressive orientation in the literature, the studies of Russell (1974) and Touhey (1971) have demonstrated a relationship between aggression and Machiavellianism (see Section 3.2.2). Aggression has, however, also been associated with the alienated person (see Section 3.4.2). It is thus likely that alienated people will also score high on Cohen's (1967) aggression subscale, although not as high as Machiavellians. This is because the items of Cohen's subscale seem to characterize Machiavellianism rather than alienation. For example, high Machs would be more likely to endorse items such as "Using pull to get ahead" and "A strong desire to surpass other's achievements". Finally, autonomous and dependent people are expected to have a low level of aggression. There is no evidence to suggest that either of these two groups is higher or lower than the other on this variable.

According to the hypothesis on the detached orientation (hypothesis 2c), alienated people are expected to be the most detached, followed by Machiavellians and then by dependent and autonomous people. Horney's description of the detached orientation seems most characteristic of the alienated person (see Section 3.4.1). It must be recalled, however, that the high Mach has also been associated with an emotionally detached orientation: he has been described in terms of the "cool syndrome", that is, he is said to remain emotionally uninvolved with others (see Section 3.2.2). On the other hand, the reviews of the dependent and autonomous styles show that people characterized by these styles are likely to be involved with other people rather than detached (see Sections 3.1 and 3.3). There is, however, no evidence in the literature which suggests that these two styles can be rank ordered in terms of detachment.

The hypotheses on Machiavellianism

As previously described (see Section 3.2.3), Christie's "a priori" categorization of items of the Mach IV scale into Machiavellian tactics, views and morality has found empirical support. The results of a study based on items of Srole's (1956) anomia scale and the Mach IV and V scales, suggest that anomia scores are significantly correlated with Machiavellian orientation (or views) scores, but that there is little relationship between anomia scores and Machiavellian tactics scores. It seems feasible that both Machiavellian and alienated people share similarly negative views of people but that alienated people remain resigned and passive in outlook, while Machiavellians actively manipulate other people. Thus both Machiavellian and alienated people would be expected to be high on Machiavellian views and morality. This is proposed in hypotheses 3c and 3d according to which Machiavellian and alienated people are not expected to differ significantly on Machiavellian beliefs. There is no basis in the Machiavellianism literature for rank ordering dependent and autonomous people on the Mach IV total score or subscores. All that is clear from the literature is that these people are expected to have lower Machiavellian tendencies than those of Machiavellian and alienated people.

The hypotheses on locus of control

The relationships between locus of control and the four interpersonal styles were discussed in Section 4.1.1(iii). Briefly, research has associated alienation, and especially Seeman's (1959) powerlessness variant of it, with an external locus of control. Whereas this association makes intuitive sense in view of the alienated person's resigned but dissatisfied outlook, the positive association shown by empirical research between Machiavellianism and external locus of control is not as easily explained. In spite of the many different rationalizations of the association (see Section 4.1.1(iii)), it still

seems that the association between Machiavellianism (as measured by the Mach IV and V scales) and external control locus is counter-intuitive. If Machiavellians did not believe that their behaviour affected the environment to bring about the reinforcements they seek, they would not pursue their manipulative behavioural tactics. Hence it seems likely that Machiavellianism would be, to some extent, positively associated with an internal control orientation. The research literature has, however, shown Machiavellianism to be largely uncorrelated with Levenson's (1972) internal control dimension (see Section 4.1.1(iii) for a detailed discussion of the locus of control of Machiavellians).

There is no empirical research on the control orientations of dependent and autonomous people. It is, however, likely that the dependent person, consistent with his reliance on the help and support of others, would have an external locus. On the other hand, the mature, independent outlook of the autonomous person would seem to be consistent with an internal locus. The author expects the autonomous person followed by the Machiavellian to have a stronger internal control orientation and a weaker external control orientation on the scales of Levenson (1972) and Russell (1982), than those of alienated and dependent people. There appears to be no basis for rank ordering alienated and dependent people on Levenson's internal and powerful others dimensions and on Russell's dimensions. It does, however, seem likely that the alienated person, who resigns himself to his situation and does little to improve it, would strongly believe in the role of fate and chance events.

The hypotheses on alienation and anomia

The alienation and anomia hypotheses of category D propose that alienated people score the highest on Maddi's (1979) Alienation Test and Srole's (1956) anomia scale, followed in turn by Machiavellians, dependent people and then by autonomous people. As the Mach IV scale has been shown to have an anomia component

(see Section 3.2.3), people with high Mach IV total scores would be expected to score highly on Srole's (1956) anomia scale. In addition, Machiavellians have been associated with a detached orientation (see Section 3.2.2) and would thus be expected to be fairly high on alienation. The autonomous person, on the other hand, who is receptive to the views of others and is willing to reciprocate with his own services, is likely to be the least alienated and the least anomic. The dependent person is also expected to be low on alienation, for he sees himself as part of a group of people rather than as an individual. Hence, his attitude is likely to be reflected in a low anomia score on Srole's (1956) scale. His alienation and anomia scores are not, however, expected to be as low as those of the autonomous person, for the dependent person always strives to be accepted by others and hereby overcomes his fears of isolation. The autonomous person, on the other hand, has a mature sense of reality and fears neither isolation nor dependence.

The hypotheses on work-related variables

The final hypothesis category deals with the work-related variables of general or overall job satisfaction, job rank and job involvement. The job satisfaction of people characterized by the four interpersonal styles was discussed in Section 4.2.1(iii). On the basis of the evidence reviewed, it was concluded that both personality and situational factors have an influence on a person's job satisfaction. There was, however, no reliable evidence in the literature to propose that workers characterized by the styles of dependence, Machiavellianism and autonomy can be rank ordered on job satisfaction, without examining the characteristics of their jobs. On the other hand, empirical evidence has shown that the alienated person is generally dissatisfied with his job. The hypothesis on general job satisfaction (6a) therefore proposes that alienated people have the lowest level of job satisfaction. No distinctions are made among people characterized by the other three styles.

Job rank or seniority is the only biographical variable on which an hypothesis is based. The author has no reason to believe that interpersonal styles can be rank ordered according to age, level of education or length of service. For example, some workers, as they grow older, may become more autonomous, whereas others may become dependent on their younger colleagues. Alternatively, older workers may feel alienated from their younger and more innovative colleagues.

With respect to job rank, however, the author expects Machiavellian and autonomous people to be more senior. Firstly, research has shown this to be so with Machiavellians (see Section 3.2.2(iv)). Secondly, it is likely that the self-actualized or autonomous person would be successful in his career. The dependent person, who is unable to work by himself or make decisions for himself, is likely to hold a job of lower rank. The rank of the alienated person is likely to be somewhere in the middle. The job rank hypothesis therefore proposes that Machiavellian and autonomous people have jobs of the highest rank followed by alienated people and lastly by dependent people.

The third hypothesis of the work-related category proposes that alienated people are the least job involved. No rank order is posited for people characterized by the other three styles. As in the case of job satisfaction, job involvement seems to be a function of both situation-free elements such as personality characteristics, as well as characteristics of the work environment. Research has consistently shown there to be a negative relationship between alienation and job involvement (see Section 4.2.2(iii)). Although there is no clear evidence of the job involvement of people characterized by the other three styles, the author expects these people to be job involved (see Section 4.2.2). It seems likely that the alienated person is the least job involved.

5.2.3. The hypothesis of the third class

The hypothesis of this class was formulated in order to ascertain whether the personality variables included in the study (apart from self-esteem and trust) could be grouped, using cluster analysis techniques, into four clusters which would essentially correspond to the four categories of the model. If this were so, it could be said that the categorization of the Interpersonal Styles Model was essentially the same as the one that would be obtained based on a natural clustering of personality measures known to be related to the four interpersonal styles. This would lend credence to the construct validity of the model.

The hypothesis may be formally stated as follows:

Hypothesis 7: When scores on the personality variables are cluster analysed, clusters will emerge containing substantially the same people as the groups formed by performing median splits on the principal component scores derived from the classifier variables.

5.3 Analysis Techniques

In the present research, several different analysis techniques were used in the processing of the data. Included among these techniques are: principal component analysis, analysis of variance (ANOVA), Mantel's (1983) method for ordered comparisons, the binomial test, the chi-square test and cluster analysis. As the ANOVA techniques and the binomial and chi-square tests are well documented in the literature (see, for example, Conover, 1971; Roscoe, 1975), they are not described in this section. Special attention is, however, devoted to the description of the other techniques mentioned, and to their applications in the present research.

5.3.1 Component analysis

Component analysis is suitable in cases such as the present study where the objective of the analysis is to summarize the major part of the information contained in the original variables in terms of a smaller number of variables, rather than to account for just the correlations among the original variables. In the present study, component analysis was used to combine the various measures of self-esteem and trust into global indices.

Component analysis is most frequently thought of as a factor analysis of a correlation matrix with 1's instead of communalities along its principal diagonal (Mulaik, 1972, p.174). The component analysis model does not distinguish between the common and unique variance in the variables; instead, it is designed to analyse the variables into a linearly independent set of component variables from which the original variables can be derived.

One of the major advantages of component analysis over common factor analysis is that the former is a completely determinate model. This means that component analysis can directly compute the factor scores without the need to estimate them, as in the case of common factor analysis. The indeterminacy of the common factor model stems from the fact that it is mathematically impossible to determine the unique or exact common-factor scores from scores on the observed variables. This is so even if one knows the population values for the correlations among the observed variables and the correlations between the observed variables and the common factors (Mulaik, 1972, p.327). The determinate component-analysis model is thus particularly well-suited to the present study where scores on the self-esteem and trust factors are required.

Most factor analysts use the principal axes method for extracting components. This method is chosen since after any arbitrary

number of principal components have been extracted, the remaining variance to be accounted for is a minimum for this number of components extracted. This procedure of principal axes extraction of components is known as principal components analysis (Mulaik, 1972, p.175).

Although in theory the variance of n variables is accounted for by n principal components, most factor analysts retain fewer than n principal components in practice. Kaiser (1960 cited in Mulaik, 1972, p.176) uses the number of principal components with eigenvalues greater than 1 as the criterion for the number of principal components to retain.

5.3.2 Mantel's (1983) method for ordered comparisons

Most of the hypotheses of the present study (hypotheses 2a - 6c) propose that the true means of the personality or job-related variables assume a particular ordering across the four interpersonal styles.

A simple 1-way Analysis of Variance (ANOVA) merely tests for differences between the sample averages; the test does not take into consideration the degree of concordance between the anticipated and obtained orderings. Ideally, in testing the hypotheses of the ordered alternatives, heightened power should be assigned to the significance test of the ordered alternatives when the observed data are in accord with the anticipated orderings. In such a case the usual F test would not be required to attain nominal significance at the customary 5% or 1% levels. However, in a case where the obtained ordering is different from that anticipated, an extremely stringent significance test should be applied. In other words, the test would have to attain an extremely small level of significance before the hypothesis could be retained.

Mantel (1983) has devised a technique which assigns differential levels of power to tests of ordered alternatives depending on the

degree of concordance between the observed and anticipated orderings. His method thus provides a joint test of the differences between the styles and of the ordering of these styles.

Mantel's method was used for the adjustments of the significance levels of the ANOVA tests of hypotheses 2a - 6c.

5.3.3 Cluster analysis

Cluster analysis techniques are used, for example, to search for natural groupings in the data, to simplify the description of large sets of data, and to generate hypotheses to be tested on future samples. In the present research, cluster analysis was applied in hypothesis 7.

There are a number of different clustering algorithms (see, for example, Hartigan, 1975). These algorithms have various procedures for searching through the set of all possible clusterings to find one that fits the data reasonably well. The K-Means Clustering algorithm (Hartigan, 1975) is well suited to a problem in which a number of objects are required to be partitioned. This method is thus appropriate to the present study where 12 personality variables and five classifier variables had to be arranged into clusters.

The K-Means Clustering Program (Engelman and Hartigan, 1981) of the BMDP Statistical Software package (Dixon, 1981) was used in the present study. The program partitions a set of cases (or observations) into clusters. At the completion of the run, each case belongs to the cluster whose centre is closest to the case. The centre is defined as the mean of all cases in the cluster. The Euclidean distance is used to measure the distance between each case and the centre of each cluster. The program begins with user-specified clusters or with all the data in one cluster and splits one cluster into two clusters at each step. When the requested number of clusters is reached, cases are iteratively

reallocated into the cluster whose centre is closest. In the present study the number of clusters specified was four.

6. QUESTIONNAIRE DESIGN, SAMPLING APPROACH AND QUESTIONNAIRE ADMINISTRATION

In Section 6.1, an account is given of the compilation of the questionnaire used in the study. A discussion of the sampling approach adopted and of the characteristics of the samples is presented in Section 6.2. In Section 6.3 the methods of questionnaire administration are described.

6.1 Compilation of the Questionnaire

The questionnaire was constructed in a re-usable form: the instructions and the items of the scales comprised one booklet, and the subject was required to indicate his responses on a single, double-sided answer sheet. The booklets were compact and could be used on several testing occasions. A questionnaire booklet and answer sheet in each of the official languages may be found in Appendix B.

In compiling the questionnaire, the author was careful to ensure that the total response time required of a subject would not be more than an hour. If the response time were any longer, respondents could tire of the questionnaire and not complete it diligently. It was also considered unfair to expect organizations who participated in the study to release their workers for testing for more than an hour.

The questionnaire was constructed in five sections. As the classifier variables are fundamental to the Interpersonal Styles Model, the first two sections of the questionnaire were devoted to their measurement. The other three sections were composed of suitable direct measures of the interpersonal styles as well as

measures of other personality and work-related variables known to be related to the styles (see Section 4). These measures were grouped into sections according to similar response formats. The third section measures Horney's three interpersonal orientations; sections four and five include measures of the other personality variables (alienation, anomia, Machiavellianism and locus of control), and various aspects of job satisfaction. The biographical information required of the subject was presented separately at the beginning of the questionnaire.

As several of the existing measures of the classifier variables, the personality variables* and the job-related variables were found to be inadequate, it was considered necessary to modify certain scales. The independent judgements of three psychologists at the National Institute for Personnel Research (NIPR), as well as the judgement of the author, were used in the selection and modification of the items. These items were then translated into Afrikaans as virtually all the respondents of the two samples were Afrikaans speaking. Respondents could thus select whether they wished to be issued with English or Afrikaans questionnaires.

In view of these modifications, the revised scales are not strictly comparable to the original scales in terms of reliability, normality and other psychometric properties. In Section 7, the metric properties of the revised scales are presented, and their similarities and differences to those of the original scales are discussed.

* As previously mentioned, the direct measures of the interpersonal styles and the measure of other personality variables known to be related to the styles (locus of control and Horney's three interpersonal orientations), are referred to as "the personality variables".

The questionnaire was administered to two samples (see Sections 6.2 and 6.3). Owing to the empirical results of the study based on the first sample, it was necessary to revise the questionnaire slightly. There are thus two versions of the questionnaire. In the second version, a scale of job involvement was incorporated into the second section of the questionnaire. The reason for this will become clearer in Section 7.

The scales of the questionnaire and justification for the revisions made are now discussed. A detailed account of the scale modifications is presented in Appendix A.

6.1.1 Scales used to measure the classifier variables

i) Self-esteem

As described in Section 4, the author conceives of self-esteem and trust as global personality attributes which manifest themselves in a wide variety of contexts (for example, work, social, etc.). Any general self-esteem measure provides an overall picture of the construct, but is unlikely to tap the construct accurately in specific areas. In view of the importance of the study of interpersonal styles in the work context (see Section 1), the author considered it necessary to include a measure of self-esteem specifically in the work context. By using both general and work-specific measures, an attempt was made to assess global self-esteem accurately without neglecting the work-related component.

General self-esteem

The general self-esteem measure selected for the questionnaire was the revised edition of the Janis-Field Scale (Eagly, 1967). This scale, as described in Section 2.1.4, is reputed to have satisfactory psychometric properties. It takes only a few minutes to complete and is thus more suitable than the other popular measure of self-esteem, the Tennessee Self-Concept Scale (Fitts, 1964, 1965), which requires about 20 minutes to complete.

As two of the items of the scale are replicas of one another (although reversed), it was decided to omit one of them. To restore the balance of positively and negatively keyed items, an additional item had to be omitted. The item chosen for this purpose was the only one in the scale which taps self-esteem in the work situation. This omission was not considered serious since a complete scale of self-esteem in the work situation was included in the questionnaire. Examples of items of the questionnaire from the revised Janis-Field scale are:

"How often do you feel inferior to most of the people you know?"
and

"How often do you have the feeling that you can do everything well?"

Work-related self-esteem

The only available scale of self-esteem specific to the work environment is that of Wagner and Morse (1975). As described in Section 2.1.4, this scale taps an individual's feeling of competence in the work setting.

The scale, unfortunately, has certain undesirable features. The wording of the items is often cumbersome and loaded with psychological terms. As a result, the items are difficult to understand. Consider, for example, the following items of the scale:

"Problems here are easy to solve once you understand the various consequences of your actions, a skill I have acquired";

"This type of work offers subjective rewards; the job is valuable to me for no other reason than I like to do it"; and

"If the work were only more interesting I would be motivated to perform better".

Wagner and Morse claim that they administered their scale to blue collar workers. However, it appears unlikely that blue collar workers could have understood these items.

The author was thus obliged to exclude such items and to select only those that were clearly stated and unambiguous. After careful consideration, 10 of the 23 items were chosen, balanced for direction of scoring (see Appendix A). Examples of two selected items are:

"I feel thoroughly familiar with my job" and

"This job makes me tense and anxious".

The scale appears in the first section of the questionnaire.

ii) **Interpersonal trust**

General interpersonal trust

The measure of general interpersonal trust selected for the questionnaire was the trust subscale of the Comrey Personality Scales (CPS : Comrey, 1970). As discussed in Section 2.2.3, the CPS is a carefully constructed, reliable and valid instrument. Most of its items are clear and unambiguous. The trust subscale is quick to administer and suitable for use in work settings. Further, Comrey's definition of trust (T) versus defensiveness, is ideally suited to the present study:

"Individuals who are high on this personality factor indicate that they believe more than the average person in the basic honesty, trustworthiness and good intentions of other people. They believe that others wish them well and they have faith in human nature. Individuals who are low on T are cynical, defensive, suspicious and have a low opinion of the value of the average man." (Comrey, 1970, p.6).

The only items omitted from the scale were those that are badly worded or use American colloquialisms (see Appendix A). An example of such an item is :

"If you aren't willing to fight, people will walk all over you."

An example of an item which was retained is:

"Most people have a lot more good than bad in them."

As previously explained in the context of self-esteem, a general measure such as the trust subscale of the CPS cannot adequately tap specific aspects of trust (for example, in the work context). It was thus necessary to include a measure of trust specific to the work situation as well. Furthermore, a measure of interpersonal trust in the work situation should tap both trust in one's colleagues and in one's superiors as these two aspects may be quite different from one another. Three measures of trust were therefore included in the questionnaire: general trust, trust in colleagues and trust in superiors at work.

Trust in one's colleagues

No scale of specific trust in one's colleagues could be found. Certain items of general interpersonal trust scales were therefore adapted to refer to one's colleagues at work. These items were selected from Banta's (1961) People in General Scale, Rotter's (1967) Interpersonal Trust Scale, Wrightsman's (1964) Philosophy of Human Nature Scale, and the Trust in People scale (Robinson and Shaver, 1973).

The following are examples of how the items were reworded.

Original: "Anyone who completely trusts anyone else is asking for trouble" (an item from Banta's scale);

Reworded: "Anyone who completely trusts his fellow workers is asking for trouble"

and

Original: "Most people are basically honest" (an item from Wrightsman's scale);

Reworded: "Most people at work are basically honest."

In this way, fourteen items were reworded to form a scale of trust in one's colleagues. The scale was balanced for direction of scoring (see Appendix A).

Trust in one's superiors

The three-item scale of Roberts and O'Reilly (1974) was mentioned in Section 2.2.3. The items are, however, too lengthy for a paper-and-pencil test, and each item requires a different response format. Consider, for example, the following two items:

Item 1: "How free do you feel to discuss with your **immediate superior** the problems and difficulties in your job without jeopardizing your position or having it held against you later"?

and

Item 2: "**Immediate superiors** at times must make decisions which seem to be against the interests of subordinates. When this happens to you as a subordinate, how much trust do you have that your **immediate superior's** decision was justified by other considerations"?

These items were reworded in a Likert format as follows:

"I generally feel free to discuss with my immediate superior the problems and difficulties in my job without having it held against me later".

and

"I have little trust and confidence in my immediate superior regarding his general fairness".

It was necessary to split one of the original items into two as it contained two ideas. A scale of four items measuring trust in one's superior (or superiors) was thus obtained. Once again, the scale was balanced to guard against acquiescence response set (see Appendix A).

6.1.2 Scales used to measure the personality variables

Reputable scales measuring all four of the interpersonal styles of the present study were not always suitable for use in the questionnaire. As discussed in Section 3.1.2, the various scales of dependence all tap different concepts and there is no consensus as to which scale should be used. Unfortunately there was no scale of dependence suitable for the present study in terms of its psychometric properties and response time. The same difficulties were present in the measurement of autonomy: no short, reliable and valid scale of autonomy could be found (see Section 3.3.2). It was thus decided to measure these interpersonal styles indirectly, via measures of Horney's interpersonal orientations, locus of control and other personality variables known to be related to the styles.

There are, however, scales of Machiavellianism and alienation suitable for inclusion in the questionnaire. The 20-item Mach IV scale (Christie, 1970) was used to tap Machiavellianism, and two dimensions of Maddi's (1979) Alienation Test were used to measure alienation.

i) Machiavellianism

As described in Section 3.2.3, the Mach IV and V scales are the two scales used in empirical research on Machiavellianism. The Mach IV scale is easier to administer, fill in and score than the Mach V scale. In the latter, the respondent has the demanding task of having to work through a set of complex instructions to consider altogether 60 different items. It was considered unlikely that the majority of respondents would be able to manage the task in the allotted time. The Mach IV scale, on the other

hand, has 20 relatively simple Likert-type items. It is easy to explain and easy to complete. This scale was therefore chosen above the Mach V scale as the measure of Machiavellianism in the present study.

ii) Alienation

Maddi's (1979) Alienation Test (described in Section 3.4.2) appears to be one of the better measures of alienation. The scale taps four different types of alienation (powerlessness, adventurousness, nihilism, and vegetativeness) and five contexts in which alienation can occur (work, social institutions, family, other persons, and self). A total alienation score (summed across the various types and contexts of alienation) can also be computed. The scale can thus yield ten possible scores: a total alienation score, and an alienation score for each of the four types and five contexts of alienation.

Respondents are instructed to indicate their degree of agreement or disagreement to each item on a scale ranging from 0 to 100. On this scale, a score of zero indicates that a respondent considers the item to be not at all true; a score of 100 indicates that the respondent considers the item completely true.

Many of the items are worded very strongly, for example, the third and fourth items in the work context:

"Most of life is wasted in meaningless activity"; and

"If you have to work, you might as well choose a career where you deal with matters of life and death."

In addition, some items are difficult to understand, for example, the twelfth item in the interpersonal relations context:

"The best reason for getting involved with other people is participation in some action that can catch everybody up."

Such items are perhaps better understood in the American culture than in South Africa and were therefore excluded from the questionnaire (see Appendix A).

As has been previously explained, scales were included in the questionnaire in order of importance and similarity of response format. In the case of Maddi's Alienation Test it proved much easier to use a five-point Likert agree-disagree scale rather than the 0-100 agree-disagree response format. Maddi et al. deliberately worded many items very strongly and used a 101-point scale so that respondents are unrestricted in indicating their degree of agreement or disagreement. The use of a five-point scale implies a much coarser measurement scale and hence reduced ability on the part of the respondent to indicate his degree of agreement or disagreement to each item. It was thus decided to omit very strongly worded items from the questionnaire (see Appendix A). Constraints on the length of the questionnaire made it impossible to include all the subsections of the Alienation Test. The contexts of the scale considered most relevant to the present study are work and interpersonal relations. It was decided that only total alienation scores for these contexts were necessary; scores on the various types of alienation would be based on only a few items each and thus would be unlikely to be reliable indicators.

Once the items of three of the five contexts had been omitted, as well as the very strongly worded items and those that were difficult to understand, there were only 12 items that remained to be included in the questionnaire: eight from the work context and four from the context of interpersonal relations (see Appendix A). The various types of alienation were not assessed, as the number of the selected items underlying each type was considered too few to be a reliable indicator. The psychometric properties of the two abbreviated alienation subscales are considered in Section 7.

iii) Anomia

Srole's (1956) anomia scale is the most popular anomia measure. The scale purportedly measures the degree of an individual's integration with his social environment. As discussed in Section 3.4.1, research on anomia and alienation are often linked in the psychological and sociological literature. Srole's 9-item scale was thus included in the questionnaire. A review on the psychometric properties and criticisms of the scale was presented in Section 3.4.2.

iv) Horney's interpersonal orientations

The relationship between Horney's (1945, 1950) tripartite model of personality and the Interpersonal Styles Model of the present research has been discussed at length (see Sections 3.1.1, 3.2.1, 3.4.1 and 4.1.2). In Section 4.1.2, Cohen's (1967) scale, designed to tap Horney's three interpersonal orientations, was described and research based on the scale was reviewed. In spite of all the criticism that has been levelled at the scale, the decision was made to include it in the questionnaire as it is the only way of tapping Horney's interpersonal orientations considered so pertinent to the present study.

v) Locus of control

Two scales of locus of control were selected for the questionnaire: Levenson's (1972) scale and Russell's (1982) scale.

Levenson's tripartite locus of control measure was selected as it was considered the best available (the advantages of this scale over Rotter's (1960) scale were discussed in Section 4.1.1(ii)). In the present research it was considered important to investigate the relationship between Levenson's three control orientations and the four interpersonal styles of the study. The complete scale was thus included in the questionnaire. Russell's Behavioroid Locus of Control Scale was also selected as it is purported to overcome the problem of defensive externality (see Section 4.1.1(ii)). The author was interested in investigating

the effects (if any) of defensive externality in the present study. However, space and time constraints of the questionnaire restricted the author from including all the items of the scale - only 10 items (five in the internal direction and the other five in the external direction) were selected from the original 26 (see Appendix A). The metric properties of this revised scale are presented in Section 7.

6.1.3. Scales used to measure job-related variables

i) Job satisfaction

The author used a multidimensional measure of job satisfaction in order to examine the relationship between specific dimensions of satisfaction and the interpersonal styles. Five aspects were chosen that were considered pertinent to the study. These are: promotion, management, policies and practices, the work itself, and general or overall job satisfaction.

The job satisfaction scale of Blake and Mackay (1980) was used. This scale covers inter alia the five job satisfaction areas selected for study.

ii) Job involvement

The issue of job involvement was discussed in Section 4.2.2. Lodahl and Kejner's (1965) scale, the most popular measure of job involvement, has received both praise and criticism. However, it remains the best available scale and was hence chosen for inclusion in the questionnaire.

The 20-item, Likert format scale was included in the revised version of the questionnaire only; it was not included in the first version administered to the first sample. The reasons for its inclusion in the second version of the questionnaire are set out in Section 7.

6.2 Sampling

In this section the considerations involved in the sampling procedure are discussed. Thereafter, the sampling techniques are described and the characteristics of the samples are discussed.

6.2.1 Sampling considerations

The research domain was restricted in a number of aspects, all of which had implications for sample selection.

The importance of the study of interpersonal styles in the work situation was described in Section 1; hence the research was restricted to the work context, and samples of workers were required for the study.

The study was also restricted to the White population groups in order that biases and other cross-cultural problems inherent in psychometric scales might be avoided. Hence Black, Coloured and Asian samples were not sought.

The third constraint placed on the study was to examine the interpersonal styles of males only. It was suspected that the interpersonal styles of working women would be very different from those of working men, for women in some organizations are expected to adopt a subservient role. Although attitudes towards the working woman are changing, the author believes that the traditional societal role of women could introduce confounding factors to the study of interpersonal styles if both men and women were examined together. The interpersonal styles of women would be an interesting study in its own right.

One of the requirements of good experimental practice is that data collection should be carried out under controlled conditions. The author feared that there would be a bias in the data if workers were allowed to complete the questionnaire at their leisure. Under such conditions respondents may not realise the seriousness of the exercise and thus may be reluctant to fill

in the questionnaire diligently. Also, it is likely that groups of workers would discuss the questionnaire together while completing it; this would introduce to the study the serious confounding variable of group pressure.

The author also wished to test a total of 200-300 workers from an organization. A large sample size would allow the appropriate use of univariate and multivariate measurement techniques. Furthermore, if the large sample was representative of the organization from which it was drawn, the research findings would reflect the interpersonal style situation in that organization accurately.

Finally, it was considered important to test two samples of workers in order to cross-validate the findings on the Interpersonal Styles Model. Separate analysis of two samples would also yield a measure of the stability of the model across different samples (see hypothesis 1). Differences in findings could have theoretical implications which, in turn, could lead to future research.

Taken together, all these considerations imply that it was necessary to test, under controlled conditions, groups of White male workers, making up a total sample size of 200-300. A second sample would be tested for cross-validation purposes.

6.2.2 Description and selection of the samples

Two large Government Departments were among the organizations willing to participate in the research. These departments were selected for study as they fulfilled all the criteria laid down for the research. Their identities, however, cannot be revealed as the departments concerned have requested anonymity. For the sake of convenience, the two samples will henceforth be referred to as S1 and S2 respectively.

Both samples were composed of White male workers. These workers were all public servants accustomed to similar conditions of

service. In spite of these similarities, the samples differed in certain important aspects. One of the main differences between the samples relates to the nature of the departments from which they were drawn: the first is far more structured than the second; furthermore, in the first organization, a much stronger emphasis is placed on obedience and discipline than in the second organization.

Different sampling strategies were used in the selection of the samples drawn from the two departments. In S1, respondents were obligated to participate in the study. Senior members of the Personnel Section of the organization selected certain members of staff from each of several major operating centres of the organization over the whole of South Africa. The sample was selected so as to be representative of the White staff members (apart from top management) of the whole organization in terms of age, language and rank. The second sample, on the other hand, was composed of volunteers from a small number of the divisions of one local branch of the parent organization. This volunteer sample by no means constituted a representative sample of the organization from which it was drawn: respondents were generally in the older age categories and had, in most cases, remarkably long lengths of service. The respondents of the second sample had therefore higher mean age and length of service, and smaller variance on both these variables than the respondents of the first sample.

6.3 Administration of the questionnaire

Respondents of both samples completed the questionnaire at formal testing sessions. However, the procedures used in organizing, selecting and testing the samples were very different in the two cases.

In the case of S1, the manager of the Personnel Division at the department's head office in Pretoria selected a representative sample of 26 of the organization's major operating centres. He

was sent over 300 questionnaires and answer sheets, sufficient for the testing of the sample of respondents to be selected. This person then computed the number of workers required from each centre in order to arrive at a representative sample in terms of age, length of service and job level of the White male work-force of the organization. He then instructed the manager of each centre to select the required numbers of his staff according to the specified criteria, and to explain to these people that they had been selected to participate in a study. Each manager was to stress the following:

- i) that the questionnaire they were required to complete was confidential and strictly anonymous;
- ii) that all data collected would be analysed on a group basis so that individuals could not be identified;
- iii) that the project was an important part of research being carried out by the NIPR and not originated by the organization - a report on the findings of the research would be given to the organization;
- iv) that the questionnaire was not a test; there were no "correct" or "wrong" responses and no response was preferable to another.

Having reassured respondents that the testing was designed to protect the respondent in every possible way, the manager impressed upon them the importance of answering the questionnaire as honestly and completely as possible.

The manager of each centre then arranged testing times, venues and test administrators. Testing sessions lasted, on average, for about one hour, although the majority of respondents completed the questionnaire in about three-quarters of an hour. Once a respondent had completed the questionnaire, he was allowed to hand it to the test administrator and to return to his work.

The manager of each centre returned the completed questionnaires to the head office Personnel Manager who, in turn, forwarded them to the NIPR. Within six weeks of having sent the questionnaire to the Personnel Manager, 295 completed questionnaires had been received by the NIPR. They had been filled in diligently with little or no missing information.

The procedure for sampling and testing people in S2 was somewhat different. Once again, the NIPR liaised with the manager of the Personnel Division at the head of the organization, and this person approached managers of the six largest departments within the Johannesburg operating centre. The Personnel Manager instructed the six managers to approach his staff members on the issue of voluntary participation in an NIPR study. The staff members were given the same reassurances as given to the participants of S1 (points i-iv listed previously). Only about a half to two-thirds of those approached agreed to participate in the study. Those agreeing turned out to be mainly older-than-average workers who had worked at the organization for long periods of time. They were informed of testing dates and venues.

Testing took place over a period of one week under the supervision of NIPR staff members in lecture rooms of the organizational centre in Johannesburg. Altogether seven testing sessions were arranged at which between 25 and 45 workers completed the questionnaire. At each session, a representative of the organization's head office introduced the NIPR staff members. He explained that although the research had been originated by the NIPR rather than by the organization itself, the project had the complete support of top management. He emphasized, too, the anonymity of the questionnaires.

The NIPR test administrators read through the instructions of the questionnaire together with the respondents. Within approximately one hour, all respondents had completed the questionnaire. Thereupon, respondents handed the questionnaires to the test administrators and returned to work.

Both organizations received confidential reports on the findings of the research.

7. RESULTS

In this section the results of the study are presented in three subsections. In the first, the basic descriptive statistics of the two samples and of the various scales used in the study are set out, and selected intercorrelations are presented; in the second subsection, the results and applications of the principal components analyses are explained; the results of the hypotheses of the study are presented in the third subsection.

7.1 Basic Descriptive Statistics

The biographical details of the two samples tested are presented first, followed by the descriptive statistics of the scales of the questionnaire.

7.1.1 Sample characteristics

In Tables 7.1 - 7.3 information is presented on the sample sizes and age, length of service, education level and job grade of the respondents of the two samples. The information on education level and job grade is presented in separate categories as this information was not collected on equal interval measurement scales.

In Table 7.1 it is shown that there were 295 respondents in the first sample and 228 in the second. The mean age of the former is 28,36 years and the standard deviation of their ages is 7,62 years. The mean age of the respondents of the second sample is 41,6 years with a standard deviation of 8,59 years. The respondents of the first sample are therefore younger than those of the second ($F(1;521)=344,17, p=0,000$). They are also slightly more homogeneous in terms of age than the second.

Table 7.1: Data on sample size, age and length of service for the two samples

STATISTIC	S1	S2
Sample size	295	228
Age mean	28,36 years	41,60 years
Age S.D.	7,62 years	8,59 years
Length of service mean	8,44 years	22,70 years
Length of service S.D.	6,13 years	9,00 years

Table 7.2 : Percentages of respondents at each education level for the two samples

SAMPLE EDUCATION LEVEL	S1 (%) N=295	S2 (%) N=228
	> St 10	10
St 9 - 10	78	58
≤ St 8	12	33

Table 7.3 : Percentages of respondents at various job grades (high to low) for the two samples

S1 (%) N=295		S2 (%) N=228	
Grade 4	17	Grade 3	47
Grade 3	18	Grade 2	31
Grade 2	29	Grade 1	22
Grade 1	36		

It was expected that the respondents of the second sample, being older than those of the first, would be likely to have a higher mean length of service. This is certainly so: the mean length of service of respondents of S1 is equal to 8,44 years whereas the mean for respondents of S2 is 22,7 years ($F(1;521)= 459,04$, $p=0,000$). The standard deviations are 6,13 and 9,0 years for S1 and S2 respectively. Subjects of S2 have therefore been employed by their organization for most of their working lives: subjects of the first sample being younger, have much shorter lengths of service.

In Table 7.2, the education levels of the respondents of the two samples are shown. In the first sample, 10% of respondents have obtained post-matriculation qualifications, 78% have Standard 9 or 10, and 12% have Standard 8 or lower. Respondents of the second sample are generally less educated: there are 9%, 58% and 33% in the three education categories respectively ($\chi^2= 41,43$, $p 0,01$).

Details of the job levels of the respondents of the two samples are presented in Table 7.3. Unlike the preceding two tables, the samples are not comparable in terms of job level since the job structures of the two organizations are quite different. However, the job levels sampled in both of these organizations are from the low-to-middle ranks.

Respondents of S1 were selected so as to be representative in number of the sampled job levels in the whole organization. The percentages of workers at each of the job levels (from senior to junior) are respectively 17%, 18%, 29% and 36%. There are thus relatively more workers at the lower ranks than at the higher ranks of the organization. By contrast, there are relatively more respondents in higher level jobs in S2: only about 20% of workers from the lower job levels volunteered to participate in the study.

Virtually all respondents of the two samples are Afrikaans speaking: 98% and 96% for S1 and S2 respectively.

7.1.2 Statistics of the scales used: means, standard deviations, minimum and maximum scores, reliability estimates, skewness and kurtosis.

The important descriptive statistics for each of the scales included in the questionnaire are presented in Tables 7.4 and 7.5. The mean, standard deviation (S.D.) and minimum and maximum possible scores for each scale appear in Table 7.4 for the two samples; in Table 7.5, the coefficient alpha reliability estimates, skewness and kurtosis are presented. The intercorrelation matrices of the scales of the questionnaire are presented in Tables 7.6 and 7.7 for S1 and S2 respectively.

The following points should be noted:

- i) The scales in Tables 7.4 and 7.5 have been divided by dotted lines into three main categories namely, the classifier scales, the personality scales and the job-related scales.
- ii) In the scoring of the scales, all items were keyed so that positive endorsements of the construct being measured were given high scores. Thus, for example, a high score on the general trust scale means that the respondent has high general trust.
- iii) In the kurtosis index used in Table 7.5, a neutral kurtosis is zero not 3. A neutral skewness is similarly zero.
- iv) The coefficient alpha reliability estimates (computed by the Item Response Evaluation program: Coulter, 1977) are based on the assumption that missing information can be estimated from the available data.

The information contained in Tables 7.4 and 7.5 is now discussed.

For both S1 and S2, scores on the five scales of the classifier variables are reasonably normally distributed with the exception of the trust in superiors scores which are moderately negatively skewed (-0,69 and -0,75 respectively). The skewness implies that there are more respondents who express high trust in their superiors than those who express low trust.

Table 7.4: Means, standard deviations, minimum and maximum possible scores for the scales of the questionnaires administered to S1 and S2

SCALE NAME	MEAN		S.D.		POSSIBLE	
	S1	S2	S1	S2	MIN*	MAX
General s-e	67,03	68,02	9,12	9,40	18	90
Work-related s-e	36,20	35,83	4,50	4,27	10	50
General trust	42,84	45,15	6,00	5,71	14	70
Trust in colleagues	43,66	45,73	6,58	6,72	14	70
Trust in superiors	15,25	15,74	3,54	2,79	4	20
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Compliance	36,74	37,44	4,56	4,51	10	50
Aggression	42,66	41,60	5,28	5,20	15	75
Detachment	27,30	25,86	4,81	4,06	10	50
Mach IV	58,24	55,94	9,73	10,60	20	120
Mach tactics	24,65	24,02	4,84	5,60	9	54
Mach views	28,91	27,91	6,55	6,74	9	54
Mach morality	4,66	4,39	2,12	2,21	2	12
Internal loc (Levenson)	35,64	35,05	4,95	6,09	8	48
Powerful others (Levenson)	23,58	20,77	6,64	6,57	8	48
Chance loc (Levenson)	24,22	22,75	6,85	7,12	8	48
Internal loc (Russell)	25,23	25,43	2,62	2,83	5	30
External loc (Russell)	17,92	17,44	3,98	4,07	5	30
General alienation	8,61	8,47	3,06	2,78	4	20
Work alienation	15,83	15,87	4,75	5,06	8	40
Anomia	21,57	20,29	6,00	5,96	8	40
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J.s. general	13,41	13,22	2,56	2,55	4	20
J.s. promotion	16,06	15,53	4,19	3,78	5	25
J.s. work	30,98	30,28	4,89	4,66	8	40
J.s. management	13,65	13,45	3,01	2,86	4	20
J.s. policies	12,46	12,79	3,02	3,10	4	20
Job involvement	-	71,07	-	8,31	20	100

* The possible minimum scale score is equal to the number of items in the scale since the minimum item score is 1.

Table 7.5: Coefficient alpha, skewness and kurtosis for the scales of the questionnaires administered to S1 and S2

SCALE NAME	ALPHA		SKEWNESS		KURTOSIS	
	S1	S2	S1	S2	S1	S2
General s-e	0,81	0,83	-0,27	-0,21	-0,04	-0,29
Work-related s-e	0,58	0,58	-0,47	-0,27	0,18	-0,20
General trust	0,65	0,64	-0,23	-0,24	0,56	-0,09
Trust in colleagues	0,74	0,78	-0,34	-0,28	0,40	0,02
Trust in superiors	0,82	0,76	-0,69	-0,75	-0,18	0,56
- - - - -	- - -	- - -	- - -	- - -	- - -	- - -
Compliance	0,60	0,65	-0,22	-0,42	0,12	0,21
Aggression	0,50	0,52	-0,04	0,04	0,52	0,29
Detachment	0,53	0,42	0,19	0,21	-0,07	-0,43
Mach IV	0,60	0,64	-0,03	0,00	-0,07	0,00
Mach tactics	0,38	0,30	0,25	1,03	0,81	4,29
Mach views	0,53	0,57	-0,16	0,09	1,16	-0,06
Mach morality	0,03	0,09	0,02	0,26	-1,28	-1,28
Internal loc (Levenson)	0,52	0,66	-0,36	-0,45	0,11	0,11
Powerful others (Levenson)	0,71	0,73	0,19	0,29	-0,30	0,11
Chance loc (Levenson)	0,73	0,75	0,12	0,12	-0,57	-0,54
Internal loc (Russell)	0,54	0,73	-0,24	-0,43	-0,24	0,40
External loc (Russell)	0,53	0,52	-0,21	0,15	0,12	-0,19
General alienation	0,76	0,75	0,68	0,38	0,70	-0,13
Work alienation	0,76	0,84	0,66	0,98	0,37	1,95
Anomia	0,80	0,84	0,21	0,37	-0,37	-0,15
- - - - -	- - -	- - -	- - -	- - -	- - -	- - -
J.s. general	0,65	0,70	-0,56	-0,32	0,78	0,35
J.s. promotion	0,77	0,72	-0,28	-0,06	-0,52	-0,13
J.s. work	0,80	0,84	-0,72	-0,60	1,17	0,21
J.s. management	0,68	0,61	-0,30	-0,33	-0,08	-0,19
J.s. policies	0,73	0,80	-0,17	-0,28	-0,48	-0,23
Job involvement	-	0,78	-	-0,37	-	0,50

The five scales were found to have acceptable spreads and internal consistency reliability estimates for S1 and S2 (Tables 7.4 and 7.5). However, of these scales, the modified work-related self-esteem scale of Wagner and Morse (1975) and the general trust scale of Comrey (1970) have the lowest coefficients of internal consistency (coefficient alphas are in the region of 0,6 for these scales for S1 and S2 - Table 7.5). These reliability estimates are lower than those generally obtained on the original scales (see Sections 2.1.4 and 6.1.1). It must be remembered, however, that certain items of the original scales had been omitted (see Appendix A), and that the remaining items had been translated into Afrikaans. The internal consistency of the revised scales may have been affected by these modifications.

The internal consistency of Eagly's (1970) revised version of the Janis-Field scale of general self-esteem (Hovland and Janis, 1959) is high (coefficient alpha is 0,81 and 0,83 for S1 and S2 respectively - Table 7.5). This finding is consistent with the result of Eagly (1970) who obtained estimates of the internal consistency of the scale in the region of 0,7 to 0,8. As the trust in colleagues scale is a composite of several different scales (see Appendix A), its metric properties cannot be evaluated against those of any one original scale. Similarly, there is no basis for comparison of the properties of the revised trust in superiors scale (Roberts and O'Reilly, 1974), as the authors of the original scale have not published any information on its spread, normality and internal consistency.

The internal consistency reliability of the scales of Cohen's (1967) CAD is poor (Table 7.5). The detachment scale has very low internal consistency: coefficient alpha is 0,53 and 0,42 for S1 and S2 respectively. The internal consistency of the aggression scale is also low (0,50 and 0,52 for S1 and S2 respectively), and that of the compliance scale is only moderate (0,60 and 0,65 for S1 and S2 respectively). These results are consistent with those obtained by Noerager (1979) who found the scales to have unacceptable internal consistency (Kuder-

Richardson coefficients of 0,60, 0,36 and 0,43 for the compliance, aggression and detachment scales respectively). It appears that the factor structure of the scale is questionable. Noerager (1979) and Munson and Spivey (1982) reached a similar conclusion.

Subscale scores for Machiavellian tactics and views were computed for each subject based on Christie's (1970) a priori classification. Inspection of the statistics of Table 7.5 reveals that the Mach tactics scale fared poorly in terms of reliability, skewness and kurtosis. Furthermore, the two items of the Mach morality scale are virtually uncorrelated, and the internal consistency of the Mach views scale is fairly low. Owing to the poor results of two of the three Mach subscales it was decided to disregard the subscales from further analysis and to consider only scores on the Mach IV scale. Thus hypotheses 3b, 3c and 3d could not be tested.

Obtained measures of normality, spread and reliability for the external dimensions of Levenson's (1972) locus of control scale are generally acceptable (Tables 7.4 and 7.5). In line with the research of Levenson (1973), the internal dimension was found to have the lowest internal consistency of Levenson's three locus of control measures (coefficient alpha is 0,52 and 0,66 for S1 and S2 respectively). Results on Levenson's internal control measure should thus be treated with caution as the measure is not a "pure" one. The reliabilities of the internal and external dimensions of Russell's (1982) locus of control scale are disappointingly low, except for the reliability of the internal dimension in the case of S2. There is no obvious reason for the discrepancy in the reliability across the two samples; more samples need to be tested to show how reliable Russell's scale generally is. It is possible that the modifications made to the scale could have resulted in lower reliability estimates than those reported by Russell (1982).

There is a moderate amount of positive skewness in the distribution of the scores of the two alienation measures. This implies that there are more people at the low end of the continuum of alienation scores than at the high end. This trend is particularly noticeable in the amount of work alienation expressed by respondents of S2 (skewness=0,98). The internal consistency estimates (coefficient alpha) of both the general and the work-related alienation scales are high: alpha is in the range of 0,75 to 0,84 for S1 and S2 (Table 7.5). This finding is consistent with those of Maddi, Kobasa and Hoover (1979) who found that scores on the original alienation scales range on internal consistency from 0,72 to 0,95. Hence it appears that the modifications made to the two alienation scales have not affected the internal consistency of the scales. The psychometric properties of Srole's 9-item anomia scale are good despite the numerous criticisms of researchers of the scale (see Section 3.4.2).

The metric properties of the job-related scales are satisfactory. The moderate amount of negative skewness in the distributions of scores on the scales implies that more respondents express high amounts of satisfaction and involvement than low amounts. This result is consistent with the positive skewness observed in the distribution of scores on work alienation. The internal consistency of these scales is similar to those obtained by the original authors of the scales (see Sections 4.2.1(ii) and 4.2.2(ii)).

7.1.3 Intercorrelations between the scales of the questionnaire

For the sake of completeness, the intercorrelations between the scales of the questionnaire are presented in Tables 7.6 and 7.7 for S1 and S2 respectively. However, only certain intercorrelations are considered meaningful and are discussed here. The reason for this will be made clear in Section 8.4 in which the correlational approach is discussed at length.

a) Intercorrelations between the classifier variables

The correlations between general and work-related self-esteem are moderate-to-low for the two samples (0,48 and 0,38 respectively). Thus one's self-esteem in non-work and work-related situations are not highly related. The correlations between general trust and trust in one's colleagues are high-to-moderate (0,60 and 0,58 for S1 and S2 respectively) but those correlations between general trust and trust in one's superiors are lower for both samples (0,26 and 0,31). When responding to the trust in superior scales, each subject probably had in mind his own specific supervisor (or supervisors) whom he trusts differently from people in general and his colleagues.

The intercorrelations between scores on the trust and self-esteem scales of the questionnaire are low, ranging between 0,14 and 0,28 for S1, and 0,08 and 0,22 for S2.

Table 7.6: Intercorrelations* between the scales of the questionnaire administered to S1 (N=295)

	General s-e	Work-related s-e	General trust	Trust in colleagues	Trust in superiors	Compliance	Aggression	Detachment	Mach IV	Internal loc (Levenson)	Powerful others loc (Levenson)	Chance loc (Levenson)	Internal loc (Russell)	External loc (Russell)	General alienation	Work alienation	Anomia	J.s. general	J.s. promotion	J.s. work	J.s. management	J.s. policy	
General s-e	1,00																						
Work-related s-e	,48	1,00																					
General trust	,18	,14	1,00																				
Trust in colleagues	,24	,24	,60	1,00																			
Trust in superiors	,16	,28	,26	,38	1,00																		
Compliance	,14	,11	,16	,08	,15	1,00																	
Aggression	-,07	,06	-,17	-,13	,00	-,05	1,00																
Detachment	-,12	,00	-,15	-,18	-,07	,06	,34	1,00															
Mach IV	-,29	-,15	-,47	-,46	-,27	-,26	,25	,23	1,00														
Internal loc (Levenson)	,16	,15	,09	,15	,16	,18	,17	,07	-,10	1,00													
Powerful others loc (Levenson)	-,27	-,18	-,23	-,28	-,17	,02	,21	,13	,46	,19	1,00												
Chance loc (Levenson)	-,35	-,22	-,18	-,30	-,15	-,04	,15	,18	,41	,02	,66	1,00											
Internal loc (Russell)	,32	,21	,13	,14	,23	,10	,07	,01	-,23	,34	-,10	-,17	1,00										
External loc (Russell)	-,46	-,26	-,20	-,28	-,05	-,10	,12	,22	,30	,02	,25	,32	-,04	1,00									
General alienation	-,25	-,11	-,25	-,27	-,11	-,22	,12	,30	,36	-,16	,33	,36	-,23	,16	1,00								
Work alienation	-,47	-,34	-,35	-,43	-,35	-,22	,17	,23	,50	-,21	,39	,40	-,33	,30	,48	1,00							
Anomia	-,38	-,25	-,38	-,46	-,25	-,15	,15	,23	,51	-,08	,45	,51	-,15	,33	,45	,56	1,00						
J.s. general	,38	,38	,30	,44	,44	,06	-,10	-,15	-,33	,13	-,30	-,24	,19	-,26	-,26	-,59	-,44	1,00					
J.s. promotion	,29	,22	,35	,47	,36	,10	-,13	-,15	-,43	,17	-,35	-,35	,16	-,21	-,40	-,56	-,51	,61	1,00				
J.s. work	,38	,33	,29	,37	,45	,17	-,14	-,19	-,32	,18	-,29	-,22	,30	-,22	-,31	-,62	-,37	,71	,56	1,00			
J.s. management	,30	,22	,35	,42	,35	,12	-,18	-,15	-,36	,10	-,19	-,22	,12	-,19	-,30	-,46	-,40	,61	,67	,58	1,00		
J.s. policy	,18	,20	,23	,44	,37	,07	-,06	-,05	-,26	,13	-,19	-,19	,09	-,12	-,22	-,37	-,32	,57	,62	,45	,60	1,00	

* Correlations greater than 0,12 are significantly different from zero ($p < 0,05$)Correlations greater than 0,15 are significantly different from zero ($p < 0,01$)

Table 7.7: Intercorrelations* between the scales of the questionnaire administered to S2 (N=228)

	General s-e	Work-related s-e	General Trust	Trust in colleagues	Trust in superiors	Compliance	Aggression	Detachment	Mach IV	Internal loc (Levenson)	Powerful others loc (Levenson)	Chance loc (Levenson)	Internal loc (Russell)	External loc (Russell)	General alienation	Work alienation	Anomia	J.s. general	J.s. promotion	J.s. work	J.s. management	J.s. policy	Job involvement	
General s-e	1,00																							
Work-related s-e	,38	1,00																						
General trust	,08	,13	1,00																					
Trust in colleagues	,14	,22	,58	1,00																				
Trust in superiors	,11	,21	,31	,41	1,00																			
Compliance	,10	,12	,32	,22	,12	1,00																		
Aggression	,03	,07	-,13	-,16	-,12	-,07	1,00																	
Detachment	-,14	,08	-,02	-,11	-,17	-,09	,15	1,00																
Mach IV	-,19	-,30	-,55	-,62	-,34	-,30	,25	,09	1,00															
Internal loc (Levenson)	,08	,10	,04	,05	-,06	,07	,21	,02	,03	1,00														
Powerful others loc (Levenson)	-,33	-,20	-,18	-,28	-,20	-,03	,23	,19	,45	,13	1,00													
Chance loc (Levenson)	-,35	-,25	-,27	-,29	-,17	-,09	,20	,20	,40	,02	,65	1,00												
Internal loc (Russell)	,26	,14	,12	,19	,11	,16	-,12	-,10	-,25	,25	-,23	-,23	1,00											
External loc (Russell)	-,36	-,29	-,17	-,28	-,13	-,07	,18	,14	,37	-,10	,42	,42	-,28	1,00										
General alienation	-,35	-,18	-,25	-,23	-,28	-,18	,06	,34	,27	,00	,45	,43	-,22	,30	1,00									
Work alienation	-,33	-,22	-,24	-,32	-,39	-,07	,22	,20	,41	-,02	,48	,47	-,26	,39	,47	1,00								
Anomia	-,26	-,21	-,35	-,42	-,34	-,11	,20	,24	,43	-,08	,43	,48	-,25	,42	,49	,62	1,00							
J.s. general	,16	,17	,21	,33	,38	,00	-,15	-,15	-,36	,05	-,19	-,27	,13	-,19	-,22	-,58	-,42	1,00						
J.s. promotion	,11	,08	,30	,40	,35	-,02	-,12	-,12	-,40	,10	-,15	-,27	,03	-,18	-,24	-,48	-,40	,62	1,00					
J.s. work	,25	,23	,16	,30	,45	-,01	-,13	-,17	-,33	,00	-,28	-,21	,17	-,19	-,28	-,67	-,46	,69	,56	1,00				
J.s. management	,10	,18	,25	,34	,41	,00	-,15	-,07	-,42	-,03	-,16	-,15	,07	-,14	-,14	-,41	-,36	,50	,63	,57	1,00			
J.s. policy	,07	,21	,29	,36	,32	,00	-,11	-,07	-,40	,07	-,13	-,12	,00	-,09	-,14	-,33	-,29	,57	,65	,50	,62	1,00		
Job involvement	,08	,21	,06	,16	,28	,09	-,02	-,04	-,24	,12	-,15	-,09	,12	-,06	-,08	-,45	-,20	,43	,33	,50	,32	,30	1,00	

* Correlations greater than 0,13 are significantly different from zero ($p \leq 0,05$)
Correlations greater than 0,17 are significantly different from zero ($p \leq 0,01$)

Had the trust and self-esteem constructs been highly correlated, the use of both constructs as classifiers would have supplied little extra information over the information supplied by only one of them. The low intercorrelations obtained imply that the trust and self-esteem constructs are contributing different information.

- b) Intercorrelations between scores on Cohen's (1967) compliance, aggression and detachment scale.

The intercorrelations between scores on Cohen's scales are low. The compliance scale is uncorrelated with the other two scales, and the correlations between the aggression and detachment scales, though significantly different from zero, are moderate-to-low (0,34 and 0,15 for S1 and S2 respectively). These findings are consistent with those of critics of the CAD (Munson and Spivey, 1982; Noerager, 1979).

- c) Intercorrelations between the locus of control scales of Levenson (1972) and Russell (1982).

The correlations between the two external dimensions (chance and powerful others) of Levenson's locus of control scale are fairly high and of the same magnitude for the two samples (0,66 and 0,65 respectively). This implies that the belief in chance events goes hand-in-hand with the belief in the control that powerful other people have over one's life (Lefcourt, 1978). This result is consistent with that of Wallston, Wallston and DeVellis (1978).

The low-to-moderate correlations between the external dimensions of the scales of Russell (1982) and Levenson (1972) shows that these external dimensions are by no means equivalent. Similarly, the correlations between the internal control dimensions of the two scales are fairly low (0,34 and 0,25 for S1 and S2 respectively). The two locus of control scales are clearly tapping associated, but different control constructs.

Some researchers (Butler and Burr, 1980; Prociuk and Breen, 1975) assert that the powerful others dimension is a measure of defensiveness. If this were true, it would be unlikely that the powerful others dimension would be positively correlated with Russell's external dimension, which is purportedly free of defensiveness. However, significant positive correlations were observed in the present research ($r=0,25$ and $0,42$ for S1 and S2 respectively). Further research is required on the construct validity of the external scales before the issue of defensiveness can be properly investigated.

- d) Intercorrelations between measures of alienation, anomia and detachment.

The correlations between the general and work alienation measures of Maddi (1979) and between general alienation and Srole's anomia scales are in the region of 0,5 for both samples. Work alienation and anomia correlate slightly higher (0,56 and 0,62 for S1 and S2 respectively). The moderate-to-low correlations (0,20 to 0,34) between Cohen's (1966) detachment scale and the alienation and anomia scales may, in part, be due to the low reliability of the detachment scale.

- e) Intercorrelations between measures of job satisfaction and job involvement

The intercorrelations between the various aspects of job satisfaction are moderate-to-high for both samples. For S2, the correlation between job involvement and the job satisfaction measures range between 0,30 and 0,50. This result is consistent with empirical findings (see Section 4.2.2(iii)). As expected the highest correlation is between job involvement and satisfaction with the work itself.

7.2 Results of the Principal Component Analysis

Component analysis was used to summarise the information contained in the classifier variables in terms of a smaller

number of component variables. The correlations on which the component analyses are based were presented in Tables 7.6 and 7.7 (Section 7.1.3). In Tables 7.8 - 7.11, information on the variance explained by each component, component loadings and component score coefficients are presented for S1 and S2.

From Table 7.8 it can be seen that the first two components together account for almost two-thirds of the total variance* of the classifier variables (65,7% and 65,4% for S1 and S2 respectively). Only these two components have eigenvalues** greater than one. Hence, according to Kaiser's criterion (cited by Mulaik, 1972, p.176), these two principal components are retained.

In Tables 7.9 and 7.10, the unrotated and (varimax) rotated loadings for the two principal components are shown. For both samples, the rotated factor loadings of Table 7.10 clearly show that the three trust scales load highly on the first component, the loading of the trust in superior scale being the lowest. This relatively low loading is consistent with the fairly low correlation shown in Tables 7.6 and 7.7 between the trust in superiors and trust in colleagues scales ($r=0,38$ and $0,41$ for S1 and S2 respectively) and between the trust in superiors and general trust scales ($r=0,26$ and $0,31$ for S1 and S2 respectively).

* The total variance is defined as the sum of the diagonal elements of the correlation matrix on which the analysis is based. Thus, the total variance is equal to 5 in the present analysis.

** The eigenvalue of a component (or variance explained by the component) is the sum of the squares of the elements of the column of the unrotated component loading matrix corresponding to that component. Thus the eigenvalue of the first component in the case of S1 is 2,134 (Table 7.8) which is equal to the sum of the squared (unrotated) loadings of the five scales on the first component in Table 7.9.

The two self-esteem scales have high loadings on the second component for both samples (Table 7.10). There is thus clear evidence for the trust and self-esteem principal components based on the five classifier variables.

In Table 7.11, the component score coefficients used to derive the two component scores for the respondents of each sample, are presented. The coefficients are based on the standardized classifier variables (mean of zero and standard deviation of 1).

Table 7.8: The variance explained and cumulative proportion of the variance explained by each component for the two samples.

Component	S1		S2	
	Variance Explained (Eigenvalues)	Cumulative Proportion of Total Variance	Variance Explained (Eigenvalues)	Cumulative Proportion of Total Variance
1	2,134	0,427	2,068	0,414
2	1,150	0,657	1,203	0,654
3	0,807	0,818	0,723	0,799
4	0,506	0,919	0,599	0,919
5	0,403	1,000	0,407	1,000

Table 7.9: Unrotated component loadings and eigenvalues of the two principal components for the two samples.

Variable	S1		S2	
	Component 1	Component 2	Component 1	Component 2
General s-e	0,597	0,586	0,418	0,730
Work-related s-e	0,601	0,621	0,535	0,624
General trust	0,678	-0,501	0,720	-0,407
Trust in colleagues	0,778	-0,389	0,806	-0,297
Trust in superiors	0,593	-0,136	0,663	-0,162
Eigenvalue	2,134	1,150	2,068	1,203

Table 7.10: Rotated component loadings of the two principal components for the two samples.

Variable	S1		S2	
	Component 1	Component 2	Component 1	Component 2
General s-e	0,135	0,825	0,022	0,841
Work-related s-e	0,119	0,856	0,175	0,803
General trust	0,843	-0,004	0,826	-0,017
Trust in colleagues	0,857	0,145	0,850	0,121
Trust in superiors	0,590	0,241	0,661	0,172

Table 7.11: Component score coefficients for the two samples

Variable	S1		S2	
	Component 1	Component 2	Component 1	Component 2
General s-e	-0,075	0,576	-0,11	0,63
Work-related s-e	-0,091	0,602	-0,018	0,58
General trust	0,514	-0,164	0,467	-0,133
Trust in colleagues	0,494	-0,058	0,460	-0,033
Trust in superiors	0,294	-0,069	0,346	0,033

Had the self-esteem and trust scales of the questionnaire been highly (or fairly highly) intercorrelated, the two distinct self-esteem and trust components would not have emerged from the component analysis, and a simple 2x2 split on the component scores would not have been possible. For both samples of the study, it was possible to use median splits on the two component scores to arrive at the four-styles categorization.

The method of median splits is commonly used in such applications as it is robust to possible deviations from normality in the data. In Table 7.12 it is shown that approximately equal proportions of people are assigned to the model categories for S1 and S2.

Table 7.12: Percentages of respondents of S1 and S2 in each of the model categories.

Model Categories \ Sample	S1 N=295	S2 N=228
"Dependent"	23	24
"Machiavellian"	23	24
"Autonomous"	27	26
"Alienated"	27	26

As a check on the validity of the method of categorization used by the model, the results of this method were compared to those of a natural grouping of four clusters based on a K-Means cluster analysis of the five self-esteem and trust scales. The means of these five scales for each cluster are presented in Tables 7.13 and 7.14 for S1 and S2 respectively. The values in these tables show that clusters 1 and 3 are always highest on the trust scales, whereas clusters 2 and 3 are always highest on the self-esteem scales. The four clusters thus appear to correspond to the four categories of the model: relative to the scale means,

cluster 1 is low on self-esteem and high on trust;
 cluster 2 is high on self-esteem and low on trust;
 cluster 3 is high on self-esteem and high on trust; and
 cluster 4 is low on self-esteem and low on trust.

According to the Interpersonal Styles Model, these clusters correspond to the styles of dependence, Machiavellianism, autonomy and alienation respectively.

Table 7.13 : Means of the classifier variables for each cluster of S1

Classifier Variables \ Clusters	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Mean
	N=76	N=85	N=74	N=60	N=295
General s-e	60,69	73,55	73,99	57,25	67,03
Work-related s-e	34,72	37,89	38,50	32,78	36,19
General trust	44,99	39,29	48,49	38,19	42,84
Trust in colleagues	46,07	40,82	50,12	36,65	43,66
Trust in superiors	15,62	14,82	17,04	13,17	15,25

Table 7.14 : Means of the classifier variables for each cluster of S2

Classifier Variables \ Clusters	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Mean
	N=59	N=48	N=75	N=46	N=228
General s-e	60,46	75,33	74,68	59,22	68,02
Work-related s-e	34,85	36,98	38,15	32,13	35,83
General trust	46,97	41,96	48,16	41,26	45,15
Trust in colleagues	48,22	39,81	51,36	39,54	45,73
Trust in superiors	16,46	14,69	17,27	13,41	15,74

The relationship between the two methods of grouping is formally presented in Tables 7.15 and 7.16 for S1 and S2 respectively. As shown by the values along the diagonal of each table, most respondents are classified into corresponding categories by the two methods (79% and 76% respectively). A chi-square test of independence (performed on the raw data) shows there to be a significant relationship between the two grouping methods for both samples: ($\chi^2(9) = 448,623$, $p < 0,0001$; $\chi^2(9) = 322,14$, $p < 0,0001$ for S1 and S2 respectively).

**Table 7.15 : Percentages of respondents of S1 in each cluster*
corresponding to the categories of the model****

Categories of the model \ Clusters	Cluster 1	Cluster 2	Cluster 3	Cluster 4
	N=76	N=85	N=74	N=60
"Dependent"	18	0	4	1
"Machiavellian"	0	22	0	1
"Autonomous"	3	3	21	0
"Alienated"	5	4	0	18

**Table 7.16: Percentages of respondents of S2 in each cluster*
corresponding to the categories of the model****

Categories of the model \ Clusters	Cluster 1	Cluster 2	Cluster 3	Cluster 4
	N=59	N=48	N=75	N=46
"Dependent"	18	0	5	1
"Machiavellian"	1	17	5	1
"Autonomous"	1	2	23	0
"Alienated"	6	2	0	18

* In both Tables 7.15 and 7.16, the clusters are derived from cluster analysis on the five measures of the classifier variables.

** In all cases, the categories of the model are derived from component analysis on the five measures of the classifier variables.

7.3 Results of the Hypothesis Tests

In this section, results of the tests of the hypotheses of the research are presented.

7.3.1 The test of the hypothesis of the first class

The binomial test was used to test whether the orderings of the interpersonal styles for the various personality and job-related variables are essentially the same for the two samples tested.

Nine out of a total of 13 of these orderings were identical for the two samples (Tables 7.17 - 7.29).

The probability of an identical ordering of the four styles for a particular variable occurring by chance for the two samples is:

$$\frac{24 \binom{1}{4} \binom{1}{4}}{(4!)(4!)} = \frac{1}{24}$$

This is so since there are 4! or 24 possible orders of the 4 styles. The same ordering must occur for the two samples for a tie to occur. Also, a tie can occur for any of the 24 possible orderings.

The test of the first hypothesis is thus a test to ascertain whether a probability of 1/24 could have resulted in 9 out of 13 identical comparisons. If not, a probability greater than chance would mean that there is an element of consistency between the style orderings of the two samples, for the number of identical orderings obtained could not have occurred by chance.

According to the binomial test, the probability of obtaining 9 identical orderings out of 13 by chance, is virtually zero ($2,323 \cdot 10^{-10}$). This means that there is some consistency between the style orderings of the two samples, a result which supports the cross-validity of the Interpersonal Styles Model.

7.3.2 The tests of the hypotheses of the second class

Tables 7.17 - 7.30 illustrate the way in which the hypotheses of categories A-E* (see Section 5.2.2, Table 5.1) are tested. In each of these tables, the expected or hypothesized order of the interpersonal styles is stated for a particular personality or job-related variable. Thereafter, a 1-way Analysis of Variance (ANOVA) table is presented to test for overall differences between the interpersonal styles for each variable. As the ANOVA technique takes no account of the degree of concordance between the hypothesized and obtained orderings, the significance level obtained from the ANOVA table is adjusted by Mantel's (1983) method. By this method, the continuous significance test provided by the ANOVA table, and a discrete significance test based on the concordance between the anticipated and expected orderings, are simultaneously taken into account in the adjustment. The hypothesis test based on the adjusted significance level is thus a joint test of differences between the styles and of the orderings of these styles.

If this adjusted significance level is significant (that is $p < 0,05$), and if the observed style ordering is the same as the expected ordering, there is support for saying that the styles are different from each other on that particular variable, and that the observed style ordering is concordant with expectation. However, if the adjusted significance level is significant but the observed ordering is not as expected, then only the claim of overall differences between the styles is supported. Observed style orderings that are different from those expected may provide valuable information for further research.

Table 7.31 provides a summary of the results of these tests.

* The hypothesis on job rank is not included here as it is tested differently. The results of this test are presented at the end of Section 7.3.2.

In general, the results of the adjusted ANOVA tables provide support for the construct validity of the Interpersonal Styles Model. As can be seen from the summary table (Table 7.31), the tests for significant differences between the interpersonal styles which take the expected style orderings into account are all significant for S1. In the case of S2, non significant differences between the styles are on the scales of detachment and Levenson's internal locus of control. Thus for S2, it is not strictly admissible to rank order the observed values for the styles on these variables.

Other observed style orderings that are different from those expected were obtained on the scales of compliance, Machiavellianism, Levenson's powerful others locus of control and general alienation. However, if the actual style means on these variables are compared, the differences between the means are actually too small to be considered meaningful. For instance, it was expected that people classified by the model as dependent would score higher on compliance than people classified as autonomous (Table 5.1). Although this order was not observed (Table 7.17), the differences between the means obtained by these two groups (expressed in standard deviation (S.D.) units - see Table 7.4) are extremely small: 0,01 and 0,17 S.D. units for S1 and S2 respectively. Another example is the case of Levenson's powerful others locus of control scale. Contrary to expectation, people classified by the model as dependent were observed to obtain lower scores than those classified as Machiavellian (Table 7.22). However, the differences between the score means for S1 and S2 are once again extremely small (0,04 and 0,05 S.D. units respectively). The unexpected ordering for S2 on general alienation for respondents classified by the model as Machiavellian and dependent is similarly based on a very small mean difference (0,12 S.D. units).

In the case of the Mach IV scale, people classified by the model as alienated were found to score higher than those classified as Machiavellian (see Table 7.20), although the difference between

the mean scores of these two groups of people was fairly small for each sample (0,25 and 0,35 S.D. units for S1 and S2 respectively). However, the unexpected observed order on the Mach IV scale could not be ignored, particularly as the scale was intended to be one of the main criteria for establishing the construct validity of the model's categorization of Machiavellianism. In an attempt to discriminate between the two categories of the model (alienation and Machiavellianism), a scale of job involvement was included in the questionnaire administered to the second sample. It was expected that job involvement scores could be used to distinguish between the alienation and Machiavellianism categories of the model, as alienated people have been associated with low job involvement, whereas Machiavellians are not expected to have low job involvement (see Section 4.2.2(iii)). As expected, people categorized by the model as alienated did indeed obtain lower job involvement scores than those classified by the model as Machiavellian (see Table 7.30). Furthermore, as expected, people classified according to the model as alienated also obtained lower scores on the general job satisfaction scale (Table 7.29), and higher scores than those classified as Machiavellian on the two alienation scales (Tables 7.26 and 7.27) and on Srole's (1956) anomia scale (Table 7.28). These findings provide support for the distinction drawn between the model categories of alienation and Machiavellianism.

Table 7.17: Hypothesis tests for compliance

Hypothesized order: Dependent (high to low)					Autonomous	Machiavellian Alienated			
Observed		S1				S2			
Order	Aut	Dep	Mach	Alien	Aut	Dep	Mach	Alien	
Mean	37,33	37,29	36,94	35,53	38,95	38,19	36,72	35,92	
S.D.	4,19	3,95	5,69	4,15	3,91	4,27	4,81	4,49	

ANOVA Table									
Source	df	MS	F	p	df	MS	F	p	
between	3	56,38	2,76	0,042	3	111,28	5,81	0,001	
within	291	20,42			224	19,14			
After adjustment				p=0,021	p=0,0005				

Table 7.18: Hypothesis tests for aggression

Hypothesized order: Machiavellian (high to low)					Alienated	Dependent Autonomous			
Observed		S1				S2			
Order	Mach	Alien	Dep	Aut	Mach	Alien	Dep	Aut	
Mean	44,03	42,80	42,25	41,71	42,54	41,60	41,50	40,83	
S.D.	5,00	5,61	4,94	5,29	4,61	4,57	4,82	6,40	

ANOVA Table									
Source	df	MS	F	p	df	MS	F	p	
between	3	70,66	2,58	0,054	3	27,74	1,03	0,381	
within	291	27,42			224	26,98			
After adjustment				p=0,007	p=0,049				

Table 7.19: Hypothesis tests for detachment

Hypothesized Order: (high to low)		Alienated			Machiavellian		Dependent Autonomous		
Observed		S1				S2			
Order	Alien	Mach	Aut	Dep	Mach	Alien	Dep	Aut	
Mean	28,16	27,54	26,72	26,71	26,32	26,08	25,96	25,13	
S.D.	4,97	5,64	4,54	3,84	4,49	4,22	3,76	3,76	
ANOVA Table									
Source	df	MS	F	p	df	MS	F	p	
between	3	38,00	1,65	0,177	3	15,47	0,94	0,424	
within	291	22,98			224	16,53			
After adjustment p=0,023					p=0,217				

Table 7.20: Hypothesis tests for Mach IV total scores

Hypothesized Order: (high to low)		Machiavellian			Alienated		Dependent Autonomous		
Observed		S1				S2			
Order	Alien	Mach	Dep	Aut	Alien	Mach	Dep	Aut	
Mean	63,30	60,87	54,69	53,91	63,08	59,39	51,41	49,78	
S.D.	7,42	9,03	8,43	10,39	8,20	8,62	10,27	9,14	
ANOVA Table									
Source	df	MS	F	p	df	MS	F	p	
between	3	1618,14	20,48	0,000	3	2362,54	28,74	0,000	
within	291	79,00			224	82,22			
After adjustment p=0,000					p=0,000				

Table 7.21: Hypothesis tests for Levenson's internal locus of control scale

Hypothesized Order: (high to low)		Autonomous				Machiavellian		Dependent Alienated	
Observed		S1				S2			
Order	Aut	Mach	Dep	Alien	Mach	Dep	Aut	Alien	
Mean	36,49	35,74	35,65	34,71	35,87	35,25	34,90	34,28	
S.D.	5,07	5,00	4,75	4,87	4,90	6,34	6,85	6,08	
ANOVA Table									
Source	df	MS	F	p	df	MS	F	p	
between	3	42,34	1,74	0,158	3	24,99	0,67	0,571	
within	291	24,28			223*	37,26			
After adjustment				p=0,020					p=0,876

* In Tables 7.21 - 7.29, the degrees of freedom of the ANOVA tables for S2 are slightly different from those of the ANOVA tables of Tables 7.17-7.20 and 7.30. The differences are due to a small amount of missing information in the responses of the subjects of S2.

Table 7.22: Hypothesis tests for Levenson's powerful others locus of control scale

Hypothesized Order: (high to low)		Alienated Dependent				Machiavellian		Autonomous	
Observed		S1				S2			
Order	Alien	Mach	Dep	Aut	Alien	Mach	Dep	Aut	
Mean	25,69	23,71	23,43	21,48	23,61	20,76	20,42	18,28	
S.D.	6,60	6,37	6,52	6,44	6,77	6,96	6,21	5,25	
ANOVA Table									
Source	df	MS	F	p	df	MS	F	p	
between	3	235,35	5,59	0,001	3	284,54	7,13	0,000	
within	291	42,07			222	39,89			
After adjustment				p=0,0008					p=0,000

Table 7.23: Hypothesis tests for Levenson's chance locus of control scale

Hypothesized Order: Alienated Dependent Machiavellian Autonomous (high to low)									
Observed		S1				S2			
Order	Alien	Dep	Mach	Aut	Alien	Dep	Mach	Aut	
Mean	26,66	24,84	23,90	21,51	25,85	23,09	22,85	19,27	
S.D.	6,72	6,55	6,81	6,38	6,78	6,40	7,32	6,48	

ANOVA Table									
Source	df	MS	F	p	df	MS	F	p	
between	3	364,03	8,34	0,000	3	437,15	9,6	0,000	
within	291	43,67			223	45,55			
After adjustment p=0,000					p=0,000				

Table 7.24: Hypothesis tests for Russell's internal locus of control scale

Hypothesized Order: Autonomous Machiavellian Dependent (high to low) Alienated									
Observed		S1				S2			
Order	Aut	Mach	Dep	Alien	Aut	Mach	Dep	Alien	
Mean	25,86	25,50	25,18	24,43	26,48	25,41	25,34	24,46	
S.D.	2,35	2,59	2,67	2,70	2,72	2,57	2,75	2,93	

ANOVA Table									
Source	df	MS	F	p	df	MS	F	p	
between	3	29,47	4,44	0,005	3	40,94	5,42	0,001	
within	291	6,64			222	7,55			
After adjustment p=0,0006					p=0,0001				

Table 7.25: Hypothesis tests for Russell's external locus of control scale

Hypothesized Order: (high to low)		Dependent Alienated				Machiavellian		Autonomous	
Observed		S1				S2			
Order	Alien	Dep	Mach	Aut	Alien	Dep	Mach	Aut	
Mean	19,75	19,02	16,96	15,95	18,63	18,11	16,89	16,17	
S.D.	3,97	3,11	3,69	3,81	4,25	3,93	3,41	4,18	

ANOVA Table								
Source	df	MS	F	p	df	MS	F	p
between	3	239,80	17,74	0,000	3	73,62	4,67	0,004
within	291	13,51			222	15,70		
After adjustment				p=0,000	p=0,001			

Table 7.26: Hypothesis tests for general alienation

Hypothesized Order: (high to low)		Alienated Machiavellain				Dependent		Autonomous	
Observed		S1				S2			
Order	Alien	Mach	Dep	Aut	Alien	Dep	Mach	Aut	
Mean	9,50	9,18	8,21	7,57	9,75	8,66	8,33	7,15	
S.D.	3,49	3,14	2,50	2,60	2,93	2,75	2,73	2,02	

ANOVA Table								
Source	df	MS	F	p	df	MS	F	p
between	3	60,60	6,87	0,000	3	68,59	9,97	0,000
within	291	8,82			223	6,88		
After adjustment				p=0,000	p=0,000			

Table 7.27: Hypothesis tests for work alienation

Hypothesized Order: Alienated Machiavellain Dependent Autonomous (high to low)									
Observed		S1				S2			
Order	Alien	Mach	Dep	Aut	Alien	Mach	Dep	Aut	
Mean	18,79	15,84	15,52	13,09	18,55	16,00	15,25	13,62	
S.D.	4,47	4,98	4,15	3,44	5,66	5,07	4,50	3,48	
ANOVA Table									
Source	df	MS	F	p	df	MS	F	p	
between	3	433,40	23,71	0,000	3	252,40	11,21	0,000	
within	291	18,28			223	22,52			
After adjustment p=0,000					p=0,000				

Table 7.28: Hypothesis tests for anomia

Hypothesized Order: Alienated Machiavellain Dependent Autonomous (high to low)									
Observed		S1				S2			
Order	Alien	Mach	Dep	Aut	Alien	Mach	Dep	Aut	
Mean	24,74	22,47	21,12	17,98	23,05	21,35	19,45	17,32	
S.D.	5,42	5,80	5,65	5,04	5,66	6,30	6,02	4,28	
ANOVA Table									
Source	df	MS	F	p	df	MS	F	p	
between	3	630,96	21,14	0,000	3	361,84	11,61	0,000	
within	291	29,85			223	31,17			
After adjustment p=0,000					p=0,000				

Table 7.29: Hypothesis tests for general job satisfaction

Hypothesized Order: Dependent Machiavellian Autonomous (high to low)					Alienated			
Observed					S2			
Order	Aut	Mach	Dep	Alien	Aut	Dep	Mach	Alien
Mean	14,91	13,38	13,32	12,04	13,98	13,66	13,02	12,23
S.D.	1,79	2,07	2,65	2,74	2,42	2,33	2,73	2,41

ANOVA Table								
Source	df	MS	F	p	df	MS	F	p
between	3	109,78	19,99	0,000	3	35,28	5,77	0,001
within	291	5,49			223	6,12		
After adjustment				p=0,000	p=0,0005			

Table 7.30: Hypothesis tests for job involvement

Hypothesized Order: Dependent Machiavellian Autonomous (high to low)					Alienated			
Observed					S2			
Order	Aut	Mach	Dep	Alien	Aut	Dep	Mach	Alien
Mean	NOT APPLICABLE				73,07	72,13	71,17	68,05
S.D.	NOT APPLICABLE				5,68	8,66	9,19	8,69

ANOVA Table				
Source	df	MS	F	p
between	3	282,52	4,27	0,006
within	224	66,13		
After adjustment				p=0,003

Table 7.31: Summary of results of the significance tests of the second class : hypotheses of categories A-E

Table Number	Variable	Significance (S) or Non-Significance (NS) based on adjusted significance level		Complete Concordance (Y=Yes N=No)	
		S1	S2	S1	S2
7.17	Compliance	S	S	N	N
7.18	Aggression	S	S	Y	Y
7.19	Detachment	S	NS	Y	N
7.20	MachIV	S	S	N	N
7.21	Levenson's internal loc	S	NS	Y	N
7.22	Levenson's powerful others loc	S	S	N	N
7.23	Levenson's chance loc	S	S	Y	Y
7.24	Russell's internal loc	S	S	Y	Y
7.25	Russell's external loc	S	S	Y	Y
7.26	General alienation	S	S	Y	N
7.27	Work alienation	S	S	Y	Y
7.28	Anomia	S	S	Y	Y
7.29	General job satisfaction	S	S	Y	Y
7.30	Job involvement	-	S	-	Y

As previously mentioned, the hypothesis on job rank (hypothesis 6b) was tested differently from the other hypotheses of the second class. This is because the information on job rank is strictly ordinal. Details on the ranks of the respondents are presented in Table 7.32 for the two samples.

Table 7.32: Hypothesis tests for job rank

Hypothesized Order: Machiavellian Alienated Dependent (high to low) Autonomous					
Observed Percentages for S1 (N=295)					
Rank (high to low)	Alien	Mach	Dep	Aut	Total
4	3	4	5	5	17
3	6	3	4	5	18
2	8	7	5	9	29
1	10	9	9	8	36
Total	27	23	23	27	100
Observed Percentages for S2 (N=228)					
Rank (low to high)	Alien	Mach	Dep	Aut	Total
3	15	14	7	11	47
2	6	7	9	9	31
1	5	3	8	6	22
Total	26	24	24	26	100

A chi-square test of independence (performed on the raw data) shows that there is no relationship between the style categories and the job ranks of S1. However, the hypothesized order for job rank does hold for the model categories of S2 $\chi^2(9) = 8,48$, $p > 0,05$; $\chi^2(6) = 14,99$, $p < 0,05$ for S1 and S2 respectively. The relationship between interpersonal styles and job rank needs to be further researched (see Section 9).

As aspects of job satisfaction other than general job satisfaction (that is, satisfaction with promotion, management, policies and work itself) are considered to be largely determined by the characteristics of the job itself, no hypotheses were framed for these variables. An hypothesis was framed for general or overall job satisfaction as it has been associated with the alienated style in the literature (see Section 4.2.1(iii)). The other aspects of job satisfaction were included in the study in order to investigate whether they are related to the styles in any way. The means of the job satisfaction aspects for the style categories are presented in Table 7.33.

Table 7.33: Observed means of each job satisfaction aspect for the model categories of S1 and S2

Model Categories Job satisfaction	S1				S2			
	Aut	Dep	Mach	Alien	Aut	Dep	Mach	Alien
Promotion	18,63	16,74	18,90	13,95	16,80	16,94	14,70	13,73
Management	15,15	14,02	13,32	12,15	14,33	14,00	13,35	12,18
Policies	13,75	13,02	11,85	11,24	13,81	13,45	12,15	11,77
Work	33,33	30,82	31,28	28,55	32,63	30,60	29,80	28,07
General	14,91	13,32	13,38	12,04	13,98	13,66	13,02	12,23

It is noteworthy that for both S1 and S2, people classified by the model as autonomous generally tend to be the most satisfied group in terms of management, policies, work and general job satisfaction, followed respectively by people classified as dependent, Machiavellian and alienated. The model categories have been presented in this order to illustrate the trend.

However, in the case of satisfaction with promotion, there appears to be no clear trend. It is possible that promotion satisfaction is a function of the organization rather than of the personality of the worker.

7.3.3 The tests of the hypothesis of the third class

For each sample, the technique of K-Means cluster analysis was used to split the respondents into four groups. All the personality variables (apart from self-esteem and trust) were used in the analyses. The job-related variables were not included as their relationships to the styles are not as clearly defined in the literature as those between the personality variables and the styles.

An examination of the means of these personality variables across the four resultant clusters of each sample (Tables 7.34 and 7.35 for S1 and S2 respectively) reveals that each cluster corresponds to one of the four interpersonal styles. For example, the means of the first cluster of Tables 7.34 and 7.35 indicate that the people of this cluster, as compared to the people of the other clusters, are most likely to be dependent: relative to the people of the other categories, they are fairly high on compliance and external locus of control, and fairly low on aggression, Machiavellianism and alienation. On the other hand, the people of the third cluster are likely to be autonomous as they are high on compliance and Russell's internal locus of control and low on aggression, Machiavellianism, external locus of control and alienation. The means of the variables on the second and fourth clusters suggest that these clusters represent the styles of Machiavellianism and alienation respectively.

In Tables 7.36 and 7.37 the percentage of people in each cluster corresponding to the categories of the Interpersonal Styles Model are presented for S1 and S2. The order of presentation of the clusters is such that the highest percentages in each table would be expected to lie along the main diagonal if the clusters and categories of the model are concordant.

Table 7.34: Means of the personality variables for each cluster* of S1

Personality Variables	Clusters			
	Cluster 1 N=70	Cluster 2 N=74	Cluster 3 N=75	Cluster 4 N=76
Compliance	38,48	35,69	37,68	35,28
Aggression	41,87	43,58	40,82	44,37
Detachment	25,54	30,00	25,03	28,55
Mach IV Total	53,58	64,39	48,56	66,29
Levenson's internal loc	36,54	36,82	35,28	34,07
Levenson's powerful others loc	25,76	23,05	17,21	28,72
Levenson's chance loc	26,90	22,59	17,55	30,30
Russell's internal loc	25,18	25,47	26,27	23,97
Russell's external loc	18,00	18,11	15,62	20,03
General alienation	8,01	8,96	6,32	11,14
Work alienation	14,70	16,01	11,74	20,83
Anomia	20,70	21,53	16,27	27,82

* In Tables 7.34 - 7.37, the clusters are derived from cluster analysis on the personality variables (apart from self-esteem and trust)

Table 7.35: Means of the personality variables for each cluster of S2

Personality Variables	Clusters			
	Cluster 1 N=65	Cluster 2 N=62	Cluster 3 N=55	Cluster 4 N=46
Compliance	37,81	36,74	38,81	36,31
Aggression	41,44	43,16	38,70	43,04
Detachment	25,00	25,24	25,07	28,69
Mach IV Total	53,42	59,60	46,50	65,21
Levenson's internal loc	36,41	33,97	34,70	34,29
Levenson's powerful others loc	21,83	18,97	14,31	28,06
Levenson's chance loc	26,86	19,06	14,85	30,46
Russell's internal loc	25,86	24,87	26,06	23,81
Russell's external loc	17,53	17,61	13,63	20,65
General alienation	8,55	7,81	6,46	11,31
Work alienation	15,22	16,15	10,98	21,54
Anomia	19,17	20,85	14,76	26,84

Table 7.36: Percentages of respondents of S1 in each cluster corresponding to the categories of the model*.

Categories of the model	Clusters			
	Cluster 1 N=70	Cluster 2 N=74	Cluster 3 N=75	Cluster 4 N=76
"Dependent"	9	4	5	5
"Machiavellian"	6	8	4	5
"Autonomous"	6	6	14	1
"Alienated"	3	7	2	15

* In all cases, the categories of the model are derived from component analysis on the five measures of the classifier variables.

Table 7.37: Percentages of respondents of S2 in each cluster corresponding to the categories of the model.

Categories of the model	Clusters			
	Cluster 1 N=65	Cluster 2 N=62	Cluster 3 N=55	Cluster 4 N=46
"Dependent"	9	4	7	4
"Machiavellian"	6	9	4	5
"Autonomous"	7	7	12	0
"Alienated"	7	7	1	11

The highest percentage values always occur along the main diagonals of Tables 7.36 and 7.37. The groupings of the cluster analysis and of the model are concordant for 46% of respondents of S1 and 41% of respondents of S2. These percentages are fairly high considering that only 25% of each sample would be expected to lie along the main diagonal of each table by chance (just over 6% of people are expected in each cell by chance).

The results of the chi-square tests of independence show that for both S1 and S2, there is a significant relationship between the results of the groupings of the cluster analysis and the categories of the model ($\chi^2(9) = 81,57, p < 0,001$; $\chi^2(9) = 51,84, p < 0,001$ for S1 and S2 respectively).

There are, however, some inconsistencies in the results of the two sets of categorizations. These are particularly apparent for the styles of dependence and Machiavellianism: frequently, the two clusters (cluster 1 and cluster 2) that most closely resemble these styles do not correspond to the model's categorizations of these styles, and vice versa. For example, there is noticeable inconsistency where the cluster analysis assigns people to the second cluster and the model classifies these people as "alienated". By contrast, the least confusion is between cluster 3 and "alienation" and cluster 4 and "autonomy".

The main results cited in this chapter are discussed further in Section 8.

8. GENERAL DISCUSSION OF RESULTS

The emphasis in this discussion is on the implications of the main results of the study for the validity of the Interpersonal Styles Model. The discussion begins with an appraisal of the scales of the questionnaire, as the quality of the research results is dependent on the quality of the underlying measurement scales.

8.1 Measurement of the Classifier Variables

In the compilation of the questionnaire, it was often necessary to omit certain items of existing scales that were either not applicable to the South African context or were considered confusing. In general, the revised scales of the classifier variables had satisfactory metric properties, although some of the other scales of the questionnaire provided less than optimal measurement of their underlying constructs. There was, however, sufficient information derived from acceptable personality and work-related measures to test the majority of the hypotheses of the study.

The choice of general as well as work-specific scales of each classifier variable, in preference to single global measures, was justified by the modest relationships obtained between the two scales of self-esteem and among the three scales of trust. In spite of these moderate correlations, the scales loaded on only two components when analysed by the technique of principal components analysis : the self-esteem measures loaded on one and the trust measures on the other. These loadings show that there is a core of self-esteem common to the self-esteem measures; similarly, the trust measures have a common core of trust.

8.2 Measurement of the Interpersonal Styles

It was not possible to compare the results of existing measures of all four styles to the results of the 2x2 categorization of the Interpersonal Styles Model. This was because reputable existing measures of the four interpersonal styles in question were not always available. For instance, dependence could not be measured directly as there appears to be no reputable measure of the style. Although several measures of dependence exist (for example, Edwards, 1959; Rhodes' (1957) sentence completion test, and the DEQ of Blatt, D'Afflitti and Quinlan, 1976), the scales appear to be measuring different constructs. Furthermore, there is no consensus among researchers as to which scales should be

is no consensus among researchers as to which scales should be used (see Section 3.1.2). The style of autonomy was not measured directly either, as existing scales have questionable construct validity (for example, the scales of Kurtines, 1973, 1974), or are not yet thoroughly researched (for example, the scale of Karni and Levin, 1979). On the other hand, well-researched measures of alienation and Machiavellianism were available for use in the present research.

In order to overcome the problem of measuring autonomy and dependence directly, an indirect measurement approach was adopted: various personality and job-related variables indicated in the psychological literature as related to the styles were included in the research. For example, the three interpersonal orientations (compliance, aggression and detachment) of the theory of Horney (1945, 1950) promised to be useful in the study of the styles of dependence, Machiavellianism and alienation; the locus of control construct so popular in the psychological literature for most of the past two decades seemed central to the study of the styles; and the work-related variables of job satisfaction and job involvement appeared particularly useful, both for the study of the interpersonal style of alienation and to relate the interpersonal styles to aspects of the work context considered relevant in the present research.

Unfortunately, it was not possible to examine all these constructs rigorously as underlying measurement scales were not always adequate. For example, the measure of Horney's interpersonal orientations, Cohen's (1967) CAD, was found to be inferior on psychometric grounds, supporting the criticisms of Noerager (1979) and Munson and Spivey (1982). Thus the association between Horney's theory and the interpersonal styles of the present research could not be examined properly. Similarly, the issue of defensive locus of control and its association to the four styles had to remain unresearched as the items selected from Russell's (1982) locus of control scale were found to be metrically poor. It was, however, possible to

examine the other personality variables and the job-related variables included in the research.

We turn now to the two interpersonal styles (alienation and Machiavellianism) that were measured directly in the present research. In the case of alienation, items from the interpersonal relations and work subscales of Maddi's (1979) Alienation Test were included in the questionnaire. The moderate correlations found between these two alienation scales for both samples of the study are consistent with those obtained by Maddi, Kobasa and Hoover (1979), and imply that a person need not be alienated to the same extent in social and work-related contexts. It is likely that alienation experienced by a person is influenced by various external factors; for example, a person's work alienation may be heightened by unfriendly colleagues. However, the fact that correlations between the scales were of reasonable magnitude implies that there is a common underlying core of alienation.

Findings of the study suggest that the Mach IV scale may actually be measuring an aspect of alienation. Unfortunately, the associations between Maddi's (1979) scales and the Mach IV scale have not been examined in the psychological literature. However, in the present research, the correlations between the scale used to measure Machiavellianism (the Mach IV scale) and the two alienation scales were found to be of approximately the same order as those between the alienation scales themselves. Furthermore, consistent with the results of Christie and Lehmann (1970), the Mach IV scale was found to be moderately positively correlated with Srole's (1956) anomia scale. The latter has, in its turn, been said to be tapping an aspect of alienation (Bell, 1957; Srole 1956). Other findings of the present study provide additional support for questioning the construct validity of the Mach IV scale. For instance, the scale was found to be only moderately reliable in terms of internal consistency. Perhaps the most serious allegation that can be levelled against the construct validity of the scale is that many of its items appear

to be measuring a trust component only, and nothing else. Indeed, Rotter (1967) cites the literature on Machiavellianism as dealing indirectly with trust. Consider for example, the following five items of the scale to which the subject must respond by agreeing or disagreeing:

"Anyone who completely trusts anyone else is asking for trouble";

"Honesty is the best policy in all cases";

"It is safest to assume that all people have a vicious streak and it will come out when they are given a chance";

"One should take action only when sure it is morally right"; and

"Most people are basically good and kind".

There appears to be no reason why both truly alienated and truly Machiavellian people should respond differently to these items and to several others of the Mach IV scale. The scale thus appears to have low discriminating power between true alienation and true Machiavellianism. Hence, little faith should be placed in results of studies based on it. For example, Hollon (1983) found the Mach IV scale to be negatively related to job involvement (see Section 3.2.2). This counter-intuitive finding may be due to confounding of Machiavellianism and alienation by the Mach scale. It is possible that Hollon's findings may also be attributed to the misuse of the correlational method (see Section 8.4).

The suspect validity of the Mach IV scale may also account for the anomalous finding that people classified by the model as alienated obtained slightly higher scores on the Mach IV scale than people in the model category of Machiavellianism. Had a valid and reliable measure of Machiavellianism existed, the ability of the model to discriminate between the styles of

alienation and Machiavellianism could have been examined more effectively. Indeed, Hunter, Gerbing and Boster (1982) claim that the index of Machiavellianism (the Mach total score) used in virtually all studies of Machiavellianism is an arbitrary composite score that does not necessarily reflect Machiavellianism at all.

8.3 Validation of the Model

In general, the results of the hypotheses of the research attest to the cross-validity and construct validity of the model. The results of Hypothesis 1 (the stability hypothesis) showed that scores obtained on various personality and job-related variables of the study, when rank ordered according to the categories of the model, were substantially the same for the two samples. This result was obtained despite differences between the samples in terms of age, length of service, job rank and freedom of choice in participating in the study. This finding thus constitutes, to a degree, a cross-validation of the model.

Support for the construct validity of the model was provided by the results of the tests of the hypotheses of categories A-E (the personality and job-related hypotheses of Table 5.1). They showed the observed intercategory differences to be generally as expected. For instance, people categorized into the high self-esteem, high trust quadrant of the model (the quadrant proposed to reflect autonomy), were found to obtain low scores relative to people in the other model categories on the scales of aggression, detachment, Machiavellianism, external locus of control, alienation and anomia. Their scores on compliance, internal locus of control, job satisfaction and job involvement were relatively high. By contrast, people categorized into the low self-esteem, low trust quadrant (the quadrant proposed to reflect alienation), were found to obtain relatively high scores on scales of detachment, external locus of control, alienation and anomia. They obtained low scores on compliance, internal locus of control, job satisfaction and job involvement. The

observed personality and job-related scores of people categorized into the model quadrant of low self-esteem, high trust were consonant with the expected characteristics of a dependent person. Obtained scores for people in the proposed Machiavellian quadrant were compatible with a Machiavellian style, although their locus of control beliefs were neither clearly internally nor externally oriented, but rather somewhere in between.

Further evidence for the construct validity of the model was obtained through the technique of cluster analysis. A cluster analysis exercise was performed on the personality variables of the questionnaire (excluding the classifier variables of the model). It yielded four groups of people that corresponded (to a degree significantly greater than chance) to the categories of people of the Interpersonal Styles Model. As these two sets of groupings were based on completely independent variables, the correspondence between them constitutes support for the constructs of the model.

Some degree of inconsistency between the results of the two methods of groupings was expected in view of the often questionable reliability and validity of the personality scales on which the cluster analyses were based. For example, in the light of the previously expressed reservations about the validity of the Mach IV scale, some inconsistency was likely, and was indeed found, between the cluster of people who most closely resemble Machiavellians (cluster 2) and those people classified by the model as alienated. Other inconsistencies between the two grouping methods may be due to measures such as Levenson's (1972) internal locus of control scale, Russell's (1982) locus of control scale and Cohen's (1967) CAD which were shown to have poor metric properties.

It must be recognised that there were no objective criteria available for categorizing people as 'high' or 'low' on the scales of the classifier variables of the model. Whether a person's score was considered to be high or low was dependent on

the scores obtained by the other people of that sample. In other words, the cutoffs used for the categorization were sample dependent. Ideally, the cutoffs should be invariant across different samples so that the same criteria would always be used to assign people to the four categories. In this way it could be established whether people are indeed characterized by the particular styles, or whether they only appear to be so relative to the other people in the particular sample considered. The latter may have occurred to some extent in the present study. This would account for the often small mean differences obtained between people in the four style categories, and also for the inconsistencies obtained in the comparisons between the categories of the model and the groupings of the cluster analysis. Although the construct validity of the model was supported, much stronger evidence of the model's construct validity may be obtained on other samples categorized according to invariant self-esteem and trust criteria. In order to arrive at invariant criteria, cutoffs based on a representative cross-section of the population of workers should be computed. This exercise is, however, beyond the scope of the present study.

8.4 Issues Highlighted by the Present Research

The study of interpersonal styles by means of the model of self-esteem and trust highlights some critical issues ignored to date in the psychological literature. The first of these is the tendency of researchers to examine interpersonal styles in isolation. As stated in the introduction (Chapter 1), one of the disadvantages of this approach is that people are classified in dichotomous fashion as being either 'high' or 'low' on that style. For example, Gould (1969) classified people into 'high alienated' and 'low alienated' groups; throughout their research, Christie and Geis (1970) speak of the 'high Mach' and the 'low Mach'. Although people characterized by a particular interpersonal style may indeed be similar, no cognizance is taken of the fact that there are generally large individual differences between people who are not characterized by that style. The

interpersonal styles model overcomes this problem to some extent by its integrated approach.

The study of interpersonal styles in isolation has serious implications for researchers who use linear correlational methods in studying the relationship between styles and other variables. Consider, for example, the scatterplot of Figure 8.1 which shows the expected relationship between valid measures of alienation and self-esteem.

According to the hypothetical scatterplot, the overall correlation between self-esteem and alienation would be low. Closer inspection shows that there is a definite degree of order in the points. However, the relationship between the alienation and self-esteem variables is not a linear one. Consequently, the amount of order contained in the points of the scatterplot would not be revealed by a linear correlation coefficient. Statistical methods for overcoming this problem are available (see Sprent, 1969).

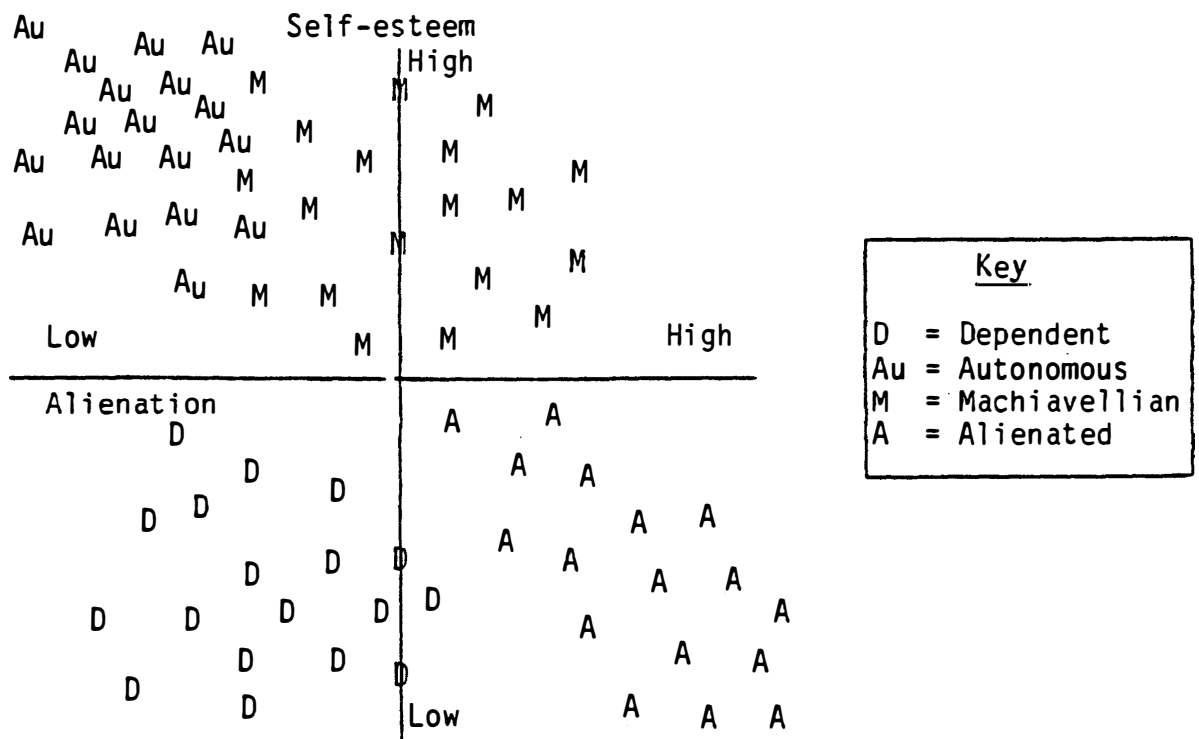


Figure 8.1: Hypothetical scatterplot of the expected relationship between alienation and self-esteem

A preponderance of people of any one of the four styles may cause a radical change in the overall correlation. For example, if there were relatively few dependent people in a sample, the overall (absolute) correlation between self-esteem and alienation would appear to be high. On the other hand, a sample containing a large proportion of dependent people would lead to a change in the overall correlation. The effects of possible biases in sampling procedures on the results of correlational studies is, however, largely disregarded in psychological research.

Thus, many spurious correlations may have been obtained in studies of interpersonal styles. A case in point concerns the positive correlation often found in the literature on Machiavellianism between the Mach IV scale and scales of external locus of control (Christie and Geis, 1970; Duffy, 1978; Prociuk and Breen, 1975; Russell, 1974; Solar and Bruehl, 1971; Zenker and Wolfgang, 1982). In spite of a number of rationalizations that have been proposed by researchers for this finding, the association still seems counter-intuitive. The questionable validity of the Mach IV scale may further compound the problem inherent in correlational studies of Machiavellianism.

9. CONCLUSIONS

In this research a model of interpersonal styles was proposed and investigated. The study served to support the viability of the four style model and to illustrate new directions for future research.

The Interpersonal Styles Model was applied to two independent samples. The results of the model were stable in both applications, in spite of a number of inter-sample differences, a finding which supports the cross-validity of the model. Support for the construct validity of the model was obtained from results on direct and indirect measures of the interpersonal styles. Some of these measures, however, proved less than adequate on metric grounds. This presented a severe handicap in the research as rigorous investigation of certain issues was not possible.

The problem of poor measurement scales is not confined to the present research. In general, the importance of good psychometric scales in psychology is overlooked, and little attention is paid to what these scales are measuring. As studies are often based on inferior scales, findings are suspect and subsequent research may be misdirected by the results. Any scientific discipline must have rigorous measurement instruments; if psychology is to aspire to becoming a science, the measurement problem will have to be faced and remedied.

One of the advantages of the Interpersonal Styles Model is that it circumvents the problems associated with the direct measurement of the four interpersonal styles by categorizing people on self-esteem and trust variables alone. Furthermore, by its use of only two variables, it presents a parsimonious explanation of the four interpersonal styles, and provides an integrated approach to the study of this domain.

Any model or theory tries to explain a set of events in simplified fashion and is thus only an approximation of the truth (Taylor, 1983). It can never explain all the facts with which it is confronted, but can, nevertheless, make valuable contributions to science. For example, Newtonian theory was used most successfully in the eighteenth and nineteenth centuries to explain natural phenomena such as the flow of the tides, the motion of the planets, moons, comets and so on. At the beginning of the twentieth century, however, scientific thinking was revolutionized by the theories of Einstein, and Newtonian physics lost its place as the fundamental theory of natural phenomena (Capra, 1982). Nevertheless, the usefulness and parsimony of the Newtonian model is still acknowledged for the explanation of events occurring at "normal" speeds and distances.

The contribution made by the model of the present research to the interpersonal styles domain should be similarly evaluated. Although the model is not flawless, it is nevertheless better than existing theories of interpersonal styles. To date,

interpersonal styles have been studied in a vacuum: people are classified on a single dimension as either high or low on the style in question, and no account is taken of the individual differences between people classified as low on the style. The model used in this study, on the other hand, provides a two-dimensional perspective by assigning each person to one of four categories rather than characterizing people in unidimensional terms. The model is constrained (parsimonious) in that it describes four constructs through the use of only two. A more complex or less constrained model may be able to account for findings more accurately, but at the cost of parsimony. A balance between complexity and parsimony is required.

A serious problem in current empirical research on interpersonal styles lies in the misuse of the correlation coefficient. Psychologists often conduct correlational studies with little or no understanding of what the correlations actually mean. As illustrated in the previous section, obtained values of correlations between scales of interpersonal styles and other scales may be completely meaningless. Although the correlation coefficient is a powerful statistical tool for describing linear relationships, it is an inappropriate descriptor of certain types of order. However, this fact remains unrecognized by many researchers who construct elaborate psychological explanations to account for unexpected correlations instead of questioning their underlying logic.

A further problem in current research that has been highlighted by the present study concerns sampling. The problem may be illustrated by referring to Christie and Geis' (1970) research on Machiavellianism. Virtually all the studies cited in their research were conducted on undergraduate students, most of whom were studying psychology or sociology. Indeed, psychology has been described as "... the study of the college sophomore" (Adelson, 1969, p.219). Findings based on student populations may not be representative of the situation in non-academic contexts. Nevertheless, injudicious generalizations are often

made. In the present research, the Interpersonal Styles Model was formulated on research findings in both work and non-work contexts. The model, however, was tested on Government office workers only: no claims are made as to its applicability to non-Government workers, student samples or to non-work-related samples. In these populations, the proportions of people characterized by the various interpersonal styles may be quite different from those observed in this study.

Investigations into the usefulness of the model in experimental and predictive exercises would constitute a logical next step in the research on the interpersonal styles model. For example, it would be worthwhile examining the job satisfaction of people characterized by the styles in relation to various characteristics of the job such as amount of interpersonal contact and task structure. It may be that dependent people would only be satisfied in jobs with a great amount of both task structure and interpersonal contact; the job satisfaction of autonomous people, on the other hand, might not be affected by the level of people-contact, but strongly affected by the amount of freedom to make decisions and take responsibility for action.

Studies also need to be conducted on the predictive aspect of the model. For example, the relationship between job rank and interpersonal styles needs to be investigated properly. Other issues, such as the possibility that the model has a stage-developmental component also needs to be researched. For instance, it may be that people begin their careers as dependent and, through changes in their self-esteem and trust levels, pass through the alienated style or perhaps the Machiavellian style, and eventually become autonomous. It is possible that certain factors influence changes in interpersonal styles. For example, older workers may feel dependent on their bright young colleagues who are familiar with modern technology. Educational level may have an impact on interpersonal styles and developmental aspects. The applicability of the model to working women also needs to be researched. The results of such a study may illustrate important

differences in interpersonal styles between male and female workers. There is also a need to investigate the validity of the model in different cultures.

The present study is thus only a beginning to the investigation of interpersonal styles. The proposed model seems to be useful as it provides a new approach to the styles. However, much research must still be conducted on it. In turn, this research may lead to new and better models of the styles.

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APPENDIX A

The items of the interpersonal styles questionnaire

APPENDIX A

* The wording of the item is provided only if modifications have been made to the item

SECTION 1

Original Scale	Item No. in original	Item No. in questionnaire	Modifications to item (if any)*	
			Original wording	Revised wording
General trust Comrey (1970)	1	1		
	28	2		
	64	3		
	37	4		
	82	5		
	55	6		
	100	7		
	118	8		
	73	9		
	127	10		
	136	11		
	145	12		
	163	13		
	10	14		
Work-related self-esteem	5	15	I do not know why it is, but sometimes when I'm supposed to be in control I feel more like the one being manipulated	Sometimes when I'm supposed to be in control at work I feel more like the one being manipulated
	6	16	I would make a fine model for an apprentice to emulate in order to learn the skills he would need to succeed	I would make a fine model to copy in order to learn the necessary skills to succeed in a job
		8		
	9	18	This job is manageable and problems tend to be optimally solved	I tend to solve any problems in my job optimally
	10	19	If anyone here can find the answer, I'm the one	If anyone in my job can find the answer, I'm the one
	11	20	Sometimes I feel I'm not getting anything done	Sometimes I feel I'm not getting anything done at work
	14	21	I go home the same way in the morning, feeling I have not accomplished a whole lot	I go home feeling the same as when I arrived in the morning - that I have not accomplished much
	17	22	Considering the time spent on the job, I feel thoroughly familiar with my tasks	I feel thoroughly familiar with my job
	19	23	I honestly believe I have all the skills necessary to perform this task well	I honestly believe I have all the skills necessary to perform my job well
	20	24		

Trust in colleagues Wrightsman (1964)	26	25	Most people are basically honest	Most people at work are basically honest
	62	26	If you act in good faith with people, almost all of them will reciprocate with fairness toward you	If you act in good faith toward your colleagues, almost all of them will reciprocate with fairness toward you
	32	27	People claim they have ethical standards regarding honesty and morality, but few people stick to them when the chips are down	People at work claim they have ethical standards regarding honesty and morality but few people stick to them in a crisis at work
	50	28	Most people are not really honest for a desirable reason, they're afraid of getting caught.	Most of one's colleagues are not really honest for a desirable reason; they're afraid of getting caught
	56	29	Most people would tell a lie if they could gain by it	Most workers would not tell a lie even if they thought they could gain by it
	Rosenberg (1957)	1a	30	Some people say that most people can be trusted
1b		31	Others say you can't be too careful in your dealings with people	One cannot be too careful in dealing with colleagues
3		32	If you don't watch yourself, people will take advantage of you	Unless you are careful, your colleagues will take advantage of you
Trust in people (Survey Research Centre)	3	33	Do you think that most people would try to take advantage of you if they got the chance or would they try to be fair?	People in the organization generally try to be fair
	11	34	Most people can be counted on to do what they say they will do	In general one's colleagues cannot be counted on to do what they say they will do
Rotter (1967)	11	34	Most people can be counted on to do what they say they will do	In general one's colleagues cannot be counted on to do what they say they will do
Rosenberg (1957)	6	35	Any normal person will stand up for what he thinks is right even if it costs him his job	In general a worker will stand up for what he thinks is right even if it costs him his job
Rotter (1967)	14	36	It is safe to believe that in spite of what people say, most people are primarily interested in their own welfare	It is safe to say that in spite of what one's colleagues say, most of them are primarily interested in their own welfare
Rosenberg (1957)	17	37	Most people are basically good and kind	Most of one's colleagues are basically good and kind
	19	38	When you come right down to it, it's human nature never to do anything without an eye to one's own advantage	It's human nature never to do anything at work without an eye to one's own advantage

Trust in superiors Roberts and O'Reilly (1974)	1	39	How free do you feel to discuss with your immediate superior, the problems and difficulties in your job without jeopardizing your position or having it held against you later	I generally feel free to discuss with my immediate superior the problems and difficulties in my job without having it held against me later
	3	40	To what extent do you have trust and confidence in your immediate superior regarding his general fairness?	I have little trust and confidence in my immediate superior regarding his general fairness
	2	41	Immediate superiors at times must make decisions which seem to be against the interests of subordinates. When this happens to you as a subordinate, how much trust do you have that your immediate superior's decision was justified by other considerations	I generally trust that my immediate superior takes into account the interests of all his subordinates in making decisions
	2	42		My immediate superior has little interest in the welfare and happiness of those who work here.
General self-esteem Revised Janis-Field Scale (Eagly, 1967)	SECTION 2			
	I(1)	1		
	II(1)	2		
	I(3)	3		
	I(4)	4		
	II(2)	5		
	I(5)	6		
	II(3)	7	When you talk in front of a class or group of people, how pleased are you with your performance?	When you talk in front of a group of people how often are you pleased with your performance?
	II(4)	8	How comfortable are you when starting a conversation with people whom you don't know?	How often are you comfortable when starting a conversation with people whom you don't know?
	I(6)	9		
II(5)	10			
I(7)	11			
I(8)	12			
II(7)	13	When you speak in a class discussion, how sure of yourself do you feel?	In a social discussion how often do you feel sure of yourself?	
I(9)	14			
II(8)	15			
II(9)	16	How confident do you feel that some day the people you know will look up to you and respect you?	How often do you feel confident that some day the people you know will look up to you and respect you?	
I(10)	17			
II(10)	18	In general how confident do you feel about your abilities?	In general how often do you feel confident about your abilities?	
Job involvement Lodahl and Kejner (1965)	1-20	19-38		

Compliance(C) Aggression(A) and Detachment(D) Cohen's (1967) CAD	A(1) A(2) C(1) D(1) C(2) A(3) D(2) A(4) C(3) A(5) C(4) D(3) A(6) D(4) A(7) C(5) D(5) A(8) C(6) A(9) D(6) C(7) A(10) D(6) A(11) C(8) A(12) D(8) C(9) A(13) D(9) A(14) C(10) D(10) A(15)	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35	SECTION 3	
---	--	---	------------------	--

			SECTION 4	
Machiavellianism Christie's (1970) Mach IV	1-20	1-20		
Locus of control Levenson (1972) Russell (1982)	1-24	21-44		
	3	45		
	8	46		
	21	47		
	6	48		
	4	49		
	16	50		
	5	51		
	23	52		
	7	53		
	22	54		

Work alienation Maddi (1979)	2 5 6 7 8 9 10 11	1 2 3 4 5 6 7 8	<p style="text-align: center;">SECTION 5</p> I find it difficult to imagine enthusiasm concerning work It doesn't matter if people work hard at their jobs; only a few bosses profit	I find it difficult to be enthusiastic about work It doesn't matter if people work hard at their jobs; only the bosses profit
General alienation Maddi (1979)	2 6 9 10	9 10 11 12	There is no point in socializing: it goes nowhere and is nothing	There is no point in socializing - it achieves nothing
Anomia Srole (1956)	9 2 3 4 5 6 7 8	13 14 15 16 17 18 19 20		
Job satisfaction Blake and Mackay (1980) subscales		21-45		

APPENDIX B

English and Afrikaans questionnaires and answer sheets

BIOGRAPHICAL INFORMATION

i) Today's date DAY MONTH YEAR
 [] [] []

ii) Job grade/rank []

iii) Length of service at the organization YEARS MONTHS
 [] []

iv) Age YEARS MONTHS
 [] []

v) Home language ENGLISH AFRIKAANS OTHER
 [] [] []

vi) Qualifications

Std. 8 and below	[]
Std. 9 to 10	[]
Higher than Std. 10	[]

SECTION 1					
ITEM NUMBER	STRONGLY AGREE	AGREE	UNCERTAIN	DISAGREE	STRONGLY DISAGREE
1	a	b	c	d	e
2	a	b	c	d	e
3	a	b	c	d	e
4	a	b	c	d	e
5	a	b	c	d	e
6	a	b	c	d	e
7	a	b	c	d	e
8	a	b	c	d	e
9	a	b	c	d	e
10	a	b	c	d	e
11	a	b	c	d	e
12	a	b	c	d	e
13	a	b	c	d	e
14	a	b	c	d	e
15	a	b	c	d	e
16	a	b	c	d	e
17	a	b	c	d	e
18	a	b	c	d	e
19	a	b	c	d	e
20	a	b	c	d	e
21	a	b	c	d	e
22	a	b	c	d	e
23	a	b	c	d	e
24	a	b	c	d	e
25	a	b	c	d	e
26	a	b	c	d	e
27	a	b	c	d	e
28	a	b	c	d	e
29	a	b	c	d	e
30	a	b	c	d	e
31	a	b	c	d	e
32	a	b	c	d	e
33	a	b	c	d	e
34	a	b	c	d	e
35	a	b	c	d	e
36	a	b	c	d	e
37	a	b	c	d	e
38	a	b	c	d	e
39	a	b	c	d	e
40	a	b	c	d	e
41	a	b	c	d	e
42	a	b	c	d	e

SECTION 2					
ITEM NUMBER	VERY OFTEN	FAIRLY OFTEN	OCCASIONALLY	ONCE IN A WHILE	VERY SELDOM
1	a	b	c	d	e
2	a	b	c	d	e
3	a	b	c	d	e
4	a	b	c	d	e
5	a	b	c	d	e
6	a	b	c	d	e
7	a	b	c	d	e
8	a	b	c	d	e
9	a	b	c	d	e
10	a	b	c	d	e
11	a	b	c	d	e
12	a	b	c	d	e
13	a	b	c	d	e
14	a	b	c	d	e
15	a	b	c	d	e
16	a	b	c	d	e
17	a	b	c	d	e
18	a	b	c	d	e
SECTION 2 (continued)					
ITEM NUMBER	STRONGLY AGREE	AGREE	UNCERTAIN	DISAGREE	STRONGLY DISAGREE
19	a	b	c	d	e
20	a	b	c	d	e
21	a	b	c	d	e
22	a	b	c	d	e
23	a	b	c	d	e
24	a	b	c	d	e
25	a	b	c	d	e
26	a	b	c	d	e
27	a	b	c	d	e
28	a	b	c	d	e
29	a	b	c	d	e
30	a	b	c	d	e
31	a	b	c	d	e
32	a	b	c	d	e
33	a	b	c	d	e
34	a	b	c	d	e
35	a	b	c	d	e
36	a	b	c	d	e
37	a	b	c	d	e
38	a	b	c	d	e

SECTION 3					
ITEM NUMBER	EXTREMELY DESIRABLE	DESIRABLE	UNCERTAIN	UNDESIRABLE	EXTREMELY UNDESIRABLE
1	a	b	c	d	e
2	a	b	c	d	e
3	a	b	c	d	e
4	a	b	c	d	e
5	a	b	c	d	e
6	a	b	c	d	e
7	a	b	c	d	e
8	a	b	c	d	e
9	a	b	c	d	e
10	a	b	c	d	e
11	a	b	c	d	e
12	a	b	c	d	e
13	a	b	c	d	e
14	a	b	c	d	e
15	a	b	c	d	e
16	a	b	c	d	e
17	a	b	c	d	e
18	a	b	c	d	e
19	a	b	c	d	e
20	a	b	c	d	e
21	a	b	c	d	e
22	a	b	c	d	e
23	a	b	c	d	e
24	a	b	c	d	e
25	a	b	c	d	e
26	a	b	c	d	e
27	a	b	c	d	e
28	a	b	c	d	e
29	a	b	c	d	e
30	a	b	c	d	e
31	a	b	c	d	e
32	a	b	c	d	e
33	a	b	c	d	e
34	a	b	c	d	e
35	a	b	c	d	e

TURN OVER FOR SECTION 4
212.

SECTION 4

ITEM NUMBER	STRONGLY AGREE	AGREE SOMEWHAT	SLIGHTLY AGREE	SLIGHTLY DISAGREE	DISAGREE SOMEWHAT	STRONGLY DISAGREE
1	a	b	c	d	e	f
2	a	b	c	d	e	f
3	a	b	c	d	e	f
4	a	b	c	d	e	f
5	a	b	c	d	e	f
6	a	b	c	d	e	f
7	a	b	c	d	e	f
8	a	b	c	d	e	f
9	a	b	c	d	e	f
10	a	b	c	d	e	f
11	a	b	c	d	e	f
12	a	b	c	d	e	f
13	a	b	c	d	e	f
14	a	b	c	d	e	f
15	a	b	c	d	e	f
16	a	b	c	d	e	f
17	a	b	c	d	e	f
18	a	b	c	d	e	f
19	a	b	c	d	e	f
20	a	b	c	d	e	f
21	a	b	c	d	e	f
22	a	b	c	d	e	f
23	a	b	c	d	e	f
24	a	b	c	d	e	f
25	a	b	c	d	e	f
26	a	b	c	d	e	f
27	a	b	c	d	e	f
28	a	b	c	d	e	f
29	a	b	c	d	e	f
30	a	b	c	d	e	f
31	a	b	c	d	e	f
32	a	b	c	d	e	f
33	a	b	c	d	e	f
34	a	b	c	d	e	f
35	a	b	c	d	e	f
36	a	b	c	d	e	f
37	a	b	c	d	e	f
38	a	b	c	d	e	f
39	a	b	c	d	e	f
40	a	b	c	d	e	f
41	a	b	c	d	e	f
42	a	b	c	d	e	f
43	a	b	c	d	e	f
44	a	b	c	d	e	f
45	a	b	c	d	e	f
46	a	b	c	d	e	f
47	a	b	c	d	e	f
48	a	b	c	d	e	f
49	a	b	c	d	e	f
50	a	b	c	d	e	f
51	a	b	c	d	e	f
52	a	b	c	d	e	f
53	a	b	c	d	e	f
54	a	b	c	d	e	f

SECTION 5

ITEM NUMBER	STRONGLY AGREE	AGREE	UNCERTAIN	DISAGREE	STRONGLY DISAGREE
1	a	b	c	d	e
2	a	b	c	d	e
3	a	b	c	d	e
4	a	b	c	d	e
5	a	b	c	d	e
6	a	b	c	d	e
7	a	b	c	d	e
8	a	b	c	d	e
9	a	b	c	d	e
10	a	b	c	d	e
11	a	b	c	d	e
12	a	b	c	d	e
13	a	b	c	d	e
14	a	b	c	d	e
15	a	b	c	d	e
16	a	b	c	d	e
17	a	b	c	d	e
18	a	b	c	d	e
19	a	b	c	d	e
20	a	b	c	d	e
21	a	b	c	d	e
22	a	b	c	d	e
23	a	b	c	d	e
24	a	b	c	d	e
25	a	b	c	d	e
26	a	b	c	d	e
27	a	b	c	d	e
28	a	b	c	d	e
29	a	b	c	d	e
30	a	b	c	d	e
31	a	b	c	d	e
32	a	b	c	d	e
33	a	b	c	d	e
34	a	b	c	d	e
35	a	b	c	d	e
36	a	b	c	d	e
37	a	b	c	d	e
38	a	b	c	d	e
39	a	b	c	d	e
40	a	b	c	d	e
41	a	b	c	d	e
42	a	b	c	d	e
43	a	b	c	d	e
44	a	b	c	d	e
45	a	b	c	d	e

START ON THE OTHER SIDE
OF THE ANSWER SHEET

This questionnaire is part of a study designed to learn more about how people work together. The questionnaire was compiled by the National Institute for Personnel Research.

You are assured that all responses you make to the items are anonymous and absolutely confidential. The completed questionnaires are processed by computers and summarized so that individuals cannot be identified. A report on the findings of the research will be given to your organization.

Please realise that this is not a test - there are NO 'correct' or 'wrong' responses and no response is 'better' than any other. It is of great importance to the research that your answers reflect your true opinions.

There are 5 sections in the questionnaire.

We appeal to you to answer all the items.

The questionnaire should take approximately one hour to complete.

Thank you for your co-operation.

You should have a two-sided answer sheet.

At the top of the answer sheet is marked 'BIOGRAPHICAL INFORMATION'.

Do not write your name anywhere on the answer sheet or questionnaire.

Where necessary, place a cross (X) in the appropriate box on the answer sheet:

e.g. Home language

ENGLISH	AFRIKAANS	OTHER
X		

would indicate that your home language is English.

Please answer all the questions in the section marked 'BIOGRAPHICAL INFORMATION' on side A of your answer sheet. Begin now!

When you have completed the questions, turn to Section 1 on the following page of the questionnaire.

SECTION 1: Instructions

In this section there are a number of statements.

Item 1 of this section is:

1. The average person is honest.

Your task is to indicate the degree to which you agree or disagree with each statement.

The first column of the answer sheet Appears as follows:

NOTE: Each item is numbered

SECTION 1					
ITEM NUMBER	STRONGLY AGREE	AGREE	UNCERTAIN	DISAGREE	STRONGLY DISAGREE
1	a	b	c	d	e
2	a	b	c	d	e
3	a	b	c	d	e
"	"	"	"	"	"

This is how you answer each item:

If you 'strongly agree' with item 1 you should place a cross over the letter 'a' in the column marked 'STRONGLY AGREE' as follows:

ITEM NUMBER	STRONGLY AGREE	AGREE	UNCERTAIN	DISAGREE	STRONGLY DISAGREE
1	X	b	c	d	e

Suppose however that you feel impartial or 'uncertain' about item 1. You would then place a cross over the letter 'c' in the column marked 'UNCERTAIN'.

Similarly if you strongly disagree, you would place a cross over the letter 'e' in the column marked 'STRONGLY DISAGREE'.

Always mark 1 of the 5 possible responses to each item.

Answer all items in this way on 'Section 1' of your answer sheet. When you have finished turn to 'Section 2'.

S E C T I O N 1

1. The average person is honest.
2. Some people will deliberately say or do things to hurt you.
3. You don't get far unless you are ready to fight off the competition.
4. Most people are valuable human beings.
5. Most people aren't worth the room they take up.
6. Most people try hard to be unselfish.
7. Most people are out to get more than they give.
8. I seem to run into people who have a mean streak in them.
9. If somebody does something which hurts me, my tendency is to believe it was unintentional.
10. Most people have a lot more good than bad in them.
11. Most people would cheat if they could get away with it.
12. The average person will put the welfare of those close to him ahead of his own personal needs.
13. Most people would go out of their way to avoid hurting somebody else.
14. Other people are selfishly concerned about themselves in what they do.
15. Sometimes when I'm supposed to be in control at work I feel more like the one being manipulated.

16. I do not know as much as my predecessor did concerning this job.
17. I would make a fine model to copy in order to learn the necessary skills to succeed in my job.
18. I tend to solve any problems in my job optimally.
19. If anyone in my job can find the answer, I'm the one.
20. Sometimes I feel I'm not getting anything done at work.
21. I go home feeling the same as when I arrived in the morning - that I have not accomplished much.
22. I feel thoroughly familiar with my job.
23. I honestly believe I have all the skills necessary to perform my job well.
24. This job makes me tense and anxious.
25. Most people at work are basically honest.
26. If you act in good faith toward your colleagues, almost all of them will reciprocate with fairness toward you.
27. People at work claim they have ethical standards regarding honesty and morality, but few people stick to them in a crisis at work.
28. Most of one's colleagues are not really honest for a desirable reason; they're afraid of getting caught.
29. Most workers would not tell a lie even if they thought they could gain by it.

30. Most of one's colleagues can be trusted.
31. One cannot be too careful in dealing with colleagues.
32. Unless you are careful, your colleagues will take advantage of you.
33. People in the organization generally try to be fair.
34. In general one's colleagues cannot be counted on to do what they say they will do.
35. In general, a worker will stand up for what he thinks is right even if it costs him his job.
36. It is safe to say that in spite of what one's colleagues say, most of them are primarily interested in their own welfare.
37. Most of one's colleagues are basically good and kind.
38. It's human nature never to do anything at work without an eye to one's own advantage.
39. I generally feel free to discuss with my immediate superior the problems and difficulties in my job without having it held against me later.
40. I have little trust and confidence in my immediate superior regarding his general fairness.
41. I generally trust that my immediate superior takes into account the interests of all his subordinates in making decisions.
42. My immediate superior has little interest in the welfare and happiness of those who work here.

SECTION 2: Instructions

In this section you are required to answer a number of questions about yourself.

Item 1 of Section 2 is:

1. How often do you have the feeling that there is nothing you can do well?

Section 2 on your answer sheet appears as follows:

SECTION 2					
ITEM NUMBER	VERY OFTEN	FAIRLY OFTEN	OCCASIONALLY	ONCE IN A WHILE	VERY SELDOM
1	a	b	c	d	e
2	a	b	c	d	e
3	a	b	c	d	e
"	"	"	"	"	"

If you wish to respond 'OCCASIONALLY', you would place your cross in the column marked 'OCCASIONALLY' as follows:

↓

ITEM NUMBER	VERY OFTEN	FAIRLY OFTEN	OCCASIONALLY	ONCE IN A WHILE	VERY SELDOM
1	a	b	X	d	e

Similarly if you wish to respond 'very seldom', you would place a cross over the letter 'e' in the column marked 'VERY SELDOM'.

Please answer questions 1-18 in this section in this way.

S E C T I O N 2

1. How often do you have the feeling that there is nothing you can do well?
2. How often do you feel that you have handled yourself well at a social gathering?
3. How often do you worry about whether other people like to be with you?
4. How often do you feel self-conscious?
5. How often do you have the feeling that you can do everything well?
6. How often are you troubled with shyness?
7. When you talk in front of a group of people how often are you pleased with your performance?
8. How often are you comfortable when starting a conversation with people whom you don't know?
9. How often do you feel inferior to most of the people you know?
10. How often do you feel that you are a successful person?
11. Do you ever think that you are a worthless individual?
12. How much do you worry about how well you get along with other people?
13. In a social discussion how often do you feel sure of yourself?
14. How often do you feel that you dislike yourself?

15. How often do you feel sure of yourself when among strangers?
16. How often do you feel confident that some day the people you know will look up to you and respect you?
17. Do you ever feel so discouraged with yourself that you wonder whether anything is worthwhile?
18. In general, how often do you feel confident about your abilities?

SECTION 2 (continued)

You are now required to continue with Section 2.

For these items, you must indicate the degree to which you agree or disagree with each statement.

Your answer sheet appears as follows:

SECTION 2 (continued)					
ITEM NUMBER	STRONGLY AGREE	AGREE	UNCERTAIN	DISAGREE	STRONGLY DISAGREE
19	a	b	c	d	e
20	a	b	c	d	e
21	a	b	c	d	e
22	a	b	c	d	e
23	a	b	c	d	e

If you wish to respond 'UNCERTAIN', you would place a cross over the letter 'c' in the column marked 'UNCERTAIN'.

Similarly if you wish to respond 'DISAGREE', you would place a cross over the letter 'd' in the column marked 'DISAGREE'.

Turn to Section 3 on the following page when you have finished.

S E C T I O N 2 (continued)

19. I'll stay overtime to finish a job, even if I'm not paid for it.
20. You can measure a person pretty well by how good a job he does.
21. The major satisfaction in my life comes from my job.
22. For me, mornings at work really fly by.
23. I usually show up for work a little early, to get things ready.
24. The most important things that happen to me involve my work.
25. Sometimes I lie awake at night thinking ahead to the next day's work.
26. I'm really a perfectionist about my work.
27. I feel depressed when I fail at something connected with my job.
28. I have other activities more important than my work.
29. I live, eat, and breathe my job.
30. I would probably keep working even if I didn't need the money.
31. Quite often I feel like staying home from work instead of coming in.
32. To me, my work is only a small part of who I am.
33. I am very much involved personally in my work.
34. I avoid taking on extra duties and responsibilities in my work.

35. I used to be more ambitious about my work than I am now.
36. Most things in life are more important than work.
37. I used to care more about my work, but now other things are more important to me.
38. Sometimes I'd like to kick myself for the mistakes I make in my work.

SECTION 3: Instructions

In this section you are required to indicate how desirable or undesirable you feel each statement to be.

Section 3 on your answer sheet appears as follows:

SECTION 3					
ITEM NUMBER	EXTREMELY DESIRABLE	DESIRABLE	UNCERTAIN	UNDESIRABLE	EXTREMELY UNDESIRABLE
1	a	b	c	d	e
2	a	b	c	d	e
3	a	b	c	d	e
"	"	"	"	"	"

For this section mark your responses on 'Section 3' on your answer sheet in the same way as you did in the previous sections.

When you have finished please turn to 'Section 4'.

S E C T I O N 3

1. To refuse to give in to others in an argument seems:
2. For me to be able to own an item before most of my friends are able to buy it would be:
3. Giving comfort to those in need of friends is:
4. Being free of emotional ties with others is:
5. The knowledge that most people would be fond of me at all times would be:
6. Knowing that others are somewhat envious of me is:
7. Enjoying a good movie by myself is:
8. Using pull to get ahead would be:
9. To feel that I like everyone I know would be:
10. For me to have enough money or power to impress self-styled "big shots" would be:
11. Basing my life on duty to others is:
12. For me to pay little attention to what others think of me seems:
13. To work under tension would be:
14. To be able to work hard while others are elsewhere having fun is:
15. Punishing those who insult my honor is:

16. To give aid to the poor and underprivileged is:
17. If I could live all alone in a cabin in the woods or mountains it would be:
18. Standing in the way of people who are too sure of themselves is:
19. To have something good to say about everyone seems:
20. Telling a waiter when you have received inferior food is:
21. Being free of social obligations is:
22. Sharing my personal feelings with others would be:
23. To be able to spot and exploit weakness in others is:
24. Planning to get along without others is:
25. A strong desire to surpass others' achievements seems:
26. Wanting to repay others' thoughtless actions with friendship is:
27. To have the ability to blame others for their mistakes is:
28. For me to avoid situations where others can influence me would be:
29. Putting myself out to be considerate of others' feelings is:
30. Having to compete with others for various rewards is:
31. If I knew that others paid very little attention to my affairs it would be:
32. To defend my rights by force would be:

33. To be fair to people who do things which I consider wrong seems:

34. For me to work alone would be:

35. Correcting people who express an ignorant belief is:

PLEASE TURN OVER YOUR ANSWER SHEET TO 'SIDE B'

S E C T I O N 4: Instructions

In this section you are required to indicate how much you agree or disagree with each statement.

Section 4 on your answer sheet appears as follows:

SECTION 4						
ITEM NUMBER	STRONGLY AGREE	AGREE SOMEWHAT	SLIGHTLY AGREE	SLIGHTLY DISAGREE	DISAGREE SOMEWHAT	STRONGLY DISAGREE
1	a	b	c	d	e	f
2	a	b	c	d	e	f
3	a	b	c	d	e	f
"	"	"	"	"	"	"

Please mark your responses to the items on Section 4 of your answer sheet as in the previous sections.

Turn to 'Section 5' when you have answered all the items.

SECTION 4

1. Never tell anyone the real reason you did something unless it is useful to do so.
2. The best way to handle people is to tell them what they want to hear.
3. One should take action only when sure it is morally right.
4. Most people are basically good and kind.
5. It is safest to assume that all people have a vicious streak and it will come out when given the chance.
6. Honesty is the best policy in all cases.
7. There is no excuse for lying to someone else.
8. Generally speaking, men won't work hard unless they're forced to do so.
9. All in all, it is better to be humble and honest than to be important and dishonest.
10. When you ask someone to do something for you, it is best to give the real reasons for wanting it done rather than giving reasons which carry more weight.
11. Most people who get ahead in the world lead clean, moral lives.
12. Anyone who completely trusts anyone else is asking for trouble.
13. The biggest difference between most criminals and other people is that the criminals are stupid enough to get caught.

14. Most men are brave.
15. It is wise to flatter important people.
16. It is possible to be good in all respects.
17. The claim "that there's a sucker born every minute" is false.
18. It is hard to get ahead without cutting corners here and there.
19. People suffering from incurable diseases should have the choice of being put painlessly to death.
20. Most men forget more easily the death of their father than the loss of their property.
21. Whether or not I get to be a leader depends mostly on my ability.
22. To a great extent my life is controlled by accidental happenings.
23. I feel that what happens in my life is mostly determined by powerful people.
24. Whether or not I get into a car accident depends mostly on how good a driver I am.
25. When I make plans, I am almost certain to make them work.
26. Often there is no chance of protecting my personal interests from bad luck happenings.
27. When I get what I want, it's usually because I'm lucky.
28. Although I might have good ability, I will not be given leadership responsibility without appealing to those in positions of power.

29. How many friends I have depends on how nice a person I am.
30. I have often found that what is going to happen will happen.
31. My life is chiefly controlled by powerful others.
32. Whether or not I get into a car accident is mostly a matter of luck.
33. People like myself have very little chance of protecting our personal interests when they conflict with those of strong pressure groups.
34. It's not always wise for me to plan too far ahead because many things turn out to be a matter of good or bad fortune.
35. Getting what I want requires pleasing those people above me.
36. Whether or not I get to be a leader depends on whether I'm lucky enough to be in the right place at the right time.
37. If important people were to decide they didn't like me, I probably wouldn't make many friends.
38. I can pretty much determine what will happen in my life.
39. I am usually able to protect my personal interests.
40. Whether or not I get into a car accident depends mostly on the other driver.
41. When I get what I want, it's usually because I worked hard for it.
42. In order to have my plans work, I make sure that they fit in with the desires of people who have power over me.

43. My life is determined by my own actions.
44. It's chiefly a matter of fate whether or not I have a few friends or many friends.
45. I usually consider all the alternatives carefully before making a decision.
46. I often find myself dwelling on past mistakes and failures.
47. I prefer games of skill over games of chance.
48. I find a lot of things in life are hard to understand.
49. I often do things on the spur of the moment without really thinking them through.
50. I have a hard time following through with the projects I start.
51. I can generally figure things out for myself with a little thought.
52. When something unexpected happens to me, I'll make the effort to find out why.
53. I can recall far more successes in my life than I can failures.
54. I'd rather take what I can get now than wait for something better in the future.

SECTION 5: Instructions

Please indicate whether you agree or disagree with the following statements.

Mark your answers on Section 5 of your answer sheet.

SECTION 5

1. I wonder why I work at all.
2. No matter how hard you work you never really seem to reach your goals.
3. I find it difficult to be enthusiastic about work.
4. It doesn't matter if people work hard at their jobs; only the bosses profit.
5. Ordinary work is too boring to be worth doing.
6. I feel no need to try my best at work for it makes no difference anyway.
7. I don't like my job or enjoy my work; I just put in my time to get paid.
8. I find it hard to believe those people who actually believe that their work is of value to society.
9. I am better off when I keep to myself.
10. There is no point in socializing - it achieves nothing.
11. I try to avoid close relationships with people so that I will not be obligated to them.
12. Most social relationships are meaningless.

13. To make money there are no right and wrong ways anymore, only easy and hard ways.
14. Nowadays a person has to live pretty much for today and let tomorrow take care of itself.
15. In spite of what some people say, the lot of the average man is getting worse, not better.
16. It's hardly fair to bring children into the world with the way things look for the future.
17. These days a person doesn't really know whom he can count on.
18. Most people really don't care what happens to the next fellow.
19. Next to health, money is the most important thing in life.
20. You sometimes can't help wondering whether anything is worthwhile.

NB: THE ITEMS BELOW REFER TO THE ORGANIZATION IN WHICH YOU ARE WORKING
#####

21. Chances of promotion often depend on whether someone high up likes you.
22. My work gives me a sense of achievement.
23. Superiors and subordinates get along well together.
24. Many of the things I have to do in my job are just a waste of time.
25. This organization is consistent throughout in its application of policies.
26. My work has helped me to develop.
27. Considering all things, I feel pretty happy in my job.

NB: THE ITEMS BELOW REFER TO THE ORGANIZATION IN WHICH YOU ARE WORKING

28. Sometimes I think that people in high positions do not know what they are doing.
29. I find my work challenging.
30. Employees who are promoted are almost always those who deserve promotion.
31. My work does not allow me to apply my knowledge and capabilities.
32. Policies are put into practice effectively.
33. It is not difficult to be promoted if you apply yourself to your job.
34. At the present moment I am satisfied with my job.
35. My work is of little importance to the organization.
36. Often, organizational practices do not conform with organizational policies here.
37. I feel that my job in general does not provide me with the satisfaction I would like.
38. Often vacancies at higher levels are filled by hiring people from outside the company, rather than by promoting employees of the organization.
39. Policies and practices are often not consistent over time.
40. There is much that could be done to improve the general satisfaction of employees here.
41. I am confident that leaders in the organization have the ability to run the organization effectively.

NB: THE ITEMS BELOW REFER TO THE ORGANIZATION IN WHICH YOU ARE WORKING

42. My job doesn't offer much scope to do work which I can really take pride in.
43. There are occasions when I get so absorbed in my job that I don't know what time it is.
44. I would have more promotions at another organization than I have had here.
45. This organization is certainly not one of the better managed organizations in South Africa.

BIOGRAFIESE INLIGTING

i) Vandag se datum

DAG	MAAND	JAAR
<input type="text"/>	<input type="text"/>	<input type="text"/>

ii) Beroepsvlak/rang

<input type="text"/>

iii) Lengte van dienstyderk by die organisasie

JARE	MAANDE
<input type="text"/>	<input type="text"/>

iv) Ouderdom

JARE	MAANDE
<input type="text"/>	<input type="text"/>

v) Huistaal

AFRIKAANS	ENGELS	ANDER
<input type="text"/>	<input type="text"/>	<input type="text"/>

vi) Kwalifikasies

St. 8 en laer	<input type="text"/>
St. 9 tot 10	<input type="text"/>
Hoër as st. 10	<input type="text"/>

DEEL 1					
ITEM - NOMMER	STEM STERK SAAM	STEM SAAM	ONSEKER	STEM NIE SAAM NIE	VERSKIL TEN STERKSTE
1	a	b	c	d	e
2	a	b	c	d	e
3	a	b	c	d	e
4	a	b	c	d	e
5	a	b	c	d	e
6	a	b	c	d	e
7	a	b	c	d	e
8	a	b	c	d	e
9	a	b	c	d	e
10	a	b	c	d	e
11	a	b	c	d	e
12	a	b	c	d	e
13	a	b	c	d	e
14	a	b	c	d	e
15	a	b	c	d	e
16	a	b	c	d	e
17	a	b	c	d	e
18	a	b	c	d	e
19	a	b	c	d	e
20	a	b	c	d	e
21	a	b	c	d	e
22	a	b	c	d	e
23	a	b	c	d	e
24	a	b	c	d	e
25	a	b	c	d	e
26	a	b	c	d	e
27	a	b	c	d	e
28	a	b	c	d	e
29	a	b	c	d	e
30	a	b	c	d	e
31	a	b	c	d	e
32	a	b	c	d	e
33	a	b	c	d	e
34	a	b	c	d	e
35	a	b	c	d	e
36	a	b	c	d	e
37	a	b	c	d	e
38	a	b	c	d	e
39	a	b	c	d	e
40	a	b	c	d	e
41	a	b	c	d	e
42	a	b	c	d	e

DEEL 2					
ITEM - NOMMER	BATE DIKHELS	REDELIK DIKHELS	SOMS	AF EN TOE	BATE SELDE
1	a	b	c	d	e
2	a	b	c	d	e
3	a	b	c	d	e
4	a	b	c	d	e
5	a	b	c	d	e
6	a	b	c	d	e
7	a	b	c	d	e
8	a	b	c	d	e
9	a	b	c	d	e
10	a	b	c	d	e
11	a	b	c	d	e
12	a	b	c	d	e
13	a	b	c	d	e
14	a	b	c	d	e
15	a	b	c	d	e
16	a	b	c	d	e
17	a	b	c	d	e
18	a	b	c	d	e
DEEL 2 (vervolg)					
ITEM - NOMMER	STEM STERK SAAM	STEM SAAM	ONSEKER	STEM NIE SAAM NIE	VERSKIL TEN STERKSTE
19	a	b	c	d	e
20	a	b	c	d	e
21	a	b	c	d	e
22	a	b	c	d	e
23	a	b	c	d	e
24	a	b	c	d	e
25	a	b	c	d	e
26	a	b	c	d	e
27	a	b	c	d	e
28	a	b	c	d	e
29	a	b	c	d	e
30	a	b	c	d	e
31	a	b	c	d	e
32	a	b	c	d	e
33	a	b	c	d	e
34	a	b	c	d	e
35	a	b	c	d	e
36	a	b	c	d	e
37	a	b	c	d	e
38	a	b	c	d	e

DEEL 3					
ITEM - NOMMER	UITTERS WENSLIK	WENSLIK	ONSEKER	ONWENSLIK	UITTERS ONWENSLIK
1	a	b	c	d	e
2	a	b	c	d	e
3	a	b	c	d	e
4	a	b	c	d	e
5	a	b	c	d	e
6	a	b	c	d	e
7	a	b	c	d	e
8	a	b	c	d	e
9	a	b	c	d	e
10	a	b	c	d	e
11	a	b	c	d	e
12	a	b	c	d	e
13	a	b	c	d	e
14	a	b	c	d	e
15	a	b	c	d	e
16	a	b	c	d	e
17	a	b	c	d	e
18	a	b	c	d	e
19	a	b	c	d	e
20	a	b	c	d	e
21	a	b	c	d	e
22	a	b	c	d	e
23	a	b	c	d	e
24	a	b	c	d	e
25	a	b	c	d	e
26	a	b	c	d	e
27	a	b	c	d	e
28	a	b	c	d	e
29	a	b	c	d	e
30	a	b	c	d	e
31	a	b	c	d	e
32	a	b	c	d	e
33	a	b	c	d	e
34	a	b	c	d	e
35	a	b	c	d	e

BLAAI OM VIR DEEL 4

DEEL 4						
ITEM - NOMMER	STEM STERK SAAM	STEM MATTIG SAAM	STEM EFFENS SAAM	VERSKIL EFFENS	VERSKIL MATTIG	VERSKIL STERK
1	a	b	c	d	e	f
2	a	b	c	d	e	f
3	a	b	c	d	e	f
4	a	b	c	d	e	f
5	a	b	c	d	e	f
6	a	b	c	d	e	f
7	a	b	c	d	e	f
8	a	b	c	d	e	f
9	a	b	c	d	e	f
10	a	b	c	d	e	f
11	a	b	c	d	e	f
12	a	b	c	d	e	f
13	a	b	c	d	e	f
14	a	b	c	d	e	f
15	a	b	c	d	e	f
16	a	b	c	d	e	f
17	a	b	c	d	e	f
18	a	b	c	d	e	f
19	a	b	c	d	e	f
20	a	b	c	d	e	f
21	a	b	c	d	e	f
22	a	b	c	d	e	f
23	a	b	c	d	e	f
24	a	b	c	d	e	f
25	a	b	c	d	e	f
26	a	b	c	d	e	f
27	a	b	c	d	e	f
28	a	b	c	d	e	f
29	a	b	c	d	e	f
30	a	b	c	d	e	f
31	a	b	c	d	e	f
32	a	b	c	d	e	f
33	a	b	c	d	e	f
34	a	b	c	d	e	f
35	a	b	c	d	e	f
36	a	b	c	d	e	f
37	a	b	c	d	e	f
38	a	b	c	d	e	f
39	a	b	c	d	e	f
40	a	b	c	d	e	f
41	a	b	c	d	e	f
42	a	b	c	d	e	f
43	a	b	c	d	e	f
44	a	b	c	d	e	f
45	a	b	c	d	e	f
46	a	b	c	d	e	f
47	a	b	c	d	e	f
48	a	b	c	d	e	f
49	a	b	c	d	e	f
50	a	b	c	d	e	f
51	a	b	c	d	e	f
52	a	b	c	d	e	f
53	a	b	c	d	e	f
54	a	b	c	d	e	f

DEEL 5					
ITEM - NOMMER	STEM STERK SAAM	STEM SAAM	OMSEKER	STEM NIE SAAM NIE	VERSKIL TEN STERKSTE
1	a	b	c	d	e
2	a	b	c	d	e
3	a	b	c	d	e
4	a	b	c	d	e
5	a	b	c	d	e
6	a	b	c	d	e
7	a	b	c	d	e
8	a	b	c	d	e
9	a	b	c	d	e
10	a	b	c	d	e
11	a	b	c	d	e
12	a	b	c	d	e
13	a	b	c	d	e
14	a	b	c	d	e
15	a	b	c	d	e
16	a	b	c	d	e
17	a	b	c	d	e
18	a	b	c	d	e
19	a	b	c	d	e
20	a	b	c	d	e
21	a	b	c	d	e
22	a	b	c	d	e
23	a	b	c	d	e
24	a	b	c	d	e
25	a	b	c	d	e
26	a	b	c	d	e
27	a	b	c	d	e
28	a	b	c	d	e
29	a	b	c	d	e
30	a	b	c	d	e
31	a	b	c	d	e
32	a	b	c	d	e
33	a	b	c	d	e
34	a	b	c	d	e
35	a	b	c	d	e
36	a	b	c	d	e
37	a	b	c	d	e
38	a	b	c	d	e
39	a	b	c	d	e
40	a	b	c	d	e
41	a	b	c	d	e
42	a	b	c	d	e
43	a	b	c	d	e
44	a	b	c	d	e
45	a	b	c	d	e

BEGIN OP DIE ANDERKANT
VAN DIE ANTWOORDVEL

Hierdie vraelys is deel van 'n studie wat ontwerp is om meer te wete te kom oor hoe mense saamwerk. Die vraelys is deur die Nasionale Instituut vir Personeelnavorsing opgestel.

U word verseker dat alle response wat u maak op die items anoniem en geheel en al vertroulik is. Die voltooide vraelyste word deur rekenaars verwerk en opgesom sodat individue nie geïdentifiseer kan word nie. 'n Verslag oor die bevindinge van hierdie navorsing sal aan u organisasie gegee word.

Besef asseblief dat hierdie nie 'n toets is nie - daar is GEEN 'korrekte' of 'verkeerde' antwoorde nie en geen antwoord is beter as enige ander nie. Dit is ter wille van die navorsing van die uiterste belang dat u antwoorde u ware menings weerspieël.

Daar is 5 dele in die vraelys.

Ons doen 'n beroep op u om alle items te beantwoord.

Dit behoort ongeveer een uur in beslag te neem om die vraelys te voltooi.

Dankie vir u samewerking.

U moet 'n tweekantige antwoordvel hê.

Bo-aan die antwoordvel staan geskryf 'BIOGRAFIESE INLIGTING'.

Moenie u naam enige plek op die antwoordvel of vraelys neerskryf nie.

Waar nodig, maak 'n kruis (X) in die gepaste blokkie op die antwoordvel:

b.v.

Huistaal

AFRIKAANS	ENGELS	ANDER
X		

sou aandui dat u huistaal Afrikaans is.

Beantwoord asseblief al die vrae in die seksie gemerk
'BIOGRAFIESE INLIGTING' op Kant A van u antwoordvel. Begin nou!

Wanneer u die vrae voltooi het, blaai na Deel 1 op die volgende bladsy.
van hierdie vraelys.

DEEL 2: Instruksies

In hierdie deel word daar van u verwag om 'n aantal vrae oor uself te beantwoord.

Item 1 van Deel 2 is:

1. Hoe dikwels kry u die gevoel dat daar niks is wat u goed kan doen nie?

Deel 2 van u antwoordvel sien soos volg daaruit:

DEEL 2					
ITEM - NOMMER	BAIE DIKWELS	REDELIK DIKWELS	SOMS	AF EN TOE	BAIE SELDE
1	a	b	c	d	e
2	a	b	c	d	e
3	a	b	c	d	e
"	"	"	"	"	"

As u graag 'af en toe' wil antwoord, plaas u kruis oor die letter 'd' in die kolom gemerk 'AF EN TOE' soos volg:

↓

ITEM - NOMMER	BAIE DIKWELS	REDELIK DIKWELS	SOMS	AF EN TOE	BAIE SELDE
1	a	b	c	d	e

Eweneens, as u 'baie selde' wil kies, sal u u kruis oor die letter 'e' plaas in die kolom gemerk 'BAIE SELDE'.

Beantwoord asseblief alle vrae in hierdie deel op dieselfde manier.

Blaai na 'Deel 3' op die volgende bladsy wanneer u klaar is.

DEEL 2

1. Hoe dikwels kry u die gevoel dat daar niks is wat u goed kan doen nie?
2. Hoe dikwels voel u dat u goed by 'n sosiale byeenkoms opgetree het?
3. Hoe dikwels bekommer u uself daaroor of ander mense dit geniet om saam met u te wees?
4. Hoe dikwels voel u selfbewus?
5. Hoe dikwels kry u die gevoel dat u alles goed kan doen?
6. Hoe dikwels het u probleme met skaamheid?
7. Hoe dikwels is u tevrede met u vertoning wanneer u voor 'n groep mense praat?
8. Hoe dikwels voel u op u gemak wanneer u 'n gesprek aanknoop met mense wie u nie ken nie?
9. Hoe dikwels voel u minderwaardig teenoor die meeste van die mense wat u ken?
10. Hoe dikwels voel u dat u 'n suksesvolle persoon is?
11. Dink u ooit dat u 'n waardelose individu is?
12. Hoeveel bekommer u oor hoe goed u met ander mense oor die weg kom?
13. Hoe dikwels voel u selfversekerd in 'n sosiale bespreking?
14. Hoe dikwels voel u dat u nie van uself hou nie?

15. Hoe dikwels voel u selfversekerd tussen vreemdelinge?
16. Hoe dikwels voel u vol vertroue dat die mense wie u ken eendag na u sal opsien en u sal respekteer?
17. Voel u ooit so ontmoedig met uself dat u wonder of enigiets die moeite werd is?
18. In die algemeen, hoe dikwels voel u vol vertroue in u eie vermoëns?

DEEL 2 (vervolg)

Daar word nou van u verwag om met Deel 2 voort te gaan.

Vir hierdie items moet u aandui tot watter mate u met elke stelling saamstem al dan nie.

U antwoordvel sien soos volg daaruit:

DEEL 2 (vervolg)					
ITEM - NOMMER	STEM STERK SAAM	STEM SAAM	ONSEKER	STEM NIE SAAM NIE	VERSKIL TEN STERKSTE
19	a	b	c	d	e
20	a	b	c	d	e
21	a	b	c	d	e
22	a	b	c	d	e
23	a	b	c	d	e

Gestel u voel onpartydig of 'onseker' oor item 19. Dan sal u 'n kruis oor die letter 'c' in die kolom gemerk 'ONSEKER' plaas.

Eweneens, indien u 'ten sterkste verskil', sal u 'n kruis plaas oor die letter 'e' in die kolom gemerk 'VERSKIL TEEN STERKSTE'.

Blaai na 'DEEL 3' op die volgende bladsy wanner u klaar is.

D E E L 2 (vervolg)

19. Ek sal oortyd werk om 'n taak te voltooi, selfs al word ek nie daarvoor betaal nie.
20. Jy kan 'n persoon redelik goed opsom deur te kyk hoe goed hy 'n taak verrig.
21. Die belangrikste bevrediging in my lewe kom uit my werk.
22. Vir my vlieg oggende by die werk regtig verby.
23. Ek is gewoonlik 'n bietjie vroeg by die werk, om dinge gereed te kry.
24. Die belangrikste dinge wat met my gebeur het betrekking op my werk.
25. Ek lê soms in die nag wakker en dink vooruit aan die volgende dag se werk.
26. Ek is regtig 'n perfeksionis oor my werk.
27. Ek voel terneergedruk as ek misluk in iets wat met my werk te doen het.
28. Ek het ander aktiwiteite wat belangriker as my werk is.
29. Ek eet, leef en praat my werk.
30. Ek sal moontlik aanhou werk, selfs al het ek nie die geld nodig nie.
31. Ek voel dikwels dat ek liever by die huis wil bly eerder as om in te kom werk toe.
32. Vir my is my werk slegs 'n klein deel van wie ek is.

33. Ek is persoonlik baie betrokke by my werk.
34. Ek vermy om ekstra take en verantwoordelikhede in my werk te aanvaar.
35. Ek was gewoonlik meer ambisieus oor my werk as wat ek nou is.
36. Meeste dinge in die lewe is belangriker as werk.
37. Ek het gewoonlik meer oor my werk omgegee, maar nou is daar ander dinge wat vir my belangriker is.
38. Soms wil ek myself skop oor die foute wat ek in my werk maak.

DEEL 3: Instruksies

In deel 3 word van u verwag om aan te dui hoe gewens of ongewens u elke stelling beskou.

Deel 3 op u antwoordvel lyk soos volg:

DEEL 3					
ITEM - NOMMER	UITTERS WENSLIK	WENSLIK	ONSEKER	OMWENSLIK	UITTERS OMWENSLIK
1	a	b	c	d	e
2	a	b	c	d	e
3	a	b	c	d	e
"	"	"	"	"	"

Vir hierdie deel moet u u antwoorde in 'Deel 3' van die antwoordvel aandui net soos in die vorige dele.

Wanneer u klaar is, blaai asseblief na 'Deel 4'.

D E E L 3

1. Om te weier om vir andere in te gee in 'n argument, lyk:
2. Vir my om iets te kan besit voordat die meeste van my vriende in staat is om dit te koop, sou wees:
3. Om diegene wat vriende nodig het te troos, is:
4. Om vry te wees van emosionele bande met andere, is:
5. Die wete dat die meeste mense te alle tye van my sou hou, sou wees:
6. Om te weet dat andere my ietwat beny, is:
7. Om op my eie 'n goeie fliiek te geniet, is:
8. Om invloed te gebruik om vooruit te kom, sou wees:
9. Om te voel dat ek van elkeen hou wat ek ken, sou wees:
10. Vir my om genoeg geld of mag te hê om mense wat hulleself "groot kokkedore" noem te imponeer, sou wees:
11. Om my lewe te baseer op plig teenoor andere, is:
12. Vir my om min aandag te skenk aan wat andere van my dink, lyk:
13. Om onder spanning te werk, sou wees:
14. Om in staat te wees om hard te werk terwyl andere elders pret maak, is:
15. Om diegene te straf wat my eer aantas, is:

16. Om hulp aan die armes en minderbevoorregtes te verskaf, is:
17. As ek heeltemal alleen in 'n hut in die woude of berge kon woon, sou dit wees:
18. Om in die weg te staan van mense wat te selfversekerd is, is:
19. Om oor elkeen iets goeds te kan sê, lyk:
20. Om aan 'n kelner te sê wanneer jy swak kos ontvang het, is:
21. Om vry van sosiale verpligtinge te wees, is:
22. Om my persoonlike gevoelens met andere te deel, sou wees:
23. Om in staat te wees om swakheid in andere raak te sien en dit uit te buit, is:
24. Om te beplan om sonder andere oor die weg te kom, is:
25. 'n Sterk begeerte om andere se prestasie te oortref, lyk:
26. Om andere se onbedagsame handelingte met vriendskap te beloon, is:
27. Om die vermoë te hê om andere te blameer vir hulle foute, is:
28. Vir my om situasies te vermy waar andere my kan beïnvloed, sou wees:
29. Om uit my pad te gaan om andere se gevoelens in ag te neem, is:
30. Om met andere te moet meeding vir verskeie toekennings, is:
31. As ek geweet het dat andere baie min aandag aan my sake gee, sou dit wees:

32. Om my regte met geweld te verdedig, sou wees:
33. Om regverdig te wees teenoor mense wat dinge doen wat in my oë verkeerd is, lyk:
34. Vir my om alleen te werk, sou wees:
35. Om mense reg te stel wat 'n onkundige opvatting uitdruk, is:

DRAAI ASSEBLIEF U ANTWOORDVEL OM NA 'KANT B'D E E L 4: Instruksies

In hierdie deel word van u verwag om aan te dui hoeveel u saam met elke stelling stem al dan nie.

Deel 4 op u antwoordvel sien soos volg daar uit:

DEEL 4						
ITEM - NOMMER	STEM STERK SAAM	STEM MATTIG SAAM	STEM EFFENS SAAM	VERSKIL EFFENS	VERSKIL MATTIG	VERSKIL STERK
1	a	b	c	d	e	f
2	a	b	c	d	e	f
3	a	b	c	d	e	f
"	"	"	"	"	"	"

Merk asseblief u antwoorde op die items in Deel 4 van u antwoordvel net soos in die vorige dele.

Blaai na 'Deel 5' sodra u al die items beantwoord het.

DEEL 4

1. Moet nooit aan iemand die ware rede verklap waarom jy iets gedoen het nie tensy dit nuttig is om so te maak.
2. Die beste manier om mense te hanteer is om aan hulle te vertel wat hulle graag wil hoor.
3. 'n Mens moet net tot handeling oorgaan wanneer jy oortuig is dat dit moreel reg is.
4. Die meeste mense is basies goed en welwillend.
5. Dit is die veiligste om te glo dat alle mense 'n bose trek het en dat dit sal uitkom wanneer hulle die geleentheid gegee word.
6. Eerlikheid is in alle gevalle die beste beleid.
7. Daar is geen verskoning vir lieg teenoor iemand anders nie.
8. In die algemeen gesproke sal mense nie hard werk tensy hulle gedwing word om dit te doen nie.
9. Alles in ag genome is dit beter om nederig en eerlik te wees eerder as belangrik en oneerlik.
10. Wanneer jy iemand vra om iets te doen, is dit beter om die ware redes te verstrek waarom jy dit gedoen wil hê eerder as om redes te verstrek wat meer gewig dra.
11. Die meeste mense wat vooruit in die wêreld kom, lei skoon, sedelike lewens.
12. Enigiemand wat 'n ander persoon volkome vertrou, soek moeilikhied.

13. Die grootste verskil tussen die meeste misdadigers en ander mense is dat misdadigers onnosel genoeg is om betrap te word.
14. Die meeste mense is dapper.
15. Dit is wys om belangrike mense te vlei.
16. Dit is moontlik om in alle opsigte goed te wees.
17. Die bewering: "Daar word minstens een swaap elke minuut gebore", is vals.
18. Dit is moeilik om vooruit te kom sonder om hier en daar kort paaie te vat.
19. Mense wat aan ongeneeslike kwale ly, moet die keuse kry om pynloos ter dood gebring te word.
20. Die meeste mense vergeet makliker die dood van hulle vader as die verlies van hulle eiendom.
21. Of ek 'n leier sal kan word al dan nie is hoofsaaklik van my vermoë afhanklik.
22. My lewe word in 'n groot mate deur toevallige gebeurtenisse beheer.
23. Dit voel asof gebeurtenisse in my lewe meestal deur invloedryke mense bepaal word.
24. Of ek in 'n motorongeluk betrokke raak al dan nie berus grootliks op hoe 'n goeie bestuurder ek is.
25. Wanneer ek planne beraam, laat ek hulle feitlik gewis werk.
26. Daar is dikwels geen kans om my persoonlike belange te beskerm teen ongelukkige gebeurtenisse nie.

27. Wanneer ek kry wat ek wil hê, is dit gewoonlik omdat ek gelukkig is.
28. Alhoewel ek oor goeie vermoë mag beskik, sal ek nie die verantwoordelikheid van leierskap ontvang sonder om my te beroep op diegene in magsposisies nie.
29. Hoeveel vriende ek het, hang af van hoe 'n innemende persoon ek is.
30. Ek het dikwels ondervind dat wat gaan gebeur, sal gebeur.
31. My lewe word hoofsaaklik deur invloedrykes beheer.
32. Of ek in 'n motorongeluk betrokke raak al dan nie is grotendeels 'n kwessie van geluk.
33. Mense soos ekself het baie min kans om ons persoonlike belange te beskerm wanneer hulle in stryd is met dié van sterk drukgroepe.
34. Dit is nie altyd vir my wys om te ver vooruit te beplan nie omdat baie dinge 'n kwessie van geluk of ongeluk blyk te wees.
35. Om te kry wat ek wil hê vereis dat ek diegene bo my behaag.
36. Of ek 'n leier sal word al dan nie hang daarvan af of ek gelukkig genoeg is om op die regte tydstip op die regte plek te wees.
37. As belangrike mense sou besluit dat hulle nie van my hou nie, sou ek waarskynlik nie baie vriende maak nie.
38. Ek het redelik baie beheer oor wat in my lewe sal gebeur.
39. Ek is gewoonlik in staat om my persoonlike belange te beskerm.
40. Of ek in 'n motorongeluk betrokke raak al dan nie hang grootliks van die ander bestuurder af.

41. Wanneer ek kry wat ek wil hê, is dit gewoonlik omdat ek hard gewerk het daarvoor.
42. Ten einde my planne te laat werk, maak ek seker dat hulle inpas by die wense van mense wat mag oor my het.
43. My lewe word deur my eie optredes bepaal.
44. Dit is grootliks 'n kwessie van noodlot of ek min of baie vriende het.
45. Ek weeg gewoonlik al die alternatiewe deeglik op voordat ek 'n besluit neem.
46. Ek betrap myself dikwels dat ek peins oor foute en mislukkings van die verlede.
47. Ek verkies vaardigheidspeletjies bo kansspelle.
48. Ek vind dat dit moeilik is om baie dinge in die lewe te verstaan.
49. Ek doen dikwels dinge op die ingewing van die oomblik sonder om hulle werklik te oordink.
50. Ek kry swaar om die projek deur te voer waarmee ek begin.
51. Ek kan gewoonlik dinge vir myself uitredeneer met 'n bietjie nadenke.
52. Wanneer iets onvoorsiens met my gebeur, sal ek 'n poging aanwend om die rede daarvoor uit te vind.
53. Ek kan veel meer suksesse as mislukkings in my lewe ophaal.
54. Ek sal eerder nou uit die lewe haal wat ek kan as om te wag vir iets beters in die toekoms.

DEEL 5: Instruksies

Dui asseblief aan of u saam met die volgende stellings stem al dan nie.

Merk u antwoorde in Deel 5 van u antwoordvel.

D E E L 5

1. Ek wonder waarom ek hoegenaamd werk.
2. Maak nie saak hoe hard jy ookal werk nie, dit lyk of jy nooit werklik jou doelstellings bereik nie.
3. Ek vind dit moeilik om entoesiasties oor werk te wees.
4. Dit maak nie saak as mense hard werk in hulle beroepe nie, net die base baat daarby.
5. Gewone werk is te vervelig om die moeite werd te wees.
6. Ek voel geen behoefte om my bes by die werk te probeer nie want dit maak in elk geval geen verskil nie.
7. Ek hou nie van my werk nie en geniet dit nie; ek bestee net my tyd daaraan om betaal te word.
8. Ek vind dit moeilik om daardie mense te glo wat inderdaad van mening is dat hulle werk vir die gemeenskap van waarde is.
9. Ek is beter daaraan toe wanneer ek my eenkant hou.
10. Daar is geen sin in sosiale verkeer nie - dit bereik niks nie.
11. Ek probeer om intieme verhoudings met mense te vermy sodat ek nie onder verpligting staan teenoor hulle nie.
12. Die meeste sosiale verhoudings is sinloos.

=====NB: DIE VOLGENDE ITEMS VERWYS NA DIE ORGANISASIE WAARVOOR JY WERK=====

28. Ek dink soms dat mense in hoër posisies nie weet wat hulle doen nie.
29. Ek vind my werk uitdagend.
30. Werknemers wat bevorder word is bykans altyd diegene wat bevordering verdien.
31. My werk laat my nie toe om my kennis en bekwaamhede toe te pas nie.
32. Organisasiebeleid word doeltreffend ten uitvoer gebring.
33. Dit is nie moeilik om bevorder te word indien jy jouself aan jou werk toewy nie.
34. Ek is tans tevrede met my werk.
35. My werk is vir die organisasie van min belang.
36. Organisasiepraktyke stem dikwels nie hier ooreen met beleid nie.
37. Ek voel dat my werk in die algemeen nie aan my die tevredenheid verskaf wat ek draag sou wou hê nie.
38. Vakatures op hoër vlakke binne hierdie organisasie word dikwels gevul deur mense van buite die maatskappy te huur eerder as om werknemers van die organisasie te bevorder.
39. Beleid en praktyke is dikwels nie konsekwent oor tyd nie.
40. Daar kan baie gedoen word om die algemene tevredenheid van werknemers hier te verbeter.
41. Ek is vol vertroue dat die organisasie se leiers die vermoë het om die organisasie doeltreffend te bestuur.

NB: DIE VOLGENDE ITEMS VERWYS NA DIE ORGANISASIE WAARVOOR JY WERK

42. My werk bied nie veel geleentheid om werk te doen waarop ek werklik trots kan wees nie.
43. Daar is geleentheid wanneer ek so in my werk versonge raak dat ek nie weet hoe laat dit is nie.
44. Ek sou meer bevorderings by 'n ander organisasie gehad het as wat ek hier gehad het.
45. Hierdie organisasie is gewis nie een van die beter-bestuurde organisasies in Suid-Afrika nie.

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