A DESCRIPTIVE STUDY OF THE RELATIONSHIPS BETWEEN
WORK RELATED SELF-ESTEEM, JOB INVOLVEMENT AND JOB SATISFACTION
in four occupational groups.

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by

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The major goals of the present thesis are to develop a measure of Work Related Self-Esteem (WRSE) for non-managerial employees, gather evidence on its reliability and validity and learn something about the nature and importance of this concept through correlations with other job attitudes. Particular attention is focused on job involvement and job satisfaction.

The overall framework has a multivariable approach, with particular emphasis on the subjective outlooks and evaluations of the individual. 474 employees, consisting of industrial workers, psychiatric nurses, clerical staff and general nurses are surveyed.

The reliability and validity of WRSE, as well as its usefulness as a moderator variable are supported. WRSE is found to be the best predictor of performance appraisals, job satisfaction and job involvement. The motivational model behind WRSE is shown to be that of self enhancement rather than that of self consistency.

Regarding job involvement, a significant inference is made from the results that high levels of it sometimes bring low performance appraisals, and that when coming in conjunction with a perceived inability to make decisions, it leads to long-term absences attributed to psychosomatic illnesses. In general, the results show that age and job involvement are the best predictors of intended length of service (explaining 35% of the latter's total variance). In one of the samples it is possible to explain a great deal more (71%), with two additional measures original to this study, namely the desirability of the type of work in one's own eyes and in the eyes of significant others.

Results partly support the two-factor theory of job satisfaction. A suggestion is made, following many of the results, that correlations tend to emerge mainly when the variable(s) in question do not represent the person's main orientation, but nevertheless, remain significant to the individual.
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APPENDIX

LIST OF ABBREVIATIONS

1. AUTH - authoritarian orientation
2. INSTRORI - instrumental orientation
3. JI - job involvement
4. JS - job satisfaction
5. JS_COWO - job satisfaction with fellow workers (co-workers)
6. JS_FIRM - job satisfaction with the firm
7. JSJOB - job satisfaction with the job itself
8. JS.OPP - job satisfaction with opportunities for promotion
9. JSPAY - job satisfaction with pay
10. JSSUP - job satisfaction with supervision
11. MARSTATU - marital status
12. NORMBEL - desirability of the type of work in the eyes of significant others
13. TJS - total job satisfaction
14. TXIR - satisfaction with the type of work
15. TYPEWORK - desirability of the type of work in the eyes of significant others
16. WRSE - work related self-esteem
A DESCRIPTIVE STUDY OF THE RELATIONSHIPS BETWEEN
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in four occupational groups.
1. Review of the literature

1.1 Introduction - origins of the study

The source of this thesis stems from the interest the author has in the concept of alienation and the unclarity in meaning which is attached to it. The term has been used loosely in different contexts referring to any kind of separation or perceived separation between an individual and his surroundings, product, community, etc. Faunce (1968), for example, defines alienation as the incongruence between self evaluation and that which is made by others. Despite some existing attempts to operationalize the concept of alienation, it has been felt that it is not adequate as an empirical tool. Much of what is being said about it could be said more clearly and meaningfully using other concepts. There seems to be a broad confusion as to whether "alienation" has its source in the individual, his environment, or in the interaction between the two. While all three possibilities have been examined, the greatest benefit seems to be attached to the examination of concepts which are more specific than "alienation", linking the self to its environment. Self-esteem is one such concept. Its importance lies in its relevance to mental health (as a stabilizer, providing identity and control. Coopersmith, 1967) and in its role as a motivational force (self enhancement and/or self consistency). Although the various approaches in the literature of alienation are seen as legitimate, an investigation of an area as broad as this seems to be more fruitful when making use of a different approach such as the one that has been undertaken here. Thus, in place of the loose concept of alienation, in this thesis, the focus is on the concept of self-esteem (and not on alienation).

In this instance, the environment of interest is the
work situation, particularly because work has been seen (Klein, 1976) as: 1) fulfilling a biological drive to master the environment, 2) gaining pleasure from achievement including the consequences of performing a task, and the achievement of independence, freedom and security, and 3) as a major link between the individual and reality. Since the concept of self-esteem (defined as a self-judgement of worthiness) failed to concentrate specifically on the importance of work to the self, it had to be defined stipulatively so as to refer only to self-esteem in relationship to one's work. However, one's evaluation of one's own worthiness in the work situation only plays a part in one's job behaviour when there is some element of involvement with the job. Hence, job involvement is another necessary constituent in the use of the "work related self-esteem" concept in explaining work behaviour. Job involvement is therefore introduced as a further variable, being in any case, a frequently discussed, but little researched element in managerial thinking. Within the confines of the present study, attention is focused upon these two variables, looked into in the context of different job situations and occupational groups.

In order to arrive at a measure of "work related self-esteem", as distinct from "self-esteem" in general, it was necessary to rely on theoretical foundations provided by investigations about the self and more specifically on the theory and research concerned with self-esteem. The author also tried to relate this attitudinal measure (termed "work related self-esteem") to other factors, such as the demographic and the psychological (including job satisfaction). These were regarded as relevant by previous researchers in the study of behaviour at work.

The population sample used includes the following four occupational groups: industrial workers, clerical
staff, psychiatric nurses, and general hospital nurses. By choosing such a sample, the author intended to have a "panel" of occupations from which he could make some generalizations.

When reviewing the literature about work and its problems, it is interesting to note that the particular perceptions which each author holds about the nature of work, as well as his own views about human nature, can influence conclusions reached, both at a theoretical and at a practical level. It seems essential, therefore for a distinction to be made between the researcher's own values and value system, and the factual data which he presents. An author's philosophical preconceptions and his conceptualization of events can often influence the way he "explains" facts. Also, these philosophical assumptions can influence the way "hard" data is analysed and interpreted. As an example, a researcher may conduct a field study in an organisation and find out that workers in that organisation have a purely instrumental orientation to work (i.e. they see their work as a task to be accomplished in order to obtain money for their survival and attain other goals through it). This fact and its practical consequences might be interpreted in a variety of ways, depending on the researcher's own values. If the researcher is inclined to believe that men are inherently incapable of desiring anything further than the fulfillment of their basic needs (as defined, for example, by Maslow, 1956), he could possibly come to the conclusion that the organisation's system of structuring work is basically sound and there is no need for changes. On the other hand, the researcher could hold a philosophy of life according to which all men are potentially capable of reaching "self-actualization" (the process in which the individual meets challenges, exercises responsibility, develops independence, and freely expresses a range of talents and aptitudes [Fox, 1971], or as conceptualized by Kurt Goldstein, it is "a human creative trend, by which
the person maximizes his or her potentials" (Zurcher, 1977, p. 77). If this were the case, the researcher would think that society should create conditions for such a development. Therefore, he might interpret the above results as a proof that the system of work, adopted at the organisation, excludes the likelihood of workers being able to gain intrinsic satisfactions from their work. He would then come to the conclusion that change is desirable. It is consequently in the author's opinion that being aware of one's own values and value system is a prerequisite to any attempt to "objectify" the interpretation of empirical findings. (The values held by the author of this study are discussed in chapters 2 and 7.)

1.2 The problem of alienation

A term which readily comes to mind, while thinking of the gap in adjustment between psychological development and technology, is that of "alienated man". Today's general situation in industrial relations seems to be such that one could perhaps describe a majority of workers as mechanized, routinized and unable to make use of their full capacities. Central to the definition of alienation is the idea that modern man has lost his identity or "selfhood". This assumes that there is in each of us a Self, which in many cases we are prevented -by internal conflicts or societal forces- from knowing or achieving. What is important to remember is that Self is an abstract concept, whose function is to help in explaining behaviour.

1.2.1 Marx - alienated labour. As previously stated, the "self-actualizing model" of working behaviour can be said to be closely linked with Marx's theories about "alienated labour". Marx's vision of the "alienated man" is related to his beliefs about Man, which can be said to correspond to Maslow's (1954) theories about the "self-
actualizing man". Marx does not believe in human nature existing propter hoc", but sees man as a product of historical developments. However, he also states that the distinction between humans and animals consists in the fact that "man only becomes himself" by acting upon his environment in a meaningful and purposeful way, of which he is aware. This conscious, meaningful and purposeful activity is called in Marxist terminology "praxis". The Marxist vision of man implies a system of values which sees man becoming "fully human" and realizing his potentialities through praxis. Thus, in Marx's perspective, work (in a very broad sense) should constitute man's main life activity.

"Alienated labour" (Marx, 1844) is described as containing the following dimensions:

1. Alienated labour is perceived as something external to the worker, and not as something which belongs to his essential being. Alienated workers cannot affirm themselves and develop freely their capabilities at their jobs. When such is the case, work, instead of being the core of a man's life, becomes a peripheral activity and the worker only feels as a whole human being outside his work.

2. When conditions which lead to alienation exist, work instead of being perceived by the worker as satisfying in itself, is seen as a means of satisfying other, basic needs (such as, for instance, shelter and food) in order to preserve man's mere physical existence. These needs are external to the work itself.

3. Under conditions of alienated labour, the work a person does is not perceived as something which belongs to the worker. Marx (l.c.) states that this happens because the products of his labour do not belong to the worker, but to another person (the employer). Although the worker is the one who produces the products, he is treated as a manipulated object, which can, at any moment, be replaced either by another worker or a machine.

The French sociologist Henri Lefebvre (1972)
clarifies some of Marx's ideas about alienation. He explains that, for Marx, alienation exists because a man's relations to what he produces are twofold: 1) He realizes himself through praxis, and 2) under the conditions of alienated labour man loses himself in his work. Dialectically, the process of alienation could be described as this: at one moment the worker acts upon the material world and creates objects. At another moment, the thing he has created takes on a life of its own and becomes an alienated object which dominates him. This Marxist idea could be linked, in empirical terms, with the fact that in modern industrial society, most people seem to think that the main objective of work is to produce goods or provide services which would satisfy the consumer, client or patient, rather than the worker himself. The latter regards himself as part of this consumer society and sees his duty as that of giving satisfaction to the "buyer" ("the customer is always right"). He accepts that his own satisfaction will be had only after the customer is content. The acceptance of this value by the workers, could explain the finding that the great majority of workers are relatively satisfied with their work (no matter what they do and what conditions they do it in). This was found, for example, on a National Random Sample of the Quality of Employment Survey, 1972 (Davis, 1972).

It is explicitly stated in Marxist theories that the existence of alienation is inherently linked with the existence of societies which are divided into classes, and that the opposite state of alienation could only be achieved in a classless society. Obviously, in a society which is divided into classes, there are those who own the means of production and those who who are their pawns. Those subordinates are alienated from their work because they feel like a cog in a machine that does not belong to them. In a classless
society, according to Marx, each person would feel that he is not enslaved to the product he creates. However, individual workers in a class society could overcome the effects of alienation by praxis.

1.2.2 Erich Fromm. According to Fromm (1959), the alienated man does not believe in his own freedom; he does not experience himself as a true centre of his world, the creator of his own acts, but his acts and their consequences have become his masters, whom he obeys, or whom he may even worship..."

1.2.3 Blauner. Robert Blauner, in his book "Alienation and Freedom" (1964), gives evidence for different forms of alienation, depending on the nature of the technology involved in the work. Blauner's field research took place in the fifties, when textile workers, for example, were in a different position from that of today. A study of their present conditions and situation may give a different picture, offering an opportunity for further insight in the process of alienation.

Marxist theory about alienated labour attracted the attention of some industrial sociologists who tried to operationalize the notion of alienation and use it in empirical research. Alienation was operationalized by Seeman (1954) and also accepted and used by many others, for instance, Blauner (1964). It was defined according to four different psychological dimensions, which are, in principle, independent of each other: 1. powerlessness: The feeling of being controlled and manipulated by powerful others or by an impersonal system. 2. meaningfulness: Operationalized as a lack of sense of purpose in the work and failure to see oneself as a part of a larger whole.
3. **normlessness**: The lack of knowledge of norms for what is right and wrong.

4. **isolation**: The feeling of "nonbelongingness" and lack of identification with the work situation and the work community.

5. **self-estrangement**: Operationalized as the feeling by the worker that his job offers him no opportunities to express himself (i.e. his abilities), and does not integrate with his real life which starts when work finishes.

One of the criticisms that could be made of such an operationalization of alienation and alienated labour, is that the concept of alienation as used by Marx, is an integral part of an entire philosophical and political ideology. This postulates that alienated labour can only be ended by ending divisions of society into classes, and cannot be achieved only by changes in the structure of work, management techniques, changes in technology, etc. If this is held to be true, it seems to the author that the basic assumptions to be tested in Marx's theory of alienation are whether alienated labour exists only in a class society, and whether all labour in capitalistic society is, by its basic nature, alienated labour. Nevertheless, it might be interesting to point out that certain elements in Marx's theory of alienation could be seen as part of psychological models which correspond to some modern theories of motivation (for example, Maslow, l.c.).

Durkheim's (1897) concept of Anomie is frequently used in the literature as equivalent to that of alienation. However, the concept of alienation, as explained by Marx, cannot be equated with it. This is so, for Anomie refers to the state in which the individual perceives himself as lacking firm social norms that control his behaviour. This concept is much narrower than alienation and could be paralleled only with the dimension of meaninglessness.
If the concept of alienated labour, as presented by Marx, is to be considered from a psychological point of view, it could be linked to theories about the self, especially self-esteem.

Recapitulating Marx's idea of alienation, labour, for the alienated worker, is narrowed down to satisfying only basic physical needs. One sees the alienated worker as deprived of the most important things that work should offer, such as expression of abilities, development of capabilities, and being the master of one's own product, or in other words, having power (control) over what one does and how he does it. These latter elements, of which the alienated worker is deprived, also constitute the basis for the development of the concept of the self and its evaluation (self-esteem). This is so because they are part of what influences the person's feelings of worthiness, which is, in fact what self-esteem is all about.

1.3 The self concept and self-esteem

1.3.1 Definition. It is not easy to derive from the literature a rigorous definition of self-esteem. A reason for such difficulty is that although self-esteem may be a theoretical construct requiring a clear conceptual definition, it is at the same time a term in common day to day use. Both readers and writers think that there exists some kind of intuitive, common-sense idea of what self-esteem is and does. Therefore, much published research (especially the socio-psychological) does not bother to define what is meant by self-esteem. The vagueness in the use of this term in most published research might lead to the illusion that when different authors use the variable "self-esteem", they deal with a common phenomenon across
different perspectives and measurements. Dealing with the concept of self-esteem as such leads to authors using it without explicitly stating which is the theoretical framework in which it is used. In order to get a better understanding of the concept of self-esteem, as well as a certain degree of comparability between results obtained using this variable by different authors, it is necessary for the implicit assumptions surrounding this concept to be more clearly stated.

It seems interesting to point out (as it has been done in what concerns work philosophies) that the researchers' implicit values about what ought to be "desirable behaviour" influence their choice of hypotheses and the predictions made from them, as well as the interpretation of their results. An example of what is meant can be understood by noting that most authors view high self-esteem as a "desirable" trait or state, as opposed to low self-esteem which is most often regarded as an undesirable state which might hinder psychological adjustment. Nevertheless, it is possible to hold the value that low self-esteem is a desirable trait which enhances psychological adjustment. These might be value judgements which are implicit in most published research. Many researchers are perhaps unaware of these value judgements with which they commence their research. If they are aware of them, they rarely declare them openly.

Despite the problems in defining the concept of self-esteem, it is accepted by most authors to be a self judgement of worthiness, and this is accepted by the present author.

Self-esteem is a concept derived from a broader theoretical framework. It postulates the existence of a "self", a theory about what is the self, and how it is developed. It also offers considerations about the utility of the concept of self in explaining and predicting behaviour.
1.3.2 The development of the concept of self. A consideration of the conceptual and methodological issues in self-esteem research must begin with an understanding of the development and use of the concept of Self in psychology.

The study of the Self has attracted attention since the beginning of human thought. For instance, the distinction made by Aristotle and other Greek philosophers between the physical and non-physical aspects of the human being had a great importance in philosophy's early attempts to understand human behaviour.

1.3.2.a Greek philosophy. In Greek philosophy the concept of "soul" had a great importance in explaining dimensions not related to the merely physical existence of man. Although the meaning of the term "soul" was not very precise, it was often used by earlier writers to describe the "core" of the non-physical or psychic; that part which is essential and unique in mental functioning. This notion has much in common with what later theorists meant by "self".

1.3.2.b Christianity. With Christianity, the concept of "soul" became the property of theology and lost its relevance to scientific thinking. However, the Aristotelian distinction between physical and non-physical continued to be an important concern of thinkers and philosophers.

1.3.2.c Descartes. As one of the founders of modern philosophy, Descartes considered that the problem of the relationships between body and mind was one of the most important philosophical problems which faced human thought at his time. Although Descartes wrote many things about the possible relationships existing between body and mind, it can perhaps be said that, in what concerns problems related to the Self, his main
contribution consists in the reasoning underlying his famous saying "I think, therefore I am". The assumption behind this statement may be that since I cannot deny the reality of my existence as a thinking being, I also cannot deny my own existence as a thinker, as a cognizant "I". This notion of an "I", a thinking, knowing, cognizing entity, can be said to be one of the direct predecessors of the concept of Self in psychology.

Problems such as the differences and relationships between "mind" and "body", the nature of thinking and the nature of human experience were very important to later philosophical thinking of people such as Berkeley and Hume who examined such problems at length. It was out of this philosophical tradition that in the late nineteenth century psychology became a separate entity from philosophy. Early psychology was largely concerned with personal experience and used introspection as a method by which individual consciousness could be understood. Many investigators, in this non-empirical tradition, thought that amongst the most important contents of the conscious mind was the individual's experiences of himself (Self).

1.3.2.d William James (1890) - self psychologists. One of the earliest "self" psychologists, William James' writings are still considered important in what concerns discussions about the self and self-esteem. For James, the total self (or person) is differentiated into two aspects: the self as the knower, and the self as that which is known, or the agent of experience and the contents of experience. In describing the self, James states that a "man's self is the sum total of all that he can call "his" (identity), and divides it into three parts:

1. The material me (a person's body, his possessions, his family, and all the material things with which he might feel a sense of unity).
2. The social me (how he perceives his identity in the
eyes of other people), and
3. the spiritual me (the person's awareness of his own mental processes).

1.3.2. Social self theories - Cooley and Mead. Theorists who adopt this point of view stress the importance of the interaction with other people as being crucial to what concerns the development of a sense of personal identity. This tradition of theoretical thinking and empirical research arises from the writings of Cooley (1902) and Mead (1956), up to contemporary theorists such as Rogers (1959).

According to these theorists, man is seen as a being who "interprets" his environment and himself in relation to it. These interpretations are assumed to play an important part in determining his reactions in different situations. Human beings are different from the inanimate objects which are studied by the natural sciences precisely because they are aware of themselves as entities. This self awareness is developed through social interaction and is affected by the different social environments in which individuals find themselves. This, in turn, affects the behaviour of individuals in the environment, and by affecting it, contributes to the changing of social environments.

Cooley (1902) introduced the notion of the "looking-glass self", which postulates that an individual's conception of himself is determined by his perception of other people's reactions to him.

Mead (1956), who also belonged to the same tradition presented the concepts of "generalized other" and "self-structure" as being crucial to the understanding of the self. Coining the words "generalized other" into a concept, Mead (l.c.) meant to say that the social context in which an individual lives, and the norms of the community to which he feels he belongs, play an important part in his conceptions about himself (Self). This concept
of "generalized other" also helps to call attention to the importance of a normative dimension in determining the "self", and therefore, in determining behaviour. It is also implied in this concept that individuals may play different roles (and have different conceptions about themselves) depending on the social context they find themselves in. However, Mead (1.c.) also points out the fact that although the self concept may depend on the opinions of others, the individual does not keep on changing his self-image in order to conform perfectly with the image of him held by whoever he happens to be with at the time. For Mead (1.c.), the Self is a semi-permanent structure within the individual, built up through experiences of acting upon the environment and being acted upon by it. This concept has two important implications. First, the Self is not conceived by him as changing with every change in the individual's social-psychological environment. Second, the development of a structure, as a result of previous interactions, implies that the effect of future interactions might not be as important for the Self as earlier ones.

1.3.2.f Psychoanalytic theorists: Freud, Erich Fromm, Karen Horney. Another early trend which threw additional light on self theory and self-esteem was the work of psychoanalytic theorists, beginning with Freud.

Freud's (1922) main concern was with the Ego, rather than with the Self, and although there are common elements between the two constructs, there are also points of difference. In psychoanalytic theory, the Self is generally described as being an inclusive construct, with the ego, id, and superego being its component parts. The Self is, many times, treated as a synonym for the person or personality in general. As described by psychoanalysts, the ego is a mediational structure which develops as the result of the contact
of the individual with social reality. The main function of the ego is to help individuals make a realistic adaptation to the external world. Thus, Freudian theories about the relationships of the individual with the external world, the formation of moral values (superego), the existence and functioning of various defence mechanisms have some relevance and some points in common with other theories about the Self.

Many of Freud's followers tried to extend psychoanalytic theory in ways most useful to later research on the Self and self-esteem, as did, for instance, Erich Fromm (1959) and Karen Horney (1950). They (as many others) derived their theories from clinical experience and observation. Fromm (1959) emphasizes the close relation between a person's regard for himself and the way he is able to deal with other persons. For Fromm, humans are unique because of their ability to make objects of themselves, which is a pre-condition for the use of the concept of Self. This ability to stand apart from himself enables man to have greater control over his environment. On the same token, this ability, having created an unnatural distance from all existence (including the person himself), leads to anxiety from freedom. Man escapes from this anxiety by making clear-cut definitions of himself and others. In other words, Fromm argues that most people choose societal definitions of Self. He states that "self concept was bound in how passive one could be to norms, how expert one was in dominating others, how many material accumulations one could display, and how well one could sell himself or herself as a desirable person." (Fromm, 1959).

Horney (1950) postulates that individuals are born with a need for fulfilling potentialities of the self. For her, self-realization is an important motivational force present in all human beings. She assumes that all individuals possess "basic anxiety" resulting from experiences of helplessness in infancy in a potentially
hostile world. This anxiety, for Horney (l.c.), results in a need for security, which is fulfilled by the individual who has high regard for himself. In this context, to be highly valued by others is also of extreme importance.

1.3.2.g Maslow—self actualization. Considering the concept of the self and self-esteem, Maslow (1937, 1942, 1954) centers his work around the notion of "self-actualization". He postulates that individuals have a multitude of needs which could be arranged hierarchically in five groups, from the most basic to the highest:

1. physical needs (such as food and shelter),
2. safety or security needs,
3. needs for loving and belonging,
4. esteem needs, and
5. need for self-actualization.

One of the assumptions of Maslow's theory is that the basic needs must be fulfilled before higher needs could become apparent. Consequently, for him, the establishment of a sense of self-esteem is a precondition for self-actualization.

1.3.2.h Rogers—a phenomenological approach to the self. The self is defined by him (1959) as "a perceived object in the phenomenal field". According to Rogers (l.c.), the Self is constituted by "self-regarding attitudes": a person's perceptions and cognitions of his abilities, reactions and relations with his social environment. For Rogers, self-esteem is essentially self-acceptance. According to him, an individual's attitudes towards himself could have three dimensions: cognitive, evaluative and affective. Self-acceptance (and self-esteem) is considered to be the affective dimension of the individual's attitudes towards himself.

1.3.2.i Experimental social psychologists. They have been interested in the concept of self-esteem
and have widely used it. For instance, McGuire (1968) sees self-esteem as one of the most important personality variables in explaining individual variations in the tendency to change as a result of persuasive messages. Hendrick and Page (1970) and Leonard (1973) also experimented in the field of self-esteem. As an important factor in experiments on interpersonal attraction, self-esteem was also included as a variable in studies that explained behaviour of individuals in groups (Gergen & Bauer, 1967, Faucheux & Moscovici, 1965) and in considering the effects of groups on individual members (Zander et al., 1960; Kipnis, 1972; Wood et al., 1973). Self-esteem was also used in the analysis of the dynamics of "moral" behaviour. It was used to explain helping, or altruistic behaviour (Rodestam et al., 1971; Tessler & Schwartz, 1972), resistance to temptation (Eisen, 1972), and tendency to cheat or engage in dishonest behaviour (Graf, 1971). Self-esteem was employed to assess the effects of different factors on task performances as well. The published results suggest that self-esteem can be an important mediating variable in this context, mediating between experiences of failure (Perez, 1973) and success (Maracek and Mettee, 1972). It is worth mentioning that research in experimental psychology done so far, seems less concerned with theoretical descriptions of self-esteem and its operation, than with discovering interesting empirical tendencies.

While there is no developed and explicit theory of self-esteem behind most experimental work, the work of Rosenberg (1965), Coopersmith (1959), and Ziller (1973), in contrast, represent definite attempts at developing theories of self-esteem and its correlates.

1.3.2. Rosenberg. He (1965) views self-esteem as an evaluative attitude towards the Self. His research suggests that people with low self-esteem are
more likely to express personality traits which could be labelled as "neurotic". Such people might find it more difficult to cope with situations that require social interaction than people with high self-esteem. People with low self-esteem, according to Rosenberg (l.c.), also tend to have a lower level of aspiration and less expectation for success than high self-esteem individuals. Trying to account in causal terms for these differences, Rosenberg (l.c.) assumes that individuals who have been submitted to more negative evaluations by "significant others" have had more direct experiences of insecurity, and have had less support from their environment (in terms of both the family and peer relationships). According to Rosenberg, such individuals are more likely to have low self-esteem.

1.3.2.k Coopersmith. He (1967) sees self-esteem as a more complex concept than Rosenberg does (l.c.). For Rosenberg (l.c.), self-esteem is an attitude about a specific object, namely the self. For Coopersmith, on the other hand, it is a concept which does not only involve self-evaluation, but also several defence mechanisms and various manifestations of these processes. Self-esteem for Coopersmith is "a personal judgement of worthiness that is expressed in the attitudes the individual holds toward himself" (1967). His research suggests that three conditions seem to be conducive to higher self-esteem levels:
1. acceptance of the child by the parents,
2. enforcement of clearly defined limits for the children by the parents, and
3. respect for individual initiative within these limits by the parents (Coopersmith, 1967).
It can be seen from the above that Coopersmith's position seems to be generally consistent with that of Rosenberg.
1.3.2.1 Ziller. He (1973) describes self-esteem as a component of the person's overall evaluation of himself. In his opinion, self-esteem acts as a mediator between the self and the real world. When the person's social environment changes, it is the self-esteem which determines the resulting changes in self-evaluation. Self-esteem is linked to the concept of personality integration which is relative to the person's ability to react to a variety of incoming stimuli. According to Ziller, a person with low self-esteem is more dependent upon external stimuli than a high self-esteem person. A low self-esteem person is defined as more "field-dependent", in other words, he tends to passively conform to the influence of the prevailing field or context.

The Ziller formulation seems different from almost all others since it uses a topological metaphor. The concepts of self and self-esteem are only described in terms of their functions, but are not made explicit. Despite apparent differences, the behavioural predictions made by him for various levels of self-esteem are the same as the ones made by Rosenberg and Coopersmith. He assumes that high integration of the personality is associated with high self-esteem, and that a person with a more integrated personality is more effective in what concerns social interaction with other people and can function more effectively.

The concept of self-esteem can also be related to other constructs in psychological literature. These are not intended to be identical with it, but could perhaps be useful in further developments of the self-esteem construct. For instance, when self-esteem is viewed as sense of personal competence, Diggory's thought about "level of aspiration" is well worth mentioning (1966). This notion is that a person's evaluation of himself is linked to the choice of level of task difficulty. This means that the more highly the person evaluates himself, the more difficult the task that he chooses will be, or
vice versa. (The difficulty of the task is objectively assessed.) The perceived probability of success is important in determining the choice of task difficulty. This is in turn, linked with the person's evaluation of himself.

Rotter's construct of "internal-external control" is another example of one that may be connected to self-esteem (Fish and Karabenick, 1971). It presents several points in common with Ziller's conceptualization of a high self-esteem person. They both claim that a person who has high self-esteem is less field-dependent than a low self-esteem person.

The idea of "ego strength", as presented by Symonds (1951), also seems to be closely related to self-esteem. His idea is concerned with the relationships between self-esteem and the ability of an individual to cope with the experiences of failure.

1.3.3 Summary and conclusions about the self. As a conclusion to this section's brief review of literature, it could be said that the several theories about the self, examined so far, have in common the assumption that behaviour is not simply a function of environmental contingencies. People tend to behave consistently and show some evidence of continuity of personal identity in different situations. In order to explain unity of behaviour, the "self" is postulated as a theoretical construct. Without the self it is impossible to understand unity of behaviour which is basic to the understanding of human beings as individuals. The attribution of traits, which enables the judgement of character (or personality), depends finally upon the continual existence of a core within the physical body. This "core", which for common convenience has been called "self", permits the person himself, and those surrounding him, to see
in him the same person throughout time. His physical appearance might change (colour of hair, etc.), even particular traits which were judged previously at one point in time, might have changed since then. Nevertheless, the person himself and those around him will still see him as the same entity which they knew before. This can be understood only in terms of an abstract concept such as the self, which is continuous throughout the passing of time.

Intentionality is another aspect of human behaviour which seems to have attracted the attention of personality theorists and could perhaps be better understood by postulating the existence of a self. Will (motivation) and the power people derive from it is possible only thanks to the existence of man's ability to "objectify" himself. This ability enables man to have continuity (throughout time) in the same way as he (and to a lesser animals too) is able to perceive objects as "the same" though he might be looking at them from an angle which he has never seen before (a phenomenon which is known as the "consistency of objects"). Man's ability to "stand apart" from himself provides him with power, which is entrusted to him by society, like the playing of roles. These roles are normally entrusted to the person by others, but they become part of him and they give him the power to act upon others. This power is transformed in such an instance into the will of the person himself. The person becomes the source of the power-will, an "unmoved mover", "context independent". As Holmes (1976) points out, the message of Aristotle is essentially that "...things are accounted for by pointing to the essence to which they strive. This essence was called "purpose"- by realizing their "true" or "natural" purposes, the living entity attains its final definition."

The Self is seen as the source of will because of our ability to stand outside ourselves and look at ourselves as objectively independent and free of external
constraints. Of course, whether people have such freedom is a value judgement, but the fact remains that those people who show the so-called "will-power" or need achievement (or are somewhere along its continuum), hold value judgements about the world and themselves which influence their behaviour. The perception of objects and human beings, including our-"Selves" as entities (conservation of effects) accounts for the "unity of behaviour"; of people having personalities or traits. The ability of persons to perceive their "selves" outside their own shoes, and as being somewhere along the continuum of free-enslaved, is what gives power or weakness, motivation, initiative or apathy.

It seems evident to many theorists that human beings can show ability to plan ahead (intentionality, will, motivation) and enact long-range behaviours. They do not only act under the operation of immediate rewards or controlling conditions. However, it is also important to keep in mind that the Self is a theoretical construct and not an empirically verifiable variable. The utility of this concept in explaining and predicting human behaviour can be argued from two different viewpoints:
1. in what concerns a pragmatic aspect, empirical research reviewed so far tends to demonstrate that variables related to Self may improve predictive ability (see p. 15, section 1.3.2.1) and
2. from the point of view of building a humanistic psychology, the use of a construct such as Self may enable us to interpret behaviour in so-called "non-mechanistic" terms.

All theories about the self, reviewed so far, seem to have the following points in common:
1. The Self seems to involve some kind of activity by the individual which refers back to himself, i.e. thoughts, feelings or actions in which the agent and the object of the behaviour are the same person.
2. The Self must be regarded as a subjective experience
and not as an objective phenomenon.
3. The Self is not directly observable, but is an inferred structure.
4. The Self is generally viewed as a structure acquired through social interaction.

1.3.4 A summary of self-esteem. A review of the literature that concerns self-esteem suggests that this concept has been defined principally by emphasizing four different approaches (Wells & Marwell, 1976):
1. Self-esteem as attitudes: This definition refers to self-esteem as a more or less phenomenal process in which the person perceives characteristics of himself and reacts to them emotionally or behaviourally. Self-esteem is, thus, seen as an attitude toward a particular object, the Self. This conception of self-esteem uses the idea of attitude in any of its various meanings: cognitions, feelings, beliefs, and predispositions to act. The attitudinal perspective also describes self-esteem as both global and specific. A person may have different characteristics to which he attaches specific evaluations. Moreover, he may, in some way, form an overall opinion of himself from these evaluations (global).
2. Self-esteem seen as a relation between attitudes: Other authors, such as James (1890), conceptualize self-esteem as a "ratio of our actualities to our supposed potentialities", or in James' equation:

\[
\text{self-esteem} = \frac{\text{pretensions}}{\text{successes}}
\]

This definition, opposed to the definition of self-esteem as an attitude, involves two sets of attitudes: how the person actually sees himself in relation to some quality or ability, and how he perceives he might be or ought to be, in relation to this same quality.

Cohen (1959) defines self-esteem as "the degree of correspondence between an individual's ideal and actual
 concepts of himself. As James, Cohen (l.c.) considers self-esteem as a result of individual experiences of success and failure. It is implicit in his definition of self-esteem that such experiences are compared with the individual's aspirations.

3. Self-esteem seen as psychological responses: In this perspective, it is not the content of the attitudes towards the Self which constitutes the key element, but rather the affective response of the person to this content: how he feels and behaves towards himself. Rosenberg (1965), for instance, states that "high self-esteem expresses the feeling that one is good enough." He goes on to say that low self-esteem implies self-rejection, self-dissatisfaction and self-contempt.

4. Self-esteem seen as a personality function: This perspective about self-esteem, which is mainly presented by Ziller (1973), is different from the common attitudinal description of self-esteem, as presented by the majority of authors in the literature. Ziller regards the concept of self-esteem as a kind of conceptual buffer which regulates the extent to which the self system is maintained, being more obvious mainly under conditions of strain. Thus, the more capable the individual is of processing and regulating internally his self system, the higher his self-esteem.

It seems also interesting to note that, although most definitions of self-esteem sound fairly similar, the meaning of the constructs are heavily dependent upon the theoretical context from which they are derived. This is so because identical definitions of self-esteem do not always lead to the same behavioural predictions. Self-esteem is, thus, "theory bound". Each one of the definitions of self-esteem carries with it assumptions about what should be an "optimal self-esteem level" which leads to a more effective personal functioning. Different theoretical perspectives differ in the level
of self-esteem which is considered to be optimal for adjustment. Optimal adjustment usually refers to effective personal and social functioning.

Authors like Rosenberg (1965), Coopersmith (1967) and Ziller (1973), adopt the position that there exists a positive linear relationship between self-esteem and adjustment. This assumption is also basic to all self acceptance perspectives ("you cannot like other people if you don't like yourself"). Rosenberg's (1965) data suggests that low self-esteem individuals are more likely to be lacking in self confidence, to be more dependent upon others, to be more shy and less explorative. Coopersmith (1967) says that low self-esteem individuals in his sample were less creative and less flexible. Linton and Graham (1959) describe low self-esteem individuals as unimaginative, conformists, unable to face themselves and having to rely heavily on repression as a defence mechanism in dealing with the social environment. Boshier's (1969) data suggests that low self-esteem individuals are more likely to be authoritarian.

Although no perspective on self-esteem asserts that low self-esteem is "best" for effective functioning, there are authors who state that there might exist some negative relationships between levels of self-esteem and the occurrence of behaviours or traits, labelled as "desirable". Thus, at least in some respects, low self-esteem might be more functional than high self-esteem. This position relates self-esteem to its frequent use in clinical circles as a defence style. For example, a person who is said to have low self-esteem, due to his being short (inferiority complex), may strive to prove himself more successful than others.

Cohen (1959) suggests that differences among individuals, in what concerns their level of self-esteem, are dependent on their use of different defence mechanisms. He describes high self-esteem individuals
as using "repressive" defence mechanisms, which include denying and ignoring, challenging and conflicting impulses. He states, on the other hand, that low self-esteem people tend to use defence mechanisms which are more "expressive". Thus, for Cohen (l.c.), high self-esteem people are less "open to change" since their cognitive field tends to be more rigid, and because they tend to avoid or ignore information which they might perceive as negative and therefore a criticism of them. In contrast, low self-esteem people tend to seek out, reflect on, and incorporate information from the environment which is negative.

Byrne's description of the repression-sensitization dimension (Byrne; 1961) offers a similar self-esteem model. Repressors tend to have high self-esteem because they avoid negative information, while the low self-esteem of sensitizers is explained as a consequence of their sensitivity to such negative information. Byrne's data suggests that low self-esteem persons are more flexible, more given to self-analysis, more able to admit weakness, less likely to hide behind a facade, and less authoritarian.

A different outlook which stems from "the medium self-esteem" model, described by Weissman and Ritter (1970), amongst others, suggests that the relationship between self-esteem and adjustment, rather than positive or negative, is curvilinear, and that a moderate self-esteem level represents a balance between self-criticism and self-enhancement.

The researchers mentioned in this brief summary represent the different theoretical approaches. They are the representatives of other researchers who have also obtained similar data. Their results are, generally, in line with their initial outlook on self-esteem. Presumably, disagreement between the different models could be resolved by reference to empirical data. However, the reviewed published research does not allow any
unequivocal decision in favour of any of the above three models. There is somewhat more evidence congruent with the high self-esteem position, since published research indicates that low self-esteem persons are more likely to exhibit anxiety and neurotic behaviours (Wylie, 1974; Fitts, 1972), to perform less effectively under stress and failure (Shrauger and Rosenberg, 1970), and to be generally less effective in social situations.

It is possible that the decision upon which self-esteem model is the "best" cannot be made at an empirical level. Many findings which seem to oppose each other may not be actually comparable since the indicators and measures of self-esteem used were not actually meant to be compared. Even if the measures were comparable, the "meaning" attached to the phenomena observed could be quite different, depending upon the theoretical framework of the researcher. Also here, there is the problem of "values": different theoretical approaches differ in what they consider to be unequivocal indicators of "good adjustment". Ultimately, the definition of "good adjustment" depends on what the researcher thinks "a good life" is or should be.

1.4 Job involvement

In contrast to the multitude of studies on job satisfaction (see Dunnette, 1976 for a most comprehensive review of it), relatively few empirical studies have been made on job involvement. The reason for the scarcity in research in job involvement in comparison to that made in job satisfaction is most probably due to the popular myth that these two variables are directly linked so that, for example, an increase in job satisfaction will lead to a direct increase in job involvement, and vice versa. In reality, both statistically and logically, there is strong support for the position that these two are independent (Lawler & Hall, 1970). As with self-
esteem and job satisfaction, the problem of definition has caused a mixing-up of concepts thought to be equivalent in meaning to job involvement, and therefore used interchangeably. Some of these are: ego involvement, ego involved performance, occupational involvement, work role involvement, and organisational identification. The latter, for instance, has been defined as "the extent to which the individual accepts the values and goals of an organisation as his own, and therefore, becomes emotionally committed to that organisation" (Hall, 1971).

The common use of the word "involvement" as an obvious concept for both, managers and researchers, makes it difficult to realize that a definition is essential in order not to fall into the trap of offering circular explanations.

The source of most investigations on job involvement has been Lodahl and Kejner's (1965) paper on its definition and their research work is an attempt to create a measure for it. Their definition is that job involvement is "the degree to which a person's work performance affects his self-esteem" and that it is also "the degree to which a person is identified psychologically with his work, or the importance of work in his total image". Most theorists (Bass, 1965; Gurin, Veroff & Feld, 1960; Vroom, 1962; Mawrer, 1969; Lawler & Hall, 1970; Rabinowitz & Hall, 1977; McKelvey & Sekaran, 1977) use for their conceptualization of job involvement one of the above definitions.

Determinants of job involvement may be divided into: a) characteristics of the individual, b) characteristics of the job.

a) **Individual characteristics** - only the most frequently studied traits will partially be reviewed. These are: individual differences, age, sex, education, marital status, length of service, and locus of control.

**Individual differences**: Individual differences,
traditionally the focus of psychological studies, have drawn the attention of sociologists like Dubin (1961), who sees individual differences as the product of social norms and values which, when internalized, determine specific modes of behaviour. He claims that this

"internalization means acceptance into the personal behaviour systems, and ways of thinking. It means literally, putting inside the social personality, modes of activities and thoughtways so they become, in the future, the basis for behaviour and thought."

A real continuity is seen between childhood experiences and adult experiences in the work organisation, which builds its motivational systems on these early foundations (Dubin, I.c.; Holmes, 1976). Conceiving differences in job involvement in this manner links the job involved person to a socialization process of the "Protestant Work Ethic", which means having a moral character in work ("it is man's spiritual obligation to partake hard labour for the glory of God"). Indeed, Lodahl (1964) and Bass & Barrett (1972) believe that job involvement operationalizes in some ways the Protestant Work Ethic since it is the result of internalizing work values into the self. Such conception of job involvement leads to the view that it is probably change-resistant to external circumstances in the work situation. Support to this outlook came from Runyon's (1973) study in which different management styles, in a multiplant chemical company, did not affect the degree of job involvement. Lawler, Hackman and Kaufman (1973) evaluated the effect of a job enlargement programme on job involvement over a six-month period, finding no significant change in the job involvement of directory assistance operators. In another area, Hall and Mansfield (1971) investigated the effect of organisational stress on the job involvement of research scientists and engineers, over a twenty-month period. Though the results show high reliability over time (.70) of a shortened version of
Lodahl and Kejner J. T. scale, the data does not show individual changes in job involvement due to economic stress. These results seem to support the earlier claims of Lodahl and Kejner (l.c.) that job involvement is relatively unaffected by changes in the work environment. The claim was based on a study by Lodahl of women on an electronic assembly line, over a twenty-month period, during which many job improvements were made.

Orientations to work might also be seen as an individual difference affecting job involvement, and extrawork socialization processes as responsible for differences found between urban and rural workers (Hulin & Blood, 1968). Blood and Hulin (1967) claim that there is a spectrum ranging from integration with middle-class norms (Protestant Ethic?) to alienation from such norms (people for whom work is only a means to an end) which is presumably more prevalent in urban areas. Different results were obtained in two recent works which were inconsistent with Hulin and Blood's (1968) predictions. Siegel and Ruh (1973) and Ruh and White (1975) found positive correlations between urban background and job involvement and between urban residence and job involvement. Also a relationship between participation and job involvement was more positive for those from larger communities.

Age: Studies looking into the relationship between job involvement and age have resulted in mixed results. A review of the existing literature on the topic ranges from studies which show a positive relationship, in which the older the person, the more involved he is with his work (Jones, James & Bruni, 1975; Hall & Mansfield, 1975), through studies which show a very weak correlation (Schyhart & Smith, 1972; Lodahl & Kejner, 1965) to studies showing no association between these two variables (Gurin et. al., 1960; Mannheim, 1975). It should be noted that
all these studies were cross-sectional and that, as Rabinowitz and Hall (1977) point out, the relevant variable might be the kind of work rewards and satisfactions the person receives over time, rather than age or time per se.

**Sex:** One might assume that the traditional role of men as bread winners, and therefore the socialization of males which emphasizes the value of work, would make men, as a group, more job involved than women. Siegel (1969, in Rabinowitz & Hall, 1977) discusses the possibility that the role of valuing work might be more important to men for maintaining their sense of general well being. The only study found in this area (Rabinowitz, 1975) showed no effect of sex upon job involvement when the effects of job level and length of service are controlled.

**Education:** Here again mixed results are found, so that no conclusion can be reached (Jones et al., 1975; Siegel & Ruh, 1973; Gurin et al., 1960; Mannheim, 1975). Rabinowitz and Hall (1977) comment that the low relationships between education and job involvement might be due to restrictions in the range of education levels in any given sample.

**Marital status:** Lodahl and Kejner (1965) found no association between marital status and job involvement for separate samples of nurses and engineers. Gannon and Hendrickson (1973) in their study of working wives, present data showing that it is possible to be involved in both job and family.

**Length of service:** Conflicting results appear also here with the studies of Lodahl (cited in Lodahl & Kejner, 1965) and Jones et al., (1975). They found a significant relationship between length of service and
job involvement, while the studies of Schneider, Hall and Nygren (1971), Schwyhart and Smith (1972) and Hall and Mansfield (1975), found no relationship between these two variables.

**Locus of control:** Internal locus of control is a trait which refers to individuals who perceive reinforcement as being contingent upon their own actions. Alternatively, it refers to persons who believe that their actions can affect the course of their lives. This is in contrast to external locus of control which points to those individuals who believe their lives to be determined by chance, luck, or God. One would expect that people who regard themselves as "masters of their own fates" ("internals") believe that they are an integral part of their jobs and therefore more job-involved. This could mean that they truly perceive themselves as having control on what occurs in their jobs, for instance, taking part in decision making. The writer found two studies that confirm the positive relationship between internal locus of control and job involvement (Evans, cited in Hall and Mansfield, 1971; Runyon, 1973).

b) **Characteristics of the job** - Studies of job involvement in this area relate mainly to job factors of supervision, the work group, job level, and those that have something to do with the structure and nature of the job. Other variables which could be argued to belong to this section are job satisfaction and performance, though they could also be seen from a different angle as consequences or part-determinants (this would also depend on the definition of job involvement).

**Supervision:** In a study by Anderson (cited in Lodahl & Kejner, 1965) of twenty-five female head nurses in a large general hospital, it was found that job involvement
was negatively associated with the leader consideration scale (LBDQ) and with preference for nursing care activities, and was positively associated with preference for co-ordinating activities. Jones et al. (1975), in a study of military engineers and civil service employees, divided their sample into low and high involved persons. They investigated the relationship between perceived leader behaviours and confidence and trust in him. Both, low and high involved groups achieved similar results, though the high involved group related to only four out of the six measures of leader behaviour. The conclusion of the authors was that each of the samples might have looked at different aspects of leadership and/or the highly involved person might have less need to interact with the leader.

Related to supervision is the opportunity of the employee to participate in decision making. Using the short version of Lodahl and Kejner's job involvement scale, White and Ruh (1973) found significant correlations for their dichotomized sample (low and high job involved—total N=2755 employees of six manufacturing organisations) between involvement and participation in decision making (r=.44 & r=.53). A similar result was obtained by Schuler (cited in Rabinowitz & Hall, 1977).

The work group: Lodahl and Kejner (1965) cite work done by Hearn (1962) where he found that team operators were more job involved than people working alone. They also describe a study by Lodahl (1964) who found a correlation between job involvement and the numbers of people contracted per day, and to the physical distance of other workers.

Job level: Lodahl and Kejner (1965) did not find differences in job involvement for various levels of nursing personnel. Nevertheless, the assumption that people are more involved in the higher level jobs
(for example, Tannenbaum, 1966), is partly supported by the Mannheim study (1975) who found a significant difference between those occupations requiring specific skills and abilities (having the highest centrality scores) and other groups. Work was most central (important) for professionals, scientists, and technicians, followed by administrators, managers, clerical workers, traders, craftsmen, and production and process workers. Lowest work centrality scores were given by those employed in "services and recreation". Rabinowitz (1975, cited in Rabinowitz & Hall, 1977) found no relationship between involvement and measure of skill level in a sample of operating, supervisory and technical jobs.

Structure and nature of the job: McGregor (1960) sees the organisation as responsible for the behaviour of its employees. This he regards to be true because, as he states, the way people behave is largely dependent upon the assumptions of management. The latter are in turn responsible for the work design. Similarly, Argyris (1964) argues that the structure of many organisations does not recognize the need of workers to mature (by desiring for instance, more independence and complex jobs). Both authors argue that such work design leads to less job involvement.

According to Blauner (1964), job involvement may come from personal control, from association with others, and from a sense of purpose. Continuing the same line of thought, Bass (1965), in his discussion on job involvement, points to a variety of conditions at work which might strengthen it. Some of these are the opportunity to make more decisions regarding one's job, the feeling that one is contributing to the company's success, and the freedom to set one's own pace. Lawler and Hall (1970) mention that, other things being equal, more people will become involved
in a job that allows them control and a chance to use their abilities. Hall (1971) argues that the more an individual's job contains autonomy and challenge, the more likely he is to become job involved. Patchen (1970), measuring "general job interest" (a highly similar construct to job involvement), found that it correlates with control over work methods, feedback on performance, difficulty with the job, and the chance to learn new things. An interesting and unexpected finding of his, is that need for achievement is unrelated to "general job interest". On the other hand, Steers (1971) found a correlation of .22 between job involvement and need-achievement in a sample of female clerical supervisors. Wanous (1974) believes that a person holding a set of work values similar to those known as "Protestant Work Ethic", or middle-class work values, will become involved in his job when it allows for autonomy, variety, challenge, feedback and task identity. Waters, Roach and Batlis (1974) found that job involvement correlates (.31) with work autonomy, i.e., a situation in which the worker has control over his job and therefore, presumably, responsibility.

1.4.1 The relationship between job involvement and job satisfaction. There is an apparent failure to realize, until it is pointed out, that it is possible for some persons to be highly satisfied, but not involved, and for others to be highly involved, but not satisfied (Lawler and Hall, 1970; Seeman, 1971; Weissenberg & Gruenfeld, 1968). It might be that the reason for this apparent failure is that the two variables; that of job satisfaction and that of job involvement, were taken for granted to be part and parcel of each other. That is perhaps one of the reasons why much more research has been made in the
area of job satisfaction, while at the same time, research on job involvement was relatively cast aside.

Although job satisfaction and job involvement were usually found to correlate (Lodahl & Kejner, 1965; Gannon & Hendrickson, 1973; Schwyhart & Smith, 1972; Schuler, cited in Rabinowitz & Hall, 1977) as Lawler and Hall (1970) point out, they are independent of each other. Nevertheless, a factor analysis by Lodahl and Kejner (1965) shows that in a sample of engineers both variables load on the same factor. Their conclusion is that in that case "job involvement had roughly the same factorial content as job satisfaction". Supporting the independence of both, Kanungo et. al. (1975) found no differences in job satisfaction between high and low job involved groups. Weissenberg and Gruenfeld (1968) attempted to clarify the relationship between motivator and hygiene satisfaction variables and job involvement. The results of the study were such that motivator (but not hygiene) satisfaction variables correlated with job involvement.

1.4.2 Performance. Vroom (1962) speculated that a direct relationship between involvement and performance may exist only for jobs requiring valued and possessed abilities. Lodahl and Kejner (1965, in a sample of engineers); Goodman, Rose and Furcon (1970, with scientists); Lawler and Hall (1970, in R & D employees); Siegel and Ruh (1973, in rank and file workers); Steers (1976, in female clerical supervisors); Hackman and Lawler (1971); and Schuler (in Rabinowitz & Hall, 1977, using a sample from a manufacturing firm), found no relationship between job involvement and performance. An explanation for such findings is provided by Lawler and Hall. They said that a person may view the job as important to his total identity because of socially satisfying relationships, social status, security reasons, or a sense of meaningful activity. Thus,
performing well is not necessarily associated with involvement. On the other hand, it may be that a criteria looking at quality performance, rather than at quantity performance, may be more likely to be related to job involvement. Hall and Lawler (1970, in a sample of R & D) found a correlation between job involvement and global technical performance (.43), but no relation of job involvement to an objective or composite measure of performance. Such results could be looked upon as supporting quality criteria (rather than that of quantity) to be related to job involvement. Alternatively, the results suggest that non-objective criteria derived from supervisory ratings are influenced by the employees' level of involvement. Related to the latter explanation, Wood (1971) found that inter-correlations between supervisory and objective ratings of performance, ranged from .31 to .55 for the high job-involved workers, but -.22 to -.32 for the low-involved workers. Wood's (1971) study with female factory workers supports the validity of job involvement as a moderator between job performance and job satisfaction. He found no significant correlation between the workers' performance and their level of satisfaction. But when he dichotomizes the group into high and low involvement groups, the results manifested significant correlations. For the low-involved group, correlations were found between performance and satisfaction with the company and salary. For the high job-involved group, correlations were found between performance and satisfaction with recognition and correlation between performance and advancement. In a more recent study, Wood (1974) viewed the degree of job involvement as an orientation to work. He hypothesized that for those workers who are intrinsically oriented (i.e. high job-involved), performance, as evaluated by supervisors, would not correlate with satisfaction. On the other hand, for
those with an extrinsic orientation to work (i.e. low job-involved), there would exist a relation between the firm's appraisal and the workers' satisfaction. The argument given for these assumptions is that the low-involved worker is more strongly dependent on the external criteria on which the firm bases its appraisal. Wood's data seems to support his assumptions.

1.4.3 Turnover and absenteeism. Siegel and Ruh (1973, sample of manufacturing workers) show a weak and negative relationship between involvement and turnover, and no association between involvement and absenteeism. Similarly, Farris (1971) found a correlation between involvement and turnover in a sample of pharmaceutical personnel, but no association in a sample of engineers. On the other hand, Patchen (1965) found negative correlations between involvement and absenteeism. Dewhirst (1973), from a different perspective, uses turnover and absenteeism as actual measures of job involvement, relating them to job performance.

1.4.4 Summary of job involvement. Research made after Lodahl and Kejner (1965) seems to confirm their assumption that job involvement is affected by organisational conditions and childhood socialization. The effect of the latter, though, seems particularly strong, making job involvement a fairly stable variable which could be looked upon as an individual characteristic (research showed that neither job enlargement, nor economic stress changed job involvement levels). Mixed results were obtained for the relationship (if any) between job involvement and personal characteristics of age, sex, education, and length of service. Marital
status does not seem to be related to job involvement. It also appears that higher levels of job involvement go hand in hand with internal locus of control.

Regarding characteristics of the job, job involvement seems to be (at least for head nurses) related to the preference for co-ordinating activities. It also seems that behaviour toward supervisors might be somewhat different for people with various levels of job involvement. However, there are conflicting results regarding the effect of job level on job involvement. Positive and strong relations were found between job involvement and participation in decision making. And, results seem consistent in that, work with other people and the possibility of social interaction, go hand in hand with higher job involvement. There is theoretical consensus and some evidence that job involvement is influenced by the work design. Control over work methods, feedback on performance, difficulty of the job, and chance to learn new things seem to be related to job involvement. It would be interesting to see whether job involvement does not relate to need achievement. Such a finding would pose some inconsistencies if both, job involvement and need achievement are looked upon as variables which are affected (or determined) by early socialization experiences of a similar nature ("middle-class values").

Job involvement is independent of job satisfaction, but is often associated with it. It is particularly associated with the intrinsic facets of job satisfaction. For example, how challenging the job is. Job involvement is the importance of work to the Self and the intrinsic facets of job satisfaction are those that are supposedly important to the Self as well. That is why there is often an association between these two variables. Regarding job involvement as independent of both job satisfaction and performance, makes it a successful moderator between the two. The introduction
of job involvement, by dichotomizing groups into high and low job involvement, enabled, for example, to find the existence of prior non-existent or weak correlations between satisfaction and job performance (Wood, 1971).

The direct relationship between job involvement and performance remains unclear, largely due to problems in the criteria of performance. Similarly, there are mixed results regarding the effect, if any, of job involvement on turnover and absenteeism.

1.5 Orientations to work

An additional approach to the understanding of working behaviour is that of orientations to work. The most frequently used orientations to work are:

1. **Instrumental orientation** (also called "extrinsic orientation"): Seeing work as a means to an end, or ends which are external to the work situation. Work is regarded as a necessary expenditure of efforts in order to acquire the income and rewards that enable the worker to live, support a family and carry out his leisure activities.

2. **Expressive orientation** (also called "intrinsic orientation"): Seeing work as an end in itself. Regarding work as a place for self-expression, self actualization, and a source of intrinsic satisfaction.

3. **Social orientation** (also called "people orientation" and "solidaristic orientation"): Seeing work as a social activity. Regarding it as a source of social rewards and relationships.

4. **Promotion orientation** (similar terms are "career orientation" and "bureaucratic orientation"): Seeing work as a ladder. Regarding it as a source of advancement and status.

Bass (1967) presents three similar orientations (excluding the instrumental):
1. **Task orientation**, which is the same as expressive orientation.
2. **Interaction orientation**, which is similar to the social orientation, and
3. **Self orientation**, which resembles that of promotion. Bass thinks that assessing orientations furthers the understanding of performance.

Another way of looking at the first three orientations is by seeing them as parallel to the three traditional "models" about the nature of man (Schein, 1970). These models are: the economic man, the social man, and the self-actualizing man.

One model is that of "economic man". This model is derived from a hedonistic philosophy, in which man does the maximum in order to enhance his own interests. Such a philosophy of life led to (Adam Smith) regarding work as an activity which should bring the greatest economic gain. This has been regardless of whether the process of work itself had an intrinsic value to the performer. The behaviour of "economic man" can, thus, be seen as similar to the behaviour of someone who holds an instrumental orientation. The two emphasize extrinsic satisfaction.

A second model is that of "social man". The assumptions of this model are derived from Elton Mayo's (1945) conclusions from the Hawthorne studies. In this model, man is seen as basically motivated by social needs. Man obtains his identity through relationships with others and is in solidarity with them. He is apt to be in much more solidarity with his fellow workers rather than with his bosses or outsiders. One can see the likeness between this model and the social orientation.

The model of "self-actualizing man" is derived from the belief in man's inherent need for using his abilities in an intrinsically rewarding and productive way (Argyris, 1964; McGregor, 1960; Maslow, 1964).
This model has a full resemblance to the expressive orientation which also stresses the intrinsic satisfaction from work.

Schein (1965) discusses a "mixed" model of man, i.e. having all the orientations at the same time, arguing that people differ only in their priorities.

Orientations were first used by Rosenberg (1957) in his study of occupational values and reintroduced by Goldthorpe et al. (1968). The latter found relatively high attachment to work among car manufacturers in Luton. This finding was in contradiction to previous American studies on the alienating effects of assembly line work (Walker & Guest, 1952; Blauner, 1964). Goldthorpe's explanation was in terms of instrumental orientation to work, arguing that "affluent workers" regard work primarily as a means for gaining material rewards, attach relatively little importance to the "self actualizing" aspects of the job, and therefore are not badly affected by the assembly line technology. They conclude that:

"The question of job satisfaction cannot in the end be usefully considered except in relation to the more basic question of what we would term orientations to work."

"Until one knows something about the way in which workers order their wants and expectations relative to their employment - until one knows what meaning work has for them - one is not in a position to understand what overall assessment of their job satisfaction may most appropriately be made in their case."

Orientations to work are normally taken to include both preferred outcomes and the standards for judging these outcomes. It is important to notice that as Goldthorpe et al. (1968) and Ingham (1970) point out, orientations are something the worker brings with him into the work situation and they
reflect the properties of the individual more than
the nature of the situation.

1.6 Final comments on the review of the literature

Several reviews of the literature (Katzell, 1964; Vroom, 1964, 1970; Athanasiou, 1969; Kahn, 1972) hold
the view that workers' attitudes and behaviour should
be explained by both the properties of the situation
and those of the individual. Seashore (1973) even tries
to attach speculative weights to the relative influence
of individual variables, situational variables and
interaction effects. Nevertheless, Herman and Hulin
(1972) conclude that virtually no studies have been
made investigating the simultaneous influence of
organisational variables and individual characteristics
on workers' job attitudes and behaviour.

Attitudes and behaviour have traditionally been
thought of as positively correlated and determined by
common factors. In fact, such relationships have not
always been found (Brayfield & Crocket, 1955; Vroom,
1964; Athanasiou, 1969) and several variables like
abilities and self-esteem have been suggested as the
moderators in this relationship.

It follows from the above cited literature that
a description of the relationships between various
variables is a prerequisite for a fuller understanding
of workers' attitudes and behaviour. While there are
these variables which have already drawn much attention,
leading to voluminous research, there are others, such
as job involvement, which might have often been
mentioned, but on which little empirical data exists.
In this context, it should be said that the investigation
of variables, one at a time, particularly in the early
studies, demonstrated with their results that an
approximate understanding of the realities at work can
be achieved only by looking at several variables at the same time. Thus, a conclusion of this review of the literature is that more would be learnt about work attitudes and behaviour if man were looked upon as a complex being in whom many variables are at play concomitantly, and a multivariable approach would have its obvious advantages in this kind of study.
2. Conceptual framework

2.1 Introduction

As an introduction to the conceptual framework of this study, it is important to understand the reasoning behind its thesis. The discussion of three topics should help clarify this reasoning. These are: causalism, the objective-subjective dilemma, and the benefits of a multivariable approach to the study of social science. This will be followed by a short discussion on alienation which is the topic that prompted this study.

2.1.1 Causalism. Causalism is, in its traditional form, the assumption that determinism and causation are coextensive and that science is the discovery of causality, and therefore scientific laws are all causal. In rationalistic thinking (Kant, Leibniz), it is assumed that the causal principle is an a priori principle of thought.

"It is ... the belief of Kantians, who assert that the causal bond is synthetic, in the sense of being verifiable in experience, but not derivable from it nor further analysable" (Bunge, 1959, p. 28).

As the philosopher David Hume argues, the causal inference is very persuasive. However, he believes that it is impossible to isolate an empirical referent which indicates the presence of causal necessity.

An alternative assumption, acausalism, is the position when causation is reduced to external connection, succession, and concomitance. Ultimately, acausalism involves a radical empiricism which, in the extreme, denies logical constructs and theories. In considering his position, the present author was reminded of the distinction between an agnostic and an atheist. The
latter denies altogether the possibility of the existence of God, while the first does not acknowledge the existence of God, but at the same time does not deny its possibility.

The assumption that behavioural events are organised in meaningful ways (i.e. understandable) is deterministic and cannot be demonstrated empirically. This is why the study of even natural phenomena must be based on empirical evidence plus the thought processes of the investigator. The investigator must be constantly humbled by the fact that the strength of his work comes down to his ability to impose order on the empirical data (DeCharms, 1968). A cause (for example, a motive) is a constructed concept which is imposed on data. On the other hand, the establishment of a correlation (concomitant variation) is an empirical affair. As both Hume (1740) and Kant (1781) point out, justification for causal connection must be extra-empirical. The concept of a causal relationship is abstracted from the data by the investigator. It is possible to establish a) concomitant variation, b) temporal sequence, and even possibly c) co-presence and co-absence of cause and effect (Selltiz, Jahoda, Deutche & Cook, 1959), but these are not fullproof empirical evidence of a cause and effect.

Thus, the Humian empirical argument is accepted by the present author who, moreover, accepts that people definitely think in terms of causes, so consequently sees it as beneficial to look into the concept of causality in these perspectives. The following research was planned having in mind the above notions concerning causality. This led to the formation of a descriptive study in which as far as possible, no causal links were imposed a priori. Nevertheless, it is obvious that for the discussion of the data and its understanding, explanations are given in causal terms, though the proof of these is
not attempted.

2.1.2 The objective-subjective dilemma. The second topic for clarification is the objective-subjective dilemma. This dilemma can be regarded as equivalent to the mind-body issue, according to which, all that is subjective is in the mind, and all that is objective is physically verifiable. Science has found much usefulness in seeing man as a machine operating through cybernetic feedback mechanisms. However, the fact that there are differences between men and physical objects is usually acknowledged. When behaviourists ignore psychological phenomena, simply because they are subjective or private, they are arbitrarily narrowing their field (Koch, 1964). In doing so, they limit their understanding of man.

When dealing with persons, psychologists, at one and the same time, deal with the objective and subjective which are intertwined in the life of the individual. Only for the sake of research and explication, do they separate the two. This separation is purely artificial and never renders the complete picture of the individual.

Psychology cannot reconcile the subjective and the objective by rejecting either one of them. It cannot cast aside the objective because human beings have physical properties that exist in time and space. It can neither ignore the subjective since humans have personal knowledge and intention. Human beings are seen as an origin of motion, as internally motivated, sometimes as a center of consciousness. That is, they are seen as having an internal locus of causality (DeCharms, 1968), having will-power, being "unmoved movers" and "context independent" (Holmes, 1976).

The acceptance that people have motivation (as opposed to drives) leads to the belief that man has
potential for "psychological growth". This means that man is capable of striving for responsibility, independence, and the confronting of challenges. The level, ability and direction of this potential in man is related to individual characteristics. Many of the latter are assumed to depend on the individual's socialization and reference groups. Inherent in this view is that there would be people striving for "psychological growth", as well as people who would strive to be in a situation with no responsibility, dependent on others and meeting as few challenges as possible. This is not to say that there are men with inherent nature A and men with inherent nature B. Most probably there would be individuals along the whole continuum between these two poles.

The relevant question then, is not whether such people are found, or more importantly, under what conditions different proportions of them are found, but how such situations are interpreted (and here is where our own values show up).

Human behaviour is partly the result of internal motivation (which is not influenced by the immediate environment). Individuals may vary greatly in their levels of aspiration. The latter will depend on the person's subjective outlook, which in turn depends greatly on the individual's frame of reference. This is, to a great extent, provided by experience, expectations, and alternatives available in a given situation.

This study is designed so that what matters most is the individual's subjective feelings concerning his work. Answers given to questions, about how one feels about aspects of his work, are the end result of mental processes which take into account the person's subjective world. As feelings that are conveyed already include these, it is unnecessary to look into things such as experiences and expectations.
There is also a seemingly objective approach to this study in which the feelings of groups of people who are in "objectively" different occupations are compared. The fact that the occupations are "objectively" different was to be derived by consensus of experts in these occupations.

2.1.3 The multivariable approach. The third subject for clarification is the growing need for a multivariable approach (which is the one used in this thesis). This approach refers to the analysis of various variables not only one by one, or one at a time, but also in relation to other variables. According to this approach, no real picture of problems in human behaviour can be portrayed by neglecting the different aspects and relationships since most of these are complex. For instance, research on job satisfaction in the last decade should have taught a lesson about the disadvantages of comparing variables one by one. Hundreds if not thousands of studies were performed in this area trying to relate job satisfaction to performance or other behaviours with no significant success. These results do not necessarily prove that the assumptions about job satisfaction were incorrect. The problem might have been that the assumptions were seen as simple ones rather than complex, in which more than one psychological variable should have been taken into account at the same time. One cannot separate variables and try to find a "real" link with another variable while completely ignoring all others which might be relevant. Nevertheless, it must be remembered that even when taking many variables into account the danger always exists that the results might still be "unreal" when the wrong variables are chosen.

This day and age have brought with them many scientific and technological discoveries. Their
application had unprecedented impact on the relations between man, society and the environment and created new problems. A strong criticism can be leveled against present attitudes in confronting problems: people are more used to analysing than synthesising, to examining problems one by one, each as a separate entity, than to making efforts at synthesizing.

This goes against the reality of today's very complex and dynamic systems, where phenomena - no matter how disparate - are interlocked and whose interactions are decisive. Industry is an example of a system in which components such as organisation, technology, environment and human factors are, in the majority of cases, looked upon separately. Nevertheless, it is seen as the manager's task to allocate financial, technological and human resources. The success of the manager's endeavours will greatly depend on and be determined by his ability to evaluate and co-ordinate these factors, while he is aware of a given environment (for example, labour demands and individual's expectations, abilities and limitations; market situations and development prospects).

In keeping with the multivariable approach to the data, the model of man suggested in this thesis is very similar to Schein's (1965) "complex man". This view, as its name implies, sees man as complex and highly variable. His motives interact forming complex patterns which are arranged in some sort of hierarchy according to what is important to him. Naturally, these motives and/or patterns are subject to change from time to time as our environment is never exactly the same. Motives are dynamic, theoretical concepts and as such, they may change, even radically, according to past and present experiences. Extending this view, it should be made clear that a motive is a concept which may be said to contribute to the production of a behavioural
effect. Workers can become productively involved with the organisation on the basis of many different kinds of motives. Argyris (1964) argues that if organisations had been made more meaningful, they would have been able to elicit greater involvement, and thereby greatly improve their overall effectiveness. Again it should be pointed out that the nature of motivation is only one factor among the ingredients which play a role in man's satisfaction and the ultimate effectiveness of the organisation. The characteristics of the work setting (for example, level of technology), the work itself, the abilities, experiences and expectations of the person, his inclination or general orientation (for example, his predispositions to the particular working situation); management strategies, and the nature of the other people in the organisation (supervisors, fellow workers) all interact to produce specific compositions between working conditions and individual reactions. As Schein states, "where we have erred is in oversimplifying and overgeneralizing."

Suggested in these comments is the necessity, in this kind of research to look not only into situational and organisational structures, which include technological restrictions, but also into any other variables which might affect alienation and (dis)satisfaction among workers. It follows that, man, being at the center of attention in this thesis, renders it pertinent to investigate in particular how his personal characteristics (the resulting combination of genetic and environmental factors, including past and present expectations) might influence his behaviour at work. As for the present study, it has been decided that the best strategy of research in order to increase our understanding in the area and to be able to expect more fruitful results, is to analyse as many relevant variables as possible. Alternatively, to use at least
those variables which seem of major relevance.

2.2 The relevance of alienation to work conditions

Perhaps a basic feature of most present jobs is that work itself is not closely integrated in the "total life" of individuals and communities, thus predisposing workers to be estranged from their tasks. One way of explaining this assertion which appears frequently in the literature on alienation (see chapter 1), is to see this as a phenomenon of modern society's political and economic aspects. Fromm (1959) holds such a view stating that "the alienation between man and man results in the loss of those general and social bonds which characterize medieval as well as most other precapitalistic societies." (p. 139).

As Thorsrud (1972, in Davis and Taylor, 1972) asserts:

"The relationship between man and his work is basic to his relationships to himself and to his fellow men. If we cannot improve these basic relationships, I doubt very much we can even turn our attention to more global problems."

Other related explanations could stem from the artificial division made between work and leisure and the introduction of a technology of automation in every field.

According to Davis (1972), the group that is first to be affected by automation are the industrial workers because they stand at the confluence of changes involving technology, social values, economic environment, organisational design, job design and the practices of management. He states about the future: "No longer will workers patiently endure
dehumanized work roles in order to achieve increased material rewards." Most affected by automation are workers who at every given moment of the work process have to be at the disposal of machinery; having to respond many times to stochastic conditions (what is meant here mostly is the control and maintenance of automated machinery). Concomitantly, they have nothing to say about the actual pace of work and their only possible achievement is to keep the machine running. It is characteristic of this kind of jobs, where technology dictates the narrow limits of available contingencies of almost "automatic" behaviour, that it is extremely difficult for certain workers to find sources of satisfaction in their jobs. Inherent in the relationship of man and machine is also the organisation of structural conditions which tend to hinder satisfying relationships between fellow workers.

When discussing the concept of alienation, it should be stressed that alienation can be seen as determined by 1) external, 2) internal constraints, or 3) a combination of these two. This would mean that alienation at work could be a product of the particular environment (for example, technology), or inherent in the individual; or a combination of these two. The present author holds the third possibility to be the most feasible one. Confirming the validity of these assumptions, and finding out the weight of each of the alternatives would be a significant step forward in our understanding of human behaviour, however such endeavour is beyond the scope of this study.

In the past two decades, social psychology has witnessed a growing concern for the taking into account of individual differences, in addition to other "classical" variables (Annual Review of psychology, vol. 22, 1971).
A number of studies could demonstrate that individual differences considered as moderators or intervening variables, gave the results increased reliability, helped to make them more meaningful, and above all, improved their criteria for construct validity (Siegel & Bowen, 1971; Wiener, 1973). Wood (1971), using job involvement as an individual difference and trying to get a more reliable picture about the relationships, if any, between job satisfaction and job performance, made a study in which he analysed his data twice. First, he analysed the data for the whole sample (without taking individual differences into account, or in this case, the level of job involvement of the subjects) and found no significant correlation between satisfaction and performance. Secondly, he dichotomized his sample into high and low job involved individuals and analysed the relationship between job satisfaction and job performance for each of these groups (the high-involved and the low-involved) separately. This time he got significant relationships, showing that individual differences play a meaningful role in the understanding of work behaviour. In accordance with this, it has been argued that in most instances, when dealing with socio-technical systems, it is necessary to take into account relevant individual differences.

A considerable practical constraint on any scientific research on alienation would be the diverse connotations, and the difficulty in showing any construct validity while using this concept. Thus, the author of the present thesis suggests to use more restricted concepts (perhaps less dynamic), but which may, for the sake of study, be defined operationally. An example here would be to use concepts such as self-esteem, whose connection to
alienation was shown in chapter 1. Self-esteem is a concept which is relatively better understood than alienation. Self-esteem is also less abstract and less complex and is easier to get a consensus as to its definition. Alienation, on the other hand, seems open to much diversity of interpretation. The most frequently accepted mode of understanding alienated labour in modern times is the one put forward by Marxism. However, it is not the purpose of this thesis to prove or test the Marxist theory.

The author of the present study is mainly interested in the psychology of humans at work. In this area, most research has been conducted on job satisfaction. The latter's definition has been accepted by the author as:

"The feelings that are associated with a perceived difference between what is expected as fair and reasonable return and what is experienced, in relation to the alternatives available in a given situation. If a person fulfills his expectations at work, it is sensible to assume that he is satisfied" (Smith et. al., 1969).

If these expectations aim at a meaningful and purposeful activity, the satisfied person will not be alienated. Under such a condition one can see the link between alienation and job satisfaction. As Marx claimed, a person is alienated when not acting upon his environment in a meaningful and purposeful way of which he is aware. So, if hypotheses were proposed to demonstrate, for example, that the construct validity of alienation could be derived by the direction of the workers' 'locus of control' and degree of automation at work, it would be more useful and clear to relate these measures to job satisfaction and self-esteem, rather than to alienation.
2.3 The original problem

The purpose of the study was to make an attempt at getting information about the sources of behaviour in a working environment. It was hoped that such research would help in providing empirical data, which could be used in projects aimed at increasing levels of job satisfaction and job productivity among industrial workers. At this stage, there was no well-established traditional theory behind the efforts of the study, with the aim being that of not wanting to restrict the research to any particular school of psychological thought. This was done explicitly in an attempt to keep an open mind in the search for a better understanding of the behaviour of industrial workers. An additional aim was to try to offer some suggestions about what could be done to improve the organisation of work.

2.4 The problem reformulated

A review of the literature, together with experience gathered as a participant observer on the shop floor of a factory, led to the reformulation of the problem, and its priorities in terms of practical aims. The first objective of the study was the tentative development of a measure of WRSE which, it was hoped, could be of utility in research on working behaviour (for example, work-performance). This assumption was made on the basis of previous publications, showing that the consideration of relevant individual differences, and in particular, self-esteem and job involvement, were important, but relatively neglected in the literature. This dimension could be crucial to the understanding and prediction of behaviour in general, and working
behaviour in particular.

Regarding individual differences, two main positions in modern psychology could be argued to exist:

1. Personality theorists - who emphasize the importance of relatively permanent personality characteristics, mostly developed through early(ier) socialization experiences, as the most significant variable affecting behaviour arousal and direction.
2. Behaviourists - who take an opposite view, i.e., they see all behaviour as controlled by environmental circumstances, disregarding individual differences (the "black box"). It is the position of this thesis that both these theoretical models are too rigid, and take a one sided view in what concerns human behaviour. This stand seems to be supported by results obtained from research of investigators from both schools, which usually leave a great proportion of the variance unexplained. Mischel (1968) believes that there is an interaction between the individual and the environment. He states that

"although it is evident that persons are the source from which human responses are evoked, it is the situational stimuli that evoke them and it is changes in conditions that alter them" (p. 296).

He rejects trait theories because he states that they hold that individuals cannot change due to personal traits that are predetermined and imposed by irrational, infantile forces. Mischel disagrees with these theories because, according to them, a person responds in the same fashion in every situation. He concludes that people behave in accordance with the situation which they are in.

Dunnette (1976) also believes in the interactionist position. He sees personal dispositions as:

"generalized expectancies which increase
the relative probabilities of particular situations being chosen or avoided by particular persons who, in turn determine the nature of the reinforcing or aversive qualities of those situations."

The author of this thesis holds that progress on the understanding of human behaviour would be made if behaviour were considered in specific situations as determined by both subjective structures and conditions of the environment. It is suggested that progress would be achieved only by considering which environment, people, and/or conditions. The author believes that the environment can be interpreted by the individual in different ways, and that this interpretation can lead to different behaviours in the same situation. For example, Rotter (1966) shows that in a skill situation one's expectancies of future outcomes are more contingent upon past performance than in a chance situation.

2.5 Work and "Total Man"

Why had the field of work been chosen? There are different ways of looking at work. These (if already not covered by "orientations to work", see chapter 1, sec. 1.5, pp. 51) normally fall near one of the poles, or somewhere along the continuum between the following two:

1. As a means to an end (instrumental only): where the end is wages or salary and things they can buy. This view could be prevalent in individuals a) when they are willing to forego satisfaction, and work hard for a period of time to earn more money in order to attain certain goals, such as buying a house, car, etc. (provided such highly paid jobs are available for them), b) when the employment market is such that it leaves the worker without much choice in finding a suitable occupation, and c) when the
individuals' skills are such that his minimum acceptable wages are given only in a kind of job which is highly monotonous and/or physically strenuous.

2. Work as part of life itself: This approach sees man as a "total individual" seeking a meaningful life and inspiring to fulfill higher or intrinsic needs, whether extrinsic needs are fully satisfied or not. This stand can be said to be similar to Maslow's (1964) theory of motivation. However, in contrast, it does not assume a hierarchy of needs once a minimal standard of satisfaction with basic needs has been achieved. In this respect, the position is more similar to Herzberg's (1966) two-dimensional model of needs. It is important to note that not only sophisticated types of occupation are filled by men with intrinsic or higher goals. The literature shows many cases in which even the least skilled jobs could bring fulfillment and satisfaction to its performers. (for example, Pritchard, 1969; Turner & Lawrence, 1965).

Contemporary research (Pritchard et al. & Davis & Taylor, 1969) indicates that there is an increasing disaffection on the part of young people for industrial or similar jobs, because these unskilled jobs are regarded as dull and uninteresting. Moreover, workers' organisations such as Trade Unions in industrialized countries, are showing signs that in the future they will not be content with real increases in wages only, but will also want to see an improvement in the "quality" of industrial jobs. This tendency makes research in this area important and necessary.

A sound theoretical start for understanding why it is thought that work can play an important and central role in the life of individuals can be found, for example, in Freud's book "Civilisation and its Discontents" (1914). Freud says that "work is man's
strongest tie with reality" and therefore almost indispensable to healthy psychological functioning. It should be noted, however, that work is not the only component for man's continuous assessment of his environment, but one of the most important. For it is through work that one can act upon the outside world and modify it by these actions. This conception could perhaps be related to the Marxist concept of "praxis", and the idea that one of the fundamental differences between nature and culture for Levi-Strauss comes from the fact that "cultural" as opposed to "natural" objects are modified by human action.

Another important function of work is to provide a sort of testing ground for the individual's sense of worthiness. The individual can test the latter by seeing how well his abilities enable him to deal with his social and physical environments. Since the occasions for self-evaluation found in the family, among close friends and relations are many times not sufficient, work becomes the testing ground for one's sense of worthiness. This may be so due to the small number of persons who fill the function of family and friends in our type of society. Moreover, the high emotional charge attached to those put these evaluations on a different dimension as far as reality testing is concerned.

Jahoda (1966) discusses the link between work and reality, suggesting a number of dimensions:
1. Work strengthens the experience of the passing time (people without work tend to lose a sense of time).
2. Work encourages the continuous action necessary to maintain objective knowledge of reality.
3. Work permits the pleasurable experience of competence.
4. Work adds knowledge, particularly of interdependence with others in common purposes.
5. Work permits the enrichment of the world of immediate experience and it permits the mutual reinforcement of pleasure and reality principles as regulators of adult behaviour.

It is also the author's opinion that one of the problems of modern industrial society is the sharp differentiation of work from other areas of experience, resulting in a feeling of estrangement and alienation from work. The resulting feelings of alienation (due to the artificial division between work and other areas), in turn affects man's relation to work. A challenge to the author's opinion that this is a problem could be said to come from sociologists such as Dubin (1958) and Whitehill (1964), who do not see work as such an important activity since, in their opinion, most people today find their fulfillments outside work.

In the present pilot study of this thesis it has been found that the most frequent answer to the completion of the sentence "Work for me is..." was: "Work for me is something which has to be done." (This pilot study was carried out in a population of unskilled workers of the servicing industry).

Kellman (1966) distinguishes among three categories in the acceptance or change of social norms, which are:
1. compliance- you do something because you are afraid of the sanctions.
2. internalization- when the norm becomes more personal and the constraints are internal and not external.
3. identification- there is no more the problem of constraint; the norm is part of the individual.

If this frame of reference were used in relation to problems concerning work, it could be said that in the first category-compliance- a slight change in the environment (for example, supervision, pay) might
bring a drastic change in attitudes and behaviour towards the job; while the second and third categories would be less dependent on environmental cues. Thus, one cannot expect to find need towards involvement, internal responsibility and creativity in a situation in which work is seen as an imposition. However, it is evident that such needs, as exemplified in some professions (like nursing), are one of the main attractions to remain in certain jobs, even when the pay is relatively low. Therefore, it is suggested that if work had been made to be "part of life itself", it would have contributed to the reducing of the number of drop-outs from industry as well as the amount of turnover and absenteeism in different firms.

The conception of work involving "total man" is closely related to the framework of this study. In very general terms, the problem in the specific area in which this thesis deals seems to be that most research makes no distinction between the two approaches to work mentioned earlier. This results in findings which are confounded with regard to the relations between job satisfaction and its assumed correlates. It is believed that in order to get meaningful results, among other things, individual intervening variables must be taken into account.

2.6 Self-esteem

2.6.1 Definition. Self-esteem is defined as the evaluation that the individual makes and customarily maintains with regard to himself; i.e. it is a personal judgement of worthiness. This definition coincides with the one given by most authors, for instance, Rosenberg's "a positive attitude towards the Self," Diggory's (1966) "a
positive evaluation of oneself, related to the part we play in accomplishing our goals", Korman's (1974)

"Self image, self perceived competence, self perceived abilities, expectancy of success, are all variables that are logically subsumable under the general self-esteem variable".

The fact that different measures of self-esteem developed by different authors are highly related (Silver & Tippet, 1965) also strengthens the conviction that, when referring to self-esteem, most authors mean similar things, though their theoretical perspective might be different.

Somewhat different in this approach is Ziller (1973) who proposes self-esteem as a perceptual-adaptation mechanism, mediating between the organism and the environment, though in common with the other authors he sees it as helping in the keeping of the consistency of the individual's responses. Ziller's (1973) definition of self-esteem is "a cognitive orientation of the Self in relation to significant others along an evaluative dimension chosen by the evaluator himself". His approach stresses the adaptive functions of self-esteem in social behaviour, which are carried out by definite modes and patterns of perception (for example, leveling, i.e. overlooking differences between objects; sharpening, i.e. differentiation; assimilation and organising).

The present definition of self-esteem includes the word "customarily" which perhaps needs some clarification. "Customarily" refers to a vague description of length of time; something that is maintained for an unspecified period of time and has some permanency, but which at the same time is neither fixed nor permanent nor transient at the appearance of a relevant stimulus (whether failure/success or as a consequence of social interaction). The usage of the word "customarily" makes strict operationalization of
self-esteem impossible until more empirical data is gathered, and then presumably, the definition might have to be changed in order to allow for specificity in circumstances (i.e. under what conditions). The word "customarily" also implies certain dynamism of the self-esteem structure. Self-esteem is characterized by being something predictable and, at the same time, something which can change, not necessarily following direct stimulation (like "negative reinforcement"). People can be said to be predictable and unpredictable at the same time. The same applies to their self-evaluation and this is essentially the reason why, with our present knowledge, it is impossible to present a strict operationalization of self-esteem. Nonetheless, human behaviour, on the whole, is thought to be predictable. An explanation is that individuals, in order to make sense of their environment (and themselves) need certain stability and regularity. One way of achieving this stability in, for example, social situations, is by forming a "coalition" between the Self and the others by adhering to some rules of conduct. Adherence to group normative behaviour makes for predictability of individual behaviour. Predictability, in turn, makes it possible for other members to adapt to the individual's behaviour. Social trust renders unnecessary the constant monitoring of others' behaviour, and so facilitates concentration on specific interests, as well as simplifying the social context (Holmes, 1976).

Self-esteem, at its higher levels, permits an insulation from changes in the environment that occur from moment to moment. This creates a feeling of stability which is often equated with mental health. Evaluations by others, of either positive or negative nature, do not evoke immediate corresponding action by the individual with higher level self-esteem. New information, relative to the Self, might be examined
in terms of its relevance and meaning to the person. Some information might then be discarded as irrelevant or invalid. Even if the information is accepted, a person with high self-esteem might tend to try to assimilate the information rather than change his position. Self-esteem can then be said to provide the individual, to a certain extent, with a feeling of continuity-unity (identification) as well as with a feeling of stability which insulate the person from being a constant subject to environmental contingencies.

2.6.2 The concept of self-esteem. Recent research has shown that many individual differences may play an important role in determining or explaining behaviour. Self-esteem was selected for study from among these differences because, among other things, there is a widely held belief that it is significantly associated with personal satisfaction and effective functioning (Coopersmith, 1967). Moreover, self-esteem is an important component in mental health (Kornhauser, 1965; Rosenberg, 1965) and is related to successful achievement of tasks (Shaw, 1968), as well as having an important influence in social interaction (Fromm, 1959; Rogers 1959; Gergen, 1971). Most research concerning self-esteem tends to show that the consideration of differences in the level of this variable is crucial to the understanding of human behaviour.

Since this thesis deals with work behaviour, it is one of its aims to find out what the possible effects of different levels of self-esteem are. Therefore, it must first be explained why it is thought that self-esteem may be important in this context. Generally speaking, it can be said that, in addition to the environmental conditions (that are
external to the person), how a person behaves at his job and how successful he is at it, depend on two main groups of factors. One has to do with his ability to perform it, and the other with his motivation to perform it.

An elaboration of what is the function of Performance may be seen as follows (from Campbell & Pritchard, 1976):

\[
\text{Performance} = f (\text{aptitude} \times \text{skill} \times \text{understanding}) \\
\begin{align*}
\text{(choice to initiate expenditure of effort} & \times \text{expenditure of effort} \times \text{persistence})(\text{facilitating and inhibiting conditions not under the control of the individual}).
\end{align*}
\]

The first brackets indicate what was termed "ability", the second what was called "motivation", and the third bracket includes the factors beyond the control of the individual in what concerns his performance (for example, technology).

Another account of motivation is given by Atkinson (1958) for whom the motivation to perform some act is assumed to be a multiplicative function of the strength of the motive (the disposition to strive for something), the expectancy (subjective probability) that the act will consequently lead to the attainment of an incentive, and the value of the incentive, motivation = f(motive X expectancy & incentive).

"A motive is conceived as a disposition to strive for a certain kind of satisfaction, as a capacity for satisfaction in the attainment of certain class of incentives. The names given to motives such as achievement, affiliation and power, are really names of classes of incentives which produce essentially the same kind of experience of satisfaction; pride in accomplishment, or the sense of being belonged and being
warmly received by others, or the feeling of being in control and influential." (Atkinson, 1958, p. 324).

As it will be seen, the conceptualization of work related self-esteem involves very similar variables conducive to the experience of satisfaction mentioned by Atkinson.

In connection with what has just been said, it is important to remember the role of self-generated attributions and internally mediated outcomes which have a much more severe effect than externally mediated outcomes. This is a complication in any theoretical model, since in different conditions and/or times, for example, an individual's task-success or failure, might be attributed either to ability or effort (Heider, 1958). Attribution to effort may not lead so much to a feeling of accomplishment as would attribution to ability. So, when someone experiences failure, it is much more rewarding to attribute it to environmental factors or to the fact that the person did not put in enough effort or did not feel like trying, than to attribute it to his lack of ability. Given the importance of self-generated attributions that emphasize environmental conditions (Heider, 1958; Jones & Davis, 1965), it would be wise for the motivational models to consider the possible effects of relatively stable individual differences in these processes. As an example, Rotter (1966) suggests that individuals vary in the degree to which they perceive their control of events. Individuals with an external locus of control may see no connection between either ability or effort and task accomplishment. Conversely, those with an internal locus of control may always interpret the attainment of outcomes as dependent on the individual's own behaviour. However, if the situation is such that no matter what the individual does, rewards cannot be brought under self-control, there would
surely be long-term behavioural effects, for instance, self-esteem could steadily erode. Weiner and Kula (1970) suggest that individuals high or low in achievement motivation tend to attribute failure to themselves, but high scorers attribute theirs to a lack of effort, while low scorers attribute theirs to a lack of ability.

One source for the suggestion that an optimal level of self-esteem constitutes an important motivational force in what concerns individuals at work, is research in employment. Morse and Wiess (1955) for instance, in a study about the meaning of work in the USA, found that 80% of the employed males in the sample, after being asked if by some chance they inherited enough money to live comfortably without working—would they go on working or not—found that most men in the sample answered that they would want to keep on working. Morse and Weiss (1955) found that the reasons people gave for continuing working were: "working keeps me occupied" (interest), "justifies my existence", "gives me feelings of self-respect", "is good for oneself". On the other hand, some also said that without work they would feel lost, go crazy, feel useless and bored. Recent experimental work in the USA, where people were actually given roughly the same wages, whether they worked or not, found that most of the men continued to work or to look actively for jobs, although they knew that practically any money they would receive to perform a job would be reduced from the money they were receiving (Prof. T. Cook, personal communication, 1974; Rossi et al., 1976). The moral would seem to be that, unless work values change in our society, work as it is generally conceived is an important source of people's self-esteem. The argument that it is not self-esteem, but boredom, which is the cause of continuous employment under non-material incentive
conditions has some validity but can easily be disputed. Boredom is as good an argument for not working as it is in many cases, for working. The above results suggest that the response to boredom is seeking a different job and not unemployment. It could be argued that the above results, including many of the reasons people gave for continuing working are linked with self-esteem, and justify together with other studies already reviewed in chapter 1, the value in pursuing research in this line.

The two things that are being argued are that in our society, in the present circumstances, work provides an environment which is an important source of self-esteem; and that self-esteem, apart from its many indirect consequences (for example, see p. 12-13, chapter 1), is a motivational force per se. This view does not disregard the importance of other individual differences in motivation which are probably very helpful in determining how people might perform at their job. What is being argued is that motivation is a complex area and that among other things, self-esteem might be an important component. Among these, one variable which has received much research attention is that of achievement motivation. Why do some people try to achieve success in a task? Why are some people highly motivated to perform well when given an assignment in the job and others are not? In accordance with Korman (1974), it is proposed here that the problem of need achievement is intimately connected with that of self-esteem. Other authors, like Diggory (1966) and Smith (1968), among others, also stress the fact that since our attitudes towards ourselves have the same determinants as any other of our attitudes, we evaluate ourselves (self-esteem) partly in relation to the role we play in accomplishing our goals. In Korman's words:
"What we value about ourselves is primarily our abilities, of which our achievements bear witness."

Of course such a stand implies many values about our society, the main one being that people are judged by their "accomplishments" full stop, disregarding that there are a multiple array of other factors not based on direct performance, like race or class or age which still play an important role in people's evaluative judgements (and some would argue that most probably their impact would become much stronger under conditions of slower social change). Past accomplishments, which might not be relevant any more for current criteria of performance might also be added to the "non-performance" criteria, but which due to man's tendency for psychological consistency, it is accepted as valid criteria. An example might be a professional (e.g. doctor) or leader who at some point in time "proved" himself, and ever since his ability and/or skill is taken for granted though his accomplishment is not continuously based on his actual performance. Nevertheless, Korman's (1971) position that, for many individuals the fact that they perceive themselves as attaining their goals, is extremely important for their evaluation of themselves (i.e. self-esteem), is accepted. Research data shows that in our culture, academic achievers have higher self-esteem than non-academic achievers (Shaw, 1968). There is a significant positive correlation between self-esteem and grades obtained at college (Brookover & Thomas, 1964-5); women with high self-esteem intending to go to college are more likely to engage in activities designed to achieve that goal, than women with low self-esteem that intend to go to college (Denmank & Guttentag, 1967). Korman (1974) also presents evidence that the motivational processes known as achievement, creativity and aggression are a function of certain
belief systems about the Self, others and the world.

2.6.3 Global vs. situational self-esteem. A review of the literature dealing with self-esteem seems to show that the search for its determinants and consequences has been made assuming three different approaches: global, fixed and situational. Most researchers use the first two in conjunction. These assume that self-esteem is not differentiated for different areas of experience (global self-esteem). They also assume self-esteem to develop early in life and its level retained from then on (fixed self-esteem). Rosenberg (1965) can be seen as one of the many authors exemplifying this position. The last approach is generally shown by experimental psychologists who often regard self-esteem as situational so that it can be manipulated even by such experiences as success or failure. Experimental psychologists using such a method see self-esteem as changing with almost every new and significant situation.

The position taken here is that such views are short sighted, and that people can have different evaluations about themselves, which might change over time and within situations, depending on many factors. Mischel (1968) states that despite the fact that people may construct themselves and each other as characterized by consistent dispositions, their behaviour across settings is far from homogeneous. Accordingly, their evaluations of themselves and others may vary under different conditions. For example, a person can feel confident about his ability to deal with social situations, and less confident about how good he is as a professional, and vice versa. Favourability is given to a relatively stable structure, but which
might change over time and across situations, can be differentiated for various areas (for example, work, family relations) and is susceptible to measurement.

Those holding the global-fixed approach usually believe in the concept of personality and in self-esteem as a personality trait. Personality rests on the belief that individual behavioural consistencies exist widely and that behaviour is consistent across many situations. Results from the Fels Longitudinal Study give some typical examples of the stability of a person's behavioural patterns over time (Kagan et al., 1962). Their study backs up those supporting the fixed approach. In that study the most highly significant positive associations were found between ratings of achievement and recognition strivings obtained at various periods of childhood and in early adulthood (subjects were from the "middle class"). Children who were rated as showing strong desires for recognition also tended to be rated as more concerned with excellence and with attainment of high self-imposed standards when they were interviewed as young adults. Some of the many correlations between achievement strivings in childhood and comparable adult preoccupation with attaining excellence were exceptionally high, in several instances reaching the .60 to .70 range.

Another way of explaining the tendency to evaluate oneself and others consistently is Heider's (1958). His thesis about perceptual constancies can be seen as analogous to the consistency in human behaviour. In the same way as a stimulus object will appear to have the same size under many different conditions, while the size of the image on the retina will vary widely, self-esteem can be seen as a consistent trait over situations.
2.7 The self-consistency and self-enhancement models

There are two main theoretical arguments regarding which mechanisms affect self-esteem, the self consistency and the self enhancement models. These derive from two broad traditions in social psychology which relate to problems of interpersonal evaluations. One relevant question to this issue is how the evaluations made by others affect one's self-esteem.

Secord and Backman (1965), for example, equate self consistency to congruency with aspects of the self concept. If there are inconsistencies in interpersonal relationships, the person may change the conception of himself in order to resolve the inconsistency. Theories of self consistency hold that an individual tends to maintain or move toward a cognitive state of consistency in his actions, attitudes, and openness to information with his evaluations of himself. Relations between evaluations of the Self and others are mediated by a tendency toward self consistency. The notion of self consistency is central in theoretical approaches such as Heider's (1958) balance theory, Newcomb's (1961) symmetry model, and Baron's (1966) social reinforcement theory.

The enhancement model holds that individuals have a need to enhance their self-esteem, increase, maintain or confirm their feelings of worthiness, effectiveness and personal satisfaction. (This model is also called the self-esteem model.) Self-esteem theories normally assume that the need for self-esteem is global though it might manifest itself with respect to particular aspects of one's self-evaluation. Moreover, as Jones (1973) states:

"...the state of the need varies with the degree of personal satisfaction or frustration the individual experiences..."
in a particular situation or a period of time." 

The assumption of self-esteem theorists is that persons with high self-esteem have relatively satisfied their need for enhancement of self-esteem. In comparison, since low self-esteem individuals have not satisfied this need, they will strive for it more ardently.

The common denominator between self consistency and self enhancement models is that, in both, self-esteem is responsive to information the individual has from his own behaviour and comparative or reflected appraisal from other people. The difference between the models is that changes in self-esteem are designed, in one, to achieve self consistency, and in the other, to enhance self-esteem.

The self consistency model predicts that high self-esteem individuals will react more favourably to approval than to disapproval and that low self-esteem individuals will react more favourably to disapproval than to approval than high self-esteem individuals (Korman, 1977). This is because it is consistent with the evaluations they make of themselves. The self enhancement model predicts that, in comparison with high self-esteem individuals, the low self-esteem ones will respond more favourably to positive evaluations from others and more unfavourably to negative evaluations from others.

In general, evidence (Jones, 1973) tends to favour self enhancement theory over self consistency, though any firm conclusions are premature. Studies which obtained self consistent responses (for example, London & Klimoski, 1975; Healy, 1973; Mansfield, 1973; Korman, 1976) could also be explained as resulting from people renouncing immediate fulfillment of esteem needs, anticipating more self enhancement or less derogatory experiences in the future.
Another way of explaining results supporting self consistency studies is by Jones and Davis' (1965) concept of personalism. This concept implies that people prefer self consistent evaluations from others when they feel that they are accepted or liked by others. However, when the individual feels that he is strongly disliked or unapproved of, he would rather receive inconsistent evaluations. This fact indicates, according to the above authors, that esteem enhancement is the ruling force operating in social relations, and not self consistency.

Judging from the results obtained in the literature (Jones, 1973; Korman, 1974; Schlenker, 1975; Dipboye, 1977), both models work, but the position held by the present author sees the self-enhancement model as prevailing. In other words, it is believed that humans have a fundamental need to achieve and maintain high levels of self-esteem. Low self-esteem individuals are seen in a state of deprivation with regard to self-esteem need which motivates them to maximize their psychological success and minimize failure. Persons with low self-esteem who attribute their failure to lack of effort are seen as making decisions which will protect their self-esteem rather than as "an irrational consistency with the self perception of inadequacy" (Dipboye, 1977). Nevertheless, Korman's (1974) predictions for self-esteem as a moderator variable are seen as plausible. Korman predicted that self-esteem will moderate between self attributes and attitudes and between the former and behaviour. This is accepted though the explanation is not sought in consistency terms. Korman argues that low self-esteem persons reject their own attributes as guides and rely on social reference to maintain consistency with their self concept of inadequacy. The present author sees in the deprivation of the self-esteem
need suffered by the low self-esteem person a motivational force which might make him conform to others to a greater extent than high self-esteem persons. Thus,

"a low self-esteem person may evaluate a situation in terms of how he perceives others rate it and what its general 'acceptability' is, rather than in terms of how the situation meets his needs." (Korman, 1967, p. 537 in Dipboye, 1977).

Dittes' (1959) proposal that conformity is an attempt to enhance self-esteem through obtaining social approval is accepted. It is also assumed that the greater the impact of a situation (like one's work) on global self-evaluations, the more likely a person is to seek enhancement or protection of self-esteem than self-consistency (Wiener, 1970, 1973; Dutton, 1972; Steele, 1975).

2.8 Work related self-esteem (WRSE)

According to Mead (1934), a Social Self theorist, individuals have different conceptions about themselves depending on the social context they find themselves in. This thought, although accepted in theory by many researchers, has very seldom been put to practice in actual studies of human behaviour which generally regard self-esteem as global. Nevertheless, factor analytic studies seem in line with the view that self-esteem is complex and multidimensional (for example, Mitchell, 1962; Gunderson & Johnson, 1965; Richards, 1966; Vacchiano & Strauss, 1968; Parker & Veldman, 1969; Veldman & Parker, 1970). Moreover, when self-esteem is conceptualized as varying from situation to situation, the summing of self-esteem items for different situations puts the validity of a global measure in question. For instance, a person might feel extremely worthy in affective relationships and
his answers to items relating to this field may reflect this, but at the same time he may feel unworthy in his ability to cope with proactical problems which could reflect his feeling of unworthiness at work. Summing, for example, items related to the above example, in addition to other items, which would appear on a global self-esteem measure, will give a composite score which will be meaningless for predicting any particular behaviour. Also, it is doubtful whether it would be possible to compare individuals with the same composite score.

Korman (1970, 1971), while developing a hypothesis of work behaviour, suggests the use of measures of social and task-specific self-esteem. These have not been clearly defined either operationally or conceptually with the result that both are used interchangeably.

The present author holds that a work situational measure of self-esteem which includes the social feedback in this environment and is not too specific about the actual task being performed (since this would require, unless experimentally manipulated, a different measure for most individuals) as a more viable alternative. This approach is reinforced by Dipboye's (1977) review of Korman's self consistency theory of work motivation.

It is argued in this thesis that one's overall self-esteem (global) is affected by one's perception of worthiness in a specific situation which in turn influences, depending on the importance of the situation, overall self-esteem.

"Situational and global self-esteem replace Korman's own distinction between the chronic, social and task-specific components of self-esteem which possess several weaknesses in conceptualization and operationalization." (Dipboye, 1977).

Dipboye's (1977) criticism of Korman's conceptualization of "chronic self-esteem" also confirms the writer's
position. The notion that people have occasional feelings of general adequacy or inadequacy is endorsed. However, as was first asserted by the present author, Dipboye rejects Korman's (1974) proposal that the low "chronic self-esteem" person does not experience as much anxiety in response to outcomes of failure as the high "chronic self-esteem" person, and that self perceptions of general inadequacy endure across situations. Dipboye (1977) supports his criticism by bringing results from the literature that low global self-esteem is associated with high anxiety, fear of failure and fear of criticism, all of which reflect emotional states which the person seeks to reduce. He goes on confirming the author's assertion that global self-evaluation regarding one's worthiness as a total person does not appear to be as "chronic" as Korman suggests.

Gergen (1978) and Mischel (1968), among others, show evidence supporting the notion that overall self-evaluation (as well as many other personality traits) varies in response to changes in the situation rather than enduring across situations. The latter statement is what prompted the construction of a situational measure of self-esteem in the area of work. It is seen as essential for the further development of knowledge in the field of work behaviour.

Work related self-esteem (WRSE) is defined as a personal judgement of worthiness at work. This definition refers only to "how good I am at the job I do". The understanding of WRSE could also be increased by looking at the terms which, although may appear similar or equivalent, are different. The definition excludes the importance that the particular job has to the individual, or how desirable he feels his job is.

An attempt is made here to find the determinants
of self-esteem by making inferences from the writings of various theorists who were concerned with it (for example, Freud). Whatever the interpretations made as to what they are, what is sought are common denominators which could be useful for the building of a measure of work related self-esteem.

2.8.1 Dimensions of WRSE: (a) power-powerlessness: Historically, it could be said that the first authors that called attention to the importance of the dimension of power-powerlessness, in the evaluation of the Self were James (1890); Hoffding (1891); Freud (1914, 1920, 1921, 1922).

James (1890) states that what is defined as belonging uniquely to the individual are those objects and activities (which become associated with the human body during the process of maturing) that contribute to an increase in his positive self-feelings. It is those objects especially which the person perceives as "saturated with our own labour" that increase self-esteem. In fact, for James, individuals are what he calls their "psychic powers", their abilities and capacities, knowledge and skills. In making use of these they may encounter success and failure, and this will influence how they evaluate themselves (self-esteem). However, according to James, although it is logically possible to choose among many possible selves, it is impossible for human beings to excel in everything, so the person chooses a self on which he "stakes his salvation". For instance, if someone puts his stakes in being a psychologist, he would not usually be concerned with his ignorance in ancient languages, for example. This being so, for James, a person's self-esteem would depend, to a great extent, on what
he chooses to be and do, and this is determined by the ratio between what he actually manages to achieve and what he aims to achieve. The things that are perceived as being saturated with a person's own labour, not only enable him to have the knowledge of who he is (identity) and how good he is (self-esteem), but also show him that he can act effectively upon his environment (have power over it). On the basis of this then, it is being argued in James' theory of Self that there are elements which point out the importance of the dimension of power-powerlessness.

Hoffding (1891) links self-esteem with the idea that self-evaluation depends on whether or not the person feels that he can control his environment. According to him, the psychic life of infants consists mainly of feelings of pleasure and pain. As the child grows older he starts to differentiate between objects which might cause pleasure and pain. At this stage, the instinct of self-preservation manifests itself in feelings of love or hate for these objects. At this level, feelings about objects are guided by the idea that some can promote and others hinder self-assertion, and these will take the form of feelings of power or powerlessness, depending on whether the child feels that he can have at his disposition the sufficient means to assert himself. For Hoffding, the dimension of power-powerlessness is crucial to self-esteem because the feeling of pleasure (or the hindrance of a painful feeling) can be sensed only when people perceive its cause or hindrance, to be within reach, or in other words, if people feel that they have some control over these actions. Self-esteem, for Hoffding, is dependent on whether or not individuals perceive themselves as possessing some power of attaining the goals they aim to attain.
Powerlessness, which Hoffding equates with low self-esteem, arises with the failure to control conditions of life which seem desirable to the individual.

Freud (1914) states that the ability to love oneself is the same as the ability of having a good opinion of oneself. Even in young children, he thought he detected an instinctive tendency to treat one's "own body in the same way as otherwise the body of a sexual object is treated". This he called "primary narcissism". Early in life, since instincts are gratified auto-erotically, they cannot be distinguished from the self preservative, self assertive "ego instincts", until the individual finds a love object outside himself, usually the mother. When the child has developed, so that his own ego can be an object of love, some amount of the sexual instincts' energy can be withdrawn from objects and directed to the ego. This is what Freud calls "secondary narcissism". It is the combination of the tendencies of primary and secondary narcissism that makes the ego the principal love object. However, for Freud psychic life consists in an accommodation between the "pleasure principle" and the "reality principle". In the normally maturing individual, the impact of the harsh realities of everyday life contributes in reducing his love for himself. Between these experiences, for Freud, are the ones of losing a love object and failing to accomplish important goals. These experiences leave behind them what he calls "narcissistic scars", which contribute in creating a sense of inferiority". In order to prevent this, one has to be able to feel that he has some control over outside events and loved objects (power-powerlessness). It can then be seen that in psychoanalytic theory, the importance of the dimension power-power-
lessness in relation to self-evaluation and its connection with achievement is also stressed.

It is also important to point out that for Freud, the self-love of the normal adult is not unconditional, since one's ability to love himself (what would be called self-esteem) depends on one's achievements. In Freudian theory, achievements are studied as belonging to what he calls "ego functions". The ego for Freud is a structure which tries to conciliate instinctive drives with outside reality. For Freud, what a person manages to achieve, how he uses his abilities to accomplish his aims, how well he does things he wants to do, belong to what he calls "ego functions", and a smooth functioning of the ego (or Self) is according to him, the most important pre-condition for mental health.

More recent theorists, such as Rotter (1966 Internal-external); Atkinson (1964, subjective probability); Atkinson and Feather (1966); DeCharms (1968, origin vs. pawn) have also called attention to the importance of power-powerlessness in determining both, attitudes towards the self, and behaviour. Recent research using the concepts mentioned above (in brackets), shows that the consistency between one's feeling of power and one's actual attempts to be effective is striking. If a person believes that he is controlled by forces he cannot master, he tends to act on this belief by assuming a passive orientation to his environment. On the other hand, if a person believes that he is master of his fate, he tends to assume an active orientation to his environment.

This being so, a person's evaluation of how powerful or powerless he feels seems to be an important determinant of the actions he will take. Clark (1959) was the first to relate the powerlessness dimension of alienation to a specific organisational setting. Clark has helpfully called attention to the
distinction between global and situationally-specific type of alienation. In the conceptualization of this thesis the dimension power-powerlessness is situationally specific. It refers to the perceived freedom and control, or lack of them, the person has in the job and would be central to any measure of WRSE.

(b) Feedback. The second area, namely that of feedback from "relevant others", to which great importance was attributed as being a component of WRSE, derives mainly from the Social Self theorists. These theorists emphasize the importance of the interaction with other people as crucial to what concerns the development of self-evaluation. Social Self theorists, who are often called "environmentalists" stress the importance of contact with others for the development of personality. There are at least two forms of environmentalist thought:

1. behaviourism: approaches personality development solely in terms of social learning. In this school of thought the individual is acted upon more than he acts; and when he acts, the action itself is understandable as a learned reaction to external stimuli and there is no place for the term Self.

2. the interactionist school: emphasis is put on the Self. No matter what the person's motivations, drives, and attitudes are, or what traits he has, these are explainable only as consequences of his previous interaction with other people. In this approach, great importance is attributed to the social feedback the individual gets, and in particular from those who are significant in the eyes of the beholder.

One of the first authors who introduced the importance of social interaction in the establishment
of a Self, and who called attention to the importance of such a construct in explaining behaviour, was Cooley (1902), with his idea of the "looking-glass Self". Cooley also called attention to the fact that, although other people's opinions are important in what concerns an individual's evaluation of himself, it is possible that in many occasions one may not perceive them correctly. Moreover, he thought that people interpret these opinions in the light of what they know about these other people.

Mead (1934, 1956) stresses the relevance of "generalized other" implying that the individual may sometimes behave differently and have different conceptions about himself depending on the social circumstance he is in. This could be so when he accepts the norms of those surrounding him. The individual's ability to change his conceptions and behaviour can be understood in the light of his capability of looking at himself through the eyes of others, accepting at the same time the feedback transmitted from them, which is one of the main factors shaping his self-esteem. When the feedback is given in a work situation, the person's self-evaluation is affected, providing one of the main sources for his WRSE. Nevertheless, Mead's reasoning helps to understand, for instance, the case of an individual whose work has been highly praised by others in the past, and therefore sees himself as being competent at this task. Once this has happened (and it could be seen as part of WRSE) the effect of further praise (or condemnation) from others will be different from what it would have been before the individual came to think of himself as, for example, competent.

Another important concept used by Social Self theorists is that of "significant others" attributed
to Sullivan (1947). In this concept the fact that not all other peoples' opinions are equally important in determining the self is taken into consideration. A "significant other" is one whose opinions and actions matter to the individual; one whose approval he needs and whose disapproval he seeks to avoid. Therefore, as an example, for a child it is more important to have his work praised by his teacher than by his friends; it is nice to be complimented by a person who is known to have good taste than by someone who is not regarded as such.

Within the past twenty years a substantial number of empirical studies have been made, based on the theoretical ideas of Cooley, Mead and Sullivan. As far as self-esteem is concerned, research made by Miyamoto and Dornbuch (1956); Moore (1964); Reeder et. al. (1960) seems to confirm the following aspects of the Social Self theories:
1. Self-esteem seems to be a direct function of the perceived opinions of others.
2. Such others may not be equally important to the individual.
3. Many times, individuals misperceive other people's opinions. Sometimes it appears that the distortion is in the direction of a more favourable self-evaluation, but this is by no means the case at all times.

In what concerns the "significant other" hypothesis, research by Israel (1965), Couch (1958), Backman et. al. (1963), Maher et. al. (1962), Haas and Maher (1965) seems to suggest particular criteria for determining whose opinions will matter to the individual: a) those who the individual perceives as competent to evaluate his performance. b) Those who he perceives as having access to objective evaluative criteria. c) Those who are of relatively high status.
Other important findings of the research in the Social Self tradition (Webster & Sobieszek, 1974) is that, the importance one attaches to someone else's opinion is a function of the amount of interaction he has with this person, and that the more reference groups an individual has, the less importance he will attach to the opinions of any one of the members of each of these groups. This topic is more complex than it would appear from the last statement. There may be cases where no personal interaction whatsoever is needed for an individual to influence someone's self-esteem and behaviour. An example is Goethe's (1774 novel The Sorrow of Young Werther which prompted the suicide committed by quite a few readers at the time.

A person's level of self-esteem is very much affected by the social surroundings in which he happens to find himself. Research shows that it does not depend on the absolute amount of good things a person has, but rather in how he stands in comparison to others. In order to try to account for this phenomenon, Festinger (1957) argues that people have a continuous need to establish the correctness of their beliefs and attitudes. When there is little evidence (factual) on which to rely on, people tend to turn to others, comparing their own conceptions with other people's in order to assess the validity of their own position. Moreover, this can also help to understand why the same action might be perceived differently by various individuals, depending on their different comparison levels. This can also provide an explanation to the fact that some industrial workers, although performing boring and repetitive jobs (according to the perception of researchers) perceive those as quite satisfying as they compare themselves
to other workers in that industry (Adams, 1963; Pritchard, 1969). An example of the importance of social comparison in self-esteem is seen in an experiment made by Morse and Gergen (1971) who found that when people compare themselves with a high prestige person (Mr. Clean) their self-esteem diminishes and vice versa (with Mr. Dirty). Fromm (1959) was probably the first to observe the close connection between a person's evaluation of Self and his feelings for others, and Rogers (1959) noted a similar phenomenon in many of his patients. Experimental research shows that persons with high self-esteem exhibit greater acceptance of others as potentially worthy persons, therefore being more effective in social relations. In a working environment they might complain less about supervisors and fellow workers and make less extreme demands upon colleagues and immediate superiors. Research also shows that they attempt to influence others more, and it is therefore hypothesized that they would be more interested in participation in decision making.

Feelings towards Self might not only influence our general feelings towards others, but might also predispose us to react in specific ways to their behaviour and evaluation of us. For example, people tend to like those who have a good opinion of them and dislike those who appraise them negatively (Deustch and Solomon, 1959).

Another relevant form of feedback is a direct one, which comes from one's own performance. This form of feedback is considered by the author as very significant. Nonetheless, it has not been dealt with here since it is assumed that in what concerns self-esteem, the dimension of social feedback partly includes it.
To sum up, feedback, and social feedback from "significant others" in particular, appears to be central to any measure of WRSE.

Looking for a theoretical frame of reference for the understanding of what constitutes the concept of WRSE, a critical review of the literature has been carried out. From this review, it was concluded that two areas in particular are responsible for most of the variance attributed to this concept. The first is the subjective feeling about the possibility one has in controlling his own environment (power-powerlessness). The second concerns the feedback (or its absence) one gets from his performance at work from relevant others who, in the individual's concerned opinion, are able to judge it. Although these two areas seem to account for a great part of the variance, the researcher is well aware that there are additional factors which might be relevant and important in explaining what constitutes WRSE in different circumstances. For example, a person's "inherited" position (status), race, or religion, might all have a strong influence over one's WRSE, or might interact with the two areas which this study is focusing on. Nonetheless, what is being argued is that in present day Britain, the role of the factors mentioned in the above example as influential in WRSE are decreasing and are much less significant than the two which are focused upon by this study. In addition, the factors in the above example could be seen as "distal variables" (Jessor, 1973) which ultimately should be reflected in the variables chosen for study. This justifies their omission which enables to concentrate on the latter.
2.9 Job involvement

Traditionally, job involvement was perceived as somehow linked to performance. Indeed, one of the definitions of job involvement is:

"The degree to which a person's work performance affects his self-esteem"

(Lodahl & Kejner, 1965).

French and Kahn (1962) also defined it in a very similar way. Vroom (1962), too, associates between job involvement and job performance. He describes a person as ego-involved in a job to the extent that his self-esteem is affected by his perceived level of performance. In short, for the above theorists, involvement exists when a person's feelings of esteem are increased by good performance and decreased by unsatisfactory performance.

It seems to follow from a definition of job involvement, which uses performance in its operationalization, that it would be circular and fruitless to use the concept of job involvement when trying to explain performance. Such a definition might also suggest that job involvement is more prone to be a situationally determined variable than an individual's characteristic.

A second definition, and the one that has been chosen for use in this study, 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"

(Lodahl & Kejner, 1965).

Lawler and Hall (1970) adapted this definition, referring to job involvement as the "psychological identification with one's work", as well as "the degree to which the job situation is central to the person and his identity". McKelvey & Sekaran (1977) define it as "the merging of a person's ego identity with his or her job". Gurin, Veroff and Feld (1960) define it similarly. In the proliferation
of terms used to describe job involvement, Mowrer (1969) describes "work role motivation" as

"the degree to which an individual's work role is important in itself, as well as the extent to which it forms the basis of self definition, self-evaluation and success definition".

All these definitions seem to "have a common core of meaning in that they describe the job-involved person as one for whom work is a very important part of his life, and as one who is affected very much personally by his whole job situation: the work itself, his fellow workers, the company, etc. On the other hand, the non-job involved person does his living off the job. His interests are elsewhere, and the core of his self image, the essential part of his identity, is not greatly affected by the kind of work he does or how well he does it". (Lodahl & Kejner, l.c.).

Similarly, to other attitudinal concepts, the determinants or antecedents of job involvement may be seen as deriving from early socialization, from the particular situation or from the interaction between these two. The lack of a clear and accepted definition of job involvement, leads various investigators to pursue research in this area according to their own school of thought. For example, Dewhirst (1973) is mainly interested in how the environment affects job involvement. He uses turnover and absenteeism, among others, as the actual measures of job involvement, skipping altogether the attitudinal phase of its measurement. On the other hand, Kanungo, Misra and Dayal (1975) are mainly interested in the relationship between job involvement and employees' needs. Nevertheless,
the majority of studies in this topic were carried out using items from Lodahl and Kejner's original scale of 20 items. In fairness to their work, it should be said that the lack of previous empirical data necessitated an ambiguous approach to the problem, so as to be able to learn in the process of additional research what the determinants of job involvement are and their relative effect on it. From their results it can be learnt that job involvement is a multidimensional attitude and that it is affected by local organisational conditions (mainly social ones), as well as by value orientations learnt early in the socialization process.

Theoretically speaking, when trying to understand people who are job-involved, it is postulated that there may be two main ways of how they attain their involvement at work:

1. positive factors: A person might become involved in his job because he evaluates his job highly. It is assumed that this would be the case when the job has certain characteristics which are perceived by the individual as good, interesting and so forth.

2. negative factors: These factors would be those that came from outside the job itself. These might be part of the individual characteristics or social factors outside the world of work. The reason for calling the latter "negative factors" is that although they might involve people with their work, they would not necessarily affect its quality or quantity. On the other hand, it is assumed that those called "positive factors" could help in improving the output of work. It is appreciated that there is no reason why there should not be people affected by both types of factors or either one of them. Nevertheless, the use of a traditional
measure of job involvement would not provide the necessary information to know which people are affected by which type of factor. As it was seen from the review of literature, the evidence seems to indicate that job involvement as measured by Lodahl and Kejner (1965) is more of a trait which is probably developed through early socialization experiences, and as such would be more influenced by what was called "negative factors."
3. Methodology

3.1 Introduction - A descriptive study

Decisions concerning which research techniques to employ, and what the different uses the result of studies can be expected to have, must be made against the background of scientific inquiry. The latter usually aims to be descriptive, explanatory, and predictive. All this is done in the hope that it will provide a sense of understanding or awareness.

This study was designed in such ways as to be primarily descriptive. Basic to any descriptive information is the classification of the range of elements seen as comprising of a given subject matter domain, in this case WRSE.

There are three ways in which descriptions of a scientific inquiry are directly related to scientific objectives (Black & Champion, 1976):

1. Theoretical points or concepts cannot be taken for granted, but must be verified through empirical observations when the aim is to portray them more accurately.

2. Descriptive information should be capable of being used to say something about areas of social life not directly spoken about in the theory.

3. Descriptive data should increase awareness of the relative accuracy of the measures used. This enables further accumulation of factual data made when focusing in a more sophisticated way on problems which previously had been treated casually. This kind of data, in turn, enables to broaden knowledge significantly.

Besides being directly related to scientific objectives, descriptive (or factual) information can also be simply "interesting", having the potential of influencing scientific objectives indirectly. A
datum that has no direct, foreseeable use can be put aside for reflection at some future time. The results of a descriptive research might also be unexpectedly stimulating in a new direction so as to justify their study in a more systematic and controlled way. In addition, there are different kinds of factual information which, once one is familiar with them, greatly enhance the data-gathering process of future research. This includes information about the respondents part-taking in the study, and knowledge of their situation as seen by them.

Examining the aims of scientific inquiry, there is a point beyond which descriptions, when placed in a certain context relative to each other, cease to be viewed as descriptions, and become viewed as explanations. The ability to interpret data so that some segments of behaviour are rendered more comprehensible is an especially rewarding undertaking. However, to the scientific investigator, explanation is achieved only when relationships can be demonstrated between specified causes and effects. Since this study is not geared and designed to discover causes and effects, all that is expected regarding explanations are the finding of discerning regularities among variables. When certain conditions are met, they are expected to increase the researcher's confidence in the possibility of making generalizations beyond the immediate data. The comprehension of the linkage among various relationships found at the descriptive level is basic to theories of behaviour.

Research designs delineate four major purposes:
1. to gain familiarity with a phenomenon or to gain insights,
2. to describe things,
3. to determine associations between variables, and/or
4. to test hypotheses.
This study is mainly concerned with the first three
and focuses predominantly on the third point. Contrasted with exploratory studies, descriptive designs direct attention to particular aspects or dimensions of the research target. Descriptive studies provide researchers with a vast amount of information about many social settings and they can reveal potential relationships between variables. Describing certain characteristics of a sample or population enables investigators to construct more sophisticated or elaborated experimental research designs in the future.

3.2 Listing of variables

3.2.1 Main focus variables:
1. objective type of work: subjects belonged to one of the following four occupational samples: industrial workers, psychiatric nurses, clerical staff, and general nurses.

2. WRSE (work related self-esteem): a personal, self judgement of worthiness at work. It was measured by a Likert scale constructed by the author in this study, consisting of fifteen items (see chapter 4).

3. general self-esteem: Rosenberg's scale of ten items was utilized only in the first stage of the study. This is a Guttman scale, describing a unitary property of the person's overall self-image.

4. job involvement: defined as the importance of work to the self. It was measured by five items, derived from Lodahl and Kejner (1965). These were taken from their original scale of twenty items, which yielded in a factor analysis five distinct dimensions. Seven items, similar to the items with the highest factor loadings in the first dimension.
were used by Wood (1971) as a measure of job involvement, and again used initially in this study. A Likert item analysis (for measuring the internal consistency of a scale) carried out in this study (N=110, see results for table) showed poor item-total correlations for two of these items. The remaining five were then used as a job involvement measure for the main study.

5. job satisfaction: feelings or affective responses to different aspects of the work situation. The Worker Opinion Survey was used here. This is a measure of job satisfaction originally developed by the Cornell Studies group (Smith et al., 1969, Job Description Index-J.D.I.) and adapted by Denys Cross (MRC Soc. and App. Psychl. Unit, Univ. of Sheffield) to British workers. This is a cumulative-point adjective check list/scale, constructed to measure six separate areas of job satisfaction: These are: the firm, pay, opportunities for promotion, the job itself, the supervisor or superior, and the fellow workers.

6. authoritarian orientation: three items with high loadings in authoritarianism (Adorno et al., 1950) were introduced because it was felt that this variable was related to how a person felt about his type of work. In addition, it was chosen for the testing of discriminant validity of the WRSE measure. The three items are the ones that were used in a national U.S. survey (Sheppard & Herrick, 1972).

3.2.2 Socio-demographic variables:
1. sex - male/female
2. age
3. number of jobs outside the company in the last three years
4. grade
5. tenure
6. marital status - single/married
7. country of origin
8. number of dependent children at home
9. education level
10. part time/full time
11. the time that it takes to come to work

3.2.3 **Additional attitudinal variables:**

1. evaluation of the type of work in the eyes of others
2. conformity
3. instrumental orientation
4. evaluation of the type of work in one's own eyes
5. intention to change one's job within the same organisation (within six months)
6. intended length of service in the organisation
7. perceived requirements for the type of job (5 items)
8. extent to which various factors are present in the type of work including:
   (a) Orientations to work:
      a. intrinsic orientation (creativity, interest)
      b. instrumental orientation (good pay, good working conditions, future security, convenient hours)
      c. solidaristic orientation (with work group)
      d. social orientation (working together with people, social facilities)
   (b) Factors said to constitute "alienation" (apart from power-powerlessness):
      e. meaninglessness-effect on other people's lives
      f. isolation-working together with people
      g. normlessness-easiness in knowing if you are doing a good/bad job
      h. estrangement-integration with a work group
9. ranking of the five most desirable items
among the requirements and factors that might be relevant to the type of work (17 items) for the individual in question.

10. **satisfaction with the type of work**—measure derived by the multiplication of the rank ordering items (weighed) by the same person's rating of their presence (or desirability) in the job.

11. **self rating on last performance appraisal.**

### 3.3 Sampling and the administration of the questionnaire

Ideally, a proportionate stratified random sample would have been desired in this study since it would have enabled it to be representative of the entire population of the occupational groups. The stratification then, would have been made according to an array of occupations of non-managerial employees. This would have been possible if a) there had been unlimited funds for one's research, b) an unlimited timetable for research completion, and c) open or unlimited access to the samples which, to begin with, in this case, depended on a different section of people, namely that of managements.

In actual fact, the samples that were obtained, after long negotiations with managements of various organisations (more than a hundred were approached, but their managements refused to give access to their employees at the particular time of the study) resulted in a disproportionate stratified sample. This type of sampling has the disadvantage of not giving each substratum proper representation relative to its distribution throughout the original population of the occupation. Since there was no true means of establishing randomness as a primary control, the generalizability of the results in the
probability sense is open to criticism. Much of the criticism could be due to the fact that such sampling was made according to the subjective judgement of the investigator, while in fact, in the dimension chosen for stratification in this study, namely occupation, there was no room for arguing that the people in the respective samples did not belong to that occupation. However, the organisation that employed them might not be representative of all others that employ the same occupational groups. Therefore, strictly speaking, the occupational samples are not random. Nevertheless, it is felt that results would be generalizable at least for those employees working in the same occupations for what the author would call "paternalistic" managements. (This is so since the author believes that access to employees making up the samples was permitted by such managements). Still, the inability to have drawn a stratified random sample is a major, though inevitable, drawback.

Once the organisations that were to be studied were selected (which in fact means; when permission was granted to study them) the sampling methods used varied somewhat for the different occupational populations. For the industrial group, they could be described as saturation sampling (Coleman et. al., 1959) since virtually every non-managerial employee who was present (excluding drivers) at the time of the study was asked to participate in it. The sampling of the other occupational groups was different. In the case of psychiatric and general nurses, the author and a senior nursing officer went through the nurses registrar and a list of nurses was drawn randomly from each of the various grades. The selected nurses were then invited to attend one of a number of sessions in which the author explained the purpose of the study, and its anonymous
nature, asked for the voluntary co-operation of the nurses, and gave the instructions as to how to fill in the questionnaire correctly. The author then answered any queries and probed many of the nurses.

The administration of the questionnaire was different for the sample of Guy's District Hospital nurses since it had no organised sessions with the researcher. Instead, the questionnaire was given to each selected nurse by the head nurse of each ward, and returned anonymously to the author.

The sample of clerical staff was again drawn slightly differently. After the management and the employees' committee of the company had agreed to take part in the study, the representative of each section (department) asked its members to participate in the survey. It was then that a room in the building, accessible to all, was arranged for the researcher. The clerical staff who volunteered to take part in the survey could collect the questionnaire from that room at any time, receive its instructions, and then fill it in either in the same room or at their own desk. In the latter case, they were to return it personally to the researcher who would probe some of them, and ask for any additional relevant information.

3.4 The size of the samples

Considerable ambiguity exists concerning the number of people a researcher should use in order to conduct his research appropriately. In fact, no agreement exists currently as to how many persons constitute a large or small sample, though it is accepted that the objectives of the research are a crucial factor. The larger the sample selected, the less sampling error is associated with it. For the
purposes of this study, it was considered reasonable to deal with samples consisting of about a hundred persons each. Although the selection of this number was made arbitrarily, it seems large enough for the purposes and scope of this study, especially when considering that altogether the study surveyed nearly five hundred individuals, and was restricted in the number of its measures.

The actual size of the samples was:

<table>
<thead>
<tr>
<th>Sample Type</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial workers</td>
<td>110 (53+57)</td>
</tr>
<tr>
<td>Psychiatric nurses</td>
<td>91</td>
</tr>
<tr>
<td>Clerical staff</td>
<td>84</td>
</tr>
<tr>
<td>General nurses</td>
<td>189 (94+95)</td>
</tr>
<tr>
<td><strong>Total N</strong></td>
<td><strong>474</strong></td>
</tr>
</tbody>
</table>

3.5 Socio-demographic characteristics of the samples

3.5.1 Industrial workers. The questionnaire was administered to 125 employees; 110 (or about 85% of them) completed it. 53 employees were from the Walthamstow plant, and 57 were from the Hadleigh plant. The results are from the two plants together (N=110).

1. This sample consisted of 43 males (about 40%) and 67 females (60%).
2. 60% of the workers in the sample were under 45 years of age.
3. 72% of the workers in the sample started working at the age of 15 or before (39% at the age of 14).
4. 71% of the workers in the sample had no dependent children at home; 11% had one, and 18% had two or more children at home.
5. 38% worked part time vs. 62% who worked full time, but the division between males and females was not equal; there were only 9% of men working part time, while there were 57% of women working part time.

6. 24% of the workers had a tenure of up to six months; 38% were with the firm from one to three years and 38% were with the firm for four years or more.

7. 55% of the men had no other job outside the company in the previous three years; 31% had had one, and 14% had had two or more.

8. The distribution of the sample according to occupation was as follows: folding 15.5%, pressing 13.6%, machine repairs 6.4%, racking 9.1%, dry cleaning 2.7%, wet cleaning 3.6% 29.1% was rotating between jobs or were supervisors, packing 8.2%, office 11.8%.

3.5.1.a A comparison between the two industrial plants. Points of similarity:

1. belonging to the same organisation, and under the same top management.

2. performing the same service and with the same objectives.

3. with the same technology.

4. similar organisation layout, i.e. division into small units of work, with a supervisor for each one of them (but with different kinds of buildings: one vs. two floors).

5. The population sample used for the study seemed to match in demographical variables, though coming from locations with different population size and number of industrial plants nearby.
6. Slightly more part time women in the Hadleigh plant sample, and a difference in the number of employees with long service (more at Hadleigh).

| TABLE 1: A comparison between the characteristics of the two industrial plants |
|---------------------|---------------------|---------------------|
| characteristic      | London              | Hadleigh            |
| male                | 23                  | 20                  |
| female              | 30                  | 37                  |
| total number        | 53                  | 57                  |
| age that started working altogether |                     |                     |
| at 14               | 67.9%               | 75.4%               |
| at 15 or more       | 32.1%               | 24.6%               |
| number of dependent children |                 |                     |
| none                | 75.5%               | 66.7%               |
| one or more         | 24.5%               | 18%                 |
| age group           |                      |                     |
| under 45            | 58.5%               | 60%                 |
| over 45             | 41.5%               | 40%                 |
| number of jobs      |                      |                     |
| outside the present company |                |                     |
| none                | 61.5%               | 63%                 |
| in the last one     | 27.5%               | 28%                 |
| three years more    | 10%                 | 9%                  |
| description of Folding job |                |                     |
| Folding press       | 17%                 | 14%                 |
| Pressing            | 13%                 | 14%                 |
| machine repairs     | 4%                  | 9%                  |
| racking             | 6%                  | 12%                 |
| dry cleaning        | 4%                  | 1%                  |
| wet cleaning        | 6%                  | 1%                  |
| supervisors/rotating | 30%                | 28%                 |
| packing             | 6%                  | 10%                 |
| office              | 15%                 | 9%                  |
| tenure              |                      |                     |
| up to one year      | 32.1%               | 17%                 |
| from one to five years | 35.8%            | 39%                 |
| over five years     | 30.2%               | 44%                 |
| part time           | 30.2%               | 46%                 |
| full time           | 69.8%               | 54%                 |
3.5.2 Clerical staff. This sample consisted of 84 clerical employees who volunteered to take part in the study. In all, 148 persons were approached, out of which 28 said that they did not want to participate. Of those who agreed to take part, 46 either failed to return the questionnaire, or had an unexpected increase in their work load which absorbed their allotted time for participation in the study.

1. 82% of the clerical employees were females, and 18% were males.
2. The mean age was 30, with 50% over or under the age of 23. The most frequent age was 22.
3. 64% were under the category of "single", and 35% were married.
4. 86% had no dependent children at home.
5. 94% worked full time.
6. The mean tenure was 5.6 years, with 50% of the clerical employees having a tenure of over or under 3.6 years. The most frequent time of tenure was one year (20%).
7. 93% were of U.K. origin.
8. For 23% it took up to half an hour to get to work, for 24% it took up to three quarters of an hour, for 26% up to an hour (i.e. for 75% of the clerical employees, it took up to an hour to get to work), for 21% it took up to an hour and a half.
9. 60% volunteered their name.
10. 81% of the employees had a formal education up to O'level standard, 16% up to A'level standard.
11. 33% considered that their performance (on their birthday interview) was rated as average, 43% as good, 24% as very good.
12. Only 10% of those who answered the item "fairness" (excluding "Not Applicable", and "Don't Know" categories) said that their appraisal was not fair.

3.5.3 Psychiatric nurses. This sample consisted of 92 psychiatric nurses who volunteered to take part in the study. In all, 95 psychiatric nurses were approached at meetings arranged by the hospital. One person refused to take part in the study, and two additional nurses were unable to complete the questionnaire because of linguistic problems.

1. 51% of the nurses were females, and 49% males.

2. The mean age was 36, with 50% over or under the age of 32. 25% were under 25 years of age, and 75% were under 45.

3. 32% of the nurses were under the category of "single", and 68% were married.

4. 61% had no dependent children at home. From the remaining 39%, 20% had one child, 40% had two children, and 26% had three children.

5. 90% worked as full time nurses.

6. The mean tenure was 8.7 years, with 50% of the nurses having a tenure of over or under 4.8 years. The most frequent time of tenure was four years.

7. 41% of the nurses were of U.K. origin, 13% from the West Indies, 33% from Asia, 7% from Guyana, 3% from Spain, and 1% from Africa.

8. For 47% of the psychiatric nurses, it took up to 15 minutes to get to work, for an additional 35% it took up to half an hour, and for another 12%, it took up to an hour to come to work.

9. About a third of the nurses in the sample volunteered their names.
10. 88% of the psychiatric nurses had a formal education up to O'levels standard, 10% up to A' levels standard, and 2% higher.

11. 28% of the nurses in the sample belonged to unit I of the hospital, 40% belonged to unit II, 32% to unit III, and 14% worked on night shift.

12. 18% of the nurses were nursing assistants (N/A), 14% were S.E.N., 32% were S.R.N., 14% were ward sisters or charge nurses, 20% were senior nurses, and 2% were nursing officers.

13. 30% of the psychiatric nurses believed their performance to be rated as "medium", 42% as "good", and 27% as "very good".

14. Only 10% of those nurses who answered the item "fairness" said that their performance appraisals were not fair.

3.5.4 General nurses.

3.5.4.a From St. Mary's General Hospital.

This sample consisted of 94 general hospital nurses working at St. Mary's Hospital in London, W2 or W9.

1. 97% of the nurses were females, and 3% were males.

2. The mean age was 28, with 50% of the nurses in the sample being over or under 25 years of age. The most frequent age was 22. 80% were under 30 years of age.

3. 69% of the nurses were under the category of "single", and 31% were married.

4. 89% had no dependent children at home.

5. 91% worked as full time nurses.

6. The tenure of the nurses in the sample ranged from one to thirty years of service with the hospital. The mean length of service was four years, with 50%
being in the hospital over or under three years. The most frequent length of service was four years.

7. 75% of the nurses were of U.K. origin.

8. For 36% of the nurses, it took up to one quarter of an hour to get to work, for 40%, it took up to a half hour, for 11% it took up to an hour, i.e. for 76% it took up to a half hour to come to work.

9. 80% of the nurses in the sample volunteered their names.

10. 47% were in general medical wards, 30% in surgical wards, 16% were in intensive care, or casualties wards, and 7% were in orthopedic wards.

11. 97% of the nurses in the sample worked in the day shifts.

12. The distribution of grades in the sample was: S.E.N. 23%, S.R.N. 43%, junior sisters 14%, and senior sisters 20%.

13. 13% of the nurses considered that their performance was appraised as "average", 50% as "good", and 37% as "very good". It should be noted that only 62 nurses answered this item with the rest answering "don't know", or N/A.

3.5.4.b Nurses from Guy's General Hospital.

This sample consisted of 95 general hospital nurses working at Guy's District Hospital.

1. 98% of the nurses were females, and 2% males.

2. The mean age was 30, with 50% of the nurses in the sample being over or under 26 years of age, only 25% were over 31 years of age.

3. 72% of the nurses were under the category of "single", and 22% were married.

4. 82% had no dependent children in their household.
5. 88% worked as full time nurses.

6. The tenure of the nurses in the sample ranged from one to 32 years of service with the hospital, the mean length of service was just over 4 years, with 50% being in the hospital either over or under two and a half years, 28% were in the hospital up to a year, and only 25% were over four years.

7. 83% of the nurses were of U.K. origin.

8. For 65% of the nurses, it took only up to half an hour to get to work, for an additional 15%, it took three quarters of an hour, for another 14%, it took an hour, and for 6%, it took more than an hour to come to work.

9. 66% of the nurses in the sample volunteered their names.

10. 31% were in general medical wards, 29% in surgical or intensive care wards, 18% were health visitors, 4% were in children wards, 4% in orthopedic wards, and for 14% it was not known.

11. 78% of the nurses in the sample worked in the day shifts.

12. The distribution of grades in the sample was: Nursing Assistants 7%, S.E.N. 14%, S.R.N. 43%, Sisters 12%, senior sisters 15%, and Nursing Officers 9%.

13. 26% of the nurses considered that their performance was appraised as "average", 47% considered that their performance was appraised as "good", and 27% thought it was appraised as "very good".

3.5.4.c General nurses from St. Mary's and Guy's District Hospitals combined. These samples
consisted of 189 general nurses from two district hospitals.

1. 98% of the nurses were females, and 2% were males.

2. The mean age was 29, with 50% of the nurses in the samples being over or under 25-26 years of age. 80% were under 30-31 years of age.

3. 70% of the nurses were under the category of "single", and 30% were married.

4. 85% had no dependent children at home.

5. 90% worked as full time nurses.

6. The tenure of the nurses in the two samples ranged from one to 32 years of service with the hospital, the mean length of service was 4 years, with 50% of the nurses being in the hospital either over or under 3 years.

7. 79% of the nurses were of U.K. origin.

8. For 70% of the nurses, it took only up to half an hour to get to work.

9. 73% of the nurses volunteered their names.

10. 39% were in general medical wards, 37% in surgical or intensive care wards, 9% were health visitors, 6% in orthopedic wards, and for 9% it was not known.

11. 87% of the nurses in the samples worked in the day shifts.

12. The distribution of grades in the samples was: Nursing Assistants 4%, S.E.N. 18%, S.R.N. 43%, Junior Sisters 13%, Senior Sisters 18%, and Nursing Officers 4%.

13. 20% considered that their performance was appraised as "average", 48% considered that their performance was appraised as "good", and 32% thought that their performance was appraised as "very good".
3.6 Design and type of instrumentation

The most popular designs used by social scientists are the survey, the case study, and the experimental. The last two have been discarded as suitable designs for this study since the case study has too limited a generalizability, and the experimental design is not an answer to its objectives. The method of research used here has the nature of a survey design.

A survey design has been defined as "specifications of procedures for gathering information about a large number of people by collecting information from a few of them" (Black & Champion, 1976, p. 85). The quality of a survey depends on: a) the number of people one is able to get for the study, b) their typicalness, and c) the reliability of the data. The latter is dependent on the extent to which the researcher obtains the co-operation of persons he studies.

Some of the major advantages of survey designs are:
1. Because of the large number of persons included in a survey, generalizability to larger populations is more legitimate.
2. Surveys accumulate information from individuals efficiently and at relatively low cost to the researcher.
3. Surveys are flexible to permit the use of a variety of data collection techniques (observation, interviewing and/or questionnaires).
4. Surveys sensitize the researcher to potential problems that were originally unanticipated or unknown.

These advantages seem to override, in the case of the objectives of this study, the general disadvantages of survey designs.

These disadvantages are:
1. Surveys allow less "in-depth" information.
2. Surveys are unstable reflections of population characteristics.
3. The researcher has little or no control over individual responses to surveys.
4. Statements about population from which samples are obtained are tentative.

This research attempted to overcome the above shortcomings in its approach. The "in-depth" information was sought in the pilot study whose design was different from that of the main study, and which enabled the gathering of more sensitive information.

The nature of this study is such that fluctuation of opinions over time does not represent a main issue since it is accepted as a fact that opinions in the areas researched should change under different situations. The objective of the study is to learn about the relationships between the different variables and not only about their state in a particular moment. The problem exists, however, when trying to find out the (test-retest) reliability of measures of such nature.

Regarding the researcher's control over individual responses, great care was taken in this study to ensure at the same time the participation and confidence of the subjects that were chosen to be part of the study's samples. The results themselves and the very high proportion of completed questionnaires are evidence for the success of this endeavour.

The last mentioned disadvantage is not really a serious one because all scientists are obliged to regard their research findings with caution and take into account their potential limitations.
3.6.1 Data collection.

3.6.1.a Participant observation. Although interviews and questionnaires were the main instruments of data-gathering in this study, they did not fulfill the initial objectives of this research. These were to i) capture the natural social context in which persons' behaviour occur, 2) grasp the significant events that affect the participants (for example, social relations), and 3) to determine what constitutes reality from the standpoint of the observed when the main objective is exploration.

Observation was seen as the first step of acquiring information. Since the area of interest was work and there was need to preserve the natural social setting so that generalizations would be more valid, participant observation was found to be a highly desirable method of the gathering of first field information.

3.6.1.b The interview.

(a) Unstructured interviews: Hand in hand with later stages of participant observation, unstructured interviews were begun. Due to the nature of, and the approach to the areas studied, the participant observation in itself was unsatisfactory in gathering information. This study put a special emphasis on the importance of the subjective outlooks of individuals, therefore seeing direct verbal rapport (despite its limitations) as a very useful tool in providing insights into the subjective realities of the employees. This could be done, once the ice was broken, thanks to the previous period of participant observation.

Apart from the interview being a highly effective, exploratory and stimulating device for the development of assumptions, it also illuminated areas which subsequent stages of the study did not
go into, possibly precisely because of the impressions formed at this point. These were derived stressing the interviewee's definition of the situation, encouraging him to introduce his notions of what he regards as relevant, instead of relying upon the investigator's notions of relevance.

(b) Structured interviews: Once the facets of the areas to be investigated were scrutinized and somewhat narrowed down, a more structured interview was initiated in which the same questions were asked in the same order. This approach was similar in its format to a questionnaire, but allowed the respondents to make comments freely and allowed the investigator to probe the respondents.

3.6.1.c The questionnaire. Finally, enough data was collected to build a valid questionnaire, which due to practical constraints (time required to complete it), had to be restricted in the number of its issues.

The questionnaire which was developed here was of a fixed-response type since items of this kind are easy to score and code. No writing is required of the respondent, and because they are rapidly completed, a larger amount of information can be gathered in the restricted time available to the respondent. Obviously, this type of questionnaire has disadvantages, the main ones being that a) the researcher is unable to provide the respondent with all the relevant response alternatives, and b) the respondent, in order to get the questionnaire over with, might lapse into a response set. The author attempted to solve these problems at the onset by designing the questionnaire on the basis of the pilot study,
eliminating potential verbal complications, and by presenting equal numbers of positive and negative items randomly.

The questionnaire was administered by the author and had to be completed in his presence, or alternatively would be personally collected in the course of the same morning or afternoon.

The author aimed at maximizing the number of completed questionnaires by the respondents who were selected for its administration. This was done in order to minimize the unknown effects of "non-response" which would have increased the doubts about the generalizability of the results. This was done by keeping the questionnaire to a reasonable length, giving it face validity (i.e. so that the respondents felt that the questions asked were relevant, and that it was in their interest that they should be investigated) and most importantly, by giving them assurances about the anonymity of the individual results. It was stressed that the completion of the questionnaire was a voluntary task, though at the same time the respondents selected for its administration were persuaded by the researcher and their work committee or supervisor to take part in it. This was partly achieved after the management in question had agreed to have the survey carried out, by explaining the nature of the investigation, its potential indirect benefits to the employees, and the independent, academic status of the author who had no contract with or obligations to the management.

3.6.2 Techniques of scaling - Likert. There are various methods of scaling, i.e. developing a measurement standard whereby individuals may be compared relatively to one another regarding the
properties they possess. The most popular ones are: the Likert, Thurstone measures, and Guttman measures.

The Guttman scaling technique is somewhat limited or applicable mostly to situations where the researcher has few items with dichotomous responses. (It also becomes more awkward to employ this technique in large samples.) However, the main disadvantage of its use in this study would have been its restricted attitudinal continuum (because of the large number of potential "ties"), while its ability to determine unidimensionality is not an asset in a study where measures are expected to cover possibly more than one dimension.

The Thurstone scale provides a wider attitudinal continuum, but has the disadvantage particularly in an area of study such as with which this thesis deals, of there being no way of controlling the influence of a judge's bias in item sorting. In addition, in reality, Thurstone scales are no better at predicting behaviour than Likert based measures which are less difficult to construct and score.

Likert scaling is also flexible, allowing the researcher to include as many items as he chooses. The fact that Likert scales are similar to other forms of attitude measurement (Kerlinger, 1965), combined with its advantages, made the Likert summated rating measures the most frequently used in social research and the one chosen for use in this study. Nevertheless, it also has weaknesses of which the author is (and so should the reader be) fully alert to. These weaknesses are related to the not necessarily valid assumption that each item in a measure has identical weight (meaning) in relation to every other item. A most serious criticism leveled against this type of scale is that the same total score may be obtained in many
different ways. For example, scores in the middle region could be due to a neutral (indifferent) response, or lack of knowledge, uncertainty, or to the presence of both strongly positive and negative responses, which could more or less balance each other.

"In practice, if we remember that equal score intervals do not permit to make assertions about the equality of underlying attitude differences and that identical scores may have very different meaning, the Likert scales tend to perform very well when it comes to a reliable rough ordering of people with regard to a particular attitude" (Oppenheim, 1966).

So, in the case of the present study, for instance, if WRSE is assumed to be comprised of two main factors, identical summated scores of two respondents do not necessarily mean that they have the same scores on items of each factor. Therefore, the summated scores should be considered as crude estimates only.

3.7 The pilot study - four stages

The pilot study was carried out in a population of industrial workers (since industrial work was the main interest of the researcher at the outset of the study). The population under study was from the servicing industry, namely in the cleaning of industrial overalls and other such items. The pilot study consisted of four stages:
1. participant observation
2. informal interviews
3. administration of improved questionnaires
4. analysis and feedback from management
3.7.1 Stage 1: Participant observation in a shop floor of a factory. The first stage involved an explanatory study of a real life situation, i.e. participant observation in the shop floor of a factory. After having succeeded in finding a management with understanding for research, and getting its permission to carry out an investigation in their company, the first step was a basic provision of facts about the firm layout; its previous history, and the way work is carried out. These facts were provided by the directors of two factories who consented to let the author actually work in each of the tasks at the shop floor. Previous to the start of work, the director asked for a meeting of the working committee, a separate meeting of the supervisors, and formally introduced the author as a student, with no contract or obligation of any kind towards the company, asking for the voluntary co-operation of the employees.

The following week the actual participant observation period started, with the author working full time and changing tasks about every other day. Hence, personal contact was established to some degree with a vast majority of workers who were, it seemed, behaving quite naturally. This (normal behaviour) was probably accomplished due to two things: the author, while trying to perform properly at the task at hand, behaved as a new worker normally would, interested in the task itself and asking as few questions as possible regarding other areas. Secondly, the workers obviously had a better position regarding a newcomer who was doing the same job as they, which allowed them to feel very much at ease. The researcher tried his best to become part of the working force (joining other blue collar workers in the brakes, having lunch at their canteen,
joining in their game of darts, etc.). Taking
notes at this stage would have undermined the
researcher's credibility. Instead, he let the
workers impose on him "admission requirements",
and be indoctrinated by their categories and values.
The researcher felt that his presence in the factory
was accepted by its workers as legitimate while
suspicions about any concealed connection with
management had disappeared.

Having thus become socialized in the factory,
the first step was to be engaged in free floating
attention, i.e. "listening with a third ear". When
this phase had ended, check lists were developed
regarding specific interests though the formal
research design was left loose enough to allow
for developments in the field. Once the major
themes were integrated, then interpretation was
tested by probing the workers about their validity.

A danger at this stage was that the researcher
might have been given idealized versions of what
the workers felt was happening or ought to happen.
Although care was taken to try and approach all
workers at the unit of work, one could not overcome
completely the influence of the information given
by those workers who were more talkative and felt
free to express whatever opinions they had. In
addition, there was the problem of sub-cultures
within the task force, which included individuals
with very poor English, and who had great difficulty
in expressing themselves. No doubt they were also
sensitive to their feelings of being a minority,
not always accepted by others.

3.7.2 Stage 2: Informal interviews. After
a short interval of absence from the factory, the
researcher returned with the purpose of making
further observation (participant and non-participant),
and administering some questionnaires as a pilot to the main study. At this stage, twenty-five workers were asked to fill the J.D.I. (a measure of job satisfaction, Smith e.al., 1969); Rosenberg's (1965) Self-esteem Scale; questions about job involvement, which included seven items from Lodahl and Kejner's (1965) Measure on job involvement; and a general questionnaire on attitudes towards work with a few items on participation. This included issues on communication, like the amount of general information provided by the management ("management usually keeps me informed about the things I want to know"), specific information about the job ("I always get the full information needed to carry out my job properly", and "Know what the standards are to evaluate my performance"), Participation in the decision making directly affecting the employee ("I am unable to influence my supervisor's decisions and actions affecting me", "the man in charge often encourages me to show initiative and exercise judgement", and "consulted when decisions are made affecting work"). How the decisions have an effect on the job ("can be flexible about pace and intervals in my job"). Decisions regarding with whom to work ("up to certain limits can choose with whom to work"). The degree of interest in making decisions ("How often does your group/unit get involved in arguments or disputes with your supervisor?" and "have you ever made any suggestions for improving efficiency or quality?"). In addition, questions about behavioural expression of participation, or involvement with the job were put forward. These involved the employees actual talking with each other in or outside work about work or the company ("when you talk with other employees, do you ever talk about what's happening in this factory or in
the company?", "Do you ever talk about work problems with the man/woman in charge of your unit?", "with management?", "friends outside work and/or family?", "Do you ever discuss problems with members of the workers' committee about matters relating to their office?" and "Have you ever approached fellow workers about possible actions for improvement of working conditions; company's policies; wages; etc.?". It also included any actions taken by the employee ("Have you actually ever done anything about the above?"), spending unpaid time on matters relating to work ("Have you ever spent any of your free time on matters regarding work?", "Have you ever gone to work related meetings outside the ones formally led in the factory?", and "Have you ever been elected or appointed to a work committee?"), Questions on attitudes to participation including the degree of confidence in management. Belief that workers can make decisions about working conditions ("I feel that management could give workers more chance of deciding about working conditions if they wanted to? Should they?, if yes, how?" Workers were asked to what extent they agree or disagree (on a five-point Likert scale) with statements such as: "The ordinary worker should have much say in decision-making relating to his work as management", and "management are experts and know their stuff, so it is only right that they should give orders and the workers should do as they say"). A grid was also designed to explore the desired extent of decision making. Items were about:

a. changes in method of payment
b. discharge of workers
c. introduction of new working methods
d. alteration of work rules so as to change disciplinary procedures
e. Setting up of new procedures to deal with absenteeism
f. Long term company policy (including mergers, investment, pricing policies, etc.).

The employee ticked whether he thought that management alone should decide; that workers should only be consulted; that decisions should be reached together by workers and managers; or that workers should decide by themselves.

Open-ended questions on job attitudes included statements for completion such as "Work for me is...", "Hard working people are...", In my opinion the important things about work are...". Other questions, perhaps pertaining to job involvement, were about the amount of time that seems to drag while at work, and the amount of effort put at work in relation to other employees.

3.7.3 Stage 3: administration of improved questionnaires. Examination of the pilot study's results to detect and eliminate possible inconsistencies, obscurities and vagueness. Drafting final questionnaires (which did not include issues on communication) and schedules. Administration of final questionnaires to all plants.

3.7.4 Stage 4 - analysis and feedback from management. Analysis of the data and discussion with management and workers for clarification for the interpretation of results.

3.7.5 Conclusions derived from the pilot study. The initial approach to this thesis, and in particular to the present topic, was not to follow a specific design with predisposed categories. The writer aimed
at being open-minded and receptive to the realities he would encounter in the field. Such an approach led to being susceptible to pertinent issues at the time of the research. One such issue was the degree, or level of employees' participation in decision making in their organisation.

In trying to discover what the main focus of this research is, it was decided that the main issue was the development of a measure of WRSE, and finding its relationships with other variables. These variables were to be relevant to the concept of WRSE, help verify its construct validity, and thereby create a conceptual framework which should increase the understanding of work behaviour.

Consequently, it was decided that such issues as participation in decision making, which (although very interesting and topical) constitute areas of research by themselves, should not be investigated within the scope of this study.

To summarize, the pilot study provided a measure of WRSE; the experience of testing new and used measures and their face validity. The author gained first hand experience by working closely with industrial employees and making informal interviews with them. This renders the present research a general validity and relevance to some currently discussed issues in industry, which are raised and discussed in this thesis.

3.8 The statistics to be used

Descriptive statistics provide a method of reducing large data matrices to manageable summaries to permit easy understanding and interpretation. The simplest type of analysis consists of the estimation from the sample of means totals, simple
correlation coefficients (measures of association) and frequency distributions.

The primary goal here is to provide the maximum amount of information in the simplest (most efficient) summary form. One way of achieving this is through measures of associations. These are based on what could be called the researcher's ability to "guess" each respondent's value on one variable on the basis of the knowledge of the other.

The purpose of statistical tests of significance of the measures of association is not to point to causation or explanation. Their function in this case is to tell whether the variation observed can give one some confidence in the result (O'Muircheartaigh, 1977).

As stated previously, since there was no clear distinction between the independent (or causal) and the dependent variable (or criteria) investigated in this study, and because of the difficulty in manipulating them, the experimental design had been rejected in advance. The research question was whether the variables under investigation are in some way related to one another, and if so, in what way. The level of analysis was then correlational rather than causal. Throughout this research, variables were often controlled through selection and then treated as independent variables for the purpose of statistical analysis. This was never regarded as equivalent to experimental manipulation. This is so since when a subject's level on an independent variable is determined by his own self-assignment, random manipulation of exposure to this variable is necessarily impossible.

3.8.1 Correlations and multiple regressions.
In its most basic form, all experimental research is
intended to determine whether individuals who differ on one dimension are also likely to differ on another. The major advantage of correlational research design is that it permits the free variation of both variables of interest, so that the degree of relationship between them can be determined without the loss of data inherent in the experimental design. In the latter, variation in the independent variable is limited by controlled manipulation (unless it involves "categories").

Another advantage of correlational analysis is that it is possible, through them, to know in what way the combination of several different variables relates to some particular measure. The most commonly used technique for this purpose is the M.R. (Multiple Regressions) correlation in which a weighted combination of scores on the "predictor" measures is used to create a predicted value on the variable of interest (the criterion measure), and then the linear correlation between individual predicted scores and actual criterion scores is computed. The larger this correlation value, the better the combined predictor factors "account for" the variation in the criterion measure.

Generally, the misuse of correlational techniques is related to the distinction between two types, or functions, of statistical analysis - description and inference. This research had as its starting point a conceptual framework from which, on one hand, certain assumptions were made as to what kind of results were expected, but on the other hand, it left considerable ground for exploratory research to develop. Computing correlations between naturally occurring variables is a valuable tool for hypotheses testing research dealing with predictions derived from an empirical or conceptual framework. However, much care should be taken in the interpretation
of exploratory data obtained post-hoc since in the case of small samples some appearance of orderly patterning is inevitable, and in the case of large random sampling of data, there is the opportunity for low probability events to occur. Nevertheless, the much criticized practice of "combing" a correlational matrix for correlation values which exceed the minimum required for statistical significance, and then selecting these correlations as indices of meaningful relationships, remains valuable. This is true if, and only if, the meaningfulness of the relationship remains seen in the context of explorative research. So long as the author is aware of the fact that in these analyses the probability level associated with statistical significance refers to the probability that an event will occur in one trial (and not in many undiscriminated correlational analyses obtained in a correlational matrix), this practice can still be quite useful for exploring, and as a stimulus for the developing of new, or the extension of theoretical ideas. As Simon (1969) argues, it is argued that, any patterns obtained in this way can only be suggestive and may not be tested except on new data.

The orientation of this study is not towards the testing of specific hypotheses, but towards discovering regularities or irregularities in the collected data. One of the principal concerns of this research was to discover the structure or pattern which may exist amongst the individuals or variables on which the data was collected as well as the identification of latent dimensions. Two analytical techniques, namely factor analysis and smallest space analysis were used to satisfy the above mentioned objectives.
3.8.2 **Factor analysis.** This analysis is used in order to discover patterns among the variations in values of several variables. This is done essentially through the generation of artificial dimensions (factors) that correlate highly with several of the real variables and that are independent of one another (Babbie, 1973). There are a number of advantages in factor analysis. Firstly, it is an efficient method for discovering predominant patterns among a large number of variables. Secondly, factor analysis presents data in a form that can be interpreted by the reader and/or researcher by seeking the variables with high loading on a given factor, thus noting clusters of variables.

The disadvantages of factor analysis are in the potential difficulty of interpreting its results meaningfully and in that it always generates a solution in the form of factors which by no means insure meaning.

3.8.3 **Smallest space analysis.** It is a geometrical representation of variables based on their correlations. As opposed to factor analysis, it is a non-metric technique since it relies on the rank ordering of distances between points, while the metric distances are irrelevant. Further advantages of the smallest space analysis are that it is not limited to two dimensions, and computer programmes generate SSA diagrams. The latter also provides a summary statistic called the coefficient of alienation. The lower this coefficient, the better fit of the diagram to the correspondence between distances and correlations. This coefficient determines the number of dimensions which are worth analysing.
Additional statistical techniques used in this study include the "T" Test, and one way analyses of variance. These were used for testing whether or not the difference between two or more sample means were significant. For example, T tests were carried out to find out if differences existed between employees of two industrial plants, and on another occasion, in order to find out whether there were differences between general nurses from two district hospitals regarding the variables studied. One way analyses of variance were carried out in order to find out whether there was a significant statistical difference in the mean of the different variables studied for the various occupational samples; they were also used in order to find differences between the various grades of general nurses.
4. Additional attitudinal variables

4.1 Introduction

The first steps of this study consisted of a pilot study, the building of a "work related self-esteem measure, Likert type scale, and the measurement of job satisfaction and job involvement in two samples of industrial workers. Subsequently, a number of attitudinal measures were developed. From the start, these relevant variables were considered, but were not measured, though the multivariable nature of the investigation made it necessary to keep such variables in mind. Practical restrictions made impossible the inclusion of these desired variables in the first stage of the study, partly because of reasons inherent in the strategy of the research. The lack of a self-esteem measure related to work for non-managerial people made it inevitable for the first steps of the study to be the building of such a measure. In order to validate it, a measure of general self-esteem had to be included in the questionnaire, making implausible the addition of still other measures. The main constraint was the time that it took for each individual to fill in the whole questionnaire. Willingness to co-operate with the investigation would have diminished considerably if completing the questionnaire had taken more than about half an hour. In addition, as the study was carried out during working hours, the management might have had strong objections to the study if it had taken longer, particularly as it involved about a third or more of the employees of each factory. From another point of view, the researcher's experience from the first stage was thought to be beneficial for the selection and building of measures that were to be included in the second stage. The additional measures were selected after a review of literature had been done, as well as from the experience gained in the pilot and first stage.
4.2 The type of work questionnaire: a measure of self perception of the characteristics of work

There are few things in life that are more important than the work an individual does. The importance of work is recognised by the literature, and there are many books concerned with the sociological and socio-psychological aspects of work. In what concerns job satisfaction, for instance, the so-called human relation approach sees workers' satisfaction as determined by styles of supervisory leadership, participation, the existence of cohesive work groups, etc.

According to another approach (Blauner, 1964), Woodward (1970), among others, technology is regarded as the important determinant of behaviour at the place of work. Several writers have argued that job satisfaction depends on production technology, with conveyor belt mass-production work being intrinsically less satisfying, in contrast to jobs in craft or process technology.

It can be seen that the two above mentioned approaches do not pay enough attention to the subjective desires and wants of the workers. The human relations approach focuses mainly on group processes that are said to operate in the working place, and the authors who stress the influence of technology tend to relegate possible differences in attitudinal variables to a subordinate role.

More recently, industrial sociologists (Goldthorpe et al., 1968; Beynon & Blackburn, 1972), aware of the shortcomings of the above mentioned theoretical positions, have advocated that for the understanding of working behaviour, it is important to take into consideration subjective variables such as values and expectations that each worker brings to the work situation, and only then try to predict working behaviour. The assumptions behind this position are that subjective factors are important in understanding working behaviour, and that if people define situations as real, they are so in their
consequences. Within such an approach, technology does not cease to be important, it merely takes on a different significance. Beynon and Blackburn (1972) advocate that the way in which work is experienced depends neither on work factors, nor on subjective factors alone, but rather on the interaction between the two.

It is postulated that how individual workers characterize for themselves the work they do is an important variable which must be taken into account together with the nature of the work group and the specific conditions which each of the workers brings to the work situation. Occupations are said to differ in a number of "objective characteristics". They are said, for instance, to differ in prestige, to be "blue collar" or "white collar", skilled or non skilled. However, many of these so-called "objective characteristics" are not as objective as they may appear to be at first sight. For instance, the "prestige" of an occupation might change with the changing of circumstances. In the United Kingdom, just recently, a constant confrontation could be observed between occupational groups trying to modify their relative position in what concerns pay differentials. Since traditionally, pay differentials are linked with differences in status and prestige, it can be presumed that a change in pay differentials would bring a change in the status and prestige of different occupations. The problem of the relative explanatory power of environmental vs. personal variables, including the ones concerning the possible differences that might exist between physical and psychological environments, is one which has caused a great deal of controversy not only among sociologists, but also among psychologists. In what concerns psychological literature, there are authors (such as, for instance, Skinner (1971), Bandura (1969), Mischel (1968) who claim that behaviour is a function of objective stimuli present in the environment. The individual is seen as a "black box", acted upon rather
than acting. These authors, in trying to predict one's behaviour, deny the importance of the meaning one gives to a situation. A close inspection at the epistemological premises of the behaviourists, shows that their definition of a crucial concept, such as "reinforcement", is a rather circular one. An event is said to be "reinforcing" if the frequency of certain behaviour(s) increases after its occurrence. In addition, many times it can be observed that different individuals, confronted with the same stimulus, behave quite differently. Also, what might be a reinforcer for one person could appear as a deterrent for another. ("The same fire that melts the butter, hardens the egg.")

In sharp contrast with the behaviourists position, there are other social scientists that call attention to the fact that behaviour is a function of both, the person and the environment he finds himself in, and that a person's characteristic way of sorting and classifying events is central in determining the course of his activities (Rogers, 1959; Murray, 1968; Rotter, 1966; DeCharmes, 1968 among others). Nevertheless, the contrast between these two positions, and the ensuing controversy that arose from them, was probably beneficial since each one contributed to the progress of psychological knowledge. They did so by criticizing the weaknesses of the other, focusing on those aspects which they thought were relevant.

More recently, in attempting to understand and predict behaviour, there have been signs of new theoretical trends which have been trying to take into account both, environmental and individual characteristics. They also call attention to the importance of the interaction between the environment and the individual. Scientists have long known that variables do not act independently. Rather, they often act in concert. So, it can be said, in this perspective, that the virtue of one style of supervision contrasted with another style of supervision, for instance, will depend on the super-
visors using it. Also, what constitutes the "best" kind of leadership often depends on the kind of situation in which it is addressed. An authoritarian leader may be quite effective with some individuals in a certain type of task, but much less effective with others.

It can also be said that when considering the possible relations between different environments and behaviour, it would be useful, as Jessor (1973) does, to draw a distinction between "proximal" vs. "distal" environments. Distal environments could be described as those which are relatively more remote from direct experience and are generally described in a non-psychological language. For the most part, the distal environments are without immediate functional significance for the person. According to Jessor, the environments of physics, geography, biology and institutional sociology, are, in this respect, distal. He argues then, that it is not the climate, as described by the geographer, which influences certain behaviours, but rather the individual's perception of being "hot" and/or "bold". The same would happen with sociological variables, such as social class, which is not experienced by the individual in the same way as categorized by the social scientist. On the other hand, "proximal" environments would be those which are perceived and experienced by the individual and are usually described in psychological language. These environments would be formed by variables which are, or could be, directly experienced or responded to by the subject. The present author endorses Jessor's (1973) argument that

"personality development and behaviour are logically variant with, or dependent upon proximal not distal environment."

He also goes on claiming that social scientists should concern themselves more with proximal environments. It could be argued that whenever a link is found between
behaviour and "objective characteristics" of the environment, it is because of intervening variables that are more "proximal" to the individual. As an example, he mentions that being black in the USA often implies a high probability of exposure to an interpersonal environment where "stigmatizing" experiences are frequent. This being so, he suggests that a social scientist who is interested in studying self-esteem, can regard differences in levels of self-esteem in black and white subjects as being more dependent on the proximal variable of being subjected to stigmatizing interactions, rather than to the distal variable of being black. Jessor and Richardson (1968) give some confirmation to this argument by finding a more constant relation between a low level of self-esteem and exposure to stigmatizing interactions (in both, black and white subjects), than the one obtained between being black and low self-esteem.

It is accepted here that an individual's perceptions about the environment he is in, and the belief systems he holds about himself (as well as the interaction between the two) are important in determining how he would behave in that environment. The author holds that environments categorized and described in a psychologically meaningful language are more proximal to the individual. It is therefore held that knowledge of the way in which different individuals perceive and categorize the type of work they do, might render a more reliable picture of the relationships between different types of work and the behaviour of people engaged in them.

Following this line of reasoning, it is hypothesized that, jobs which could "objectively" be categorized by an outsider as being different, may be perceived by the people engaged in them as having similar characteristics. On the other hand, people engaged in the "same" job, may perceive it quite differently.
Having these considerations in mind, it was thought useful to include in the final questionnaire a measure of how individual workers perceive and evaluate the work they do. An examination of the possible relationships between Type of Work, Work Related Self-Esteem, Job Involvement, Absenteeism, and Productivity could give a more complete picture for the understanding of behaviour during work. It is postulated that the interaction between this subjective perception and evaluation and other psychological variables, such as job satisfaction would enable the elicitation of a profile which might have certain behavioural consequences.

4.2.1 Definition of type of work scale. Type of work is the self-evaluation of individuals about the personal desirability and "goodness" of the kind of work they do, taking into account their abilities and qualifications.

The relevance of "type of work" can probably be appreciated in the following example: it is normally regarded as common sense that the more involved the employees are, the more productive they would be. Now, the illusion about the generality of such an assumption can easily be erased by imagining two distinctive jobs with different degrees of monotony, being performed by two contrasting samples of people in what regards their intelligence, education, and authoritarian attitudes. As an example, it is assumed that for the less intelligent, with a low level of education who have authoritarian attitudes, a monotonous job (objectively) could have its "inner" rewards, so that they would perform better in it. On the other hand, a job classified "objectively" as monotonous, could be performed quite efficiently (at least for a while, or with enough intervals in-between) by people with a high IQ, education and non-authoritarian
attitudes, without the necessity of being involved with that job. Of course, one could argue that in the long run, there might be a deterioration of performance in the more intelligent group, regardless of their involvement, while quite different results might be obtained for the other group in the long run.

The argument of this thesis, therefore is:

1. that there is an interaction between the environment and the person; i.e. various patterns of linkages between relevant variables of people in specific environments would relate in different ways to their behaviour and attitudes. In other words, distinctive profiles of people in a given environment will relate differently to their behaviour and attitudes in that environment.

2. What is seen as relevant in the environment and the way it is evaluated are subjective judgements and therefore, may vary among individuals. It is expected that the majority of subjective judgements about a certain job would be similar to each other. The variance within a group may be great, sometimes even greater than between what is considered as different jobs "objectively". However, normally individuals tend to conform to established ratings of prestige attached to a job.

Two strategies were adopted for the measurement of "type of work", which is defined as the self-perception of the characteristics of work. The first is to measure "type of work" as an evaluation by the subject. Such an evaluation is the end product of past experiences, learning and expectations, for this purpose an Osgood semantic differential type of scale was devised. His semantic differential can measure the evaluative aspects of attitudes. According to Osgood, attitudes are defined as a person's favourable or unfavourable evaluation of the object, and should be used only when there is strong evidence that the measure employed places an individual on a bipolar affective dimension. By the semantic differential technique, the
respondent is provided with one or more concepts to differentiate and a set of bipolar adjectives against which to do so. In a large number of studies involving different scales and different concepts, Osgood and his associates have repeatedly found three different factors or dimensions which underly different semantic differential ratings: evaluations, potency, and activity. The present study was interested principally in the evaluative components. For this purpose then, "type of work" was made to understand in the following introductory way: "Having in mind any abilities and/or qualifications you may or may not have, would you say that for you the type of work you do is." This statement was followed by a set of evaluative bipolar adjectives. The adjectives were: "desirable", "good", "useful", and "suitable". The respondent had to indicate whereabouts between the two extremes of the bipolar adjectives, he thought he was. In order to make sure that the semantic differential was measuring only one (evaluative) dimension, the items were submitted to a factor analysis. A principal component analysis as well as a rotated solution were analysed with one main factor emerging in the two solutions. In the rotated solution this one factor accounted for 100% of the variance, showing that the measure used here was unidimensional; assessing only the evaluative dimension. The evaluative measure of "type of work" is derived for each individual from the summation of his scores on each of the four items.

4.3 Desirability of the type of work in the eyes of significant others (NORMBEL)

It is assumed that there might be a gap between a person's self-evaluation about his type of work and the way he perceives other people who are important to him in that context to evaluate it. For example, a husband might believe that the type of work he does is very good
desirable and useful, while his wife might think that it is useless, undesirable, and lets her husband know or feel what her attitudes are. This example shows a discrepancy between the attitudes of the husband and wife about the former's type of work, and his perception of such a discrepancy. It might well be that the discrepancy between one's own attitude and the perception of "significant others" who hold an opposite or different attitude on the same matter, might influence one's behavioural intentions. An additional factor entering into such an equation is the degree to which the person will conform with his "significant others". Following the previous example, the husband might well be aware of his wife's attitude towards his work, but may consider her beliefs about his work irrelevant to him or his intentions. In other words, he may be a person who may reject the idea of conforming with significant others. Therefore, in order to understand a person's behaviour, or predict his intentions, it is not enough to know what his personal attitude and those of his significant others are, but also to what extent he accepts or rejects the idea of conforming with those significant others. The individual's own attitude is measured on the Type of Work scale. The person's perception of the attitude of the significant others is measured by asking him to agree or disagree (on a five-point Likert scale) on the degree to which people who are important to him, think (in his eyes) his type of work as desirable. (This variable is hereby called Normbel.)

4.4 Conformity

The degree of the respondent's conformity with significant others is similarly inferred from an item in which the person is asked (from "strongly agree" through "uncertain" to "strongly disagree") the extent to which he wants to do (very much) what most people who
4.5 Subjective norm

The conceptualization used for the last two variables is similar to that used by other authors in the study of attitudes. Fishbein (1975) would call the first of the two variables "normative belief". These, he states, are beliefs that certain referents think the person should or should not enact the behaviour in question. His emphasis is on the link between attitudes and behaviour. In Fishbein's terms, Normbel would be an attitude composed of beliefs and evaluations. Nevertheless, seeing Normbel as equivalent to normative beliefs seems plausible. Fishbein's "motivation to comply" with a given referent (the tendency to accept the directives of a given reference group or individual), would be equivalent to this study's measure of conformity. According to Fishbein, the multiplication of normative beliefs by the motivation to comply leads to normative pressures, which he terms "subjective norm". Like his attitudes towards behaviour, a person's subjective norm is viewed as a major determinant in the person to enact the behaviour. The multiplication of Normbel by Conform would be a subjective norm, though it would not be linked directly to behaviour. Subjective norm, as used in this study, is an attitude about the desirability of the "type of work" as perceived by relevant others, in the respondent's eyes.

French and Raven's (1959) discussion about the bases of social power may be of pertinence in this context. It is plausible that motivation to comply increases with the increase in others' power over the person. Power is related to the person's perception of others' 1) power to reward or punish him, 2) with the person's liking of
those others, 3) with others' perceived expertise, and 4) with the extent to which it is legitimate for the others to make demands on the person. A person's motivation to comply with various groups may also be related to certain personality characteristics, such as self-esteem and authoritarianism. Presumably, the higher the self-esteem and the lower the authoritarian orientation, the less motivated to comply the respondent would be.

The knowledge of the individual's self attitudes ("what I think") about the type of work he does, plus the subjective norm ("what I think they think") about it, should give a picture of the person's intentions. If a) one believes that the type of work he does is desirable, and that b) other people who are important to him perceive it similarly, it is expected that the above two together would be related to his intention to stay in that work. Nevertheless, as Fishbein would probably point out, a person's attitudinal measures do not correspond with the intention to leave or stay at the same place of work. If this were the case, the attitude measured should be the consideration of whether leaving or staying in the place of work is desirable or not, and not whether the individual considers his type of work as desirable. Therefore, a high interrelation between the attitudes measured and individual's behavioural intention to leave or stay in his place of work is not expected.

4.6 Intentions

"Intentions are seen in many respects as a special case of beliefs in which the object is always the person himself and the attribute is always a behaviour. As with a belief, the strength of an intention is indicated by the person's subjective probability that he will perform
the behaviour in question" (Fishbein, 1975).

4.6.1 Intention to change job in the same organisation within six months and intended length of service in the organisation. Two behavioural intentions were measured in this study. One was in regard to the likelihood (on a five-point Likert scale) of making a genuine effort to find a new job in the same organisation, within the six months that followed. The second behavioural intention measured the willingness to continue working in the same organisation from up to six months until retirement on a five-point time scale. It is worth stating that the objective of this study was not to test Fishbein's model regarding the link between attitudes, intentions and behaviour, but to study the effects of the desirability of the type of work a person does on the structure of his other attitudes to work. The effect that the type of work attitudes should have on intentions to leave the job, or stay in the same organisation, should be seen in the perspective of a distal variable (Jessor, 1973).

4.7 Classification of what is meant by attitudes

The conceptual confusion between attitudes, beliefs, values and intentions merits a short clarification. Rokeach's, Osgood's and Fishbein's differentiations are used here. An attitude should be used only when there is strong evidence that the measure employed places an individual on a bipolar affective dimension. When the measure places the individual on a dimension of subjective probability relating an object to an attribute, the label belief should be applied. When the probability dimension links the person to a behaviour, the concept behavioural intention should be used. Attitudes are different from values in that attitudes refer to an organisation of
various beliefs about specific objects or situations. On the other hand, a *value* refers to one special belief. Value refers to a behaviour or final objective which has a transcendent quality over specific objects and situations, guiding actions, attitudes, judgements and comparisons.

Although there is a confusion in terminology, and terms are used interchangeably, there seems to be wide agreement on the differentiation of categories. For example, Fishbein has a very similar conceptualization to Campbell's (1967). The latter states that any orientation has cognitive (beliefs and opinions), affective (likes and dislikes), normative and behavioural components. Osgood agrees, with his trilogy of affect (feelings and evaluations), cognition (knowledge, opinions and beliefs, and conation (behavioural intentions).

4.8 Beliefs about the kind of work and orientations to it

The attention is now turned to the perceived characteristics of the "type of work", or what might be classified as beliefs about the kind of work the respondents were engaged in. Hackman and Lawler (1971) cite the close relationship between workers' own descriptions of their job characteristics and "objective" descriptions. This view is reinforced by Turner and Lawrence's (1965) experience and Sheppard and Herrick's (1972) own internal evidence for the close relationship between the ratings of job tasks by the workers, and their reality of their situation. The relationship, though not one to one, varies for workers with different personality structures.

In trying to develop a measure of beliefs about the characteristics of the respondents type of work, it was considered beneficial to include general orientations to work, and factors which the literature relates to the concept of alienation. This was done because, although there is a vast literature on alienation, only a few
authors find it necessary to give operational definitions to the factors that compose this concept, and even fewer attempt to use these definitions in field work. The concept of alienation, because of the various meanings attached to it, has become a difficult term to deal with. So it was decided to get away from this problem, while retaining the awareness that there is such a problem, and that more factual data is necessary to resolve it. This approach implied taking Seeman (1954) and Blauner's (1964) acceptable operationalizations of alienation, stripping them to their basic components—when relating them to alienation from work—and arranging them in a manageable and practical way. Seeman operationalizes alienation according to five dimensions, which in principle are independent of each other. These are:

1. powerlessness (I cannot make decisions, I have no influence on what I do at work).
2. meaninglessness (I cannot understand what I do, I am not interested in it).
3. isolation (my superiors and fellow workers are not a reference group for me; I feel they do not support me).
4. self-estrangement (work is an area of experience which I do not integrate into the rest of my life, which starts when work finishes).
5. normlessness (the lack of knowledge of norms for what is right and wrong).

As the power-powerlessness dimension is conceptually seen as a central part of work related self-esteem, it was excluded from this section. Normlessness was measured by the item "easiness in knowing if you are doing a good/bad job". Self-estrangement was measured by questioning the respondent about his reason for working; whether only for money, or mainly for other reasons. Isolation was measured by the degree of perceived integration with the work group and amount of perceived social facilities. Meaninglessness was measured by the perceived effect on other people's lives. All items (apart from one representing
self-estrangement) were on a five-point Likert scale and were positive, i.e. the non-alienating pole of each dimension was presented to the respondent. (This assumes that the dimension of alienation and their opposite run along a single continuum, an unwarranted assumption which is not testable within the scope of this study.)

From the literature on orientations to work, items were selected so as to represent the instrumental, solidaristic, social and intrinsic orientations. (see sec. 1.5, p. 51). Some orientations cover the same area as the items concerning alienation. For example, the instrumental orientation, according to which the individual sees his work as a means to an end—money, can be seen as equivalent to the item that measures self-estrangement. The person who is alienated in this way feels that the work he does is not part of his real life; he does it only because he has to in order to achieve certain standards. Additional items introduced in relation to the instrumental orientation were: good pay, convenient hours, future security, and opportunities for advancement (the last item might also be seen as characteristic of intrinsic orientation and is therefore ambiguous). Social orientation was represented by the items: working together with people and social facilities. Intrinsic orientation was represented by the items: creativity and interest, and solidaristic orientation by the item: integration with a work group.

Every respondent had to rate the extent to which each of the above items was present in his Type of Work on a five-point Likert scale. The underlying assumption of the measurement method used was that, the rating of an item as present in the Type of Work would imply the possibility of fulfillment of expectations in a certain orientation to work, or the absence of an alienating dimension.

An additional set of items, generally related to perceived skill (subjective), was introduced, asking
for the degree of their importance as requirements for the respondent's Type of Work. These items were taken from the pilot study in which people were asked to mention factors which they considered when taking a job. Some of these items had already been taken into account because of their relevance to orientations or to alienation. The remaining ones were: education, the use of physical effort, skill, the use of mental effort, and training. Many of the items were left open to interpretation on purpose. In this way, the respondent could have the opportunity to "project" his own meaning into the items. For example, what may be considered as skill by one person, may not be considered so by another. This approach emphasizes the subjective perception of the individual, deriving his evaluations and beliefs from his own frame of reference, rather than from an "objective" category. For instance, instead of operationalizing the item "education" by preconceived levels, it was presented without any breakdown.

Analysis of the perceived characteristics of the Type of Work was planned to be made dependent on the factorial structure obtained from this measure. If the same factors appeared for the different "objective" types of work (occupations), covering the same dimensions, then these factors could be made into different measures for each dimension. If the same dimensions appeared, the measure would only be useful for a description of the difference between the occupations as perceived by its own workers.

The items inferring orientations to work, dimensions of alienation, and perceived requirements of skill, were all presented on the same page of the questionnaire. In this manner, it was possible for each respondent to rank order all of these items (17 in all). After completing their previous task, respondents were asked to rank order the five most desirable items for themselves - from the whole page (these were the same items that they had just rated for their presence or absence in their type of work).
4.9 Satisfaction with the "type of work"

A measure of satisfaction with the "type of work" was expected to be obtained by weighing the presence or absence of the different factors by their ranked desirability. For example, if a person ranked "future security" as the most desirable item for himself, and rated it as being absent from his type of work, his score for this item would be $5 \times 1$, while if he perceived it as present in his type of work, his score would be $5 \times 2 = 10$. The final or total score of this measure would be the summation of the multiplication scores obtained for each of the five items selected by the respondent from the seventeen possible items (which cover the different areas previously described). This means that each person's satisfaction score in this measure is composed of a combination of items personally selected by him according to the respondent's perception of their desirability.
5. The development of the WRSE measure

5.1 Introduction

In constructing an item pool, which had the intention of measuring work related self-esteem, it was attempted to keep in mind the following points:

1. Self-esteem is considered as a semi-permanent structure, and therefore capable of being measured (see sec. 2.6, p. 75).

2. Since it had been desired to obtain significant correlations between a measure of self-esteem and behaviour related to work, it was mandatory to be specific and situational, thus questions had to be formulated so that they had something to do with the specific work situation.

3. The notion that other peoples' opinions are very important in what concerns self-evaluation and had been borrowed from the "social self" school. Accordingly, the opinions of some people might be more important than others' in determining self-evaluation (see sec. 2.8.1.b, p. 95-7).

4. However, without taking into consideration all the theoretical postulates of the Developmentalists, the dimension of power-powerlessness was taken into account. This is so since the amount of control one perceives to have over his environment plays an important part in the way he evaluates himself. This dimension also entails elements from concepts such as alienation (Seeman, 1954), "Internal control" (Rotter, 1966), "origin vs. pawn" (DeCharms, 1968), and "the organisational and the scientific" (Holmes, 1976).

5.2 The test rationale and construction

The purpose of the measure of WRSE is to assess
the evaluation an individual makes of himself as a worker. The items were derived from theoretical postulates in the fields of self-evaluation and the personal experience of the author. In what concerns self-evaluation, the position of several theoretical approaches, such as the psychoanalytical one and the social interactionist's, were taken into consideration. Related to the first is the theme of alienation as it appears, for instance, in the work of Erich Fromm (1959). The items were presented to the subjects in the form of a five-point Likert format. The latter is one of the most widely used format, and as was seen from the pilot study, it was the most suitable form for the population being investigated. This is so because it is efficient and gathers sufficient information. A seven or more point-scale would have been too difficult for the population under study, while a three-point or less, would have given too limited an information. A characteristic of the Likert scaling is that all items in the scale carry equal weight. Respondents are asked to indicate their degree of agreement, and these responses are subsequently scored (1-5). The scoring for some items is reversed so that a high or low score for any item will have the same meaning. After the scoring (including any necessary reversals), the item scores are added up to a total score, and that is the respondent's score in the WRSE scale.

5.3 The basis for the item pool

Based on the theoretical considerations mentioned before, an initial item pool of fifty items was created to reflect differences between high and low WRSE persons. In order to test the validity of the author's theoretical assumptions, the first stage was set, interviewing twenty-eight workers in the shop floor of a factory in the servicing industry. These interviews did not follow
any rigid schedule and were made when the author was actually working in the above mentioned factory as a participant observer. The aim of such an undertaking was to give the author a first-hand experience of what industrial work actually meant to the person in it, and to enable him to try and find some links between theoretical concepts and everyday experience. It is the author's opinion that this part of the research project was particularly important since it enabled to establish closer contact between researcher and subjects. In such circumstances, the subjects used their own words and experiences to describe what self-evaluation at work meant to them. Thus, some "unquoted quotes" obtained in this item pool were used.

In the second stage of the pilot study, some of the questions from the original item pool were used plus some open-ended questions, in order to try to improve both question wording and the type of questions asked. The interviewees were required to criticize the questions after the interview, and it was noticed that sometimes a subject showed quite clearly that he had not understood some questions, even when he made no comment. They were also asked to produce questions which in their opinion should have been asked. On the basis of such comments, the item pool was again changed (N=30).

The present item pool was then based on the theoretical framework, corrected by the researcher's experience as a participant observer at a factory, unstructured interviews with workers, and their coded answers to open-ended questions.

5.3.1 The themes of the item pool

The item pool included the following themes thought to be important to self-evaluation at work:

a. Feelings that at work one can make decisions, take initiative, that there are things at the shop floor that are the individual's personal responsibility, that one
is actually doing something and that he is not merely a small cog in a big machine, but that the work he does has an effect on the overall running of the factory. This variable is called "power-powerlessness", and in chapter 2 it is explained why it is crucial to what concerns an individual's evaluation of himself as a human being. This variable has been studied by many authors, such as Seeman (1959) and Kanungo (1979) in relation to alienation. It is therefore accepted that an individual who feels that he has no control over the work he does cannot have a high opinion of himself as a worker. It is perhaps in connection with such variables that one can understand the negative consequences that "alienated work" can have upon the individual, its main effect being on how he values himself.

b. Feedback from superiors on one's performance at work, feelings that one's own worthiness is perceived and eventually rewarded by the "people at the top". These items were included because of the importance of social interaction to one's evaluation of himself. Also, research by Israel (1956); Backman et.al (1963); Maher et.al. (1962); Haas and Maher (1965) seem to suggest that those individuals who are perceived by the subject as competent to evaluate his performance, having access to objective evaluative criteria, and/or who are of relatively high status, will be particularly important in determining one's level of positive self-evaluation. It is reasonable to assume that supervisors would be perceived by the worker as possessing such attributes.

c. Perceived impressions about how fellow workers relate towards oneself as a worker, and how favourably or unfavourably they view a person, as far as his performance is concerned, and as a person in general. These items were included since research in the Social Self tradition (for example, Webster & Sobieszek, 1974) suggests that other peoples' opinions are particularly
important in determining one's evaluation of himself, and also that the importance one attaches to someone else's opinion is a function of the amount of interaction one has with that person. This is also what occurs in the shop floor of a factory.

d. Evaluation of one's job compared with previous ones. It was assumed that this would be an important variable in what concerns self-evaluation since in all theoretical models encountered by the writer, experience was crucial in determining one's level of self-esteem. Past jobs held, give the individual the level of comparison needed to put his present behaviour in perspective, and therefore be able to make a judgement about himself. Also, in defence of a self model, it will be hypothesized that in order to protect their own favourable self-evaluations, individuals will tend to see their present jobs as worthwhile. While items were constructed to cover this theme, the pilot study had shown difficulty in measuring it. An answer that implies that the present job is better than the previous ones does not mean that the latter was bad. In addition, there is a serious difficulty since such an item leaves out all those people that did not have a previous job. This would necessitate the construction of additional items for people who were in their first job and were in it already many years. Such additional items would make the construction of WRSE measure cumbersome and long. Therefore, skeptically, in the final version of the scale, this theme was left out.

e. Self-report on the relevance of WRSE.
Current psychological literature follows Mischel's (1968) call for attention to the importance of self-report in measurement. Subsequent to these suggestions, it was regarded important to include a measure of the individual's reported relevance of work to him as a person, to improve the face validity of the scale ("I think the work I do is important to how I feel as a person").
5.4 Reliability

Reliability of questions refers to consistency, to obtaining the same results again. Reliability can set limits to the degree of possible validity, though if a measure is valid, it will also be reliable. To assess the reliability of a "non-factual" question, by asking the same question in another form, is almost impossible since it will no longer be considered as the same question. On the other hand, the problem of bias or idiosyncrasy of an item is overcome when a set of related questions is asked, in place of a single item. A high internal consistency of items in a scale will ensure that there is a common theme underlying it. Such consistency provides a measure of reliability, helping to avoid having to ask the same questions twice.

Concerning the issue at hand, since items related to WRSE are evaluations, consistency of responses to each of these items (on the Likert scale used here) depends on how the individual estimates himself with regard to each item, hereby hindering perfect reliability. However, comparisons between individuals and groups can provide reliable (or consistent) results, though one cannot say in absolute terms what low or high WRSE is. What can be shown are only the relative differences between the individuals or groups.

Likert analysis is an internal-consistency method of item analysis providing some safeguard against the inclusion of unrelated items in a scale. What is done, in simple terms, is that correlation coefficients are worked out for each item with the total score, and those items with the highest correlations are retained.

A first Likert analysis was performed on the basis of data from the third stage of the pilot study (N=110). Only items having a Likert correlation of over .20 were retained. They gave the following results of nine items assumed to be relevant to WRSE:
<table>
<thead>
<tr>
<th>Item No.</th>
<th>Likert analysis (reliability)</th>
<th>Factor analysis I</th>
<th>II</th>
<th>Loading before rotation</th>
<th>Loading after rotation</th>
<th>Varimax</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Would you say that your present job is better than the previous ones?</td>
<td>.34</td>
<td>.53</td>
<td>-</td>
<td>.70</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>I think the work I do has to do with how I feel as a person</td>
<td>.30</td>
<td>.53</td>
<td>-</td>
<td>.60</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>I am never praised by the man (or woman) in charge of my unit</td>
<td>.25</td>
<td>-</td>
<td>.69</td>
<td>.43</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>I feel that in my work I can make decisions</td>
<td>.44</td>
<td>.65</td>
<td>.70</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>I feel that in my work there are things which are my personal responsibility</td>
<td>.36</td>
<td>.65</td>
<td>.63</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>I feel that in my work there is place for my initiative</td>
<td>.50</td>
<td>.64</td>
<td>.51</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>The work I do has an effect on how the factory runs</td>
<td>.28</td>
<td>.60</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>I often feel that I don't know what my supervisor thinks of me</td>
<td>.21</td>
<td>-</td>
<td>-</td>
<td>.74</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>I just don't know what my fellow workers expect of me as a person</td>
<td>.30</td>
<td>-</td>
<td>-</td>
<td>.50</td>
<td></td>
</tr>
</tbody>
</table>
The above table show the (Likert item analysis) correlations obtained for each item belonging to the WRSE measure with the total (summation) score of that measure. The table shows that the item-total score correlations were highest for the items portraying a feeling of initiative, ability to make decisions and responsibility.

Having obtained an initial version of a WRSE scale, the researcher undertook the task of trying to improve it to the best of his ability. Based on the experience gotten from the initial version of WRSE, several points were scrutinized. To begin with, the item concerning the evaluation of one's job compared with previous ones had to be relinquished since this item was suitable only to those workers who had had a previous job. It was questionable whether the item was valid (in the case of workers who had had previous jobs) if it had not been followed by other items which covered the whole theme it purported to measure.

The wording of many items was improved, taking care that the final version of the measure should have, whenever possible, equal numbers of positively and negatively worded items. In addition to that, since the results of the first factor analysis of the measure were already known, care was taken to leave in the scale about the same number of items for the two main factors which were obtained. Namely, items having to do with amount of power or control, and items concerning feedback from relevant others. The result of this undertaking was an improved WRSE scale containing 15 items.

A final item pool of fifteen items was submitted to all samples with a total N=361 workers from three different samples of occupation.

In the Likert analysis these items (which were selected and retained in the WRSE measure) emerged as the most discriminatory ones:
<table>
<thead>
<tr>
<th>Item no.</th>
<th>Items</th>
<th>Likert</th>
<th>Factor Analysis</th>
<th>Rotation Varimax</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Factor I</td>
<td>Factor II</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Loading (Eigen)</td>
<td>Loading (Eigen)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Value 2.0</td>
<td>Value 0.86</td>
</tr>
<tr>
<td>1</td>
<td>I feel I get along pretty well with the other people at work</td>
<td>.65</td>
<td></td>
<td>.36</td>
</tr>
<tr>
<td>2</td>
<td>In my work I often have to do things which are against my better judgement</td>
<td>.57</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>In my opinion, how good one is at one's job has to do with how good one feels as a person</td>
<td>.40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Sometimes I feel that my fellow workers think that I am not very good at my job</td>
<td>.49</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>I often feel nowadays that the results I get at work are better than what they used to be</td>
<td>.49</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>I am frequently praised by the person in charge of my unit</td>
<td>.48</td>
<td></td>
<td>.57</td>
</tr>
<tr>
<td>7</td>
<td>I feel that in my work I cannot make decisions</td>
<td>.52</td>
<td></td>
<td>.68</td>
</tr>
<tr>
<td>8</td>
<td>I feel that in my work there are things which are my personal responsibility</td>
<td>.42</td>
<td></td>
<td>.34</td>
</tr>
<tr>
<td>9</td>
<td>I feel that in my work there is no place for my initiative</td>
<td>.55</td>
<td></td>
<td>.69</td>
</tr>
<tr>
<td></td>
<td>Description</td>
<td>Correlation 1</td>
<td>Correlation 2</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>-----------------------------------------------------------------------------</td>
<td>---------------</td>
<td>---------------</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>I feel that in my work I can do a good job</td>
<td>.57</td>
<td>.37</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>I often feel uncertain about what my superior thinks of me</td>
<td>.58</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>I often feel that the work I do, has no effect on how the firm (hospital) runs</td>
<td>.47</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Most of the time my superior really cares about how I do my job</td>
<td>.49</td>
<td>.36</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>There are many times when I feel that the results of my work are not as good as those of others</td>
<td>.39</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>I feel that the people at the top reward ambition and effort</td>
<td>.57</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The above table shows that the (Likert item analysis) correlations obtained for each item belonging to the final version of the WRSE measure, with the total (summation) score of that measure are much stronger than in Table 2. The table shows that the item-total score correlations were stronger for the items showing a feeling of "getting along well with other people", uncertainty about what one's superior thinks of him, being capable of doing a good job, that ambition and effort are rewarded, and a feeling that one has to do things against his better judgement.
5.5 Construct validity

5.5.1 Validation through factor analysis. The validity of a measure is usually defined as the degree to which it measures that variable which it claims to be measuring. So, as far as its construct validity is concerned, it first involves the development of a model which explains what the measure under consideration means. Once this is done, derivations and predictions would be made as to the relationships between scores on the instrument and other theoretically relevant variables. To the extent that the predicted relationships occur, the theory or model underlying the measurement procedure is supported, and therefore, the construct validity of the instrument is backed up.

The items which were obtained through the Likert procedure were submitted to a factor analysis. The latter is a statistical technique, based on intercorrelating all the items with one another, which makes it possible to abstract one or more "factors". Factor analysis can be used either in order to eliminate items that do not belong to the measure (that is, they have low "loadings" in the factor), or, as it was used here, in order to show how a seemingly unified concept in fact "breaks up" into several independent factors.

All the initial data for validating the measure of WRSE was taken from (unless otherwise stated) a sample of 110 industrial workers. Two factors (with eigen value of 2.86 and 1.96 respectively) emerged from the latter analysis (when referring to the factor matrix using "Principal factor with iteration" - SPSS) as responsible for 37.1% of the variance in the measure. The first one corresponded to the power-powerlessness dimension (explaining 22% of the measure's variance), and was connected with how or whether the individual perceives himself as being able to have control over his actions at work.
Items 1, 2, 4, 5, 6, 7 in table 2, belonged to this dimension, with factor loadings of .53, .53, .65, .65, .64, .60 respectively. The other factor was related to what was here called feedback from fellow workers and supervisors and accounted for 15.1% of the total variance. Feedback was defined as the amount of information the individual receives from his supervisors and fellow workers about his worthiness as a worker. Items loaded in this factor were numbers 3, 8, 9, with factor loadings of .43, .74, .50 respectively.

A subsequent factor analysis with rotation of the factors (Varimax rotated factor matrix after rotation with Kaiser normalization, Nie et al., 1975) brought forward somewhat different results. This time, the two main factors (eigen values 2.36 and 1.35 respectively) accounted for 69.4% of WRSE total variance, with the factor of power-powerlessness accounting for 44.2% (for factor loadings see table 2).

A new factor analysis was carried out when additional data of 361 employees from three different occupational groups was obtained. First, the "principal factor with iterations" (non-rotated) solution was examined, but it suggested a number of factors whose interpretation was not acceptable. However, after a Varimax rotation (with Kaiser normalization), a main factor (eigen value 2) was obtained, explaining 45.1% of the WRSE measure's variance. A second factor (eigen value .86) explained 19.5% of the variance, bringing the total variance explained to 64.6%.

An examination in Table 3 of the factor analysis rotated solution clearly shows that the factor loading of factor I pertains to a dimension of power-powerlessness. It included feelings of being able to make decisions, take initiative and have responsibility. The second factor (of doubtful independence because of its low eigen value) portrays the expected dimension linked to feedback from others at work (normally, it is accepted that factors are considered independent if they have an eigen value of 1 or more—Nie et al., 1975). It highest loadings this time were on items depicting praise from superiors.
feelings of being able to do a good job, care about what superiors think, and getting along well with other people at work.

The two factor analyses which had been carried out helped establish the construct validity of the scale. In both instances, the two factors which were found to be explanatory of most of the variance in the measure were the ones which the author rightly identified from his theoretical framework as the most important components of WRSE.

5.5.2 Validation through the use of correlations and Chi Square test of significance. The concurrent validity of the scale was tested by comparing it to Rosenberg's SE scale (1965), and to a shortened version of the Job Involvement index of Lodahl and Kejner (1965). The author defined WRSE as a measure of how worthy an individual felt as a worker. He therefore saw WRSE as related to self-esteem in general (how favourably or unfavourably the worker felt as a person). However, the writer did not expect WRSE to be identical with general self-esteem since the latter can be appropriately tested in different situations, while the present author was interested in one specific situation, which was that of work (how worthy an individual regarded himself at work).

A division (a breakdown) of Rosenberg's global self-esteem scale, WRSE and job involvement into high, medium and low scores was made. No association whatsoever was found between Rosenberg's measure of global self-esteem and WRSE for the industrial sample as a whole (N=110), or for individuals who had "low" or "medium" job involvement. However, a statistically significant association (.02), using a Chi square ($X^2$) analysis for comparisons between groups, was found between the above measures for those individuals who had high job involvement. This means that an association between how worthy a person feels he is at
his work (WRSE), and how worthy he feels in general (global self-esteem) exists only for those individuals who had high job involvement. (Chi square is a test of significance. See explanation for it in appendix).

The author also postulated that job involvement (having been defined as the degree of a person's psychological identification with his job, or the importance of his job to his self-esteem) would be correlated with how highly (or low) a person evaluated himself as a worker. This was postulated on the basis of the consistency model, namely that the more a job appears important to an individual, the more crucial it is for him in maintaining a favourable image of himself, and in evaluating himself positively at doing it. In addition to these, both WRSE and job involvement are related to work and the Self. The researcher's data supports this hypothesis since he found a significant association (at the .05 level, using a $X^2$ analysis for comparisons between groups for the initial sample. Later a Pearson correlation .36 was found for the whole sample, N=472) between WRSE and job involvement.

The initial data also gave some support to the hypothesis that the relationship between WRSE and job involvement would vary according to different levels of satisfaction with the job. The population under investigation (N=110) was divided into three groups according to low, medium, and high job satisfaction. Correlations were performed between WRSE and job involvement for each of the three groups. A highly statistically significant correlation ($X^2$ significant at .01; Kendall's Tau=.41) between WRSE and job involvement was found for the medium job satisfied group. (For explanation of Kendall's Tau in appendix).

No correlation was found for the low job-satisfied, and a negative (Tau=-.26), non-significant correlation for the highly job-satisfied group. This means that an association between how worthy a person feels he is at work (WRSE) and how important work is for him (job...
involvement) exists (in the sample of industrial workers) only at a moderate level of job satisfaction. This last result might have been an artifact since there is a strong correlation between WRSE and job satisfaction, and in this particular sample there were no people with high job satisfaction who had low WRSE. Nevertheless, this might be expected since it would not be consistent to be very happy with one's job, and think of oneself as an unworthy worker in that job. Indeed, a very significant association ($X^2$ significant at .000; Tau= .39) exists between job satisfaction and WRSE, even for people with low job involvement.

At a later stage of the study, the total population sample ($N=473$) was divided into highly job-satisfied ($N=236$), and low job-satisfied ($N=237$) individuals. A separate Pearson correlation was then performed between WRSE and job involvement for each of these groups. A significantly higher correlation was obtained between WRSE and job involvement for the low job-satisfied group (.38) than for the highly job-satisfied group (.18). Now, although the expected association between WRSE and job involvement was based on the reasoning of self-consistency, this result suggests that it is not self-consistency that accounts for the relationship. If this had been so, a higher correlation would have been obtained for the highly job-satisfied group. This conclusion is corroborated by results obtained from dividing the total sample into high job involvement and low job involvement groups. A correlation between WRSE and job involvement was .39 for the group of people with low job involvement, but no significant correlation was found for the one with high job involvement.

5.6 The motivational process behind WRSE: self-consistency and self-enhancement models.

There are two different sets of models concerning the
influence which WRSE as a variable might have on other evaluations, and as an intervening variable. One stresses the need for consistency in all evaluations (self-consistency model), and the other, the need for self-enhancement (self-enhancement model). According to these two models, WRSE would be regarded as having strong implications on human behaviour, and as a variable which mediates and has an impact on various self and others' evaluations.

According to both, the self consistency and self enhancement models, it is predicted that WRSE acts as a moderator between job involvement and 1) job satisfaction, 2) intended length of service in the organisation, and 3) performance appraisals. To put it more plainly, personal feelings of worthiness at work (WRSE) are expected to moderate between the strength of association between the personal importance that a person attributes to work (job involvement), and 1) his job satisfaction, 2) his intention to stay in the organisation, as well as 3) his performance appraisals.

In accordance with the self consistency model, it is predicted that a person who has high WRSE, in order to be consistent with his self-evaluation, will be more satisfied with his work, if he regards it as important (or vice versa). The more important it is, the more satisfied he will be. Inversely, according to this model, a low WRSE person, in order to be consistent with his low evaluation, will not be satisfied with his job, if he feels that it is an important part of himself. The more important it is to him, the less satisfied he will be (or vice versa). Alternatively, according to this model, it is predicted that, for the low WRSE person, there will not be a correlation between job involvement and job satisfaction, or if there is, it will be a less drastic one, and that the correlation obtained between job involvement and job satisfaction will be weaker for the low WRSE than for the high WRSE person.
It is also predicted, in accordance with this model (consistency) that the associations between job involvement and intended length of service in the organisation, and between job involvement and performance appraisals will be stronger for the high WRSE person. This is so since, if he sees himself as worthy at what he does, and his work is important to him, then, in order to be consistent with himself, he will intend to stay longer in the organisation, and he will receive better performance appraisals. The opposite is predicted for the low WRSE person. For him, the association between job involvement and intended length of service in the organisation, and between job involvement and performance appraisals will be, if existing at all, negative or weaker because of his feelings of unworthiness at his job. Therefore, in his wish to be consistent with himself, if he feels that his job is an important part of himself, he will not intend to stay longer in the organisation, and will not strive to receive higher performance appraisals.

In accordance with the self enhancement model, it is predicted that one of people's main concern is to increase or maintain their sense of worthiness. A person with low WRSE has a greater need for self enhancement than a person who is already in a state of high WRSE. It is therefore predicted, according to this model, that, in trying to enhance his WRSE, the more satisfied with his work a low WRSE person is, the more important that work will be for him (or vice versa). In other words, the link between job involvement and job satisfaction will be stronger for the low WRSE person, who wants to increase his feelings of worthiness, than for the high WRSE individual, whose need is only to maintain his WRSE. Therefore, for the high WRSE person, the strength of the link between how important the job is to him, and how satisfied he is with it, is less crucial than for the low WRSE individual. The argumentation for this prediction is based on the assumption that attraction to a job is directly proportional to the needs
satisfied by the job, and that low WRSE employees (having greater needs for esteem enhancement) are more satisfied in a job in which they will be able to show greater involvement (higher correlation between job involvement and job satisfaction) than their high WRSE counterparts.

It is also predicted according to the self enhancement model, that the association between job involvement and intended length of service in the organisation, and between job involvement and performance appraisals, will be stronger for the low WRSE individual than for the high WRSE one since the former has a greater need for self enhancement. Therefore, if his work is important to him, he will want to stay longer in it, as well as perform better, so that his esteem will rise. A high WRSE person needs only to maintain his self-esteem and; therefore, correlations obtained for people in this group should be weaker than for the low WRSE individuals in the low self-esteem group, who need to increase their feelings of worthiness.

As it can be seen, both the self consistency and the self enhancement models predict moderating effects of WRSE. Findings that the WRSE measure developed in this study acts as a moderator will increase its validity, and the results, if WRSE proves to be a moderator, will give support to one of the two models.

<table>
<thead>
<tr>
<th>TABLE 4: Predicted strength of correlations between job involvement and other variables according to the self consistency and self enhancement models</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SELF-CONSISTENCY MODEL</strong></td>
</tr>
<tr>
<td>LOW WRSE</td>
</tr>
<tr>
<td>job involvement++job satisfaction</td>
</tr>
<tr>
<td>job involvement++length of intended service</td>
</tr>
<tr>
<td>job involvement+performance appraisals</td>
</tr>
</tbody>
</table>

*table continues on next page*
When ++ means a stronger correlation than +.

5.7 WRSE as a moderator variable

A moderator variable is that which influences correlation(s) between other variables. In most general terms, a moderator is a variable, demographic trait, etc., which is taken into account with the predictors in the validation of a selection procedure. How it is taken into account depends upon the methodology used. The method used most often is subgrouping. This is usually accomplished via a median split on a scale, or it is induced experimentally. Owens (1971) proposes the use of biographical data which he calls "biodata" and subgroups according to answers on biographical questionnaires and other background material. For example, correlations between two response patterns may be found for married, but not for single people, or may even be positive for the former, but negative for the latter. Thus, if the correlations between two response patterns are examined for married and single people combined, the different relations that might be obtained, if each of the groups were taken into account separately, could become obscure. Interactions in any field concerning human behaviour are complex, so that the relations between any two variables would more often depend on several other variables.

In the U.S.A., the moderator approach (Hobart and Dunnette, 1966; Campbell et. al., 1970) has received considerable attention, particularly since it has been used in the guidelines published by their Equal Employment Opportunity Commission (1970). According to the latter, race, for example, could be said to be a moderator
variable by law.

One of the ways in which WRSE is expected to be of influence is as a moderator between certain variables. In order to use it as a moderator, a sample of employees categorized as low in WRSE, and another one as high in WRSE was needed. This was accomplished by taking the median of the measure as a cutting point. All those persons who had received a WRSE score of 52 or under \((N=253)\) were categorized as being in the low WRSE group, and all those receiving a score of 53 or over \((N=220)\), as being in the high WRSE group. Separate correlations were then performed for each group (high WRSE and low WRSE).

WRSE is assumed to be a moderator variable (for example, between job involvement and job satisfaction) since it is expected to influence the dynamics of a situation. However, there are wide differences of opinion as to what underlying motivational processes affect a person's reactions to, for instance, the feelings that he is liked or disliked, that his opinions are valued or not appreciated, that he is accepted or rejected, praised or derogated as a worker.

5.8 Comparative correlations between various pairs of variables for a group of low WRSE and a group of high WRSE

The following are the actual results obtained in the study for the whole population:

<table>
<thead>
<tr>
<th>TABLE 5: WRSE as a moderator between job involvement and other variables</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>job involvement-job satisfaction with the job itself</td>
</tr>
<tr>
<td>job involvement-job satisfaction with the firm</td>
</tr>
<tr>
<td>job involvement-job satisfaction with opportunities for promotion</td>
</tr>
</tbody>
</table>

Table continues on next page
As can be seen from the above table, WRSE performs very well as a moderator variable. It moderates quite drastically between the relationships between job involvement and three different aspects of job satisfaction (job satisfaction with the job itself, with the firm, and with opportunities for promotion), between job involvement and intended length of service in the organisation, and between job involvement and authoritarian orientation.

Notably, WRSE did not have any effect on the (simple zero order) non-existent correlations between job involvement and job satisfaction with pay, job satisfaction with supervision, and job satisfaction with fellow workers. This is understood in the light of job involvement being related only to the intrinsic aspects of the job, and not to its extrinsic (external) facets, like pay, supervision, and fellow workers.

On the intrinsic factors of job satisfaction with the job itself, job satisfaction with the firm, and job satisfaction with opportunities for promotion, WRSE has a striking moderating effect. For the high WRSE group, there are no correlations between job involvement and job satisfaction with the job itself, job involvement and job satisfaction with the firm, and a negligible one between job involvement and job satisfaction with opportunities for promotion. However, for the low WRSE group, there are significant correlations of meaningful magnitude between the just mentioned variables. The same pattern of correlations appears between job involvement and the intended length of service in the organisation. The correlation between the importance of work to the self (job involvement) and intended

<table>
<thead>
<tr>
<th>job involvement-performance appraisals</th>
<th>n.s.</th>
<th>n.s.</th>
<th>n.s.</th>
</tr>
</thead>
<tbody>
<tr>
<td>job involvement-intended length of service in the organisation</td>
<td>.39</td>
<td>.28</td>
<td>.16</td>
</tr>
<tr>
<td>job involvement-authoritarian orientation</td>
<td>.37</td>
<td>.13</td>
<td>.27</td>
</tr>
</tbody>
</table>
length of service in the organisation is stronger for the low WRSE group (0.39) than for the high WRSE group (0.28).

Noticeably, WRSE did not have any effect on the missing link between job involvement and performance appraisals. This could mean that the assumption of a link existing between job involvement and performance appraisals is unwarranted and that job involvement does not have an effect on performance appraisals even when moderated by WRSE. The validity of WRSE as a successful moderator variable was appreciated in the previous presentations, and therefore it is hard to question its usefulness in such a role. However, the fact that there is no association whatsoever between job involvement and performance appraisals could be interpreted as deriving from a flow in the popular reasoning behind the meaning of job involvement and its consequences. Traditionally, it was seen as somehow directly related to performance, and indeed, this is a common-sensical belief. Nevertheless, if one goes deep into what job involvement actually means, there is no reason why there should be a simple relationship between it and performance. The addition of WRSE as a moderator was thought to improve or make the lack of association suddenly emerge. This did not happen in the present investigation.

Two factors should, however, be taken into account before reaching a conclusion. Firstly, the measure of performance appraisals was not a measure of actual, objective performance, but a subjective one. Secondly, the subjective measure of performance was not taken directly from the supervisor, but the subject was asked how he thought he had been appraised. Therefore, two inferential steps have to be made before equating the present measure with actual performance. Even then, the problem remains as to whether the criterion is one of quantity, quality, or both. The general tendency is to attribute, in most jobs, a relationship between job
involvement and quantity performance, which is more amenable to measurement.

The focus in this study was on how good the individual felt his or her performance was, rather than to how it was in objective terms. This is one main reason why a subjective measure of performance was chosen. In relation to this area, it is interesting to note that there were suggestions (Wood, 1971) that subjective ratings of performance made by supervisors may be in actual fact nothing else, but the supervisors' evaluations of the person's job involvement. If a positive association had been found between job involvement and a subjective measure of performance, it would have had to face the possibility offered above. Since no association was found (the problem does not arise), it is possible to disregard, until further evidence is gathered, the assumption that either job involvement is linked to performance appraisals, or that performance appraisals are affected by the subject's job involvement.

Still on the subject of performance appraisals, the published literature and unpublished research are full of attempts to try to link (in a simple way) between job satisfaction and performance (for example, Vroom, 1964; Dunnette et. al., 1976). Though expectancies of obtaining a simple link were very low, an attempt was made to correlate between the two. A simple (zero order) correlation for the total population with each of the six job satisfaction aspects resulted in only one significant correlation of a very low magnitude (−.11) with job satisfaction with pay. Subsequent separate correlations for the low WRSE and high WRSE groups did not change the picture much. Only this time, there was a significant, negative correlation between performance appraisals and job satisfaction with pay (−.20) for the low WRSE (there were no other significant correlations between performance appraisals and job satisfaction).

According to the self consistency model, a higher correlation between performance and satisfaction for
the high WRSE group would have been predicted, and either a lower, non-existent, or negative correlation for the low WRSE group. If the person thinks he is worthy worker, and his performance appraisals are high, in order to be consistent with his image, he will want to be satisfied as well, or vice versa. If he is satisfied, he will want to have high performance appraisals. A low WRSE person, according to the self consistency model, in order to be consistent with his negative image, if he is appraised positively, he will be dissatisfied.

According to the self enhancement model, on the other hand, it would be predicted that for a low WRSE person (who, as it has been postulated, has a greater need for enhancement), there would be a stronger correlation between performance appraisals and job satisfaction than for the high WRSE person. The actual result (Table 6, p.181) seems to support the self consistency model, though it is by no means conclusive. Only in the area of satisfaction with pay a correlation with performance appraisals was found, and this is correct only of the low WRSE group since no such association was found for the high WRSE group.

By the way, it was also of interest to find out the moderating effect that WRSE might have on the unexpected finding regarding the link between job involvement and authoritarian orientation (whose simple correlation N=373 was .27). The results show (Table 5, p.176-7) that WRSE does moderate between those two variables. A correlation of .37 was found for the low WRSE group, while only a correlation of .13 was found for the high WRSE group. The meaning of these results is also not understood. This cul-de-sac situation could be slightly resolved by additional information on the nature of the job involvement - authoritarian orientation relationship. A breakdown of the total sample into high and low job involvement groups enabled the researcher to observe that a strong correlation between job involvement and
authoritarian orientation appears only for the high job involvement group (.48), while no association exists between the two variables for the low job involvement group. This could be interpreted as a sign that high levels of job involvement as authoritarian orientation have their source, to a significant degree, in earlier socialization, and that the observed correlation is particularly true of people with low WRSE. So that it could be said that people who are highly involved, but have a low WRSE, would tend to be of an authoritarian nature.

Continuing with results obtained from correlations with performance appraisals while moderated by WRSE, it was found that there is also a low inverse relationship between it and both, authoritarianism and conformity for the low WRSE group. This could mean that people who have a low WRSE are less conformist, and hold a less authoritarian orientation the more highly they see themselves being appraised (or vice versa). The reason for this is not understood, but one explanation could be that since having low WRSE and high appraisals is not consistent, these people will show less conformity and authoritarian orientation. The just discussed relationships of performance appraisals while moderated by WRSE are described in the Table below.

TABLE 6: WRSE as a moderator for performance appraisals correlation

<table>
<thead>
<tr>
<th></th>
<th>LOW WRSE</th>
<th>HIGH WRSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>performance appraisals - job satisfaction with pay</td>
<td>-.20</td>
<td>—</td>
</tr>
<tr>
<td>performance appraisals - authoritarian orientation</td>
<td>-.18</td>
<td>.12</td>
</tr>
<tr>
<td>performance appraisals - conformity</td>
<td>-.19</td>
<td>—</td>
</tr>
</tbody>
</table>

Other areas of interest were the effect which an instrumental orientation might have on the job satisfaction,
and the job involvement of low and high WRSE groups.

According to the consistency model, the less the people in the high WRSE group work for the money, the more satisfied they want to be (in relation to the low WRSE group). They are not at work just for the money, they do feel that they are worthy workers, so they might as well be satisfied, otherwise why are they there in the first place. In a case where people in the high WRSE group work just for money, it would be predicted, according to the consistency model, that the more this is so, either there will be no association with satisfaction, or it is expected that they will be less satisfied with the job. This is particularly so with pay, since feeling that they are highly worthy workers, they would feel that they deserve higher pay.

Similarly, it would be predicted according to this model (consistency) that there is a stronger association between the degree of instrumental orientation and job involvement for high WRSE people. The less the people in the high WRSE group work for money (non-instrumental orientation), the more involved they will want to be; the more they work just for money, the less they will need to be involved.

According to the self enhancement model, it would be argued that a low WRSE group has stronger needs for self enhancement. Therefore, the less such persons work just for money, the more they will strive to be satisfied with their work, in order to enhance their feelings of worthiness. Alternatively, if they work only for money, job satisfaction will be less strongly related to instrumental orientation for them than for the high WRSE group. This is expected to be so because when one works only for money, he does not feel that there is anything else in the job which might help enhance his esteem. Anyone who works for money only, gets a salary, and if he is allowed to remain in the job, satisfaction with other aspects of it is less relevant to his feelings
of worthiness.

Regarding the association between instrumental orientation and job involvement, according to this model (enhancement), it would be predicted that people in the low WRSE group have stronger needs for enhancement. Therefore, there will be a stronger correlation between their degree of instrumental orientation and their scores in job involvement. The less they work just for money, the more involved they will want to be (or vice versa).

The relationship between the instrumental orientation and satisfaction is described in the following Table.

<table>
<thead>
<tr>
<th>TABLE 7: WRSE as a moderator between non-instrumental orientation and job satisfaction and between non-instrumental orientation and job involvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>(non)instrumental orientation - job satisfaction with the firm</td>
</tr>
<tr>
<td>(non)instrumental orientation - job satisfaction with the pay</td>
</tr>
<tr>
<td>(non)instrumental orientation - job satisfaction with opportunities for promotion</td>
</tr>
<tr>
<td>(non)instrumental orientation - job satisfaction with the job itself</td>
</tr>
<tr>
<td>(non)instrumental orientation - job satisfaction with supervision</td>
</tr>
<tr>
<td>(non)instrumental orientation - job satisfaction with fellow workers</td>
</tr>
<tr>
<td>(non)instrumental orientation - job involvement</td>
</tr>
</tbody>
</table>

Note that a high score in (non)instrumental orientation means that the person does work mainly for other reasons than money. A low score means that he/she works mainly for the money. The results show that there is no simple link between job satisfaction with the firm, job satisfact
with supervision, job satisfaction with fellow workers and the person's instrumental orientation, and that the use of WRSE as a moderator variable does not change the picture. However, WRSE does influence significantly two of the three existing correlations. The results show that there is a stronger correlation between the (non)instrumental orientation (people working more for reasons other than money) and job satisfaction with opportunities for promotion for the low WRSE group. They also show that people who work mainly for the money are less satisfied with the pay, particularly if they belong to the high WRSE group. (At this point, the reader might be curious to know whether there is an association between a (non)instrumental orientation and performance appraisals. The finding shows no such relationship.12.)

The results appear to support the self enhancement model. There are significant differences between high and low WRSE groups in two of the job satisfaction variables (pay and opportunities for promotion), and in the job involvement variable that correlates with (non) instrumental orientation. Another satisfaction variable (with the job itself) that also has correlations with (non)instrumental orientation, supports the predictions made by the self enhancement model, though the differences in correlations between the two groups is probably non-significant.

When developing the conceptual framework of WRSE, it was assumed that job involvement is independent of it. Nevertheless, correlations between the two were expected to be obtained. It was further assumed that there would be different correlations for people categorized as low in WRSE and high in WRSE. It was postulated that this would also be the case concerning job satisfaction, intended length of service in the organisation, performance appraisals, instrumental orientation, desirability of and satisfaction with the type of work, and conformity. Regarding the latter, it was stipulated in chapter 2 that the definition of the self-esteem need suffered by the
low WRSE person is a motivational force which might make him conform to others to a greater extent than a high WRSE person. In all these cases, the self consistency model would predict higher correlations for the high WRSE persons, while the self enhancement model would predict higher correlations for the low WRSE individuals. The following table is an example of what predictions the two models would make regarding the relationship between WRSE and job involvement. The same pattern of relationships is expected for the other variables mentioned above.

| TABLE 8: Expected correlations for the self consistency and self enhancement models |
|---------------------------------|---------------------------------|
| **LOW WRSE**                    | **HIGH WRSE**                   |
| "I am not very good at the work I do (WRSE), therefore, the work I do is not very important to me" (job involvement) and/or vice versa. WRSE + job involvement WRSE + job satisfaction | "I am very good at the work I do (WRSE), therefore, the work I do is very important to me" (job involvement) WRSE ++ job involvement WRSE ++ job satisfaction |
| "I am not very good at the work I do. Since I want to better myself, the work I do will be important to me" (or more important than for someone who already has high WRSE). WRSE + job involvement WRSE ++ job involvement WRSE ++ job satisfaction | "I am very good at the work I do (WRSE), therefore, the importance of work to me is not so critical." The importance of work for this person will be less decisive than for someone with low self-esteem. WRSE + job involvement WRSE + job satisfaction |

++ denotes a higher correlation than +.
The actual results are:

TABLE 9: Correlations with job involvement, job satisfaction, performance appraisals, desirability of the type of work, (non)instrumental orientation, and conformity for low and high WRSE groups

<table>
<thead>
<tr>
<th></th>
<th>LOW WRSE</th>
<th>HIGH WRSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>WRSE - job involvement</td>
<td>.35</td>
<td>.21</td>
</tr>
<tr>
<td>WRSE - job satisfaction with the job itself</td>
<td>.42</td>
<td>.16</td>
</tr>
<tr>
<td>WRSE - job satisfaction with opportunities for promotion</td>
<td>.33</td>
<td>.20</td>
</tr>
<tr>
<td>WRSE - job satisfaction with the firm</td>
<td>.30</td>
<td>.24</td>
</tr>
<tr>
<td>WRSE - job satisfaction with pay</td>
<td>n.s.</td>
<td>n.s.</td>
</tr>
<tr>
<td>WRSE - job satisfaction with supervisors</td>
<td>.15</td>
<td>.12</td>
</tr>
<tr>
<td>WRSE - job satisfaction with fellow workers</td>
<td>.26</td>
<td>.20</td>
</tr>
<tr>
<td>WRSE - performance appraisals</td>
<td>.24</td>
<td>.19</td>
</tr>
<tr>
<td>WRSE - intended length of service in the organisation</td>
<td>n.s.</td>
<td>n.s.</td>
</tr>
<tr>
<td>WRSE - desirability of the type of work</td>
<td>.30</td>
<td>.14</td>
</tr>
<tr>
<td>WRSE - satisfaction with the type of work</td>
<td>.15</td>
<td>n.s.</td>
</tr>
<tr>
<td>WRSE - (non)instrumental orientation</td>
<td>.22</td>
<td>n.s.</td>
</tr>
<tr>
<td>WRSE - conformity</td>
<td>.15</td>
<td>n.s.</td>
</tr>
</tbody>
</table>

Once again the results support the self enhancement model. Besides the lack of correlations for both groups between WRSE and intended length of service in the organisation (for which, by the way, there is no simple (zero order) correlation for the whole population sample either), there are meaningful differences between the correlations of the two groups.

Within the low WRSE group, people who judge themselves as worthier workers are more highly involved in their
work, their performance appraisals are higher, they see their type of work as more desirable, and are more satisfied with it, have a less instrumental orientation, and are slightly more conformist. Regarding the correlation with job satisfaction, there is no correlation at all with job satisfaction with pay, and small insignificant differences with job satisfaction with supervision, and fellow workers. However, significant differences between the two groups exist for the intrinsic aspects of the job.

This shows that it is useful (when making predictions in this field) to specify which aspects of job satisfaction one refers to, since significant differences in correlational patterns exist between the intrinsic and extrinsic aspects of the job. WRSE is mainly associated with the intrinsic aspects of job satisfaction. In reference to conformity, the results show some validity to the assumption that low WRSE persons would be more conformist, though the strength of the association was very weak. On the other hand, for the high WRSE group, there was no association at all with conformity.

In order to find support for assumptions about WRSE (made in chapter 2, p. 87), correlations were performed between the desirability of the type of work in the eyes of the beholder, and its desirability in the eyes of others (NORMBEL). It was supposed that a low WRSE person may evaluate a situation in terms of how he perceives others rate it rather than in terms of how the situation meets his needs (Korman, 1974). It was then further inferred that the desirability of the type of work measure would include the respondent's judgement as to the degree to which the job meets his needs.

Correlations were also performed between conformity and job satisfaction with fellow workers, claiming that job satisfaction with fellow workers might reflect social approval. This was done to support Dittes' (1959) notion that conformity is an attempt to enhance self-
esteem through obtaining social approval. Therefore, a higher correlation was expected for the low WRSE group. Neither of these two assumptions was supported. In both occasions, WRSE did not moderate between the correlations. One explanation for these disappointing results could be that too much was expected from the measures (apart from WRSE) used. In the first case, scores on the desirability of type of work measure were expected to also tap the degree to which the job meets the respondents' needs. In the second case, (as well as in one case in the last table) conformity was broadly defined, in a very general sense, and not specifically designed for the work context. It might well be that the above inferences were too far fetched and that therefore the measures used were inappropriate.

5.9 Multiple regressions of WRSE

Another strategy used to increase the validity of WRSE was to perform some multiple regressions. The latter is a general statistical technique through which one can analyse the relationship between a dependent variable and a set of independent or predictor variables. It is used here to control for other confounding factors in order to evaluate the contribution of WRSE to other variables. There are two basic methods of multiple regressions (MR): 1) standard regression, and 2) hierarchical. In the first method, each variable is treated as if it had been added to the regression equation in a separate step after all other variables had been included. In the second method, variables are added to the regression equation in an order predetermined by the researcher. The crucial criterion regarding which method should be employed, is whether the researcher considers the correlations among the independent variables to be causal or noncausal. Since no causal relations were presupposed at this study, the standard regression method was chosen.
Five criteria, or dependent variables were examined, one at a time with different sets of independent variables in order to arrive at their best predictor. These dependent variables were: performance appraisals, intention to change job (inside the organisation) within the next six months, intended length of service with the organisation, job involvement, and general job satisfaction. It should be noted that missing data was treated in a "listwise deletion" fashion so that all correlations (in each M.R.) are based on the same universe of data. (In contrast, when using simple Pearson correlations, "pairwise deletion" was employed, i.e. a missing value for a particular variable caused that case to be eliminated from calculations involving that variable only.)

WRSE was found to be the best predictor, or when seeing it in another way, the variable accounting for most of the variance in the criteria, while all the other variables in the equation were controlled for (partialed out) for three out of the five criteria. It was not good as a predictor of the other two.

1. WRSE is the best predictor of job involvement (N=461; MR=.36), and when it comes in conjunction with authoritarianism, they predict 22% of (the variance in) job involvement.

2. WRSE is the best predictor of general job satisfaction (N=280; MR=.46), and when it comes in conjunction with the desirability of the type of work and grade, they predict 29% of general job satisfaction. Included in the MR equation were: authoritarian orientation, desirability of type of work in the eyes of others (Normbel), age, instrumental orientation, marital status, tenure, or job involvement. None of these helped to increase significantly the prediction of general job satisfaction.

3. WRSE is the best predictor of performance appraisals (N=230; MR=.28), and when it comes in conjunction with job satisfaction with pay, they predict 9% of performance
appraisals. Included in the MR equation were: tenure, job satisfaction with opportunities for promotion, desirability of type of work, job involvement, job satisfaction with supervision, job satisfaction with fellow workers, conformity, or authoritarian orientation. None of these helped to improve the prediction of performance appraisals. It is of interest to point out that a simple correlation between WRSE and performance appraisals does not exist. Nevertheless, as seen before, a correlation of .24 between the two is found for a low WRSE group, but only of .19 with the high WRSE group.

5.10 Partial correlation between WRSE and performance appraisals

When using partial correlations to control for (partial out) job involvement or general job satisfaction, or the desirability of the type of work, similar correlations are obtained. A partial correlation provides the researcher with a single measure of association describing the relationship between two variables while adjusting (controlling) for the effects of one or more additional variables. (The control, or partialling out is statistical rather than literal, and is based on the simplifying assumptions of linear relationships among the variables.) The results therefore show that when controlling for extraneous elements within the WRSE measure, the expected correlation indeed emerges as the conceptual framework would imply.

<table>
<thead>
<tr>
<th>TABLE 10: Partial correlations of WRSE with performance appraisals</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WRSE - performance appraisals</strong></td>
</tr>
<tr>
<td>----------------------------------</td>
</tr>
<tr>
<td>WRSE - performance appraisals</td>
</tr>
</tbody>
</table>
The above table shows the relationship between WRSE and appraisals, controlling for one variable at a time. A partial correlation controlling for job involvement, general job satisfaction, and type of work together, did not better the above partial correlations, and therefore is not included in the table.

5.11 Analysis of variance for the various samples regarding WRSE

A one way analysis of variance was performed in order to find out whether there was statistically significant differences in WRSE, between the samples of the various occupational groups. "Scheffe's" A Posteriori Contrast Test was used.

**TABLE 11: Analyses of variance for the various samples regarding WRSE**

<table>
<thead>
<tr>
<th>Subset</th>
<th>Mean of WRSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subset 1 - industrial workers</td>
<td>48.4</td>
</tr>
<tr>
<td>Subset 2 - clerical staff; psychiatric nurses</td>
<td>51.5; 52.1</td>
</tr>
<tr>
<td>Subset 3 - general nurses</td>
<td>53.9</td>
</tr>
</tbody>
</table>

The above table shows three subsets of occupations which are significantly different regarding WRSE. Industrial workers (subset 1) have the lowest mean of WRSE, and the general nurses (subset 3) have the highest mean of WRSE. The clerical staff and psychiatric nurses (subset 2) lie in between. These results are once again additional evidential support for the validity of the WRSE measure, since this would be the expected order of WRSE means for the various occupational populations sampled.
5.12 Conclusion

At this point, the author can say that one of the important objectives of his research, i.e. the building of a reliable and valid, specific measure of self-esteem at work has been achieved.

The measure was standardized in an industrial sample to start with, and later in a sample of psychiatric nurses, clerical staff, and general nurses. The results show that the measure is reasonably valid. Nevertheless, the author is well aware that there are many other levels and occupations that have not been included in the standardized sample, so that broader normative data would be desirable.

In what concerns the measure itself, and its acceptability in practical terms, several of its aspects seem to be in its favour. The questionnaire is short, requiring approximately ten minutes to be completed, and the instructions and format seem to be suitable either to self or group administration. All the items of the scale also appear to be sufficiently general and suitable to be applicable to many types of occupation and different levels of hierarchy in the organisation.

However, it is also the author's opinion that because of the very nature of the construct measured, two main problems remain. The first one is to do with the problem of social desirability. It is the author's opinion that this is inherent in any measure pertaining to self-esteem. It also seems obvious to him that this kind of bias would not affect those subjects whom the test discriminates as having low self-esteem, and that the problem lies with those who have been categorized as having high self-esteem. Recent literature seems to suggest that two distinctive groups might well exist among those, the ones having "defensive" self-esteem, and those with "non defensive" self-esteem. Schneider and Turkat (1974) and Dion and Dion (1974), for instance,
have used the Marlowe-Crowne (1964) measure of Social Desirability in order to distinguish between high self-esteem and defensive self-esteem. When dividing high self-esteem subjects into two groups, one with defensive and the other with non defensive self-esteem, interesting differences were found. Defensive self-esteem subjects, for instance, were significantly more affected in what concerns evaluation of themselves concerning experiences of failure in the experimental situation. It also appears from the data presented, that subjects with "defensive self-esteem" were more dependent upon other people's evaluation of themselves to maintain their feelings of worthiness. Thus, it is thought that the distinction between defensive and real high WRSE should be kept in mind when attempting to make predictions about high self-esteem, something that had not been done in this research.

Related to the above problem, is the attempt to analyse the test-retest reliability of the measure of WRSE. As it was discussed in the theoretical background, and as can be observed in the above-mentioned results concerning global self-esteem, by its definition, WRSE is only relatively permanent, and situational. Therefore, it is expected to change as time passes and situations change and evolve. There is very little that could be done to improve its reliability since it is inherent in the measure that scores of each person might fluctuate over time. Nevertheless, more empirical work would be useful in order to indicate the variability of the scale in connection with environmental variables, and the amount of the variance in the scale which could be said to be independent of situational factors.

Regarding the search for the validity of the scale, it is perhaps worth laying stress on the fact that none of the results brought forward to support it, are in themselves proof of the scale's validity. Rather, each result is accumulated in order to increase the validity of the measure. Looked at in this manner, any additional
data will help in this endeavour.

The controversy between the models of self consistency and self enhancement, concerning what motivational forces act upon WRSE thus seems to be resolved by the data obtained in the present thesis. The vast majority of the results give strong support to the self enhancement model.

The evidence also shows the relevance and centrality of the concept of WRSE, as exemplified in its role as the best predictor of job involvement, job satisfaction, and performance appraisals from among those variables that were examined in this thesis.
6. Results

6.1 Introduction

The author aimed at a multivariable approach which puts emphasis on the subjective outlook and attitudes of the individual person. The thinking behind this approach was the belief that various patterns of relations between the same relevant variables (in the same and/or different conditions) might bring different predictions of attitudes and behaviour.

This chapter contains what might be termed the basic results, in so far as it describes responses and provides an analysis of some of the more relevant variables and their components, which this study focuses on. One of the ways in which it was attempted to obtain meaningful data, was by trying to "control" or hold constant, what seemed to be relevant aspects, when looking for associations between different areas (variables) related to work. As a descriptive study, it does not attempt to provide management and employees with all the information that could become available. However, it does provide some interesting information which could clarify what sort of information might be likely to be most useful. Such a study can point to problem areas. It cannot provide precise information about why a problem exists, nor does it necessarily point to a solution. It should be remembered that what is considered a problem, often depends on the values of whoever interprets the basic data.

The samples that were surveyed included four occupational groups which were: 1) industrial workers, 2) psychiatric nurses, 3) clerical staff, and 4) general nurses. Within these occupational groups, the sample of industrial workers consisted of workers taken from two factories. The sample of general nurses was drawn from two different district hospitals; in both cases, the sub-samples were similar to each other (see chapter 3).
In order to commence with the analysis of the results, four different possibilities were taken into account as alternatives to the first step of analysis (sec. 6.1.1):

1. Categorization of each sample according to the norms of the general population. Perhaps, this would have been possible only for the measure of job satisfaction, but because of the nature of the whole questionnaire (which is not yet standardized, and therefore has no norms), it would not have been possible for the rest of the measures.

2. Categorization by deriving a normal distribution from the scores obtained in each sample. This type of analysis was rejected since a comparison between samples using this category would not have been meaningful.

3. Deriving norms from all the samples together and making the categorization accordingly, would have been meaningful for results obtained in this study. But since an analysis of variance was intended to be carried out in any case, and results for all the samples were not available until the collection of all the data and a first analysis, this type of categorization was not utilized.

4. Categorization of scores of different measures into three equal parts: low, medium, and high. An example of such a procedure would be a measure which has scores ranging from 10-40 (for example, ten items, each on a four-point scale) so that the minimum score would be ten, and the maximum forty. In this case, scores from 10-20 would represent the "low" category, 20-30 medium, 30-40 high. It is important to remember that this categorization was not based on any norms, and this limitation should be kept in mind when interpreting the results. Since initially, norms for the population of the different samples was not available, it was decided as a first step to use this coarse method.
6.1.1 The first step in the analysis of the data - A description of the frequency of the primary results of the main measures. These results only constituted the first step in the analysis of the data for each sample. This analysis was determined by the fact that at this stage of the study, no normative figures were available for most of the measures used. The meaning of these figures is relative, and their significance is obtained only in comparison to data from other samples analysed in the same fashion.

This section includes information about general job satisfaction and its various facets, about job involvement, WRSE, and authoritarian orientation. All the samples, except for that of industrial workers, also include findings on the evaluation of the type of work in the workers' own eyes, satisfaction with the type of work, desirability of the type of work as seen by relevant others, conformity, reasons for working (money, or other reasons), the intention to change firm (or hospital) in the following six months, and the intended length of service in the organisation. These variables were not measured in the sample of industrial workers; instead, they replied to a general measure of self-esteem (Rosenberg's This was because this sample was used in the initial validation of the WRSE measure. (All the above mentioned results appear in the appendix except for the last three. Provided on request from author)

6.1.2 The second step in the analysis of the data - rank ordering. Following the above analysis, two types of rank ordering from the same universe of data were presented. (Rank ordering is stating the desirability of items concerning the type of work according to one's priorities, i.e. the frequencies with which items appear according to their desirability for the type of work the employee has.) The first is comprised of frequencies with which items appear in the first five ranks of
desirability for the employee's own type of work, i.e. how many times a certain item appears as desirable in any of the first five choices, regardless of whether it is mentioned first, second, or fifth. The second is comprised of frequencies with which items appear as the most desirable for the employee's own type of work, i.e. only the items described as a first choice in their desirability. The rank ordering was done out of a list of 17 items. These items were about: 1) education, 2) using physical effort, 3) skill, 4) using mental effort, 5) training, 6) integration with a work group, 7) convenient hours, 8) good working conditions, 9) future security, 10) opportunities for promotion, 11) creativity, 12) interest, 13) working together with people, 14) easiness in knowing if you are doing a good/bad job, 15) effect on other people's lives, 16) good pay, and 17) social facilities. For the areas these items cover see chapter 4, pp. 152-5, section 4.8.

Each respondent was asked to rank order the five most desirable items for him. The instruction given was: "Please rank order the five most desirable items for you. For example: If you feel that for you the most desirable item above is 'training', you would put to its left the number 1; then if you think that the next most desirable thing to you after that is, for instance, 'prospects', you would put to its left a number 2; and so forth. Note that you cannot repeat the same numbers".

Various ways of analysing the data were possible. Analysis could be made to find:
1. the frequency of the most desirable item,
2. the frequency of the three most desirable items,
3. the frequency of the five most desirable items, and so forth.
Since there is no accepted way of how to make this analysis, the above three were carried out, only the first and third are presented. It was felt that the one giving the most reliable picture was the third one (in which
frequencies with which items appear in the first five ranks are presented).

6.1.3 The third step in the analysis of the data - Pearson's correlations. The next section deals with results taken from Pearson's correlational matrixes, obtained for each sample. Pearson correlations were chosen as a means of analysis since most of the measures in this study could be argued to be fit for use as interval scales in common statistical usage. This being the case, Pearson correlations took the greatest advantage of the information gathered.

Since this is a descriptive study, no specific hypotheses had been formulated before the analysis for most of the expected correlations. An examination of the matrixes of correlations provided a wealth of information, some of which was obvious, some unexpected, and the remainder just provided information about the sample. Significant results (at least at the .05 level) were singled out, and explanations for them were sought for. This was done after first looking at the cases which were expected to correlate, but did not, and cases which were not expected to correlate, and did so. These were set apart for particular attention.

Correlation coefficients indicate the degree to which variation (or change) in one variable is related to variation in another. It does not only summarize the strength of association between a pair of variables, but also provides an easy means for comparing the strength of the relationship between one pair of variables and a different pair. The interpretation of a correlation \( r \) is that if the value of \( r \) is close to zero, there is little relationship or no linear relationship between the two variables. If the value of \( r \) approaches +1.0 or -1.0, it can be assumed that there is a strong linear relationship.

(All these results are shown in the appendix which is with the author and provided on request)
6.1.4 The fourth step in the analysis of the data - multiple regressions. Subsequently, a summary of some multiple regressions (predictors) is presented.

From a practical point of view, the first question that arises after considering the reliability and validity of the measures used, and the extent to which one can generalize from the sample used, is how the results might help in various decisions. Since one of the aims of this study was to gain a better understanding of the relationships between different factors at work, performance, labour turnover, absences, as well as job satisfaction and job involvement of employees were looked upon as some of the main issues.

The attempt to predict certain variables that are used as criteria, post hoc, is best met by the statistical method of multiple regression. Multiple regression is a general statistical technique through which one can analyse the relationship between a dependent or criterion variable and a set of independent or predictor variables. The main focus of analysis is the evaluation and measurement of overall dependence of a variable on a set of other variables. Multiple regression requires that variables are measured on an interval or ratio scale, and the relationships among the variables are linear and additive. These restrictions are not absolute; nominal variables, like sex, or marital status, may also be used with this technique (Nie et al., 1975).

The technique was chosen for use because of its suitability as a descriptive tool. It was used:
1. to find the best linear prediction equation and evaluate its prediction accuracy,
2. to control for other confounding factors in order to evaluate the contribution of a specific variable or set of variables; and
3. to find structural relations and provide explanations for seemingly complex multivariate relationships.

This method gives the best predictors of the criteria or
dependent variable, as well as a Beta score which indicates the relative influence of each variable on the criteria, keeping (controlling for) all the other variables in the equation constant. Not always the best predictor is also the one with the highest Beta, i.e. the one with the most influence on the criteria if all the other variables are controlled (partialed out).

In one particular sample, namely that of the nurses of St. Mary's General Hospital, recent official figures on turnover became available, enabling to compare results from the questions of this study concerning the intention to change hospital within six months. Both figures, intentions to leave the hospital (42%), and the actual percentages of people who had left during the same period (39.6%), were nearly identical. It is unusual to find no gap between intentions and actual behaviour (as it seems to have happened in this case). Nevertheless, a link between intentions and actual behaviour is usually expected.

A recent study by Waters et al. (1976) with a sample of female clerical workers, found a correlation of .42 between the intention to remain with the company and termination data from the company records, two years after the administration of the question (N=125). Of the women who indicated that they intended to stay indefinitely, 78% actually remained with the company after two years. Of those who indicated that they definitely did not intend to stay with the company, 76% terminated their employment during the subsequent two-year period. These results give further validity to the use of intentions as criteria for tackling problems of labour turnover.

It is important to bear in mind that any predictors on a criterion variable would depend on which (independent) variables are introduced into the equation. It makes sense that there are many variables that influence intentions to, for example, stay or change hospital, and they probably do in different occasions, for various
individuals. Logically, any of them, or their combination could be good predictors for the behaviour of different individuals. This reasoning does not provide any help as to which variables are consistently influential, across a whole sample of people. Such help is provided by the use of a technique such as multiple regression.

This study included the performance of several pilot multiple regressions in order to find out which variables were relevant to the prediction of turnover. As noted earlier, a distinction has been made between the intention to change firm (or hospital) in the very near future, and the intended length of service in the organisation (N.H.S.).

At different stages, six facets of job satisfaction (satisfaction with the firm/hospital, pay, opportunities for promotion, the job itself, supervision, and fellow workers), job involvement, work related self-esteem, authoritarian orientation, instrumental orientation, subjective desirability of the type of work, desirability of the type of work in the eyes of important others, satisfaction with the type of work, and conformity, as well as socio-demographic variables such as age, grade, tenure, time that it takes to get to work, marital status, and number of dependent children in the household, were taken into the predictive equation.

No multiple regressions were carried out for the industrial sample by itself because of the restricted nature of the questionnaire administered to them, which did not include items on intentions to leave or stay with the company, reasons for working, and so forth.

6.1.5 The fifth step in the analysis of the data - factor analysis. Factor analysis for each of the samples was performed on 1) the measure of WRSE, 2) the subjective characteristics of the type of work (from the same 17 items that the rank ordering was done in section 6.1.2, pp. 197-8, except in the industrial sample, and 3) the 17 psychological variables employed in this study in
the samples of the general nurses and clerical staff only. A similar, but more restricted factor analysis was performed on the industrial sample. The psychological variables were: 1) WRSE, 2) job involvement, 3) authoritarian orientation, 4) job satisfaction with the firm, 5) job satisfaction with pay, 6) job satisfaction with opportunities for promotion, 7) job satisfaction with the job itself, 8) job satisfaction with supervision, 9) job satisfaction with fellow workers, 10) conformity, 11) desirability of the type of work in the eyes of significant others, 12) instrumental orientation, 13) performance appraisals, 14) intention to change firm, 15) intended length of service in the organisation, 16) desirability of the type of work in one's own eyes, and 17) satisfaction with the type of work.

Factor analysis is a statistical technique based on intercorrelating all the items with one another, enabling to abstract one or more "factors". The single, most distinctive characteristic of this technique is its data-reduction capability. Given an array of correlations coefficients, factor analytic techniques enable to see whether some underlying pattern of relationships exists so that the data may be "rearranged" or "reduced" to a smaller set of factors. One of its most common applications is in the exploration and detection of patterning of variables with a view to the discovery of new concepts and a possible reduction of data. It can be used for testing hypotheses about the structuring of variables in terms of the expected number of significant factors and their factor loadings. The method of factor analysis used here was principal factoring with iteration. Factors were selected only if their eigen-value was 1.0 or over. The rotational method used was Varimax, according to the programming of SPSS (Nie et al., 1975).

6.1.6 The sixth step in the analysis of the data - smallest space analysis. Smallest space analysis (S.S.A.) was carried out for all the occupational samples except
the industrial. S.S.A. is a geometrical presentation where every variable is represented in an Euclidean space. The variables used in this analysis were the same 17 psychological variables used in the previous section of factor analysis. The space of the smallest possible dimensionality is calculated for reproducing the similarities among the variables. The distance between two points in this space increases as the coefficients between the two variables concerned decreases. If empirical similarity between two variables is high, the points of the two variables are close to each other; if the coefficient between the two is low, the points representing them are far from each other.

Please note:

<table>
<thead>
<tr>
<th>(non)instrumental orientation</th>
<th>working (mainly) for other reasons than just money</th>
</tr>
</thead>
<tbody>
<tr>
<td>intention to change job within the organisation in the next six months</td>
<td>less intention to change job</td>
</tr>
</tbody>
</table>

6.2 The samples of industrial workers

6.2.1 Summary of the main results.

1. An association between global self-esteem and specific work related self-esteem was found only for individuals with much job involvement (those whose work was important to their Self).

2. At the same time, there was a positive correlation between WRSE and job involvement which was strongest at medium levels of job satisfaction. However, at a very high level of job satisfaction, this correlation became negative. This suggests that in industrial work, high levels of job involvement cannot be achieved together
with high WRSE if the person is to be satisfied with his job. In other words, it could be said that the industrial worker will be satisfied with his work, if he judges himself to be worthy at his work, but that work is not a very important part of his Self.

3. Supporting the above conjecture, correlations between job satisfaction and job involvement were obtained only for people with average WRSE. For industrial workers with high WRSE, there was a weak, negative correlation between their scores on the above measures (job satisfaction and job involvement);

4. while a strong correlation was obtained between job satisfaction and WRSE regardless of the job involvement of the industrial workers.

5. The correlations between WRSE and job satisfaction were strongest with the intrinsic aspects of the latter.

6. Similarly, job involvement correlated best with the intrinsic aspects of job satisfaction (and not at all with the areas of supervision and pay).

7. Tenure was not found to be related to job satisfaction, and its tenuous relation to WRSE and job involvement of industrial workers seemed to hold true only for its younger members.

8. In the same way, age was related to job satisfaction only for the older industrial workers. The younger ones were, in comparison, more satisfied only with their opportunities for promotion.

9. However, differences were found in job satisfaction between men and women in the industrial sample. Women, particularly the older ones, were more satisfied with pay than the comparative group of men. On the other hand, the men were more satisfied with opportunities for promotion than the women.

10. In general, it seemed that part-time industrial
workers were more satisfied with supervision and the firm than full timers.

11. Although industrial workers with higher formal education (inferred from the fact that they started to work after the age of sixteen) were happier with the firm, those with less formal education were happier with the job itself and pay.

12. The fact that industrial employees with (more) dependent children were happier with the job itself and opportunities for promotion might offer some support to the model of expectancy. It could be that people with more obligations outside work expect less from their job.

13. Industrial workers performing rotating (more enlarged and sometimes also more enriched) jobs seemed to be more contented with their job than workers who performed the same few short-cycled patterns that their task required. At the same time, differences in job satisfaction were found between jobs which superficially seemed to be equally restrictive (like "packing", "racking", and "pressers" etc.).

14. Regarding satisfaction with pay, the "rotating" group, contrary to its scores in the other areas of job satisfaction, was less happy than the other groups (supporting perhaps the "equity model").

15. A comparison between the two samples of industrial workers showed no differences between them, except in job involvement and satisfaction with supervision and the job itself and WRSE.

16. One of the two plants, from which one of the subsamples was drawn, was considered to be "better" by management, while performing exactly the same functions with very similar machinery.

17. A separate analysis of Pearson correlations for each subsample showed that some correlations existed for
one plant, but not for the other, and that in some instances, the strength of association between the same variables was significantly different for the two sub-samples.

18. An explanation for these differences was attempted, resulting in a suggestive, causal diagram presented on page 210-211.

19. A factor analysis (rotated solution) of the psychological item scores of all the measures administered to the individual samples rendered six main factors. These were:

1. items on satisfaction with the job itself and the firm, and the qualifying item for WRSE,
2. items on satisfaction with supervision,
3. items on satisfaction with pay,
4. items on routine, boredom,
5. items on satisfaction with fellow workers, and
6. items on authoritarian orientation and satisfaction with opportunities for promotion.

6.2.2 A comparison between the two industrial samples. Two forms of computation were used for the data obtained from the questionnaire which was administered to both plants under very similar conditions.

1. Deriving norms from the total industrial population samples, and then using these norms to compare the two sub-samples; i.e. obtaining "cutting points" for what is considered "high, medium, and low" in each measure, and then using these "cutting points" as reference for the comparison of the two plants.

2. Using "raw" data and parametric statistics (such as the Pearson correlation coefficient, to determine the degree of correlation between two variables).

It should be noted as a validation point for the measures and the sample, that the vast majority of variables (for the whole population sample) had a fairly normal
distribution (mean, mode and median almost at the same point) with answers in the whole range of the variables. (The percentages that were derived by method of computation 1 are seen in the appendix, provided on request.)

By comparing these results, it seemed that there was little difference between the two plants with regard to total job satisfaction, satisfaction with the firm, job satisfaction with opportunities for promotion, and satisfaction with fellow workers.

On the other hand, there seemed to be a difference in satisfaction with the job itself, with more people in the low category (dissatisfied?) in the Hadleigh plant, more people satisfied with pay at the London plant, a larger number of people "dissatisfied" with supervision at Hadleigh, a higher percentage of persons with high work related self-esteem in Hadleigh, and a significant difference in job involvement between the two plants. The London plant had fewer people with low job involvement, and more people with high job involvement or, in other words, overall lower job involvement in the Hadleigh plant.

These results were striking at a first glance, particularly when one had in mind that the Hadleigh plant was considered by management as a "better" one, both, in terms of output, and in terms of problems arising in its management. This was one of the factors that led to the comparison between the two plants. It was felt that the difference was somehow related to the work force.

In general, job involvement is assumed to be related to high performance (quantity, quality, or both), but as with previous research, for instance, in job satisfaction, results obtained here seemed to suggest that this simplistic assumption did not hold in reality, and that only more complex and sophisticated analyses would help to predict behaviour leading to organisational effectiveness.

Measures obtained for job satisfaction also seemed to contradict the simple logic that more satisfaction
leads to better performance. In contrast, it was encouraging that a measure specifically built for this research (WRSE) seemed to give results in the expected direction (though it is not yet clear how it relates in the context of the other variables. This is due to the restricted data available).

Method 2 of computation (using a "T" Test) also indicated a significant difference in level of involvement of the two samples, as well as a difference in satisfaction with supervision, with the workers of the London sample being more involved with their work, and more satisfied with supervision.

Further analysis by means of the Pearson correlation gave an interesting and illuminating account of differences between the two plants. It can be observed that for the variables investigated, some correlations existed only for one plant, but not for the other. This would suggest the presence of a link (which could be caused in either direction and/or by a third factor) between two variables, and the absence of such a link in the other plant, would suggest no linear connection at all between these variables. In some instances, there appeared to be striking differences in the strength of association for the same variables in the two plants.

The following was found for workers in the Hadleigh plant (this was one of the factories surveyed and the one which management considered as "better"):  
1. A weaker relationship between the subjective judgement of how good one is at his work (WRSE), and how important that work is for him (job involvement).  
2. WRSE was more related to satisfaction with opportunities for promotion and  
3. it was linked to job satisfaction with supervision (not so in the London plant); indeed there was a correlation of .44 between job satisfaction with
opportunities for promotion and job satisfaction with supervision for Hadleigh, but none for London.

4. Satisfaction with opportunities for promotion was linked to satisfaction with pay and supervision (not so in London).

5. Satisfaction with the firm was linked more strongly to satisfaction with the job itself. On the other hand,

6. satisfaction with the firm was less related to job involvement,

7. and there was no relationship whatsoever between job involvement and a)satisfaction with the job itself, b)satisfaction with opportunities for promotion.

8. Job satisfaction with opportunities for promotion was also less related to satisfaction with the job itself.

9. Satisfaction with fellow workers was neither related to satisfaction with supervisors,

10. nor related to job satisfaction with the job itself.

11. The link between job satisfaction with the job itself was weaker than in the London plant.

6.2.2.a A suggested explanation of Hadleigh's data (in comparison to London's).

More people dissatisfied with the job itself (JOB)
  ↓ therefore
  low general job involvement (JI)
  ↓ therefore
  less connection between JI and WRSE.
  (how good I am at my work, and how important that work is for me).

More people with high WRSE → better work
  ↓ therefore
  less people satisfied with pay (PAY)
Job satisfaction with opportunities for promotion (OPP) seemed to be determined by extrinsic factors as PAY, SUPERIORS, and little by JS with the job itself (JOB) or fellow workers (COWO)

therefore

OPP has no relation to job involvement (J1).

JS with fellow workers was seen apart from:
the job itself, and satisfaction with supervisors (JOB, SUP), indicating the possibility of a dimension of its own.

6.2.3 Factor analysis of the combined samples of industrial workers (N=110). Factor analysis of WRSE for the combined samples of industrial workers is found in chapter 5, sec. 5.4, p. 163. Explanation for it is found in that chapter on pp. 167-8, sec. 5.5.

Factor analysis of the psychological variables (items)

The factor analysis for this sample was made differently from the factor analyses of the psychological variables in the other samples. First, it included only items on general self-esteem, WRSE, job involvement, authoritarian orientation, and different aspects of job satisfaction. Secondly, the factor analysis was performed on the actual items (82 in number), rather than on the summation scores of the measures.

| TABLE 12: Factor analysis of psychological items (rotated solution) |
|---------------------------------|---------------------------------|
| **Factor I (22.4%)** | **Factor II (9.8%)** |
| the job itself is worthwhile | it is easy to please the supervisor |
| .77 | .60 |
| the job itself is the right job for me | I can discuss problems with the supervisor |
| .74 | .61 |
| the job itself is satisfying | the supervisor stands up for you |
| .64 | .60 |
| the present job is better than the previous ones | the supervisor is not too busy to see you |
| .40 | .60 |
| the work I do has to do with how I feel as a person | the supervisor does a good job |
| .40 | .50 |

continues on next page
### 6.2.4 Replication of the validity of Rosenberg's measure of global self-esteem.

#### TABLE 13: Guttman's coefficients for Rosenberg's measure of global self-esteem

<table>
<thead>
<tr>
<th>Factor III (7.5%)</th>
<th>Factor IV (6.4%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>pay far too low</td>
<td>the job itself is routine</td>
</tr>
<tr>
<td>pay less than I deserve</td>
<td>the job itself is the same day after day</td>
</tr>
<tr>
<td>well paid for what I do</td>
<td></td>
</tr>
<tr>
<td>pay adequate for my needs</td>
<td></td>
</tr>
<tr>
<td>pay is poor</td>
<td></td>
</tr>
<tr>
<td>pay is fairly satisfactory</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Factor V (5.3%)</th>
<th>Factor VI (5.2%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>fellow workers do their share of work</td>
<td>any good leader should be strict with people under him in order to gain their respect (authoritarian orientation)</td>
</tr>
<tr>
<td>some fellow workers know their jobs</td>
<td>the most important thing to teach children is absolute obedience to their parents (authoritarian orientation)</td>
</tr>
<tr>
<td>some fellow workers think they run the place</td>
<td>a few strong leaders could do more for this country than all the laws and talk (authoritarian orientation)</td>
</tr>
<tr>
<td>fellow workers are hard working</td>
<td>the system of promotion is fair</td>
</tr>
<tr>
<td>fellow workers are easy to make enemies</td>
<td>easy to get on (promotion)</td>
</tr>
</tbody>
</table>

(see discussion sec. 7.10, p.332, for the interpretation of the above results.)
6.3 The sample of clerical staff

6.3.1 Summary of the main results.
1. 36% of the sample of clerical staff stated that their main or only reason for working was money, while only 8% stated that they were working mainly for other reasons.

2. Consistent with the above results, "good pay" and "good working conditions" were ranked most frequently as the most desirable aspects of their type of work.

3. Only 5% had an intention to change job within the next six months (in the same company), and 36% intended to work for their organisation only up to two years (only about half of the sample stated their intention regarding the latter).

4. Older clerical staff intended to stay longer in the organisation, but were less satisfied with pay and opportunities for promotion.

5. Positive correlations were obtained between the clerical staff's own judgement of worthiness at their work (WRSE) and their a) job satisfaction, b) job involvement, c) intended length of service in the organisation, d) evaluation of their type of work in their own eyes, e) (non)instrumental orientation (working not only for money), and f) performance appraisals.

6. Job involvement of clerical staff was related to their a) intended length of service in the organisation, b) (non)instrumental orientation (working not only for money), c) evaluation of their type of work in their own eyes, d) job satisfaction (except pay and supervision), and e) authoritarian orientation. Some support was found in order to explain the last correlation (e), either in terms of the type of work demanding to be authoritarian oriented in order to be involved with it (or vice versa), or in terms of both, job involvement and authoritarian orientation, being traits developed early in socialization.
7. Instrumental orientation, although found to be related to the evaluation of the clerical staff's type of work, and to satisfaction with the job itself, did not have any association with satisfaction with pay.

8. Significantly, the clerical staff's evaluation of their type of work was related to their intentions to change job or length of service in the organisation, and job satisfaction.

9. Performance appraisals, besides being related to WRSE, were also related to some areas of satisfaction, but notably not with satisfaction with the job itself. This is in line with the missing link between it (performance appraisals) and job involvement.

10. Intended length of service in the organisation of clerical staff was best predicted by: 1) older age, 2) greater job involvement, and 3-4) a high evaluation of their type of work in their own eyes and in the eyes of relevant others, explaining 71% of this intention. If however, age is not included in the equation, then higher WRSE and stronger authoritarian orientation explain by themselves 22% of the total variance.

11. Intention to change job within the organisation within the next six months was best predicted by 1)a lower evaluation of their type of work, 2) less satisfaction with fellow workers, 3) greater job involvement, and 4) less satisfaction with the job itself and higher WRSE. Together, these variables explained 37% of the total variance of this intention.

12. Performance appraisals were best predicted by 1) WRSE, 2) job satisfaction with supervision, 3) job satisfaction with pay, explaining 15% of this variable.

13. WRSE of clerical staff was best predicted by 1) job satisfaction with the firm, 2) job involvement, 3) job satisfaction with supervision, explaining 43% of its total variance.

14. Job involvement of clerical staff was best predicted
by 1) job satisfaction with the job itself, 2) WRSE, 
3) less satisfaction with pay, 4) authoritarian orientation, 
and 5) job satisfaction with opportunities for promotion. 
Together, these variables explained 42% of the total 
variance of job involvement.

15. General job satisfaction was best predicted by 
1) WRSE, 2) satisfaction with the type of work, and 3) 
higher evaluation of the type of work in the eyes of 
relevant others, explaining 41% of the variance.

16. The factor analysis of WRSE for the sample of 
clerical staff yielded two main clear cut factors: 
"control" (explaining 35% of the total variance), and 
"feedback" (explaining 20%).

17. The factor analysis of the subjective characteristics 
of the clerical staff type of work (17 variables) yielded 
three main factors explaining 76% of the total variance: 
a) "skill" (explaining 40%), b) "pleasantness" (18%), 
and c) "interest" (18%).

18. The factor analysis of the 17 psychological 
variables was made according to a Principal factor 
solution which yielded three main factors (explaining 
47% of the total variance) and a rotated solution which 
yielded two main factors, explaining 66% of the total 
variance. The first main factor (45% of the total variance) 
included job satisfaction (except job satisfaction with 
the job itself) and WRSE. The second factor (21%) 
included conformity, satisfaction with the type of work 
and the job itself, and the evaluation of the clerical 
staff type of work in the eyes of relevant others.

19. The Smallest Space Analysis of the psychological 
variables in the sample of clerical staff was interpreted 
as consisting of three dimensions: a) the most central, 
including WRSE and "intrinsic" aspects of job satisfaction, 
b) including job involvement, authoritarian orientation, 
instrumental orientation, job satisfaction with 
supervision, and performance appraisals. c) The periphery
dimension, seeming to convey "extrinsic" aspects of work.

6.3.2 Percentages for intentions of turnover and reasons for working.

<table>
<thead>
<tr>
<th>Intention to change job within the next six months (N=82)</th>
<th>% LOW</th>
<th>% UNCERTAIN</th>
<th>% HIGH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>83</td>
<td>12</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Intention to continue working for the same organisation (N=47)</th>
<th>% up to six months:</th>
<th>% up to two years:</th>
<th>% up to five years:</th>
<th>% up to ten years:</th>
<th>% until retirement:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>12.8%</td>
<td>23.4%</td>
<td>19%</td>
<td>4%</td>
<td>41%</td>
</tr>
</tbody>
</table>

Reasons for working:
- only for the money: 7%
- mainly for the money: 29%
- for the money and other reasons equally: 56%
- for other reasons and money too: 8%
- mainly for other reasons: 0%

Most clerical staff worked for money and also for other reasons, but a considerable proportion (36%) worked mainly for money. Only 5% of the clerical staff intended to change job within the next six months, but a relatively high number of clerical staff intended to stay within the organisation only up to two years, or viewed in a different light, to leave within two years.

6.3.3 Rank ordering: frequencies with which items appear in the first five ranks of desirability for the type of work (out of 17 items) for clerical staff.
1. good pay (57)
2. good working conditions (46)
3. convenient hours (44)
4. interest (41)
5. working with people (36)
6. future security (31)
7. opportunities for advancement (28)
8. training (26)
9. education (23)
10. using mental effort (12)

Frequencies with which items appear as the most desirable:

1. good pay (16)
2. interest (14)
3. future security (10)
4. good working conditions (7)
5. training (7)
6. education (5)
7. opportunities for advancement (4)
8. convenient hours (4)
9. using mental effort (3)
10. working with people (1)

6.3.4 Multiple regressions (predictors)

<table>
<thead>
<tr>
<th></th>
<th>Multiple r.</th>
<th>Yr.</th>
<th>r.change</th>
<th>simple r.</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.WRSE</td>
<td>.38</td>
<td>.14</td>
<td>14.5%</td>
<td>.38</td>
<td>.20</td>
</tr>
<tr>
<td>2.AUTH.</td>
<td>.47</td>
<td>.22</td>
<td>7.5%</td>
<td>.34</td>
<td>.33</td>
</tr>
<tr>
<td>3.NORMBEL</td>
<td>.50</td>
<td>.25</td>
<td>3.5%</td>
<td>.00</td>
<td>-.26</td>
</tr>
<tr>
<td>4.JSOPP</td>
<td>.54</td>
<td>.29</td>
<td>3.4%</td>
<td>.02</td>
<td>-.23</td>
</tr>
<tr>
<td>5.JSFIRM</td>
<td>.57</td>
<td>.32</td>
<td>3.3%</td>
<td>.21</td>
<td>.29</td>
</tr>
<tr>
<td>6.TYPEWORK</td>
<td>.60</td>
<td>.35</td>
<td>3%</td>
<td>.33</td>
<td>.29</td>
</tr>
<tr>
<td>7.JI</td>
<td>.61</td>
<td>.38</td>
<td>2.9%</td>
<td>.35</td>
<td>.22</td>
</tr>
</tbody>
</table>

8. job satisfaction with the job itself, 9. job satisfaction
with pay, 10. job satisfaction with fellow workers, 
11. job satisfaction with supervision.

\[
\text{with } "\text{age}"
\]

<table>
<thead>
<tr>
<th></th>
<th>Multiple r.</th>
<th>(\sqrt{F})</th>
<th>r. change</th>
<th>Simple r.</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. age</td>
<td>.77</td>
<td>.60</td>
<td>60%</td>
<td>.77</td>
<td>.69</td>
</tr>
<tr>
<td>2. JI</td>
<td>.82</td>
<td>.67</td>
<td>7.6%</td>
<td>.35</td>
<td>.22</td>
</tr>
<tr>
<td>3. NORMBEL</td>
<td>.83</td>
<td>.68</td>
<td>1.4%</td>
<td>.00</td>
<td>-.20</td>
</tr>
<tr>
<td>4. TYPEWORK</td>
<td>.84</td>
<td>.71</td>
<td>2.5%</td>
<td>.33</td>
<td>.20</td>
</tr>
</tbody>
</table>

5. authoritarian orientation, 6. job satisfaction with fellow workers, 7. job satisfaction with supervision, 8. job satisfaction with the firm, 9. job satisfaction with pay, 10. job satisfaction with the job itself, 11. marital status, 12. grade, 13. sex.

Longer service of clerical staff in the organisation \((N=42)\) was best predicted by: 1) old age, 2) higher job involvement, and 3-4) a high evaluation of one's type of work in one's own eyes, and in the eyes of others. Together, these variables predicted 71% of the intended length of service in the organisation.

If the factor of age is not taken into account, a different pattern of predictions emerges. In this case, the best predictors are: 1) higher WRSE, 2) stronger authoritarian orientation. Together, they predict 22% of the total variance of the intended length of service in the organisation. In the latter case, authoritarian orientation has the highest Beta score. It was very encouraging to be able to obtain such a high percentage of prediction. However, it should be pointed out that only about half of the population of the sample of the clerical staff entered in this multiple regressions equation, since about 43% of the sample gave a "don't know" answer to what would be their intention regarding this matter.
TABLE 16: Multiple regressions of the intention to change job within the organisation within the next six months

<table>
<thead>
<tr>
<th></th>
<th>Multiple r.</th>
<th>$\sqrt{r}$</th>
<th>r.change</th>
<th>simple r.</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. TYPEWORK</td>
<td>.45</td>
<td>.20</td>
<td>20%</td>
<td>-.45</td>
<td>-.40</td>
</tr>
<tr>
<td>2. JSCOWO</td>
<td>.50</td>
<td>.30</td>
<td>5.7%</td>
<td>-.33</td>
<td>-.32</td>
</tr>
<tr>
<td>3. JI</td>
<td>.55</td>
<td>.25</td>
<td>4.2%</td>
<td>-.00</td>
<td>.27</td>
</tr>
<tr>
<td>4. JSJOB</td>
<td>.59</td>
<td>.34</td>
<td>4.4%</td>
<td>-.38</td>
<td>-.31</td>
</tr>
<tr>
<td>5. WRSE</td>
<td>.61</td>
<td>.37</td>
<td>3%</td>
<td>.01</td>
<td>.23</td>
</tr>
</tbody>
</table>

6. job satisfaction with pay, 7. satisfaction with the type of work, 8. job satisfaction with supervision, 9. job satisfaction with the firm, 10. conformity, 11. age, 12. job satisfaction with opportunities for promotion.

Note: The multiple regression without "age" gave the same results.

A stronger chance of this occurring (changing job within the organisation within the next six months) in the sample of clerical staff ($N=74$) was best predicted by:
1) a lower evaluation of the type of work in one's own eyes, 2) less satisfaction with fellow workers, 3) higher job involvement, 4) less satisfaction with the job itself, and 5) higher WRSE. Together, these variables predicted 37% of the total variance of the intention to change job. The introduction of the factor of age, or any of the other socio-demographic variables did not increase the percentage of prediction, or alter the order of the predictors.

TABLE 17: Multiple regressions of performance appraisals

<table>
<thead>
<tr>
<th></th>
<th>Multiple r.</th>
<th>$\sqrt{r}$</th>
<th>r.change</th>
<th>simple r.</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. WRSE</td>
<td>.33</td>
<td>.11</td>
<td>11%</td>
<td>.33</td>
<td>.19</td>
</tr>
<tr>
<td>2. JSSUP</td>
<td>.37</td>
<td>.14</td>
<td>2.6%</td>
<td>.29</td>
<td>.18</td>
</tr>
<tr>
<td>3. JSPAY</td>
<td>.39</td>
<td>.15</td>
<td>1.4%</td>
<td>.24</td>
<td>.23</td>
</tr>
</tbody>
</table>

4. job satisfaction with opportunities for promotion,
5. conformity, 6. decisions, 7. job involvement, 8. evaluation of the type of work in one's own eyes, 9. authoritarian orientation, 10. satisfaction with the type of work, 11. job satisfaction with the job itself.

Performance appraisals of the sample of clerical staff (N=62) was best predicted by: 1) WRSE, 2) satisfaction with supervision, and 3) satisfaction with pay. Together, these variables predicted 15% of the total variance of performance appraisals of the clerical staff, though the last two variables were somewhat doubtful in their strength of prediction, and together added only 4% to the prediction made by WRSE on performance appraisals. The highest Beta score was obtained for satisfaction with pay. The next highest Beta score was for WRSE. None of the other variables, measured in this study, helped to increase the prediction significantly.

<table>
<thead>
<tr>
<th>TABLE 18: Multiple regressions of WRSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple r.</td>
</tr>
<tr>
<td>-------------</td>
</tr>
<tr>
<td>1. JSFIRM</td>
</tr>
<tr>
<td>2. JI</td>
</tr>
<tr>
<td>3. JSSUP</td>
</tr>
<tr>
<td>4. conformity</td>
</tr>
</tbody>
</table>

5. job satisfaction with opportunities for promotion, 6. desirability of the type of work in one's own eyes, 7. authoritarian orientation, 8. job satisfaction with fellow workers, 9. tenure, 10. desirability of the type of work in the eyes of others, 11. job satisfaction with pay.

WRSE of the sample of the clerical staff (N=74) was best predicted by: 1) satisfaction with the firm, 2) job involvement, 3) satisfaction with supervision, and 4) conformity. Together, they predicted 45% of the total variance of WRSE of the clerical staff. However,
the highest Beta score was for satisfaction with supervision, followed by the first two predictors.

<table>
<thead>
<tr>
<th>Table 19: Multiple regressions of job involvement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>1. JSJOB</td>
</tr>
<tr>
<td>2. WRSE</td>
</tr>
<tr>
<td>3. JSPAY</td>
</tr>
<tr>
<td>4. AUTH</td>
</tr>
<tr>
<td>5. JSOPP</td>
</tr>
</tbody>
</table>

6. job satisfaction with supervision, 7. desirability of the type of work, 8. performance appraisals, 9. decisions, 10. conformity, 11. satisfaction with the type of work. If "sex" is introduced in the equation (males), it comes third (N=74) adding 6\% to the prediction; marital status and age have no effect on the prediction.

Job involvement of the sample of clerical staff (N=62) was best predicted by: 1) satisfaction with the job itself, 2) WRSE, 3) less satisfaction with pay, 4) authoritarian orientation, and 5) satisfaction with opportunities for promotion. Together, these variables predicted 42\% of the total variance of job involvement. The highest Beta score was for less satisfaction with pay, followed by positive WRSE, satisfaction with opportunities for promotion, and lastly satisfaction with the job itself.

If the socio-demographic variables are also introduced in the predictive equation (N=74), then "sex" (being male) comes as the third best predictor after satisfaction with the job itself and WRSE, and these three predict 30\% of the variance of job involvement of the clerical staff, when WRSE has the highest Beta score.
TABLE 20: Multiple regressions of general job satisfaction

<table>
<thead>
<tr>
<th></th>
<th>multiple r</th>
<th>$\sqrt{r}$</th>
<th>r.change</th>
<th>simple r</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.WRSE</td>
<td>.59</td>
<td>.34</td>
<td>34%</td>
<td>.59</td>
<td>.54</td>
</tr>
<tr>
<td>2. Satisfaction with the type of work</td>
<td>.61</td>
<td>.38</td>
<td>3.3%</td>
<td>.14</td>
<td>.59</td>
</tr>
<tr>
<td>3.NORMBEL</td>
<td>.64</td>
<td>.41</td>
<td>2.8%</td>
<td>.22</td>
<td>.20</td>
</tr>
</tbody>
</table>

4. desirability of the type of work in one's own eyes, 5. instrumental orientation, 6. job involvement.

General job satisfaction of the sample of the clerical staff (N=74) was best predicted by: 1) WRSE, 2) satisfaction with the type of work (TXIR), and 3) higher evaluation of the type of work in the eyes of important others (NORMBEL). Together, they predicted 41% of the total variance of general job satisfaction of the sample of clerical staff.

6.3.5 Factor analyses. In the rotated solution two factors explain 55.2% of the variance of WRSE (N=84).

TABLE 21: Factor analysis of WRSE

<table>
<thead>
<tr>
<th>Factor I - 34.6% (power-powerlessness)</th>
<th>Factor II - 20.6% (feedback)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel that in my work there is no place for my initiative</td>
<td>Most of the time my superior really cares about how I do my job .75</td>
</tr>
<tr>
<td>I feel that in my work there are things which are my personal responsibility</td>
<td>I feel that the people at the top reward ambition and effort .67</td>
</tr>
<tr>
<td>I feel that in my work I cannot make decisions</td>
<td>I am frequently praised by my supervisor .26</td>
</tr>
<tr>
<td>I feel that in my work I can do a good job</td>
<td>I often feel uncertain about what my superior thinks of me .25</td>
</tr>
</tbody>
</table>
The results indicate that the stronger factor in WRSE for clerical staff is one of power-powerlessness, explaining 34.6% of the variance in this measure. The second main factor is that of feedback, explaining an additional 20.6% of the variance in this measure. The factor analysis of the sample of clerical staff shows very clearly and neatly the two expected areas which were assumed to play a major part in the structure of the WRSE measure.

<table>
<thead>
<tr>
<th>TABLE 22: Factor analysis of the subjective characteristics of the type of work (clerical staff)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor I (40% of the variance)</td>
</tr>
<tr>
<td>---------------------------------</td>
</tr>
<tr>
<td>mental effort required .72</td>
</tr>
<tr>
<td>education .65</td>
</tr>
<tr>
<td>skill .60</td>
</tr>
</tbody>
</table>

A factor analysis was carried out on the measure of beliefs about the characteristics of the type of work (17 items). Three main factors appeared in the rotated solution, explaining 76% of the variance in this measure. The first factor which appeared to be the most salient explains 40% of the total variance, and could be described as portraying a dimension of "skill" in the type of work. The second factor explains an additional 18% of the total variance and could be labelled as a factor of "pleasantness". The third factor again covers an additional 18% of the total variance, and could be described as covering an area of "interest".
Factor analysis of the 17 psychological variables

The rotated solution of this factor analysis yielded two main factors, explaining 65.8% of the total variance of the psychological measures.

| TABLE 23: Factor analysis of the psychological variables (rotated solution) |
|-------------------------------------------------|-----------------------------|
| Factor I (45.1%)                                 | Factor II (20.7%)           |
| job satisfaction with opportunities for promotion | conformity                  |
| job satisfaction with pay                        | job satisfaction with the   |
| job satisfaction with the firm                    | job itself                  |
| job satisfaction with fellow workers              | satisfaction with the type  |
| job satisfaction with supervision                 | of work                     |
| WRSE                                             | evaluations of the type of  |
|                                                  | work in the eyes of others  |

The table shows a first main factor covering 45% of the total variance, including most of the extrinsic aspects of job satisfaction and also WRSE. The second factor explains 20.7% of the total variance and includes: conformity, satisfaction with the job itself, satisfaction with the type of work, and the belief that others see this type of work as desirable.

In the principal factor (non-rotated) solution, the first three main factors explain 47% of the total variance.
<table>
<thead>
<tr>
<th>Factor I (24.7%)</th>
<th>Factor II (13.1%)</th>
<th>Factor III (9.2%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>job satisfaction with opportunities for promotion .70</td>
<td>authoritarian orientation .50</td>
<td>intention to change job within the next six months -.48</td>
</tr>
<tr>
<td>job satisfaction with the job itself .74</td>
<td>job satisfaction with pay -.46</td>
<td>conformity .45</td>
</tr>
<tr>
<td>WRSE .68</td>
<td>job satisfaction with the firm -.42</td>
<td>intended length of service in the organisation .37</td>
</tr>
<tr>
<td>job satisfaction with the firm .64</td>
<td>job satisfaction with supervision -.35</td>
<td>job satisfaction with fellow workers -.33</td>
</tr>
<tr>
<td>job involvement .53</td>
<td>performance appraisals -.29</td>
<td></td>
</tr>
<tr>
<td>satisfaction with the type of work .49</td>
<td></td>
<td></td>
</tr>
<tr>
<td>job satisfaction with fellow workers .47</td>
<td></td>
<td></td>
</tr>
<tr>
<td>instrumental orientation .47</td>
<td></td>
<td></td>
</tr>
<tr>
<td>job satisfaction with pay .45</td>
<td></td>
<td></td>
</tr>
<tr>
<td>job satisfaction with supervision .40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>intention to change job within the next six months .35</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In the above table, the first factor shows that it covers 24.7% of the total variance and was composed of five of the six aspects of job satisfaction, plus satisfaction with the type of work, WRSE, job involvement and the intention to change job within the next six months. This could be interpreted as a sign that the latter variables (except for the last), could affect
the intention not to change job. The second factor, explaining 13.1% of the total variance, had its highest factor loading in authoritarian orientation, and negative factor loadings for satisfaction with pay, the firm, and supervision, as well as for performance appraisals. The negative signs of the factor loadings seem to indicate that these areas of job discontent, plus authoritarian orientation may lead to lower performance appraisals. A third factor, explaining 9.2% of the total variance, included the intention to change job within the organisation within the next six months, conformity, intended length of service in the organisation, and discontent with fellow workers. It seems that this factor explains why the clerical staff in the present sample wanted to change job while staying in the same organisation. It seems that this intention is somehow linked to conformity and dissatisfaction with fellow workers.

6.3.6 Smallest space analysis (S.S.A.) (of the psychological variables). The three-dimension solution was chosen for a deep analysis (since this solution had a "coefficient of alienation or stress" of less than two).

The first dimension consisted of WRSE, job satisfaction with the job itself, job satisfaction with the firm, with opportunities for promotion, evaluation of the type of work in the eyes of others (NORMBEL), and satisfaction with the type of work (TXIR). This dimension is seen as the most central.

The second dimension consisted of satisfaction with supervision, authoritarian orientation, job involvement, performance appraisals, and instrumental orientation. It looks as if this dimension in the middle range of "centrality", has somehow to do with orientations to work and that the clerical staff may see job involvement in this context, though appraisals and supervision are also connected.

The third dimension consisted of satisfaction with
pay, fellow workers, conformity, evaluation of the type of work in one's own eyes, intention to change job within the organisation, and the intended length of service in the organisation. This dimension seems to convey "extrinsic" aspects.
6.4 The sample of psychiatric nurses

6.4.1 Summary of the main results.

1. Only 10% of the psychiatric nurses stated that their main or only reason for working was money, while 25% stated that they were working mainly for other reasons.

2. Consistent with the above results, "training" and "interest" were ranked most frequently as the most desirable aspects of their type of work.

3. 25% had an intention to change hospital in the next six months, and 20% intended to continue working for the N.H.S. only for up to two years (only 3/4 of the sample stated their intentions regarding the latter). It seems that the male psychiatric nurses accounted for a higher proportion of those who intended to stay with the N.H.S. for a shorter period.

4. Speaking of the male psychiatric nurses, it was found that in comparison with their female counterparts, they were more contented with their fellow workers, but less involved with their work, had less authoritarian orientation, and perceived their performance appraisals as being lower.

5. With the increase in age, psychiatric nurses saw their type of work as more positive, were slightly more involved and satisfied with their job, more conformist, and their performance appraisals better. The chances were that the younger psychiatric nurses would wish to change their job (hospital) and stay with the N.H.S. for a shorter time than their older counterparts.

6. A counter-intuitive result was obtained regarding an inverse relationship between grades and job involvement. This was explained as suggesting that for psychiatric nurses, job involvement was a function of direct contact with patients which would be more frequent among the lower grades.
7. On the other hand, higher grades were found to have less authoritarian orientation, and be less conformist, and the psychiatric charge nurses to possess a higher WRSE.

8. Almost half of the S.R.N.s intended to change job (hospital) within the next six months, and almost as many intended to stay with the N.H.S. for only up to two years. About a third of the S.R.N.s were not satisfied with pay, opportunities for promotion, and the job itself.

9. A positive correlation was obtained between the psychiatric nurses' own judgement of worthiness at their work (WRSE) and job satisfaction, but none was obtained between WRSE and job involvement (the importance of work to the Self).

10. Those psychiatric nurses who had greater job involvement were found to be more authoritarian oriented and their job involvement also correlated with their intended length of service in the N.H.S., and seemingly negatively with performance appraisals.

11. The evaluation of the psychiatric nurses' type of work in the eyes of relevant others was found to correlate with the intended length of service in the N.H.S., as well as with their conformity and their own evaluation of their type of work.

12. Satisfaction with the hospital, pay, and the job itself correlated with the psychiatric nurses' own evaluation of their type of work and inversely with their intention to change job (hospital), and positively with intended length of service in the N.H.S.

13. Psychiatric nurses of origins other than U.K. were much less job satisfied.

14. Intended length of service in the N.H.S. of psychiatric nurses was best predicted by 1) their own evaluation of their type of work, 2) job satisfaction with pay, 3) WRSE (explaining 26% of the total variance).
When age is introduced into the predictive equation, then it is the second best predictor.

15. Psychiatric nurses' intention to change job (hospital) within the next six months was best predicted by them being 1) single, 2) less job satisfied with pay, and 3) younger (explaining 28% of the total variance).

16. Performance appraisals of the psychiatric nurses as seen by them was rated by less than half of the sample of psychiatric nurses. It was best predicted by 1) longer tenure, 2) seeing one's job as suitable, and 3) less job involvement (explaining 24% of the total variance).

17. WRSE of psychiatric nurses was best predicted by 1) job satisfaction with supervision, 2) job satisfaction with opportunities for promotion, and 3) evaluation of the type of work in the eyes of relevant others (explaining 29% of the total variance). However, when controlling for all the variables in the equation, the strongest influence on it was by job satisfaction with the hospital.

18. Job involvement of psychiatric nurses was best predicted by 1) greater authoritarian orientation, 2) evaluation of the desirability of their type of work in their own eyes, and 3) lower grade (explaining 27% of the total variance).

19. Job satisfaction of psychiatric nurses was best predicted by their 1) evaluation of the desirability of their type of work in their own eyes, 2) WRSE, and 3) instrumental orientation (explaining 36% of the total variance).

20. The factor analysis of WRSE for the sample of psychiatric nurses yielded two main dimensions explaining 56% of the variance of this variable. One of them was called "feedback", (which was not clear cut, 30%), and the other named "control" (fairly clear cut, 26%).

21. The factor analysis of the subjective characteristics
of the psychiatric nurses type of work (17 variables) yielded three main factors, explaining 72% of this measure's variance, covering dimensions described as 1) "pleasantness" (42%), 2) "skill" (17%), and 3) "interest" (13%).

22. The smallest space analysis of the psychological variables was interpreted as consisting of three dimensions: 1) the most central, called "intrinsic", including WRSE, job involvement, job satisfaction with the job itself, and bordering on the second dimension authoritarian orientation. 2) including satisfaction with the hospital, opportunities for promotion, fellow workers, and with the type of work, and called "satisfaction". 3) The most peripheral, called "extrinsic", including performance appraisals, intended length of service, conformity, intention to change hospital, job satisfaction with pay, and instrumental orientation.

6.4.2 Percentages for intentions of turnover and reasons for working.

<table>
<thead>
<tr>
<th>TABLE 25: Percentages for intentions of turnover and reasons for working</th>
</tr>
</thead>
<tbody>
<tr>
<td>intention to change hospital in the next six months (N=89)</td>
</tr>
<tr>
<td>LOW</td>
</tr>
<tr>
<td>61</td>
</tr>
<tr>
<td>intentions to continue working for the N.H.S. (N=55)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>reasons for working:</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
The vast majority of the psychiatric nurses worked for money and other reasons equally with a tendency to work mostly for other reasons. A high intention to change hospital within the next six months was reflected by 25% of the nurses which seems a considerable percentage. In addition, the intention of 20% of the psychiatric nurses to remain in the N.H.S. for only up to two years seemed a significant finding, as was the fact that about 40% were uncertain or undecided (answered "don't know" to this item).

6.4.3 Rank ordering: frequencies with which items appear in the first five ranks of desirability for the type of work (out of 17 items) for the psychiatric nurses.

1. training (34)
2. interest (26)
3. working with people (26)
4. affect on other people's lives (25)
5. future security (24)
6. education (23)
7. good pay (21)
8. good working conditions (20)
9. opportunities for promotion (16)
10. skill (15)

Frequencies with which items appear as the most desirable:

1. education (13)
2. training (12)
3. interest (7)
4. future security (6)
5. working with people (5)
6. affect on other people's lives (4)
7. good working conditions (3)
8. good pay (3)
9. using mental effort (3)
10. convenient hours (2)
6.4.4 Multiple regressions (predictors)

**TABLE 26: Multiple regressions of the intended length of service in the N.H.S. of psychiatric nurses**

<table>
<thead>
<tr>
<th></th>
<th>multiple r</th>
<th>Sr.</th>
<th>r.change</th>
<th>simple r</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>TYPEWORK</td>
<td>.39</td>
<td>.15</td>
<td>15%</td>
<td>.39</td>
<td>.27</td>
</tr>
<tr>
<td>JSPAY</td>
<td>.45</td>
<td>.20</td>
<td>4.8%</td>
<td>.31</td>
<td>.29</td>
</tr>
<tr>
<td>WRSE</td>
<td>.51</td>
<td>.26</td>
<td>6.4%</td>
<td>.31</td>
<td>.30</td>
</tr>
<tr>
<td>JSSUP</td>
<td>.54</td>
<td>.30</td>
<td>3.7%</td>
<td>.13</td>
<td>-.24</td>
</tr>
</tbody>
</table>

5. desirability of the type of work in the eyes of significant others, 6. job satisfaction with the firm, 7. job involvement, 8. authoritarian orientation, 9. job satisfaction with opportunities for promotion.

**with "age"**

<table>
<thead>
<tr>
<th></th>
<th>multiple r</th>
<th>Sr.</th>
<th>r.change</th>
<th>simple r</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>TYPEWORK</td>
<td>.39</td>
<td>.15</td>
<td>15%</td>
<td>.39</td>
<td>.30</td>
</tr>
<tr>
<td>age</td>
<td>.46</td>
<td>.21</td>
<td>6.2%</td>
<td>.33</td>
<td>.12</td>
</tr>
<tr>
<td>WRSE</td>
<td>.50</td>
<td>.25</td>
<td>3.2%</td>
<td>.31</td>
<td>.30</td>
</tr>
<tr>
<td>JSPAY</td>
<td>.52</td>
<td>.27</td>
<td>2.8%</td>
<td>.31</td>
<td>.25</td>
</tr>
<tr>
<td>JSSUP</td>
<td>.55</td>
<td>.31</td>
<td>3.4%</td>
<td>.13</td>
<td>-.25</td>
</tr>
</tbody>
</table>

6. job satisfaction with opportunities for promotion, 7. job involvement, 8. desirability of the type of work in the eyes of significant others, 9. authoritarian orientation, 10. job satisfaction with fellow workers, 11. job satisfaction with the job itself, 12. job satisfaction with the firm.

Longer service of psychiatric nurses in the N.H.S. (N=50) was best predicted by 1) the desirability of the type of work in one's own eyes, 2) older age, 3) higher WRSE. Together they predicted 24% of this intention among psychiatric nurses. If age is not considered in the equation, then job satisfaction with pay comes in
as the second best predictor. In either case, the highest Beta score was for WRSE. None of the other socio-demographic factors, or the different aspects of job satisfaction, or job involvement helped in increasing the prediction significantly.

TABLE 27: Multiple regressions analysis of the intention to change job within the organisation within the next six months (N=87)

<table>
<thead>
<tr>
<th>Multiple r.</th>
<th>r. change</th>
<th>simple r.</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>MARSTATU (single)</td>
<td>.41</td>
<td>.17</td>
<td>17%</td>
</tr>
<tr>
<td>JSPAY (less)</td>
<td>.49</td>
<td>.24</td>
<td>7.6%</td>
</tr>
<tr>
<td>age (younger)</td>
<td>.53</td>
<td>.28</td>
<td>3.9%</td>
</tr>
</tbody>
</table>

4. job satisfaction with the hospital, 5. satisfaction with the type of work, 6. sex.
If age is not considered in the multiple regressions, then job satisfaction with pay, satisfaction with the type of work, and job satisfaction with the firm predict 16.8% of changing hospital.

The intention to change job within the N.H.S. in the next six months (N=87) was best predicted in the sample of psychiatric nurses by: 1) their marital status (single), 2) less satisfaction with pay, and 3) younger age. The nurses who were married, less satisfied with pay, and younger were more likely to leave the hospital in the near future, predicting 28% of the variance in this variable. None of the other variables helped to increase the prediction significantly.

TABLE 28: Multiple regressions of performance appraisals

<table>
<thead>
<tr>
<th>Multiple r.</th>
<th>r. change</th>
<th>simple r.</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>tenure</td>
<td>.36</td>
<td>.13</td>
<td>12.8%</td>
</tr>
<tr>
<td>type of work suitable</td>
<td>.45</td>
<td>.20</td>
<td>7.3%</td>
</tr>
<tr>
<td>job involvement</td>
<td>.49</td>
<td>.24</td>
<td>3.8%</td>
</tr>
</tbody>
</table>
4. authoritarian orientation, 5. conformity, 6. job satisfaction with fellow workers, 7. job satisfaction with supervision, 8. satisfaction with the type of work, 9. evaluation of the type of work in one's own eyes, 10. job satisfaction with the job itself, 11. job satisfaction with pay, 12. WRSE, 13. job satisfaction with opportunities for promotion. All these were also in the equation.

Performance appraisals of the psychiatric nurses were best predicted by: 1) tenure, 2) seeing one's work as suitable, and 3) less job involvement. Together they predicted 24% of the performance appraisals of the psychiatric nurses (N=39). However, the highest Beta was for less job involvement, followed by seeing one's work as suitable. Neither WRSE nor any of the job satisfaction or sociodemographic factors helped to increase the prediction. It is interesting to point out that the simple (zero-order) correlation between performance appraisals and WRSE was not significant, but that when controlling for job involvement (partial correlation), it rose to .23 (see table of partial correlations, appendix, provided on request from author).

<table>
<thead>
<tr>
<th>TABLE 79: Multiple regressions of WRSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple r.</td>
</tr>
<tr>
<td>-------------</td>
</tr>
<tr>
<td>1. JSSUP</td>
</tr>
<tr>
<td>2. JSOPP</td>
</tr>
<tr>
<td>3. NORMBEL</td>
</tr>
<tr>
<td>4. JSHOSPITAL</td>
</tr>
</tbody>
</table>

The best predictors of the WRSE of the psychiatric nurses (N=76) were: 1) job satisfaction with supervision,
2) job satisfaction with opportunities for promotion, and 3) the belief that others see one's type of work as desirable (NORMBEL). Together, these three variables explain 29% of (the total variance of) WRSE. However, when controlling for all the variables in the equation, the highest Beta score was for job satisfaction with the hospital, i.e. this variable had the strongest influence on WRSE when controlling for all the other factors. The next highest Beta was for job satisfaction with supervision, followed by Normbel.

<table>
<thead>
<tr>
<th>TABLE 30: Multiple regressions of job involvement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Multiple r.</td>
</tr>
<tr>
<td>1. authoritarian orientation</td>
</tr>
<tr>
<td>2. evaluation of the type of work in one's own eyes</td>
</tr>
<tr>
<td>3. grade</td>
</tr>
</tbody>
</table>

4) job satisfaction with pay, 5) WRSE, 6) job satisfaction with opportunities for promotion, 7) job satisfaction with the job itself, 8) sex were also in this multiple regression equation.

The best predictors of the psychiatric nurses' job involvement (N=80) were: 1) higher authoritarian orientation, 2) the perception of one's own type of work as desirable (type of work), and 3) lower grade. Together, they predicted 27% of the job involvement of the psychiatric nurses. Neither the satisfaction with the different areas of work, nor WRSE, and feelings of being able to make decisions, and so forth, helped in improving the prediction. The highest Beta score was of seeing one's type of work as desirable, followed by authoritarian orientation and grade.
The best predictors of general job satisfaction of the psychiatric nurses (N=80) were: 1) seeing one's type of work as desirable (Type of Work), 2) higher WRSE, and 3) an instrumental orientation (working mainly for money). Together, they predicted 36% of the total general job satisfaction of the psychiatric nurses in this sample. The Beta scores are in the same order as the predictors.

6.4.5 **Factor analyses.** In a rotated solution, two factors explain 56% of the variance of WRSE (N=90).
The results of the above factor analysis indicate that for psychiatric nurses, the stronger factor is one which might be called "feedback", explaining 30.2% of the variance in WRSE. The attributed name of this factor is not clear cut since its highest factor loadings are with items which might also be said to be part of a control or power dimension. The second factor, adding another 25.8% to the explanation of psychiatric nurses' WRSE is more clear cut in its structure, clearly portraying a power-powerlessness factor.

<table>
<thead>
<tr>
<th>TABLE 33: Factor analysis of the subjective characteristics of the type of work (psychiatric nurses)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factor I (42% of the variance)</strong></td>
</tr>
<tr>
<td>there are good working conditions .71</td>
</tr>
<tr>
<td>good pay .66</td>
</tr>
<tr>
<td>working with other people .42</td>
</tr>
<tr>
<td>social facilities .46</td>
</tr>
<tr>
<td>it is easy to know if you are doing a good job .50</td>
</tr>
</tbody>
</table>

A factor analysis was carried out on the measure of beliefs about the characteristics of the type of work (17 items). Three main factors appeared in the rotated solution, explaining 72% of the variance in this measure. The first factor which appeared to be the most salient explains 42% of the total variance, and could be described as portraying a dimension of "pleasantness" of the type of work. The second factor, covering 17% of the total variance, seemed to describe aspects having to do with "skill". The third factor covered 13% of the total
variance, and could be described as covering the area of "interest".

6.4.6 Smallest space analysis (S.S.A.) (of the psychological variables). The three-dimension solution was chosen for a deep analysis (since this solution had a "coefficient of alienation" or stress of less than two).

The first dimension consisted of WRSE, job involvement, job satisfaction with the job itself, and bordering on the second dimension was authoritarian orientation. This dimension is seen as the most "central" in its importance, and covers the most "intrinsic" aspects of work.

The second dimension consisted of job satisfaction with the hospital, opportunities for promotion, fellow workers, and satisfaction with the type of work. It clearly follows that this is a dimension of satisfaction.

The third dimension consisted of performance appraisals, intended length of service in the N.H.S., conformity, intention to leave the hospital during the next six months, satisfaction with pay, desirability of the type of work in one's own eyes, and in the eyes of others, and the instrumental orientation. This dimension comprises of intentions and what could be said to be "extrinsic" aspects of work.
6.5 The combined samples of general nurses

6.5.1 Summary of the main results.

1. Only 3% of the general nurses stated that their main reason for working was money, while 56% stated that they were working mainly for other reasons.

2. Consistent with the above results, "interest" and "training" were ranked most frequently as the most desirable aspects of their type of work.

3. 43% had an intention to change hospital in the next six months, and 47% intended to continue working for the N.H.S. only for up to two years (only about half of the sample stated their intention regarding the latter).

4. S.R.N.s were more likely to want to change hospital than the other grades. An analysis of variance in order to find significant differences between the grades rendered differences only in tenure, WRSE, intention to change hospital, job satisfaction with opportunities for promotion, and fellow workers. No such pronounced differences were found for job satisfaction with pay, general job satisfaction, and job involvement, and none for the remaining variables investigated.

5. Positive correlations were obtained between the general nurses' own judgement of worthiness at their work (WRSE) and the job satisfaction aspects (except with pay), and between WRSE and job involvement, and between it and the intention to change hospital.

6. Job involvement of general nurses was related to satisfaction with their type of work, the hospital, and opportunities for promotion. It was also weakly related to conformity, (non)instrumental orientation, and the intended length of service in the N.H.S. It was not related to authoritarian orientation in this sample.
7. The intended length of service in the N.H.S. was best predicted by age and job satisfaction with pay (amount predicted about 42%).

8. Their intention to change hospital was again predicted best by age or marital status (amount predicted about 22%).

9. Performance appraisals of the general nurses as seen by them were best predicted by 1) little satisfaction with pay, 2) higher WRSE, 3) less authoritarian orientation (amount predicted 26%).

10. WRSE was predicted by job satisfaction with the hospital and job involvement (amount predicted 23%-46%).

11. General job satisfaction was best predicted by WRSE (23%-31%).

12. Short-term absenteeism (one-day absences) was best predicted by higher scores in performance appraisals and little satisfaction with the job itself (15%).

13. Medium-term absences (one to three-day spells of absence) was best predicted by higher scores in performance appraisals and lower grade (15%).

14. Long-term absences (over three-day spells of absence) was best predicted by the nurse's perception that she is restricted in decision making related to her work and greater job involvement (10%).

15. The factor analysis of WRSE yielded two main and clear cut dimensions, explaining 59% of the variance of this variable. These dimensions are called "feedback" (30%) and "control" (20%).

16. The factor analysis of the subjective characteristic of the general nurses type of work (17 variables) yielded in each of the two samples three main factors. However, these factors were not equivalent in their content and salience. While for the general nurses of one hospital (St. Mary's), the ordering of the
factors was 1) "skill" (33%), 2) "pleasantness" (18%), and 3) "interest" (16%), for the other sample, it was 1) "interest" (33%), 2) "pleasantness" (19%), and 3) "skill" (16%).

17. The factor analysis of the 17 psychological variables was made according to a principal factor solution which yielded four factors, explaining 48% of its variance. A rotated solution yielded two factors, accounting for 70% of the total variance. In the rotated solution, the first factor included WRSE and five aspects of job satisfaction (without job satisfaction with pay) (explaining 50% of the total variance). The second factor included the (non)instrumental orientation, less job satisfaction with pay, and the intention to change hospital (20%). In the non-rotated solution, the second factor was composed of job involvement, authoritarian orientation, intended length of service in the N.H.S., and job satisfaction with fellow workers.

18. The smallest space analysis of the psychological variables in the sample of general nurses was interpreted as consisting of three dimensions: 1) the most central and called "intrinsic", including WRSE and all aspects of job satisfaction, except pay. 2) including the evaluation of the general nurses' type of work in their own eyes and in the eyes of relevant others, authoritarian orientation, intended length of service in the N.H.S., and 3) the most peripheral, called "extrinsic", including the intention to change hospital, job satisfaction with pay, performance appraisals, conformity and instrumental orientation.

6.5.2 Percentages for intention of turnover and reasons for working.
TABLE 34: Percentages for intentions of turnover and reasons for working

<table>
<thead>
<tr>
<th>intention to change hospital in the next six months</th>
<th>% LOW</th>
<th>% UNCERTAIN</th>
<th>% HIGH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extent of intention</td>
<td>52</td>
<td>5</td>
<td>43</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>intended length of service in the N.H.S. (N=89)</th>
<th>up to six months: 17%</th>
<th>up to two years: 30%</th>
<th>up to five years: 16%</th>
<th>up to ten years: 5%</th>
<th>up to retirement: 32%</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>reasons for working</th>
<th>only for the money: 0%</th>
<th>mainly for money: 3%</th>
<th>for money and other reasons equally: 41%</th>
<th>for other reasons and money too: 42%</th>
<th>mainly for other reasons: 14%</th>
</tr>
</thead>
</table>

None of the nurses worked only for money, and the vast majority worked for other reasons, and for money as well. Nearly half of the general nurses stated that they intended to change hospital within the next six months, and a similar number stated that they intended to stay in the N.H.S. only up to an additional two years.

6.5.3 Rank ordering: frequencies with which items appear in the first five ranks of desirability for the type of work (N=189) (out of 17 items) for general nurses.

1. interest (108)
2. training (104)
3. skill (101)
4. working together with people (97)
5. future security (59)
6. good working conditions (59)
7. opportunities for advancement (47)
8. education (27)
9. effect on other people's lives (26)
10. integration with working groups (25)

Frequencies with which items appear as the most desirable
1. future security
2. working with people
3. good pay
4. training
5. opportunities for promotion
6. convenient hours
7. effect on other people's lives
8. good working conditions
9. interest
10. using mental effort

6.5.4 Multiple regressions (predictors). The results of the multiple regression analysis for each district hospital sample are provided below. At the end of the multiple regression tables for both hospitals the author shows the common denominators of both samples which help to predict the criteria or dependent variables.

| TABLE 35: Multiple regressions analysis of WRSE - St. Mary's general hospital nurses |
|---------------------------------|----------------|---------------|----------------|----------------|----------------|
|                                | Multiple r.  | r. change      | simple r.      | Beta           |
| 1. TYPEWORK                    | .55          | 30%            | .55            | .36            |
| 2. job satisfaction with the hospital | .65          | 12.6%          | .49            | .25            |
| 3. job involvement             | .68          | 3%             | .48            | .22            |

4. job satisfaction with supervision, 5. job satisfaction with fellow workers, 6. job satisfaction with opportunities for promotion, 7. job satisfaction with the job itself, 8. tenure, 9. evaluation of the type of work as seen by relevant others (NORMBEL), 10. conformity.
WRSE (N=86) was best predicted by 1) the evaluation of the type of work as desirable in one's own eyes, 2) satisfaction with the hospital, and 3) job involvement. The multiple regression coefficient was .68. In other words, the nurses' judgement of how worthy they were at their work was most influenced by how they perceived their type of work in relation to themselves, their satisfaction with the hospital and by how important that work was to them.

<table>
<thead>
<tr>
<th>TABLE 36: Multiple regressions of WRSE - Guy's general hospital nurses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Multiple r.</strong></td>
</tr>
<tr>
<td>-----------------</td>
</tr>
<tr>
<td>1. job satisfaction with the hospital</td>
</tr>
<tr>
<td>2. job involvement</td>
</tr>
</tbody>
</table>

3. job satisfaction with opportunities for promotion, 4. evaluation of the type of work in one's own eyes, 5. job satisfaction with supervision, 6. tenure, 7. conformity, 8. job satisfaction with fellow workers, 9. job satisfaction with the job itself, 10. evaluation of the type of work in the eyes of relevant others (NORMBEL).

WRSE of Guy's nurses (N=92) was best predicted by: 1) greater satisfaction with the hospital, 2) greater job involvement. Together, they predicted 23% of the WRSE of these nurses. Less satisfaction with opportunities for promotion appeared as the third predictor (although its validity is doubtful since its statistical significance is .10). If taken into account, it adds another 2.2% to the explanation of WRSE.

The common denominators: In both general hospitals, job satisfaction with the hospital and job involvement emerged as variables that acted as the best predictors, explaining a significant part of the variance in WRSE.
TABLE 37: Multiple regressions of general job satisfaction—
St. Mary's general hospital nurses

<table>
<thead>
<tr>
<th></th>
<th>Multiple r.</th>
<th>√r.</th>
<th>r. change</th>
<th>simple r.</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. WRSE</td>
<td>.46</td>
<td>.21</td>
<td>21%</td>
<td>.46</td>
<td>.32</td>
</tr>
<tr>
<td>2. instrumental orientation</td>
<td>.53</td>
<td>.28</td>
<td>7.2%</td>
<td>.29</td>
<td>.18</td>
</tr>
<tr>
<td>3. authoritarian orientation</td>
<td>.56</td>
<td>.31</td>
<td>3.1%</td>
<td>-.24</td>
<td>-.16</td>
</tr>
</tbody>
</table>

4. job involvement, 5. evaluation of the type of work as seen by relevant others, 6. marital status, 7. grade, 8. age, 9. evaluation of the type of work as seen in one's own eyes, 10. tenure.

General job satisfaction (N=85) was best predicted by 1) work related self-esteem, followed by 2) (non) instrumental orientation to work. Approaching significance as a predictor was also a weaker authoritarian orientation (p<.06). The multiple correlation coefficient was .56.

TABLE 38: Multiple regressions of general job satisfaction—
Guy's general hospital nurses

<table>
<thead>
<tr>
<th></th>
<th>Multiple r.</th>
<th>√r.</th>
<th>r. change</th>
<th>simple r.</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. WRSE</td>
<td>.32</td>
<td>.10</td>
<td>10.5%</td>
<td>.32</td>
<td>.27</td>
</tr>
<tr>
<td>2. tenure</td>
<td>.46</td>
<td>.21</td>
<td>10.6%</td>
<td>.31</td>
<td>.29</td>
</tr>
<tr>
<td>3. grade</td>
<td>.50</td>
<td>.25</td>
<td>3.6%</td>
<td>.29</td>
<td>.17</td>
</tr>
</tbody>
</table>

4. evaluation of the type of work as seen in the eyes of relevant others, 5. authoritarian orientation, 6. job involvement, 7. evaluation of the type of work as seen in one's own eyes, 8. age, 9. instrumental orientation, 10. marital status

General job satisfaction of Guy's nurses (N=75) was best predicted by: 1) higher WRSE, 2) longer tenure, and 3) higher grade. Together, they explained about 25% of their general job satisfaction. Tenure showed the highest influence (Beta score) on general job satisfaction, closely followed by WRSE. None of the other socio-demographic factors or attitudes (including job involvement)
helped to increase the prediction or the amount of variance explained significantly.

The common denominator: In both hospitals, WRSE emerged as the best predictor of the general job satisfaction of the general nurses.

TABLE 39: Multiple regressions of the intended length of service in the N.H.S. - St. Mary's general hospital nurses

<table>
<thead>
<tr>
<th></th>
<th>Multiple r.</th>
<th>√r</th>
<th>r.change</th>
<th>simple r.</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. age</td>
<td>.58</td>
<td>.33</td>
<td>33%</td>
<td>.58</td>
<td>.95</td>
</tr>
<tr>
<td>2. job satisfaction with pay</td>
<td>.64</td>
<td>.41</td>
<td>7.3%</td>
<td>.40</td>
<td>.07</td>
</tr>
</tbody>
</table>

3. marital status, 4. job satisfaction with fellow workers, 5. tenure, 6. grade, 7. job involvement, 8. WRSE, 9. evaluation of the type of work in one's own eyes, 10. job satisfaction with the hospital.

For the intended length of service in the N.H.S. (N=37) the best predictors were: 1) age (older) and 2) greater satisfaction with pay. Together, they accounted for a multiple regression coefficient of .64, i.e. explaining 41% of the total variance. When looking at the Betas, the highest influence was that of age (older) followed by lower tenure, lower work related self-esteem, lower grade, higher job involvement, and greater satisfaction with fellow workers.

TABLE 40: Multiple regressions of the intended length of service in the N.H.S. - Guy's general hospital nurses

<table>
<thead>
<tr>
<th></th>
<th>Multiple r.</th>
<th>√r</th>
<th>r.change</th>
<th>simple r.</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. age</td>
<td>.45</td>
<td>.20</td>
<td>20.6%</td>
<td>.45</td>
<td>.41</td>
</tr>
<tr>
<td>2. job involvement</td>
<td>.60</td>
<td>.36</td>
<td>15.3%</td>
<td>.45</td>
<td>.46</td>
</tr>
<tr>
<td>3. job satisfaction with fellow workers</td>
<td>.63</td>
<td>.39</td>
<td>3.5%</td>
<td>.30</td>
<td>.22</td>
</tr>
<tr>
<td>4. job satisfaction with pay</td>
<td>.66</td>
<td>.43</td>
<td>4%</td>
<td>.16</td>
<td>-.22</td>
</tr>
</tbody>
</table>
5. evaluation of the type of work in one's own eyes, 6. job satisfaction with the job itself, 7. job satisfaction with the firm, 8. job satisfaction with opportunities for promotion, 9. WRSE, 10. job satisfaction with supervision, 11. authoritarian orientation, 12. Normbel (evaluation of the type of work as seen in the eyes of relevant others), 13. grade, 14. tenure, 15. marital status.

The intended length of service in the N.H.S. (N=57) was best predicted by: 1) older age, 2) greater job involvement, 3) greater satisfaction with fellow workers, and 4) less satisfaction with pay. Together, they accounted for a multiple regression coefficient of .66, i.e. explaining 43.4% of the total variance.

If looking at the Beta scores, the highest are those of job involvement and age which follow each other fairly closely. At a distance, with the same level of influence were satisfaction with fellow workers and pay. But perhaps surprisingly, these last two are Betas of opposing signs; it is greater satisfaction with fellow workers which has an influence on the intention to stay in the N.H.S., while it is less satisfaction with pay which is related to the intention of service in the N.H.S.

The common denominators: In both hospitals "age" was the best predictor of the general nurses' intended length of service in the N.H.S. In addition to it, job satisfaction with pay had an influence on this intention, though the strength of this influence varies between the hospitals.

<table>
<thead>
<tr>
<th>TABLE 41: Multiple regressions of the intention to change hospital within the next six months—St Mary's</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Multiple r.</td>
</tr>
<tr>
<td>1. marital status</td>
</tr>
<tr>
<td>2. WRSE</td>
</tr>
<tr>
<td>3. grade</td>
</tr>
<tr>
<td>4. age</td>
</tr>
</tbody>
</table>
5. job satisfaction with supervision, 6. job satisfaction with pay, 7. job satisfaction with fellow workers, 8. job satisfaction with opportunities for promotion, 9. tenure, 10. job satisfaction with the hospital, 11. the time that it takes to get to work.

For the intention to change hospital (N=91) the best predictors were: 1) being single, 2) lower work related self-esteem, 3) higher grade, and 4) younger age. Together, their multiple regression coefficient was .47 which explained 22.6% of the total variance of the criteria.

| TABLE 42: Multiple regressions of the intention to change hospital in the next six months—Guy's general hospital nurses. |
|---|---|---|---|---|
| | Multiple r. | \( r \times \) | r. change | simple r. | Beta |
| 1. age | .31 | .09 | 9.8% | .31 | .40 |
| 2. job satisfaction with the hospital | .42 | .18 | 8% | .27 | .17 |
| 3. satisfaction with the type of work | .46 | .21 | 3.7% | .15 | .28 |

4. marital status, 5. evaluation of the type of work in one's own eyes, 6. job satisfaction with pay, 7. job satisfaction with the job itself, 8. job involvement, 9. WRSE, 10. tenure, 11. job satisfaction with opportunities for promotion, 12. job satisfaction with fellow workers, 13. conformity, 14. grade, 15. job satisfaction with supervision.
The intention to change hospital within the next six months (N=78) was best predicted by: 1) younger age, 2) less satisfaction with the hospital. Together, their multiple regression coefficient was .42. Less satisfaction with the type of work increased the multiple regression to .46, which explained 22.5% of the total variance of the criteria. Considering that repeated measures of this kind (reliability) do not normally reach correlations much stronger than about .80, it is aimed at explaining about 65% of the total variance.

Age was not only the best predictor of intended change of hospital, but also the one with the highest Beta, i.e. it had the strongest influence on the criteria if all the other variables in the equation were held constant. The second highest Beta was that of satisfaction with the type of work. Apart from the variable of being single which increased the prediction by 1.6%, none of the other variables increased the prediction for the intention to change hospital significantly; including the various facets of job satisfaction, job involvement, grade etc.

The common denominator: Again, age was the variable which was a predictor common to this intention for both hospitals, though its importance as a predictor varies to a significant extent between the hospitals. Nevertheless, in the hospital where age was not the best predictor, another socio-demographic variable took the lead, namely that of marital status.

<table>
<thead>
<tr>
<th>TABLE 4.1: Multiple regressions of performance appraisals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple r.</td>
</tr>
<tr>
<td>1.JSPAY</td>
</tr>
<tr>
<td>2.WRSE</td>
</tr>
<tr>
<td>3.authoritarian orientation</td>
</tr>
<tr>
<td>4.conformity</td>
</tr>
</tbody>
</table>
5. job satisfaction with opportunities for promotion,  
6. job satisfaction with supervision, 7. job satisfaction  
with the job itself, 8. job satisfaction with fellow  
workers, 9. desirability of the type of work in one's  
own eyes, 10. tenure, 11. satisfaction with the type of  
work, 12. job involvement.

The common denominators: Performance appraisals of  
the general nurses were best predicted by: 1) little  
job satisfaction with pay, 2) higher WRSE, and 3) less  
authoritarian orientation. Greater conformity added  
another 3% to the prediction of performance appraisals,  
but its statistical significance was doubtful (.09).  
Together, these variables explained 26% of the variance  
of performance appraisals. Little job satisfaction with  
pay had the single strongest influence (Beta) on  
performance appraisals when controlling for all the  
other variables in the equation. The next highest  
Beta was that of less authoritarian orientation.

Surprisingly, job involvement had no effect on the  
prediction (or for that matter, it had no influence  
when controlling for all the other variables) of the  
general nurses' performance appraisals. On the other  
hand, a non significant effect on the appraisals was  
shown by the other aspects of job satisfaction. Included  
in the equation were other variables like the desirability  
of the type of work, tenure, etc.

Absenteeism

Porter and Steers (1973) reviewed the literature  
of "organisational, work and personal factors in  
employee turnover and absenteeism". Job satisfaction  
and its various facets seemed to be a recurrent theme  
in the literature. In addition, factors such as  
recognition, autonomy and feedback were being discussed  
with some research done that actually supported their  
relevance to this area (Ross & Zander, 1957; Guest, 1955;  
Hackman & Lawler, 1971). Also, some personality traits,  
such as need for clarity, higher tolerance for ambiguity,
seemed to have some relation to turnover (Lyons, 1971).

Three different criteria were used to measure this variable: 1) short-term absenteeism, 2) medium-term absenteeism; and 3) long-term absenteeism.

Short-term absenteeism refers to one day of absence, medium-term to one to three-day (inclusive) spells of absence, and long-term refers to over three-day spells of absence.

The total number of absent spells correlates .91 with one to three-day spells and therefore both criteria would be considered as medium-term absences. Total number of absent days correlates .85 with spells of over three days of duration, i.e. long-term absences. It should be noted that the data for all three criteria is derived from the same subjects' records.

<table>
<thead>
<tr>
<th>TABLE 44: Multiple regressions of short-term absences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable</td>
</tr>
<tr>
<td>1. performance appraisals</td>
</tr>
<tr>
<td>2. JSJOB</td>
</tr>
<tr>
<td>3. WRSE</td>
</tr>
<tr>
<td>4. intention to change hospital</td>
</tr>
</tbody>
</table>

5. authoritarian orientation, 6. time that it takes to get to work, 7. job satisfaction with pay, 8. job satisfaction with fellow workers, 9. marital status, 10. grade, 11. job satisfaction with opportunities for promotion, 12. job satisfaction with the hospital, 13. decision making, 14. job involvement, 15. age, 16. job satisfaction with supervision.

Short-term absenteeism was best predicted by: 1) higher scores in "appraisals" (the subject's judgement as to how good her performance has been assessed by her superiors), and 2) little satisfaction with the job itself. The multiple regression coefficient for these two was
.39 (about 20%). The highest Beta was that of little satisfaction with the job itself, followed by the perceived appraisal and work-related self-esteem. The explanation that follows then, is that if a nurse is dissatisfied with the job itself, and also thinks that she has been highly appraised, and is good at what she does (WRSE), then she can allow herself to have a day off now and again.

<table>
<thead>
<tr>
<th>TABLE 45: Multiple regressions of medium-term absences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple r.</td>
</tr>
<tr>
<td>------------</td>
</tr>
<tr>
<td>1. performance appraisals</td>
</tr>
<tr>
<td>2. grade</td>
</tr>
<tr>
<td>3. JSOPP</td>
</tr>
</tbody>
</table>

Medium-term absences were best predicted by:
1) better performance appraisals (as perceived by the nurse), and 2) lower grade. The multiple regression coefficient for both was .38.

If performance appraisals are not taken into account (to increase the number of subjects whose data is analysed) in the regression equation, then lower grade is the best predictor. The highest Beta, in this case, is that of work-related self-esteem.

Medium-term absences are then, associated with lower grades, and also thinking that one has been highly appraised and/or is good at what one does at work.

<table>
<thead>
<tr>
<th>TABLE 46: Multiple regressions of long-term absences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple r.</td>
</tr>
<tr>
<td>-------------</td>
</tr>
<tr>
<td>1. decision making</td>
</tr>
<tr>
<td>2. job involvement</td>
</tr>
<tr>
<td>3. intention to change hospital</td>
</tr>
</tbody>
</table>
4. job satisfaction with pay, 5. job satisfaction with opportunities for promotion, 6. job satisfaction with supervision, 7. time that it takes to get to work, 8. age, 9. job satisfaction with the job itself, 10. authoritarian orientation, 11. job satisfaction with fellow workers, 12. WRSE, 13. job satisfaction with the firm, 14. grade, 15. marital status.

Long-term absenteeism was best predicted by:
1) the nurse's perception that she was restricted in decision making at work, and 2) greater job involvement. Intention to change hospital follows these two predictors (but its significance was somewhat doubtful p<.09). The multiple regression coefficient was .35.

These results seem to be best explained as deriving from a stressful or anxiety producing work situation. The nurse feels that she is unable to make decisions while being highly involved in her work at the same time. i.e. her work is very important to her, and the fact that she thinks that she cannot (or just to a small degree) make decisions that are important in her role as a nurse, builds tension and stress which might culminate in long-term absences (which might well be due to illnesses of a psychosomatic nature).

6.5.5 Factor analyses (N=189). In the rotated solution two factors explain 58.8% of the variance of WRSE. (eigen value>1).

<table>
<thead>
<tr>
<th>TABLE 47: Factor analysis of WRSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor I- 39.5% (feedback)</td>
</tr>
<tr>
<td>I often feel uncertain about what my superior thinks of me</td>
</tr>
<tr>
<td>I cannot make decisions .74</td>
</tr>
<tr>
<td>Sometimes I feel that my fellow workers think that I am not very good at my job .66</td>
</tr>
</tbody>
</table>

Table continues on the next page
There are many times when I feel that the results of my work are not as good as those of others. The results indicate that the stronger factor in WRSE for the general nurses of both samples is that of feedback, explaining 39.5% of the variance in this measure. The second main factor is that of powerlessness, explaining an additional 19.3% of the variance in this measure. The factor analysis of the combined samples of the general nurses shows fairly neatly the two expected areas which were assumed to play a major role in the structure of the WRSE measure.

Factor analysis of the subjective characteristics of the type of work

<table>
<thead>
<tr>
<th>Factor I</th>
<th>Factor II</th>
<th>Factor III</th>
</tr>
</thead>
<tbody>
<tr>
<td>using physical effort</td>
<td>good pay</td>
<td>opportunities for advancement</td>
</tr>
<tr>
<td>.83</td>
<td>.66</td>
<td>.74</td>
</tr>
<tr>
<td>using mental effort</td>
<td>convenient hours</td>
<td>creativity</td>
</tr>
<tr>
<td>.82</td>
<td>.58</td>
<td>.44</td>
</tr>
<tr>
<td>skill</td>
<td>good working conditions</td>
<td>easiness in knowing if you are doing a good/bad job</td>
</tr>
<tr>
<td>.41</td>
<td>.52</td>
<td>.43</td>
</tr>
</tbody>
</table>

A factor analysis was carried out on the measure of beliefs about the characteristics of the type of work (17 items). Three main factors appeared in the rotated solution, explaining 67.8% of the variance in this measure. The first factor which is the most salient explains 33.2% of the total variance, and could be described as portraying a dimension of "skill" in the type of work. The second factor explains an additional 18.4% of the
total variance and could be labelled as a factor of "pleasantness".
The third factor covers an additional 16.2% of the total variance, and could be described as covering an area of "interest".

<table>
<thead>
<tr>
<th>TABLE 49: Factor analysis of the subjective characteristics of the type of work - Guy's General Hospital (N=95)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor I- 33% of the variance</td>
</tr>
<tr>
<td>working with people .83</td>
</tr>
<tr>
<td>interest .70</td>
</tr>
<tr>
<td>easiness in knowing if one is doing a good/bad job .58</td>
</tr>
<tr>
<td>good working conditions .40</td>
</tr>
<tr>
<td>future security .36</td>
</tr>
<tr>
<td>effect on other people's lives .32</td>
</tr>
</tbody>
</table>

A factor analysis was carried out on the measure of beliefs about the characteristics of the type of work (17 items). Three main factors appeared in the rotated solution, explaining 68.2% of the variance in this measure.
The first factor which appeared to be the most salient explains 33% of the total variance, and could be described as portraying a dimension of "interest".
The second factor, covering 19.3% of the total variance (very vaguely seemed to describe aspects having to do with "pleasantness").
The third factor covered 15.8% of the total variance, and could be described as covering the area of "skill".
Factor analysis of the 17 psychological variables (N=189)

In the Principal factor (non-rotated) solution, the first four main factors explain 48% of the total variance.

<table>
<thead>
<tr>
<th>Factor I-20.8%</th>
<th>Factor II-11.2%</th>
<th>Factor III-8.5%</th>
<th>Factor IV-7.4%</th>
</tr>
</thead>
<tbody>
<tr>
<td>job satisfaction with the hospital</td>
<td>job satisfaction with supervision</td>
<td>intention (not) to change hospital</td>
<td>conformity</td>
</tr>
<tr>
<td>job satisfaction with opportunities for promotion</td>
<td>satisfaction with the type of work</td>
<td>(non)instrumental orientation</td>
<td>(non)instrumental orientation</td>
</tr>
<tr>
<td>job satisfaction with the job itself</td>
<td>WRSE</td>
<td>job satisfaction with pay</td>
<td>• .27</td>
</tr>
<tr>
<td>job satisfaction with fellow workers</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In the above table, the first factor shows that it covers 20.8% of the total variance and was composed of five of the six aspects of job satisfaction, plus satisfaction with the type of work, and WRSE. The second factor, explaining 11.2% of the total variance, is composed of job involvement, authoritarian orientation, intended length of service in the N.H.S., and job satisfaction with fellow workers. The latter has a negative factor loading. This might suggest that intended
Length of service is influenced by one's job involvement and authoritarian orientation despite some discontent with fellow workers. The third factor, explaining 8.5% of the total variance, consists of the intention to change hospital and instrumental orientation. This suggests that those nurses working mainly for money are more likely to have an intention to change hospital. The fourth factor, explaining 7.4% of the total variance, consists of negative loadings for conformity and satisfaction with pay, and a (non)instrumental orientation (working mainly for reasons other than money).

Factor analysis of the 17 psychological variables (N=180)

The rotated solution of this factor analysis provided two main factors (eigen value over 1.) accounting for 70% of the total variance.

| TABLE 51: Factor analysis of the psychological variables- (rotated solution) |
|------------------|------------------|
| Factor I- 50%    | Factor II- 20%   |
| job satisfaction with the hospital | (non)instrumental orientation |
| job satisfaction with fellow workers | .61 |
| job satisfaction with supervision | .65 |
| job satisfaction with the job itself | .59 |
| job satisfaction with opportunities for promotion | .58 |
| WRSE | .41 |
| satisfaction with the type of work | .33 |

The table shows a first main factor covering 50% of the total variance, including all aspects of job satisfaction except pay. It also includes WRSE and
satisfaction with the type of work. The second factor explains 20% of the total variance and includes: (non)instrumental orientation, and small negative loadings on satisfaction with pay and intention (not) to change hospital. This might suggest that intention to change hospital goes together with less satisfaction with pay, and having other reasons for working than money.

6.5.6 Smallest space analysis (S.S.A.) of the psychological variables. The three-dimension solution was chosen for a deep analysis (since this solution had a "coefficient of alienation" or stress of less than two).

The first dimension consisted of WRSE, job satisfaction with the job itself, job satisfaction with the hospital, job satisfaction with fellow workers, job satisfaction with supervision, job involvement, satisfaction with the type of work, and job satisfaction with opportunities for promotion. This dimension is seen as the most "central" in its importance, and covers the most "intrinsic" aspects of work. This includes all areas of job satisfaction except pay.

The second dimension consisted of evaluation of the type of work in one's own eyes, authoritarian orientation, intended length of service in the N.H.S., and evaluation of the type of work in the eyes of relevant others.

The third dimension consisted of conformity, intention to change hospital, job satisfaction with pay, performance appraisals, and instrumental orientation. This dimension comprises of intentions and what could be said to be "extrinsic" aspects of work.

6.5.7 The differences between the two samples. In order to determine whether or not a difference between the samples of the two general hospitals is significant, or indicative of true differences between the population
a two-tailed t test was carried out. The only differences seemed to be in:
1. satisfaction with pay (Guy's nurses more satisfied; p<.03)
2. satisfaction with the job itself (as above; p<.02)
3. total job satisfaction (as above; p<.01).

The differences in satisfaction between the two hospitals might be attributed to slightly different orientations to work which are reflected in the rank-ordering of the most desirable characteristics of the type of work. "Good pay" is ranked in the ninth place for St. Mary's, and in the twelfth place for Guy's. Pay seemed to be slightly less important for Guy's nurses, and (therefore) they were more contented with it. The results of the factor analysis of the characteristics of the type of work for the two samples of general nurses also yielded different results. The factor analysis for the two samples came out with three independent factors, but their constituents differed in a marked way.

The difference in satisfaction with the job itself might have to do with the kind of patients who are sent to each one of the hospitals. It seemed that Guy's got the more interesting cases (or patients?).
6.6 All samples combined

6.6.1 Summary of the main results.

1. It could be said that for the combined samples of all four occupations: 1) no associations were obtained between the main focus variables and the socio-demographic ones. 2) WRSE and job involvement correlated with the intrinsic aspects of job satisfaction. WRSE had a weak correlation with the extrinsic aspects of job satisfaction while job involvement had none. Neither variable correlated with conformity, but job involvement correlated with authoritarian orientation. Both variables had an association with (non)instrumental orientation and the evaluation of the type of work in the eyes of others.

3) A person's (non)instrumental orientation had a bearing on his job satisfaction, having a positive influence on its intrinsic aspects and a negative one on pay. 4) Correlates were found for intended length of service in the organisation with the socio-demographic and attitudinal variables; while only the socio-demographic variables (marital status, age and tenure) were associated with the intention to change job within the organisation in the next six months. 5) WRSE was the only correlate of performance appraisals.

2. Results for each sample separately tended to show that when a correlation was obtained between (non) instrumental orientation and job satisfaction with the job itself, no correlation was obtained between this orientation and job satisfaction with pay, and vice versa. This result was seen as partly supporting Herzberg's two-factor theory. In addition, it seemed that these results might throw light on the conditions under which correlations do emerge. It was suggested that it could be that correlations tended to emerge in the case of variables which were important in their consequences, but were not the ones which represented the person's main orientations.
3. Further support to the above suggestion was found in the results of orientations to work as moderator variables. Here most correlations were stronger for the low intrinsic orientation (low job involvement) and high extrinsic orientations (working mainly for money). This is taken to mean that correlations emerge, or are stronger when work is not very important to the person, or when it is done just (or mainly) for the money.

4. An unexpected result was the correlation obtained between job involvement and authoritarian orientation. Using orientations to work as moderator variables, it was found that the association existed only for the intrinsically oriented (highly involved) group and for people who worked mainly for other reasons than money. This was interpreted as an implication that job involvement in its highest levels might have its sources in early socialization and be somehow related to the so-called Protestant work ethic.

5. Results of the partial correlations suggest that there were common elements in the main focus variables, and at the same time, that each variable covered a different area.

6. The best predictor of the intentions measured belonged to the socio-demographic variables, though the attitudinal measures helped to increase this prediction significantly.

7. WRSE was the best predictor of performance appraisals, job satisfaction, and second best in predicting job involvement after the evaluation of the type of work in one's own eyes. WRSE, in turn, was best predicted by job satisfaction with the firm and job involvement.

8. A factor analysis of the measure of the evaluation of the type of work in one's own eyes yielded only one dimension which in the rotated solution accounted for
100% of the variance of this measure, making it unidimensional.

9. The factorial structure of the (17) psychological variables studied (although differing in the results according to the factorial solution chosen) rendered, on the one hand, a factor of job satisfaction and WRSE, and on the other, a factor (or factors) which simply showed (non)instrumental orientation (not working for money only) with less satisfaction with pay, and an intention to change job within the next six months.

10. A smallest space analysis (S.S.A.) was interpreted when looking at the three dimensional solution. The results showed three main psychological dimensions going from core to periphery. The most central dimension, called "personal" included job satisfaction aspects (except with pay and supervision), WRSE, and authoritarian orientation. The second dimension was called "social", and included job involvement, intended length of service in the organisation, satisfaction with the type of work, and supervision, and evaluation of the type of work in one's own eyes and in the eyes of others. The third and most peripheral dimension was called "instrumental" and included the intention to change job, instrumental orientation, satisfaction with pay, and performance appraisals.

In general terms, the results obtained by the S.S.A. and in the factor analysis were congruent with and validated one another.

11. An analysis of variance made in order to find out whether the four occupational samples came from the same population (or in other words, that they differed significantly) indicated that indeed for most of the measures investigated there were differences among the occupational samples. No difference at all was found between the samples in job satisfaction with
the firm and conformity. For the remaining measures, two or three subsets were generally found with the expected order of means, i.e. industrial workers with the lowest means, general nurses with the highest means, and the clerical staff and the psychiatric nurses somewhere in between.

6.6.2 Some Pearson correlations (N=474).

Socio-demographic variables: No associations were obtained between the socio-demographic variables (which were: age, sex, marital status, number of dependent children, tenure, and number of jobs outside the present organisation in the last three years) and WRSE, job involvement, and total job satisfaction. (Job involvement and authoritarian orientation had a negligible association with age (.14 and .15 respectively).

WRSE: A glance at the correlational matrix of the psychological variables measured in this study revealed that WRSE was strongly related to the intrinsic aspects of job satisfaction (job satisfaction with the job itself .51, job satisfaction with opportunities for promotion .44, job satisfaction with the firm .43), and less so to the extrinsic aspects of job satisfaction. No correlation was found at all with job satisfaction with pay, and only .33 with job satisfaction with supervision, and .32 with job satisfaction with fellow workers. WRSE also correlated with the desirability of the type of work in one's own eyes (.34) as well as with job involvement (.36). WRSE had no correlation whatsoever with authoritarian orientation or conformity, however, it had a weak correlation with (non)instrumental orientation (.20), and the evaluation of the type of work in the eyes of others (.20).

Job involvement: Job involvement was related only to satisfaction with the intrinsic aspects of the job (job satisfaction with the job itself .30, with
opportunities for promotion (.28), and with the firm (.17), and to satisfaction with the type of work (.30). It correlated with authoritarian orientation (.27), but not with conformity, and like WRSE, it had a correlation with the (non)instrumental orientation (.29) and the evaluation of the type of work in one's own eyes (.37), and in the eyes of others (.20).

(Non)instrumental orientation: (Non)instrumental orientation was found to be correlated to job satisfaction with the job itself (.37), opportunities for promotion (.26), and negatively with job satisfaction with pay (-.20) (i.e. the more one works just for money, the more satisfied he is with his pay). It also correlated with the evaluation of the type of work (.30).

Satisfaction with the type of work: Satisfaction with the type of work was found to correlate best with job satisfaction with the job itself (.18), and to an even much weaker extent with other aspects of job satisfaction With general job satisfaction it correlated .19.

Intention to change job within the organisation within the next six months: This intention was found to correlate only with being single (-.31), younger (.24) and having less tenure (.19) (apart from the (non) instrumental orientation .19, i.e. if one works only for money, he will be slightly more likely to intend to change his job). No other attitudinal measure correlated with this intention.

Performance appraisals: Did not have any correlates with the variables measured in this study, except WRSE (.25) and a negligible correlation with the desirability of the type of work (.17).

Intended length of service in the organisation; Correlated principally with socio-demographic variables (age .55, tenure .32, marital status -.24 and number of jobs outside the present company in the last three years
.26), but also with job involvement (.37), WRSE (.22), desirability of the type of work (.23) and job satisfaction (.19) with pay (.24) and the firm (.23).

6.6.3 In search of circumstances in which correlations emerge. Earlier correlations carried out for the different occupational samples led the author to certain assumptions for which support was sought.

Early results had shown that for the clerical staff, there was a correlation between a (non)instrumental orientation (working mainly for other reasons rather than money) and satisfaction with the job itself (.56). This means that the less instrumentally oriented the employee is, the more satisfied he is with the job itself. However, no correlation whatsoever, was found in this sample between instrumental orientation and satisfaction with pay. Correlations obtained for the sample of the psychiatric nurses showed a correlation between (non)instrumental orientation and satisfaction with pay (-.20), meaning that the more instrumentally oriented employees (working mainly for money) were more satisfied with pay. But no correlation was found between instrumental orientation and satisfaction with the job.

In the sample of general nurses, a correlation was obtained between (non)instrumental orientation and satisfaction with the job itself (.24), this having the same meaning as with the clerical sample, but less strongly so. And again, no correlation was found between the (non)instrumental orientation and satisfaction with pay.

Analysis of these results gave further support to the notion that there are two separate dimensions of job satisfaction; one intrinsic and the other extrinsic (as would be expected, according to one of the interpretations made on Herzberg's (1966) two-
factor theory). In addition, these results could also be interpreted as supporting Goldthorpe's suggestion (Goldthorpe et al., 1968) that orientations to work are gratified by the job a person chooses. Criticisms that these results could be due to responses of particular circumstances at a particular moment are easily dismissed since, if this had been the case, most people would have answered similarly, and secondly, this would have been reflected in all the correlations with pay, in which case, no correlations should have emerged.

Further penetration into the meaning of these results suggested to the author that it might be that correlations are obtained only for those factors which are not fulfilled, to which the person is not oriented, but which are, nevertheless, important in their consequences. As was seen from the rank ordering (of the desired aspects of the type of work) for the sample of the clerical staff, items that were rank-ordered as most desirable could be used for inferring that this sample was basically instrumental in its orientation (pay is of great importance). However, there is no correlation between instrumental orientation and satisfaction with pay in this sample, but there is one between instrumental orientation and satisfaction with the job itself. On the other hand, the psychiatric nurses' rank ordering indicates that they are not instrumentally oriented (pay does not appear as one of the most desirable items), and a correlation is found between instrumental orientation and satisfaction with pay. However, no correlation is found for the psychiatric nurses between it and satisfaction with the job itself. It was thus concluded that correlations tend to emerge in the case of variables which are important in their consequences, but which are not the ones that represent the person's main orientations and strivings.

In order to find further support to this suggestion, it was decided to see what results would be obtained from separate correlations of groups of
people who are extrinsically oriented on the one hand, and intrinsically oriented on the other.

6.6.4 Orientations to work as moderator variables.

Two main orientations to work were considered; one extrinsic and the other intrinsic. Job involvement was regarded as equivalent to the intrinsic orientation, according to which work is seen as an end in itself, as a source of intrinsic satisfaction. The extrinsic orientation is the one according to which work is seen as a means of acquiring the income and rewards that assure the physical survival of the employee and his family, and also enable him to afford recreational activities. The latter was measured under the heading of instrumental orientation, and included those employees whose reason for working was mostly that of money. (see chapter 1 sec. 1.5, p. 51-4).

All individuals were classified as high or low in job involvement as well as in the instrumental orientation. This was done by taking the cutting point to be the score in each one of these measures, in which about 50% of the cases were in the low category and 50% in the high. Separate correlational matrixes were then performed for each one of the subgroups. Presented below are the correlations that emerged for WRSE and job involvement for each one of the groups.

<p>| TABLE 52: Intrinsic orientation (high job involvement) as a moderator variable |
|---------------------------------|-----------------|-----------------|----------------|
|                                 | low intrinsic   | high intrinsic  | general         |
|                                 | orientation     | orientation     | simple          |
|                                 | (involvement)   | (involvement)   | correlation     |
| WRSE-job involvement           | .39             | n.s.            | .35            |
| WRSE-job satisfaction with the firm | .50          | .32             | .43            |
| WRSE-job satisfaction with opportunities for promotion | .45 | .34 | .44 |</p>
<table>
<thead>
<tr>
<th></th>
<th>low intrinsic orientation (involvement)</th>
<th>high intrinsic orientation (involvement)</th>
<th>general simple correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>WRSE-job satisfaction with the job itself</td>
<td>.55</td>
<td>.36</td>
<td>.51</td>
</tr>
<tr>
<td>WRSE-job satisfaction with supervision</td>
<td>.29</td>
<td>.37</td>
<td>.33</td>
</tr>
<tr>
<td>WRSE-job satisfaction with fellow workers</td>
<td>.31</td>
<td>.29</td>
<td>.32</td>
</tr>
<tr>
<td>WRSE-evaluation of the type of work in the eyes of others</td>
<td>.13</td>
<td>.23</td>
<td>.20</td>
</tr>
<tr>
<td>WRSE-(non)instrumental orientation</td>
<td>.18</td>
<td>.10</td>
<td>.20</td>
</tr>
<tr>
<td>WRSE-performance appraisals</td>
<td>.25</td>
<td>.25</td>
<td>n.s.</td>
</tr>
<tr>
<td>WRSE-intended length of service in the organisation</td>
<td>.19</td>
<td>n.s.</td>
<td>.12</td>
</tr>
<tr>
<td>WRSE-evaluation of the type of work in one's own eyes</td>
<td>.39</td>
<td>.32</td>
<td>n.s.</td>
</tr>
<tr>
<td>WRSE-satisfaction with the type of work</td>
<td>.23</td>
<td>.15</td>
<td>.29</td>
</tr>
<tr>
<td>job involvement-authoritarian orientation</td>
<td>n.s.</td>
<td>.48</td>
<td>.27</td>
</tr>
<tr>
<td>job involvement-job satisfaction with the firm</td>
<td>.23</td>
<td>n.s.</td>
<td>.17</td>
</tr>
<tr>
<td>job involvement-job satisfaction with opportunities for promotion</td>
<td>.26</td>
<td>n.s.</td>
<td>.28</td>
</tr>
<tr>
<td>job involvement-job satisfaction with the job itself</td>
<td>.39</td>
<td>n.s.</td>
<td>.30</td>
</tr>
<tr>
<td>job involvement-job satisfaction with supervision</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
</tr>
<tr>
<td></td>
<td>low intrinsic orientation (involvement)</td>
<td>high intrinsic orientation (involvement)</td>
<td>general simple correlation</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-----------------------------------------</td>
<td>------------------------------------------</td>
<td>----------------------------</td>
</tr>
<tr>
<td>job involvement - job satisfaction with fellow workers</td>
<td>.17</td>
<td>-.19</td>
<td>n.s.</td>
</tr>
<tr>
<td>job involvement - evaluation of the type of work in the eyes of others</td>
<td>.18</td>
<td>.10</td>
<td>.18</td>
</tr>
<tr>
<td>job involvement - instrumental orientation</td>
<td>.33</td>
<td>n.s.</td>
<td>.29</td>
</tr>
<tr>
<td>job involvement - evaluation of the type of work in one's own eyes</td>
<td>.35</td>
<td>n.s.</td>
<td>.10</td>
</tr>
<tr>
<td>job involvement - satisfaction with the type of work</td>
<td>.19</td>
<td>n.s.</td>
<td>.16</td>
</tr>
<tr>
<td>job involvement - intended length of service in the organisation</td>
<td>.23</td>
<td>.24</td>
<td>.13</td>
</tr>
<tr>
<td>job involvement - performance appraisals</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
</tr>
<tr>
<td>job involvement - intention to change job within the next six months</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
</tr>
</tbody>
</table>

**TABLE 53: Extrinsic orientation (money as the main reason for working) as a moderator variable**

<table>
<thead>
<tr>
<th></th>
<th>work for money</th>
<th>work for other reasons</th>
</tr>
</thead>
<tbody>
<tr>
<td>WRSE-job involvement</td>
<td>.40</td>
<td>n.s.</td>
</tr>
<tr>
<td>WRSE-job satisfaction with opportunities for promotion</td>
<td>.46</td>
<td>.26</td>
</tr>
<tr>
<td>WRSE-job satisfaction with the job itself</td>
<td>.53</td>
<td>.30</td>
</tr>
</tbody>
</table>
The general impression that one gets from a first glance at both tables is that (stronger) correlations are obtained for people who either work mainly for the money (extrinsic orientation), or people who have low job involvement (not intrinsically oriented).

Two possible explanations are brought forward: according to the first one would contend that people who work only for money, or have a low intrinsic
orientation to work tend to have more consistent responses regarding work than people who work for reasons other than money and/or are highly involved. As it was previously seen, it could be argued that a consistency model would assume that for consistency reasons there should generally be correlations between WRSE and job involvement and job satisfaction. The more consistency there is, the stronger these relationships would be. The second explanation which could be said to give support to what was said before is that stronger correlations are obtained when the job is not very important to the Self (low job involvement), or when the job is done just for money. Thus, it could be said that correlations in general emerge, or are stronger when the issue at hand is, either not very important, or not emotionally loaded. In other words, the explanation is that correlations mostly emerge in the case of variables which are important in their consequences, and not fulfilled, but which at the same time, are not the orientations with which the person initially engaged in work.

In both tables, there are exceptions to both explanations. In the first one, a correlation between WRSE and satisfaction with supervision is stronger for the high intrinsic oriented (job involved) group, which would be in line with the consistency model. Such a model would claim stronger associations between WRSE and job involvement and other variables if the job is indeed more important to the person. Most of the results refute such an assumption. In addition, in both tables, the correlations between job involvement and authoritarian orientation are in opposite direction to most of the others. These associations were not expected in the first place. The results indicate that the association exists only for the highly involved group and for people who work for reasons other than money. This could be interpreted as an additional sign that job involvement
in its highest levels has its sources, to a significant
degree, in early socialization, and might be somehow
related to the Protestant work ethic.

In the second table, one exception is the stronger
correlation between job involvement and the intended
length of service in the organisation for the group
who works mainly for reasons other than money.

6.6.5 Some partial correlations.

1. Partial correlations between total job satisfaction
and performance appraisals, total job satisfaction and
the intention to change job, and between total job
satisfaction and the intended length of service, when
controlling in each case for WRSE, job involvement,
or the evaluation of the type of work, did not result
in any significant correlations (except for total job
satisfaction with the intended length of service
which, when controlling for the evaluation of the type
of work, yielded a correlation of .15).

2. Partial correlations between job involvement and
the intended length of service yielded the following
correlations:

<table>
<thead>
<tr>
<th>TABLE 54: Partial correlation between job involvement and intended length of service in the organisation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CONTROLLING FOR</strong></td>
</tr>
<tr>
<td>---------------------</td>
</tr>
<tr>
<td>simple r.</td>
</tr>
<tr>
<td>job involvement-intended length of service in the organisation</td>
</tr>
</tbody>
</table>

3. Partial correlations between WRSE and performance
appraisals yielded the following results:

<table>
<thead>
<tr>
<th>TABLE 55: A partial correlation between WRSE and performance appraisals</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CONTROLLING FOR</strong></td>
</tr>
<tr>
<td>---------------------</td>
</tr>
<tr>
<td>simple r.</td>
</tr>
<tr>
<td>WRSE-performance appraisals</td>
</tr>
</tbody>
</table>
4. The only statistically significant partial correlation between WRSE and the intended length of service in the organisation was obtained when controlling for the evaluation of the type of work (.16).

To summarize, partial correlations between total job satisfaction and the respondents' scores in their intentions and performance, controlling for the main variables of this study, did not result in any change from the simple (n.s.) correlations. However, partial correlations between job involvement and the intended length of service in the organisation, and between WRSE and performance appraisals did result in significant correlations when controlling for the main variables of this study. It can be seen that each of the controlling variables had a fairly similar effect on the partial correlations. These results, together with the fact that no partial correlations were obtained for total job satisfaction when using the same controlling variables, suggest that there are common elements in the measures that do overlap sometimes, and that each one of these variables is definitely distinct from the other.

6.6.6 Multiple regressions (predictors).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Multiple r</th>
<th>r</th>
<th>r change</th>
<th>simple r</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. age</td>
<td>.52</td>
<td>.27</td>
<td>27.5%</td>
<td>.52</td>
<td>.39</td>
</tr>
<tr>
<td>2. job involvement</td>
<td>.59</td>
<td>.35</td>
<td>7.8%</td>
<td>.38</td>
<td>.25</td>
</tr>
</tbody>
</table>

3. job satisfaction with the firm, 4. evaluation of the type of work in one's own eyes, 5. job satisfaction with pay, 6. tenure, 7. marital status, 8. job satisfaction with fellow workers, 9. WRSE, 10. grade.

The intended length of service in the organisation was best predicted by: 1) age, and 2) job involvement. Together, they yielded a multiple regression of .59,
which explains 35% of the total variance of this intention. No aspect of job satisfaction, WRSE, or the other socio-demographic factors helped to increase this prediction significantly.

<table>
<thead>
<tr>
<th>TABLE 5</th>
<th>Multiple regressions of the intention to change job within six months in the same organisation (N=340)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Multiple r.</td>
</tr>
<tr>
<td>1.marital status</td>
<td>.30</td>
</tr>
<tr>
<td>2.job satisfaction with pay</td>
<td>.36</td>
</tr>
<tr>
<td>3.time that it takes to get to work</td>
<td>.39</td>
</tr>
<tr>
<td>4.job satisfaction with the firm</td>
<td>.42</td>
</tr>
</tbody>
</table>

5.age, 6.number of jobs outside of the company in the last three years, 7.job involvement, 8.job satisfaction with supervision, 9.job satisfaction with fellow workers, 10.tenure, 11.evaluation of the type of work in one's own eyes, 12.job satisfaction with opportunities for promotion, 13.job satisfaction with the job itself, 14.conformity, 15.WRSE.

The intention to change job within six months in the same organisation was best predicted by: 1)marital status (being single), 2)less satisfaction with pay, 3)time that it takes to get to work, and 4)satisfaction with the firm. Together, they yielded a multiple regression of .42, explaining 18% of the total variance of this intention. Again, none of the other variables looked at in this study helped to increase this prediction.
TABLE 58: Multiple regressions of performance appraisals (N=232)

<table>
<thead>
<tr>
<th></th>
<th>Multiple r</th>
<th>√r</th>
<th>r.change</th>
<th>simple r</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. WRSE</td>
<td>.28</td>
<td>7.6</td>
<td>7.6%</td>
<td>.27</td>
<td>.22</td>
</tr>
<tr>
<td>2. job satisfaction with pay</td>
<td>.30</td>
<td>.9</td>
<td>1.3%</td>
<td>.00</td>
<td>-.14</td>
</tr>
</tbody>
</table>

3. tenure, 4. job satisfaction with opportunities for promotion, 5. evaluation of the type of work in one's own eyes, 6. job involvement, 7. job satisfaction with supervision, 8. job satisfaction with fellow workers, 9. conformity, 10. authoritarian orientation.

Performance appraisals was best predicted by: 1) WRSE, and 2) job satisfaction with pay. Together, they yielded a multiple regression of .30, explaining 9% of the total variance of this variable. The Beta score of satisfaction with pay had a negative loading, suggesting perhaps that less satisfaction with pay is a predictor of higher performance appraisals. The very subjective nature of this measure discussed in chapter 3 should be kept in mind, making the interpretation of this result precarious.

TABLE 59: Multiple regressions of WRSE (N=328)

<table>
<thead>
<tr>
<th></th>
<th>Multiple r</th>
<th>√r</th>
<th>r.change</th>
<th>simple r</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. job satisfaction with the firm</td>
<td>.46</td>
<td>.21</td>
<td>21.4%</td>
<td>.46</td>
<td>.32</td>
</tr>
<tr>
<td>2. job involvement</td>
<td>.54</td>
<td>.29</td>
<td>8.1%</td>
<td>.35</td>
<td>.20</td>
</tr>
<tr>
<td>3. job satisfaction with supervision</td>
<td>.57</td>
<td>.33</td>
<td>3.4%</td>
<td>.37</td>
<td>.18</td>
</tr>
<tr>
<td>4. evaluation of the type of work in one's own eyes</td>
<td>.60</td>
<td>.35</td>
<td>2.5%</td>
<td>.34</td>
<td>.13</td>
</tr>
</tbody>
</table>
| 5. job satisfaction with the job itself, 6. job satisfaction with fellow workers, 7. evaluation of the
type of work in the eyes of others, 8) tenure, 9) conformity, 10) job satisfaction with opportunities for promotion.

WRSE was best predicted by: 1) job satisfaction with the firm, 2) job involvement, 3) job satisfaction with supervision, and 4) evaluation of the type of work in one's own eyes. Together, these variables yielded a multiple regression of .60, predicting 35% of the total variance of WRSE. None of the other variables helped to increase the prediction.

<table>
<thead>
<tr>
<th>TABLE 60: Multiple regressions of job involvement (N=328)</th>
</tr>
</thead>
<tbody>
<tr>
<td>multiple r</td>
</tr>
<tr>
<td>-------------</td>
</tr>
<tr>
<td>1. evaluation of the type of work in one's own eyes</td>
</tr>
<tr>
<td>2. WRSE</td>
</tr>
<tr>
<td>3. authoritarian orientation</td>
</tr>
<tr>
<td>4. job satisfaction with opportunities for promotion</td>
</tr>
<tr>
<td>5. age</td>
</tr>
<tr>
<td>6. job satisfaction with pay, 7. job satisfaction with the firm, 8. job satisfaction with the job itself, 9. marital status.</td>
</tr>
</tbody>
</table>

Job involvement was best predicted by: 1) evaluation of the type of work in one's own eyes, 2) WRSE, 3) authoritarian orientation, 4) satisfaction with opportunities for promotion, and 5) age. Together, they yielded a multiple regression of .50, explaining 25% of the total variance of job involvement. The first two predictors had an equal Beta score, which was followed by the fourth, and only then by the third.
TABLE 61: Multiple regressions of total (general) job satisfaction (N=282)

<table>
<thead>
<tr>
<th></th>
<th>Multiple r.</th>
<th>r. change</th>
<th>simple r.</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. WRSE</td>
<td>.46</td>
<td>.21</td>
<td>21.3%</td>
<td>.46</td>
</tr>
<tr>
<td>2. Evaluation of the type of work in one's own eyes</td>
<td>.50</td>
<td>.25</td>
<td>3.6%</td>
<td>.34</td>
</tr>
<tr>
<td>3. Grade</td>
<td>.53</td>
<td>.28</td>
<td>2.9%</td>
<td>.15</td>
</tr>
</tbody>
</table>


Total job satisfaction was best predicted by: 1) WRSE, 2) Desirability of the type of work in one's own eyes, and 3) Grade. Together, they yielded a multiple regression of .53, explaining 28% of the total variance. None of the other variables helped to increase the prediction significantly.

6.6.7 Factor analyses of the 17 psychological variables (N=471) The non-rotated solution of this factor analysis yielded three main factors, explaining 41.2% of the total variance of the psychological measures.

<table>
<thead>
<tr>
<th></th>
<th>Factor I- 21.6%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job satisfaction with the job itself</td>
<td>WRSE .66</td>
</tr>
<tr>
<td>Job satisfaction with opportunities for promotion</td>
<td>.70</td>
</tr>
<tr>
<td>Job satisfaction with the firm</td>
<td>.67</td>
</tr>
</tbody>
</table>

Job satisfaction with the type of work .47
Job satisfaction with fellow workers .58
Job satisfaction with supervision .50

TABLE 62: Factor analysis of psychological variables (non-rotated principal factor solution)
The above table shows a first main factor covering 21.6% of the total variance, including most of the intrinsic aspects of job satisfaction and also WRSE. The second factor explains 10.6% of the total variance and includes job involvement, (non)instrumental orientation, authoritarian orientation, and job satisfaction with pay. The third factor explains 8.9% of the total variance.

**TABLE 63: Factor analysis of the psychological variables (Principal factor solution rotated 66.5% of the total variance)**

<table>
<thead>
<tr>
<th>Factor II - 10.6%</th>
<th>Factor III - 8.9%</th>
</tr>
</thead>
<tbody>
<tr>
<td>job involvement</td>
<td>job satisfaction with pay</td>
</tr>
<tr>
<td>(non)instrumental orientation</td>
<td>intention to change job in the next six months (in the same organisation)</td>
</tr>
<tr>
<td>authoritarian orientation</td>
<td>(non)instrumental orientation</td>
</tr>
<tr>
<td>job satisfaction with pay</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Factor I - 48.4%</th>
<th>Factor II - 18.1%</th>
</tr>
</thead>
<tbody>
<tr>
<td>job satisfaction with the firm</td>
<td>job satisfaction with the job itself</td>
</tr>
<tr>
<td>job satisfaction with opportunities for promotion</td>
<td>job satisfaction with supervision</td>
</tr>
<tr>
<td>job satisfaction with fellow workers</td>
<td>WRSE</td>
</tr>
<tr>
<td>(non)instrumental orientation</td>
<td></td>
</tr>
<tr>
<td>job satisfaction with pay</td>
<td>intention to change job within the next six months</td>
</tr>
</tbody>
</table>
In the above table, the first factor shows that it covers 48.4% of the total variance and is composed of five of the six aspects of job satisfaction, plus WRSE. The second factor explains 18.1% of the total variance and includes (non)instrumental orientation, (dis)satisfaction with pay, and intention to change job. This factor could perhaps be interpreted in such a way that the first two variables influence the latter.

**Factor analysis of the evaluation of the desirability of the type of work in one's own eyes.**

In either a Principal or a rotated solution, only one factor emerged (with an eigen value of over 1). In the rotated solution, this factor accounted for all the variance (100%) of this measure.

<table>
<thead>
<tr>
<th>TABLE 64: The items of the type of work measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>desirable - undesirable</td>
</tr>
<tr>
<td>bad - good</td>
</tr>
<tr>
<td>useful - useless</td>
</tr>
<tr>
<td>suitable - unsuitable</td>
</tr>
</tbody>
</table>

**6.6.8 Smallest space analysis (S.S.A.).** A geometrical description of the psychological variables used in this study (17 measures) was made using the S.S.A. technique. The S.S.A. is a geometrical presentation of data, where every point is represented in an Euclidian space. The space of the smallest possible dimensionality is calculated for the reproduction of the similarities amongst the variables introduced into the analysis. The distance between two points in this space increases as the coefficient between the two variables decreases. If the empirical similarity between two variables is great, the points of the two variables are close to each other; if the
coefficient between the two is low, the points representing them are far from each other.

The results here suggest that when all the samples are examined in conjunction, three main psychological dimensions, going from core to periphery, emerge in what regards people's attitudes to their jobs:

1. The central or most profound dimension, which could be named personal, has to do with the various reasons people give for being satisfied with the job they do. It includes satisfaction with the firm, satisfaction with the job itself, opportunities for promotion, and satisfaction with fellow workers. It is very interesting to notice that satisfaction with pay is not included in this dimension. Also, it includes work related self-esteem which suggests that the evaluation of one's own worthiness as a worker is closely related to satisfaction with the job.

2. The second dimension which emerged from the analysis could be called social perception of the work the subjects do. It is the author's opinion that this dimension could be related to values pertaining to the Protestant work ethic. According to this system of values, work is one of the most important aspects of a person's life, that to work is a duty, etc. The Protestant work ethic can also be said to view prestige and success as important. In this analysis of S.S.A., this dimension was represented by variables such as satisfaction with the type of work, desirability of the type of work performed as perceived by the person himself, and by significant others (as opposed to the more personal variable of satisfaction with the job itself), satisfaction with supervision (which could be explained as approval by significant others at work), job
involvement, and intended length of service in the organisation.

3. The third dimension, which is the most peripheral of all, could be called instrumental, and includes variables such as instrumental orientation, satisfaction with pay, and intention to change job.

The results suggest that there is more than one dimension covering the different aspects of job satisfaction. Taking this into account would make an analysis of this area more profitable. The results also show the importance of work related self-esteem in what concerns the personal core of job satisfaction, and confirm previous findings that job involvement is a variable which is independent of job satisfaction.

These results are validated by very similar dimensions obtained in a factor analysis, consisting of the same variables that were used in the S.S.A. analysis.

<table>
<thead>
<tr>
<th>TABLE 65: Dimensions obtained in smallest space analysis for all samples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dimension 1</strong></td>
</tr>
<tr>
<td>job satisfaction with the firm</td>
</tr>
<tr>
<td>job satisfaction with fellow workers</td>
</tr>
<tr>
<td>job satisfaction with the job itself</td>
</tr>
<tr>
<td>WRSE</td>
</tr>
<tr>
<td>authoritarian orientation</td>
</tr>
</tbody>
</table>
6.6.9 Likert analysis of the selected items for the measure of job involvement.

<table>
<thead>
<tr>
<th>Dimension 3</th>
<th>1. The major satisfaction in my life comes from my job</th>
<th>2. Most things in life are more important than work</th>
<th>3. I live, eat and breathe my job</th>
<th>4. The most important things to me are concerned with my work</th>
<th>5. I am personally very much involved with my work</th>
</tr>
</thead>
<tbody>
<tr>
<td>intention to change job</td>
<td>0.58</td>
<td>0.29</td>
<td>0.53</td>
<td>0.61</td>
<td>0.44</td>
</tr>
<tr>
<td>within the next six months</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instrumental orientation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>job satisfaction with pay</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>performance appraisals</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

6.6.10 Analysis of variance—the differences between the various occupational samples.

One way analyses of variance were performed in order to find out whether there were statistical differences between the samples of the general nurses, clerical staff, psychiatric nurses, and industrial workers.

Scheffe's A Posteriori Contrast Test was used. This is a systematic procedure of comparing all possible pairs of means of groups. The groups are divided into homogeneous subsets, where the difference in means of any two groups in a subset is not significant at the .05 level. Scheffe's test was
selected because it is the most conservative test for this purpose. (In other words, if results are found to be significant according to Scheffe's Test, they will most probably be found so in all others.) It uses a single range value for all comparisons, which is appropriate for examining all possible linear combinations of group means, not just pairwise comparisons. Thus, it is stricter and also exact even for unequal group sizes.

(Note that the lower numbers of subsets represent lower means. Each line represents a group or groups in a set order. The group in the last line has the highest mean. If more than one group is mentioned in a line, the furthest one is the one with the highest mean. Nevertheless, if they appear in the same line, there is not enough statistical difference between them.)

1. No difference was found in job satisfaction with the firm (or hospital) between the different occupational groups.

2. There was a difference regarding satisfaction with pay
   subset 1: general hospital nurses (least satisfied with pay)
   subset 2: industrial workers; psychiatric nurses; clerical staff (there is no statistical difference between these groups, but the clerical staff are more satisfied than the psychiatric nurses, who in turn, are more satisfied than industrial workers).

3. Satisfaction with opportunities for promotion
   subset 1: industrial (clerical)
   subset 2: psychiatric nurses
   subset 3: general nurses

4. Satisfaction with the job itself
   subset 1: industrial workers
   subset 2: clerical staff; psychiatric nurses
subset 3: general nurses

5. Satisfaction with supervision
subset 1: psychiatric nurses (clerical staff; industrial workers)
subset 2: general nurses

6. Satisfaction with fellow workers
subset 1: psychiatric nurses; industrial workers (clerical)
subset 2: general nurses

7. Total job satisfaction
subset 1: industrial workers (psychiatric nurses)
subset 2: clerical staff
subset 3: general nurses

8. Job involvement
subset 1: clerical staff; industrial workers
subset 2: general nurses
subset 3: psychiatric nurses

9. Work related self-esteem
subset 1: industrial workers
subset 2: clerical staff (psychiatric nurses)
subset 3: general nurses

10. Authoritarian orientation
subset 1: general nurses (clerical staff)
subset 2: psychiatric nurses; industrial workers

11. No difference was found between the different groups for conformism.

12. Desirability of the type of work in the eyes of others
A. health visitors; B. clerical staff; C. psychiatric nurses; D. general nurses.

13. Instrumental orientation
subset 1: clerical staff (mainly for the money)
subset 2: psychiatric nurses; health visitors; general nurses.
14. **Intention to change job (hospital) in the next six months**
   A. general nurses (high); B. psychiatric nurses;
   C. health visitors; D. clerical staff.

15. **Intended length of service in the company (N.H.S.)**
   A. general nurses (shortest); B. clerical staff;
   C. health visitors; D. psychiatric nurses.

16. **Desirability of the type of work in one's own eyes**
   subset 1: clerical staff (lower)
   subset 2: psychiatric nurses; general nurses; health visitors.

17. **Satisfaction with the type of work**
   A. psychiatric nurses; B. general nurses; C. clerical staff; D. health visitors (highest).

(Note that the analysis of the variables 11-17 does not include the "industrial".)
7. Discussion

7.1 Introduction

The aim of the present thesis was to make an empirical investigation which would reveal and describe relationships between various job related behaviours (including attitudes, beliefs, and intentions) of employees. A vast amount of research mentioned in the literature has been carried out in this field and with few exceptions, results are for the most part controversial. Criticisms have been made on the futility of this kind of research by attacking the vagueness of the terms used (such as job satisfaction), and by resigning to the fact that so much effort in the past did not lead to the expected results. Without rejecting completely all criticisms, the source of the defeat of not finding consistent results could be attributed to the simplistic and mechanical approaches to what appears to be, at best of times, a complex problem.

The study was set up to investigate variables at three different levels: 1) comparing individuals in relatively the same objective situation. For example, comparing individuals in any one sample. 2)Comparing groups engaged in the same type of work, in relatively different objective situations. For example, industrial workers from two similar plants, and general nurses from two different district hospitals were compared. 3)Looking at individuals with similar individual characteristics across different situations. For example, looking at correlations obtained for people with low or high self-esteem in the combined samples.

The lack of sufficient knowledge about the relationships to be studied, and the doubt in the ability to make any meaningful generalizations from
a truly experimentally controlled situation (if at all possible in this field), led the author to choose a descriptive design for his study.

This kind of design, coupled with a multi-variable approach, was regarded to be more adequate than others, particularly since most previous research failed in finding simple relationships between, for example, job satisfaction and performance. It was clear to the present author that only a simultaneous study of various relevant variables could yield meaningful results which could contribute to the understanding of this field. The main feature of this thesis was the recognition of the important role that the employees play in accomplishing the goals of an organisation, and particularly the subjective outlook and attitudes of the individual employee.

It was for this reason that it was initially decided to develop a measure which would tackle an area considered by many psychologists to be of utmost importance, but on which surprisingly little empirical work has been done. The variable in hand was self-esteem, i.e. the personal feeling of worthiness an individual has in respect to a certain area of his life; in this case work.

Once such method was established, it was also important to know what the subjective perception of the individual about the characteristics of his work (Type of Work) is, and how important the work he does is for him (job involvement).

The area dealt with in this study was work, as it is widely accepted to play an important role in the lives of the vast majority of people. However, there is a gap between psychological and technological developments in our age. One of the consequences of this gap, according to the literature, has been the creation of alienated man (see chapter 1).
A minor attempt was made in the present study to find support to the traditional approach of studying alienation according to the dimensions set by Seeman (1971). In addition, other authors writing on the subject of work put heavy emphasis on orientations to work which the person brings to the job situation (Goldthorpe et al., 1968 & Beynon & Blackburn, 1972, see chapter 2).

Since this study saw some similarities in the dimensions which were said to cover alienation and orientations to work, the respondents from the different samples were asked to rate items covering these dimensions (see chapter 4). It was assumed that a factor analysis of the respondents' scores in these items would yield results with the expected dimensions of alienation and/or orientations to work.

The results, however, do not support the assumption according to which independent dimensions cover the areas of alienation and orientations to work. Instead, factor analyses carried out for all samples (except the industrial) showed three main factors which could, broadly speaking, be said to represent the dimensions of "pleasantness", "interest" and "skill". Moreover, the items covering these dimensions were not always the same for each sample. The strength of each dimension also differed from sample to sample, so, for example, in the sample of the psychiatric nurses, the dimension of pleasantness was the strongest, while in the sample of the clerical staff the strongest was that of skill.

The results which were obtained in this study, although throwing additional light on the dimensional structure of how individuals perceived their work, did not enable the construction of separate measures according to the dimensions obtained. This is so since, as stated earlier, the items within each
dimension alternated. The findings here support Robinson's and Head's (1969) contention that dimensions of work that have been shown to be relevant to the worker vary with the work place, job and worker characteristics, and their interactions. They have suggested that further study focusing directly on the worker's concern about the conceptions of his work is needed to clarify these dimensions and to establish their relationship to the worker's attitudes under a wide variety of organisational, interpersonal, and individual conditions. Moreover, they claim that the scientific study of work, as it is experienced by the worker, is in its infancy. The present writer has made an attempt to make an investigation that falls in line with the above suggestions.

In another study (Kalleberg, 1977), using factor analysis of the importance of 34 perceived job characteristics, six dimensions were found, namely: intrinsic, convenience, financial, relationship with fellow workers, opportunities for a career, and resource adequacy. The latter study found that work values have independent effects on job satisfaction, and the extent to which workers are able to obtain perceived job rewards is conceptualized to be a function of their degree of control over their employment situation.

Returning to the discussion on alienation, its core meaning has recently been identified as a cognified, dissociative state of the individual in relation to some other element in his or her environment (Schacht, 1970). The obverse of alienation has been described as involvement (Johnson, 1973). Furthermore, prestigious sources in the literature regarding the area of work, like Dubin (1958) and Faunce (1968), seem to look upon the concepts of alienation and job involvement as
intimately related to the Protestant Work Ethic, the moral value of work, and personal responsibility.

Job involvement is said to be a state resulting from a work situation which elicits job behaviour that is perceived to be a) voluntary, b) not instrumental, i.e. not satisfying basic needs, c) instrumental in satisfying Maslow's (1954) type or higher order needs (like self realization and actualization), d) conducive to developing individuals' abilities to their fullest potential (Kanungo, 1979). In the absence of such perceptions, the worker is believed to undergo experiences of alienation.

Saleh and Hosek (1976) put forward four interpretations of job involvement. An employee is involved in his job when:

1. work is a central life interest to him,
2. he actively participates in his job,
3. he perceives his performance as central to his self-esteem,
4. he perceives his performance as consistent with his self-concept (p. 215). They define job involvement as "the degree to which the person identifies with the job, actively participates in it, and considers his performance important to his self worth" (p. 223).

The present author does not agree with the notion that alienation and job involvement are antonyms, but believes them to be independent concepts. He views the conceptualization of WRSE as stemming from psychological determinants similar to those said to constitute alienation of the individual. In recent publications (Kanungo, 1979), as well as on many other occasions throughout the literature, the concept of alienation has basically been defined as a lack of autonomy and control. The present author holds that control, or feelings of power-powerlessness, is also a major constituent
in the concept of WRSE. Indeed, the factor analyses of the measure of WRSE show two main factors which were seen covering the areas of control (or powerlessness) and feedback. As was stipulated in chapter 1, when alienation is derived from an inner state in the person, a measure of WRSE is regarded as one of the better tools for investigation in the area of work. WRSE has been defined as a personal judgement of worthiness at work, and as such, is seen as different from the concept of job involvement, which has been defined as the importance of work to the Self. Generally, since it has been assumed that for most people work is fairly important, and that people like to hold favourable rather than unfavourable attitudes of themselves (Rosenberg, 1965), a positive association was expected between the two.

The results of this study show that indeed there is a correlation between WRSE and job involvement for all the samples combined, but when looking at each sample separately, there are instances, as in the sample of the psychiatric nurses, where no such correlation exists. The fact that a correlation between WRSE and job involvement does not always emerge is supportive of the author's conceptual framework which sees WRSE (and by inference, alienation) as independent of job involvement. Moreover, results from factor analyses of the combined samples of this study, which were further validated by results obtained by smallest space analysis (S.S.A.), show that WRSE and job involvement belong to different dimensions.

7.2 The dimensional structure of WRSE, job involvement and job satisfaction.

The results obtained through factor analysis
of the psychological variables studied in all the samples combined show, on the one hand, a factor of job satisfaction and WRSE, and on the other, a factor (or factors) of the remaining variables.

In the case of the sample of the industrial workers, a factor analysis was performed on 82 items (items as opposed to scales) constituting the six areas of job satisfaction, WRSE, global self-esteem, job involvement, authoritarian orientation, and boredom with the job. Six independent factors emerged in this case, the strongest one covering the areas of job satisfaction with the job itself, WRSE, and job satisfaction with the firm. The remaining factors were about: 2. supervision, 3. pay, 4. boredom, 5. fellow workers, 6. authoritarian orientation and opportunities for promotion.

The above results support the general findings on job satisfaction as covering different facets of the job which are independent of each other (Smith et al., 1969). Those findings led to the construction of the J.D.I. as a measure of job satisfaction covering five different areas. A British adaptation of the J.D.I. developed by Dennis Cross (MRC Sheffield University) came out with the Worker Opinion Survey which included a sixth facet, namely that of satisfaction with the firm. It was the Worker Opinion Survey measure which was used in the present study. The results of this factor analysis of industrial workers suggest that job satisfaction with the firm belongs to, or covers the same dimension as job satisfaction with the job, as well as the dimension that was developed here to portray WRSE.

Two additional facts are worth noting in the factor analysis of this sample:

1. Authoritarian orientation (measured by the same items used in the national U.S.A. Survey, Sheppard & Herrick, 1972) and job satisfaction with opportunities for promotion also constitute a
separate dimension suggesting that (at least in the sample of industrial workers) an authoritarian orientation helps to promote advancement, or that the authoritarian oriented are happy with the structure for opportunities for promotion.

2. Neither the items regarding job involvement nor those of global self-esteem appear to have any significant loadings on any one dimension. This last fact is surprising because it appears to show that for the sample of industrial workers neither job involvement nor global self-esteem, when in the context of variables such as the ones studied here, has enough salience and independence.

7.3 The relationships between orientations to work and the main focus variables.

Russell (1975) sees job satisfaction as a function of the importance attached to need-perception discrepancy relative to orientations to work. The conclusion he arrives at from his research data is that orientations to work do, to a large extent, exert a pervasive influence on the perceptions, attitudes and values of workers. He therefore argues for the incorporation of orientations to work in a theoretical model of job satisfaction. (According to his results, intrinsically oriented workers find rewards intrinsic to the job as satisfiers and dissatisfiers. These results collide with Herzberg's two-factor theory).

The evidence from the present study complies with the attributed influence of orientations to work on job satisfaction, showing a definite trend. Intrinsic aspects of job satisfaction were positively related to (non)instrumental orientation, while job satisfaction with pay was (to a lesser extent) negatively related. In other words, if someone
states money as a main reason for working, he is more likely to be satisfied with his pay than someone who works mainly or also for reasons other than money. This finding is one example of the benefit accrued from empirical results obtained in this thesis. Prior to obtaining the data, speculations could have been made as to the direction and common sense of conflicting assumptions. Once the results were obtained, they described reality, even if it happened to be, as could be argued in the above case, counter-intuitive.

Another finding, which might be influenced by orientations to work, deals with the intention to change job within the organisation. This intention correlated with less satisfaction with pay and also with a (non)instrumental orientation (working for reasons other than just money). These two variables were the only ones to have a simple correlation with this intention. Although these correlations were not strong, they might have some explanatory value as to why people want to change job within the same organisation. It could be argued that people who come to work with a (non)instrumental orientation and are less satisfied with the money they earn would like to change their job within the same organisation. This is based on the belief that their job does not fulfill an inner need which is the reason for their coming to work (which is other than money, for example, meeting other people). The reason they only want to change job within the organisation, as opposed to leaving the organisation altogether, is that although unhappy about pay, they put more emphasis on fulfilling their orientation which is toward other aspects. These aspects can perhaps be found in the same organisation, although it is quite probable that their salary would remain the same. The fact that they (the non-instrumentally oriented) are less happy and concerned with pay might make
them less vulnerable in the case that such a request is seen suspiciously. Nevertheless, the fact remains that multiple regressions analysis of the intention to change job did not bring forward (non)instrumental orientation as a predictor.

Finally, a discussion on the subject of orientations to work cannot ignore the valuable work done on "Central Life Interests" which has a framework with a much wider spectrum of interest. Dubin and Champoux (1977) found that job satisfaction is highest among job oriented persons, lowest for non-job oriented and intermediate among workers with a flexible focus (C.L.I.). In order to compare the results of this study to the above findings, it could be argued that the people in this sample of population who had a (non)instrumental orientation were more job oriented than those who had an instrumental orientation. If the results are looked at in this manner, they do seem to support Dubin's findings. Alternatively however, if job involvement is looked upon as a measure of job orientation (and the items on the job involvement questionnaire indicate the validity of such an assumption), the interpretation of the results becomes more complex since correlations are obtained only for the intrinsic aspects of job satisfaction. Moreover, if the whole sample is divided into high and low job involvement, then these correlations appear only for the group with low job involvement. The author would have assumed that high job-involved persons would represent the most job-oriented ones. Thus, higher correlations would have been expected for the high job-involved group. Therefore, these results, rather than supporting Dubin's, Blackburn's and Goldthorpe's findings, denote the independence of job involvement or job orientation in this case, from job satisfaction, and support the idea that correlations emerge in instances where the variable
in question is not crucial, but is still salient and important. (The reader is reminded that a person's non-instrumental orientation was found to have only a weak association with WRSE and job involvement.)

7.4 Job involvement

It has been seen in chapter 1 that the literature links job involvement to a socialization process of the Protestant Work Ethic, which means having a moral character at work. On the other hand, job involvement has been linked to the work situation. And lastly, a third view has been that a person who holds a set of work values similar to those known as Protestant Work Ethic will become involved in his job, depending on the make-up of that job.

One of the objectives of the study at hand was to gather information so as to give support to one of the above first two alternative views. (It would have been impossible to find support to the third view when using the present study design.) The results could be interpreted to indicate that job involvement might be influenced by both, earlier socialization and the current environment.

The analysis of variance that was carried out in order to see whether there are differences in job involvement among the four occupational samples (in fact, to reject the null hypothesis that they all came from the same population regarding that variable) showed that indeed there were marked differences. Three separate subsets (denoting significance at least at the .05 level) of occupations were obtained: the first with the lowest means in job involvement, consisted of the clerical staff and the industrial workers. The second consisted of general nurses and the third, with the highest mean, consisted of psychiatric
nurses. This is taken to mean that the objective type of work has an influence on the job involvement of its members, but it could also mean that people choose their occupation according to their level of job involvement. Nevertheless, this result denotes the influence of the nature of the job rather than its physical environment. Clerical staff and industrial workers have very different environmental settings. The physical conditions of the clerical staff sample impressed the author as being better than those of the general and psychiatric nurses. In terms of work load, the clerical sample seemed to be better off. They also had more convenient hours (no shifts or weekends and flexible hours). Yet, the clerical staff had a significantly lower mean score of job involvement than the two types of nurses. On the other hand, the industrial workers who probably shared the least pleasant physical conditions (noise, dirt, smells, etc.) had a similar level of job involvement to that of the clerical staff. The results of the study seem to be supported by Mannheim's (1975) study in which significant differences were found between occupations, with the professionals, scientists and technicians having the highest job involvement, followed by administrators, managers, clerical staff, while the lowest scores of job involvement were for those in the "services" and recreations.

Results show that extrinsic factors are somewhat irrelevant to job involvement and are corroborated by the results of correlations with job satisfaction obtained in this study. Job involvement (for all the samples combined) was related only to satisfaction with the type of work and to the intrinsic aspects of job satisfaction. Significantly, it was not associated with job satisfaction with supervision, fellow workers, and pay. Regarding job satisfaction with supervision, Jones et al. (1975) suggest that
high and low job involvement groups might be looking at different aspects of the leadership, and that the high job-involved need less interaction with the supervisor.

Different levels of job involvement were found for the two plants from which the industrial sample was drawn. Both plants shared very similar conditions, exactly the same objective type of work, and were under the same overall management. One plant was based in London and the other in a small town. The plant in the large urban setting had higher job involvement. On the other hand, no differences in the level of job involvement were found for the general nurses working for two different district hospitals, both in London. Although these results, comparing job involvement levels of similar groups in urban and rural areas do not suffice for reaching a conclusion, they support more recent results (Siegel and Ruh, 1973; Ruh, White and Wood, 1975), showing higher job involvement in urban areas. These results are contrary to Hulin and Blood's (1968) expectations and earlier findings (higher job involvement for people in rural areas). They assumed rural workers to be affected by different extrawork socialization processes from urban workers, and therefore expected them to have different levels of job involvement.

Support to the view that job involvement is resistant to external circumstances (Runyon, 1973; Lawler et.al., 1973; Hall & Mansfield, 1971; and Lodahl & Kejner's, 1965 original study) seems to be found also in some results obtained in this study. These showed unexpected correlations between job involvement and authoritarian orientations which were analysed and explained by three different alternatives (see appendix).

No conclusive evidence is found for any one explanation, but the most credible seems to be the one suggesting
that the correlation exists since both variables are part of a certain type of socialization experiences acquired earlier in life. If this is so, it will explain the relative resistance of job involvement to external circumstances.

Further support to the view that job involvement is shaped, to a significant extent, in early years comes from the results showing that correlations between job involvement and authoritarian orientation are only for the intrinsically oriented (higher job involvement) or non-instrumentally oriented persons. Those individuals who come to work for reasons other than just money, and for whom work is a very important part of their lives, are presumably those sharing a certain moral value of work acquired in the earlier stages of life. This is the same period in which an authoritarian orientation is assumed to be attained. Additional results show that the significant correlation between job involvement and authoritarian orientation when moderated by WRSE exist only for the low WRSE group. This means that the correlation is true only of people with high job involvement and low WRSE. This seems a much more sensible finding to understand than the initial isolated finding of a correlation between job involvement and authoritarian orientation. It is easier to figure such a relationship in the above conditions. Perhaps when work is very important to the Self, and the person has authoritarian orientations, he tends to feel that he is not worthy enough at his work.

Job involvement was found to correlate (though weakly) with the (non)instrumental orientation, giving some legitimacy to the use of this variable as a measure of intrinsic orientation to work. In addition to these results, job involvement was found to be associated with the attributed degree
of desirability of one's type of work in the eyes of relevant others. (as opposed to "in one's own eyes"). This seems to reinforce the position taken above, that job involvement is at least partly, acquired through influential others outside, and before actually starting to work.

**Job involvement and socio-demographic variables**

The literature shows mixed results concerning the relationship between age and job involvement (Rabinowitz & Hall, 1977). The combined samples of this study showed the existence of only a negligible association between job involvement and age (which was somewhat stronger in the sample of general nurses).

As shown in the literature, job involvement was generally found to be related to neither sex, marital status, nor to grades. Regarding the conflicting reports of the literature concerning the relationship between job involvement and length of service, this study found that the tenure of industrial workers is tenously related to the job involvement of its younger members only.

**Job involvement in relation to turnover, absenteeism, and performance**

In the literature, Siegel and Ruh (1973), and Farris (1971) found a weak, negative relationship between job involvement and turnover. More recently, Steers (1977) found a correlation of .31 between the intention to remain in the job and commitment (job involvement) of hospital workers. Results of this study showed correlations between job involvement and intended length of service in the organisation only when these correlations were moderated by
WRSE or job satisfaction. More important however, job involvement was found to be the second best predictor of the intended length of service in the organisation (the best predictor was age); of WRSE (after job satisfaction with the firm); and of long-term absences (after the feeling of not being able to make decisions. The latter was interpreted as causing stress when coming together with high job involvement. Supporting such an interpretation, Bernardin (1977) using the Cattel 16P.F. found that "conscientiousness" and "anxiety" accounted for most of the variance in both absences and turnover (he obtained correlations between .31 to .38). This result is somewhat contradictory to Patchen, (1965) and Steers (1977) who found a negative correlation between job involvement and absenteeism. The latter found a correlation between commitment and attendance for scientists (.28), but not for hospital workers). Regarding the feelings of being able to make decisions (which is an item in the WRSE measure), it has also been found by other authors (White and Ruh, 1973; Schuler in Rabinowitz & Hall, 1977) to correlate with job involvement. Job involvement, in turn, was best predicted by the desirability of the type of work in one's own eyes, WRSE and authoritarian orientation, which together predicted 22% of the total variance.

In the sample of the clerical staff, higher job involvement was the third best predictor of the intention to change job within the organisation within the next six months. This was unexpected. Why should a person who is more job-involved want to change his job? The answer, as in the prediction of long-term absences, is explained by looking at the prediction in the context of the other predictors. If the type of work is not seen as desirable (which was the best predictor in this case) there is little satisfaction with the job itself, therefore
being involved with it influences the intention to change the job.

In this particular sample, one of the predictors of job involvement of its members was job satisfaction with pay, although no simple correlation exists between these two. This might indicate that pay is relevant to the job involvement of the clerical staff. Still in the sample of the clerical staff, the correlation between job involvement and (non) instrumental orientation was the highest in comparison with the other occupational samples, despite the fact that they had relatively little job involvement. This result could be taken as further support to the idea that correlations emerge or are stronger when the person is not oriented towards these variables, but they still remain important enough to him.

Another singular result, peculiar to the sample of psychiatric nurses was the negative correlation found between job involvement and performance appraisals. Moreover, job involvement was found to be its third best predictor. In the literature, no relationship was generally found (see chapter 1. sec. 4.2, p.47-8), but Hall and Lawler (1970) found a correlation (.43) for a subjective supervisory measure, and Wood (1971) used job involvement successfully as a moderator between performance and job satisfaction.

The negative results in the present study can be explained by viewing high job involvement as an emotional state which might be accompanied by inefficiency. An alternative or additional explanation which was brought forward in chapter 2, sec. 2.9, p. 102, distinguishes between two types of job involvement: "positive" and "negative". The latter is said to exist when a person is highly involved because of factors lying outside work and therefore, there is no necessity of job involvement
affecting performance. This view suggests a link between performance and job involvement only when job involvement is created by factors within work. In accordance with another view (for example Korman, 1974), a link between the two is expected as a consequence of good performance, which for consistency reasons should create conditions for job involvement.

The position taken here regarding explanations for the lack of, weak, positive, or negative correlations between job involvement and performance is similar to Steers (1977). The argument is that it is conceivable, that in the effort to reduce turnover and absenteeism, the organisation tends to retain more "security-minded" persons, who are loyal, but to whom high job performance is not role relevant. In other words, there may be a self selection process in operation whereby moderate or low job performance individuals feel comfortable in a non-threatening environment, while job-involved people seek challenge elsewhere. As Holmes (1976) puts it

"there is no good reason for assuming that the 'loyal' is a better worker than the one who is more mobile, more pragmatic, and more critical in his approach. Leaders may wish to have 'loyal' supporters for they wish to receive the unearned adulation of those that believe in what their superior asks them to do... There is no necessary relationship between commital and either satisfaction or performance—commital refers only to why you do something, not how much you do or how happy you feel about it" (p. 79).

Conceptually, Steers (1977) finds that it may be useful to distinguish between "passive" and "active" commitment, which is not the same distinction as between the above mentioned "positive" and "negative" types of job involvement. This distinction highlights the difference between commitment and job involvement.
The first is generally meant as commitment to a specific organisation (loyalty), while the latter regards one's work or job in general. Wiener and Geshman (1977) view job involvement and commitment as interchangeable labels for the same job behaviour (commitment correlated with Lodahl's and Kejner's measure .37; with Dubin's Central Life Interest .27; with Kornhauser's overall Job Satisfaction .25; and not at all with age, marital status or tenure).

Kiesler's (1971) definition of commitment as "pledging or binding the individual to behavioural acts" seems to this author to be what has been described in this thesis as an intention (see chapter 4) and not job involvement. In spite of this difference in definition, Kiesler, like the present author, sees commitment as a

"behavioural action which solidifies cognition, which in essence can affect one's definition of self".

Nevertheless, for either concept (job involvement or commitment) in order for it to be at all related to job performance it is also necessary for the person to have the required abilities and skills.

7.5 Work related self-esteem

The concept of self-esteem, like that of job involvement, is in the everyday language of our society, with all the emotional overtones, special meanings, and hidden implications that it suggests.

"We must be able to operationalize the concept without other variables intruding. It is not a simple task to strip the term of its superfluous aspects and control for other known variables without also discarding everything initially interesting about the topic" (Kiesler, 1971).

WRSE has been defined in this study as "a self judgement of worthiness at work". The measure of
WRSE, developed here, consists of 15 items. The internal consistency of the measure was established by a Likert-item analysis (with Likert correlations ranging from .39 to .65). The construct, concurrent, convergent and divergent validity of the measure was backed up by the results. These show that:
1) the structure of the measure consisted of a main dimension of "control", and a second dimension of "feedback", 2) it was associated with a general measure of self-esteem (Rosenberg's) only for those individuals for whom work was an important part of their Self (job involvement), 3) it generally correlated with job satisfaction and job involvement, and 4) it did not have any association with the unrelated variables of authoritarian orientation and conformity.

With regard to job satisfaction, it was found to correlate most strongly with its intrinsic aspects, but it also correlated with its extrinsic ones, except pay. In addition, it correlated with satisfaction with the type of work, as well as with the attributed degree of desirability of a person's type of work in the eyes of relevant others. WRSE of all the samples combined was not related to any of the socio-demographic variables.

According to the results that were obtained, the motivational process operating behind WRSE seems to be that of a need for self-enhancement rather than for self-consistency. Significantly, stronger correlations were obtained between WRSE and job involvement for half of the respondents who had less job satisfaction than for the other half who had greater job satisfaction. This is the prediction that would have been made according to the self enhancement model; while according to the self consistency model, the correlation between WRSE and job involvement should be stronger for the more highly job-satisfied group (see
Corroborating results were attained (when the same pattern of correlations were obtained between WRSE and job involvement) for two groups— one with low and the other with high job involvement. A significant correlation was obtained only for the group with low job involvement. The results seem to be in line with the experimental work of Sigael and Gould (1977) whose results support a self enhancement perspective.

The finding that the WRSE measure acted as a moderator variable (as predicted in chapter 2) enhanced its validity. The direction of its moderating effect also seems to support a self enhancement model. WRSE acted as a successful moderator between job involvement and the intrinsic aspects of job satisfaction, and between job involvement and the intended length of service in the organisation. It did not affect the non-existant correlation between job involvement and performance appraisals. Invariably, where correlations existed, they were stronger for the low WRSE group, again supporting a self enhancement model.

The assumption that WRSE would moderate between the non-existant correlation of job satisfaction with job performance was not supported. (Only one significant correlation was obtained from the attempted correlations between the six measured facets of job satisfaction and performance appraisals.) This exception, involving job satisfaction with pay was somewhat supportive of the self consistency model. This result is in direct contradiction to, among a few others, Jacobs' and Solomon's findings (1977). Their results indicated that the use of self-esteem as a moderator (via moderated regression), substantially increased the relationship between job satisfaction and job performance. It should
be pointed out however, that although they used a very similar measure of job satisfaction to the one used in this study, they used the Texas Social Behaviour Inventory for measuring self-esteem. The latter is an objective measure (as opposed to the subjective one used here). The failure in obtaining a moderating effect of WRSE between job satisfaction and performance seems to suggest that (when using a subjective measure of the latter) the expected relationship might not exist in a consistent manner after all.

Continuing with the discussion on the results of the moderating effects of WRSE, it was found that it also moderated between the relationships of (non)instrumental orientation on the one hand, and job satisfaction with pay, opportunities for promotion and job involvement on the other. The correlations were stronger for the low WRSE group. Similarly, comparative correlations between groups of low and high WRSE show that the correlations between WRSE and job involvement, intrinsic facets of job satisfaction, performance appraisals, evaluation of the type of work (and other variables to a lesser extent) seem to support once again the self enhancement model.

Attempts were made to find support to Korman's (1967) assumption that a low WRSE person evaluates a situation in terms of how he perceives others rate it, rather than in terms of how the situation meets his needs. Basing himself on a completely different conceptual framework, Ziller (1973), too, makes similar predictions. (He claims that persons with low self-esteem do not possess a well developed conceptual buffer for evaluating stimuli. They are field-dependent, that is, they tend to conform passively to the influence of the pervasive field or context. Ziller (1973) then, goes on
arguing that, since such a person's behaviour is directly linked to immediate environmental circumstances, and is not mediated or differentiated and integrated in the self concept, that person is thereby inclined toward inconsistency. In addition, support was also sought for Dittes' notion (1959) that conformity is an attempt to enhance self-esteem through the attainment of social approval. No support was found to these two assumptions. However, since the measures used were not tailored to test these assumptions, it is thought probable that inferences made in order to adopt the measures to the appropriate context might have been too far-fetched, and these particular results are therefore inconclusive.

From the five criteria, or dependent variables that were examined (performance appraisals, intention to change job within six months, intended length of service in the organisation, job involvement and job satisfaction), WRSE was found to be the best predictor of three of these: performance appraisals (there is some evidence from Cohen and Lefkowitz, 1977, that the introduction of locus of control, in addition to a measure of task specific self-esteem in a multiple regression equation, increases the prediction of job performance), job satisfaction and job involvement (WRSE is the second best predictor of the latter when data from the industrial sample is not included since, in this case, a different set of variables is introduced in the predictive equation. Nevertheless, in this case, WRSE shares the same Beta score with the first predictor).

As to results from the combined samples about WRSE, its best predictors were found to be job satisfaction with the firm, job involvement, satisfaction with supervision, and the evaluation of the type of work in one's own eyes. Together,
these variables explained 35% of the total variance of WRSE. In the specific sample of general nurses, WRSE correlated tenuously with the intention to change hospital, and it was its second best predictor in one sub-sample. When age was not taken into account, WRSE was also the best predictor of the intended length of service in the organisation of the clerical staff.

In the specific sample of the psychiatric nurses, WRSE was the third best predictor of their intended length of service in the organisation. In this sample, WRSE did not correlate with job involvement. This result is very interesting. In spite of the psychiatric nurses being significantly more job involved than all the other individual groups of samples (see results of analysis of variance, sec. 6.6.10, p. 285), it was the only sample not to have a simple correlation with WRSE. This brings to mind the discussion on when correlations emerge (sec. 6.6.3, pp. 266-8). As suggested, simple correlations are assumed to appear particularly when the investigated variables are not of the utmost importance to the individual, or they do not represent his main orientation. But these variables are still fairly important in their significance to the individual. On the other hand, the opposite also seems to be true (i.e. when the variables in the correlation are very important or represent the main orientation of the individual, correlations do not necessarily emerge). The correlation of WRSE with performance appraisals was found to be stronger when controlling for job involvement. At the same time, the correlation of WRSE with intended length of service disappeared when controlling for the joint effect of job involvement and job satisfaction. These results are an example of what was assumed in the conceptual framework of this thesis concerning the significant role of job
involvement as a moderator between WRSE and actual work behaviour. On the other hand, correlations of job involvement and job satisfaction with the intended length of service were also affected when using WRSE as a control showing its effectiveness as a moderator.

As was discussed in chapter 2, it was found that situational variables do indeed affect the level of WRSE. Jobs or occupations which allow for more control and feedback (the main components of WRSE) help to provide their members, on average, a higher level of WRSE. The mean scores of WRSE were lowest for the industrial sample and highest for the general nurses sample; in between were the clerical staff and the psychiatric nurses. A projection of these results would predict significant differences between grades, with the higher ones being expected to have higher levels of WRSE. Indeed this was found to be the case (for example, in the sample of general nurses). However, theoretically, this does not have to be the only option. One could argue that, since WRSE is a subjective measure, individuals would be having expectations and/or compare themselves to people who have similar aspirations and are in the same grade or level as they. The same could be said of differences regarding occupations. Indeed, the present author believes this is to a certain extent so.

People, to a great extent, select themselves for the job they do so that it conforms with a realistic assessment of reality and their level of aspiration. If any conclusion can be singled out from studies about levels of aspiration (experimental as well as field studies), it is that most people tend to set goals that they interpret as falling within a reasonable range of their potential accomplishments (Rosenberg, 1957).
In writings as early as 1943, Gordon Allport (1943) had summarized the level of aspiration studies by saying that

"...every investigation has directly or indirectly confirmed Hoppe's initial claim that the subject behaves in such a manner as to maintain his self-esteem at the highest possible level."

Groups as well as individuals "select" standards. This could help to understand why the occupational achievements of people of working class origins are as a whole considerably lower than those raised in a middle class environment. This would not necessarily imply that their "lower success" results in lower self-esteem, as their initial aspirations (or pretentions) are much lower. Changes in the educational system as well as in the society, in which mass-media permeate class barriers and make people more aware of the existence of possibilities in the occupational area, could bring with them changes in the aspirations of people young enough to be affected by such changes. These people could still be lagging behind in the actual behaviour (i.e. choosing, or still being in jobs below their actual aspirations). It was assumed and found to a certain extent, that people who are in a certain job will be more satisfied with it, when they perceive themselves to be worthy at that job. It is also being assumed (according to the above) that this relation will perhaps be weaker in magnitude for younger people, though this has not been investigated.

7.6 Objective type of work and the relationship between WRSE and job involvement

It has been argued in the results section of industrial workers that, due to the nature of
their tasks, industrial workers might not be able to achieve high levels of job involvement if they are to be satisfied with their job and feel worthy at it at the same time. In order to support this conjecture, parallel correlations in the remaining three samples were followed up. The results are inconclusive. In the sample of the psychiatric nurses, neither simple correlations were obtained between WRSE and job involvement or between job satisfaction and job involvement, nor were any correlations found giving moderating effects. In the sample of the clerical staff, simple correlations between these variables were found, but the moderating effects (of job satisfaction or WRSE respectively) were negligible. Lastly, in the samples of the general nurses, where simple correlations were also found, the moderating effects were in the same direction as in the case of industrial workers. In short, for one sample, correlations were not obtained; for the second, the results were supportive and for the third sample, the results were in total disagreement with the initial assumption. These results provided no conclusion for the correctness of the latter.

7.7 Labour turnover

It appears that expressed intentions about changing job and length of service in the organisation are better predictors of actual labour turnover than any other variable. Kraut (1975) who consistently found significant correlations between expressed intent to stay and subsequent employee participation states:

"It may be too much to expect any imposed model of attitudes and turnover behaviour to be effective. It is more likely that the employee himself is the best means of properly weighing and integrating the factors that go into a decision to quit
or remain in a job. If we can rely on the employee himself to provide the best synthesis of attitudes toward his work situation, his opportunities elsewhere, and other aspects of his life that bear on a decision to remain in the current job, perhaps the best predictor of turnover can come from the employee's direct estimate of his future tenure."(p. 235)

Of the people who indicated that they intended to stay with the organisation indefinitely, in Waters et. al.'s study (1976), 78% actually remained with the company after two years. Of those who indicated that they definitely did not intend to stay with the company, 76% terminated their employment during the subsequent two-year period.

The results of the present study confirm the high validity of intentions to change job. Figures on intentions to change job obtained from the sample of the general nurses are strikingly similar to official reports of the District hospital on turnover over a, more or less, overlapping period. Moreover, the breakdown of figures on turnover according to grades also matches impressively the results regarding the intention of the various grades. Having been reassured by this finding that the results of this study were not influenced by social desirability factors and faking, it was especially worthwhile finding out what the best predictors of labour turnover would be.

Ekpo-Ufot (1976) notes that intelligence, aptitude and personality factors are not consistently related to turnover. He goes on to say that relevant variables may possibly be individual differences like the employee's perception about having the required abilities to do his job. He deduces from Korman's (1970) hypothesis and empirical finding that high self-esteem individuals will approach and engage in job behavioural roles which maximize their sense of consistency, but will tend to avoid those
job roles which do not. Using a measure of Self Perceptions of Relevant Abilities (SPRAT), which is seen as part of task specific self-esteem (second source of self-esteem in Korman, 1970; the other source being "chronic" and "interpersonal" self-esteem), he found a correlation (-.27) with turnover. The conclusion of Ekpo-Ufot (1976) is that this result

"would support a general hypothesis that a worker is involved in and identified with the job situation which makes use of his self perceived abilities."

Inadvertently, since he jumped to this conclusion due to the conceptual confusion between self-esteem and job involvement, he seems to be partially right. The present study has brought evidence, suggesting that a substantial proportion of job involvement is brought to the job (as opposed to gained at the job). Nevertheless, job involvement was also found in the present study to be quite relevant to labour turnover. Factor analyses and smallest space analyses performed on the combined samples show that the intended length of service in the organisation shared the same factor or dimension as job involvement, as well as one's own evaluation of his type of work and his satisfaction with it.

Ekpo-Ufot also concludes that labour turnover may be largely dependent on other individual differences, factors and environmental moderators which might account for about 93% of the turnover variance, as against the 7% contributed by his measure (SPRAT).

Waters et.al. (1976) found that besides their correlation between the intention to remain in the company, and the actual termination (-.42), the only correlates of turnover were job satisfaction with the job itself (-.37), age (-.25) and grade
(-.24), with a multiple regression of .50, i.e. explaining about 25\% of the variance.

The results of the present study are indicative of the severeness of the problem of labour turnover. 47\% of the general nurses, 20\% of the psychiatric nurses, and 36\% of the clerical staff intended to leave their organisation within two years. Neither is the problem less severe in the N.H.S. regarding the intention to change jobs within it in the next six months (43\% of the general nurses, 25\% of the psychiatric nurses, and 5\% of the clerical staff).

When considering the results of all the samples combined (excluding the industrial workers who were not asked about their intentions), correlations were found between the intended length of service in the organisation and the socio-demographic variables (age .55, tenure .32, number of jobs outside the company in the last three years .26, and marital status .24) and job involvement (.32), WRSE (.22), job satisfaction with pay (.24), and the firm (.23), and the desirability of the type of work in one's own eyes (.23).

That age and tenure have an influence on turnover is found fairly consistently in the literature (Porter & Steers, 1973; Mercer et.al., 1976; Waters et.al., 1976). Among nurses, the Scottish study (1975 in Redfern, 1978) showed that nearly half of all leavers had completed only 18 months of service and high turnover occurred particularly in young, short tenured staff. Related to these two variables is the present finding that single people with more jobs in the last three years are more prone to turnover.

Surprisingly, grade, which in the literature was found to be a relevant variable, did not show any correlation in this study. Also, in contrast to the literature, it was not job satisfaction
with the job itself that was related to turnover, but job satisfaction with pay and the firm. Concerning the latter, the reason may simply be that this facet is not measured in most American studies (using the J.D.I., while the measure used here which is a British version of the J.D.I. has this additional facet). Nevertheless, when looking at the individual occupational samples, some had correlations with job satisfaction with the job itself, and in the case of the general nurses, about half of the S.R.N.s (a middle grade) intended to leave.

Job involvement was also found to be a strong predictor by Nicholson et al. (1977 in Redfern, 1978), and WRSE has some previous support from the Ekpo-Ufots (1976) study whose measure is said to portray a task specific self-esteem. Like WRSE, the desirability of the type of work in one's own eyes is an original measure in this study to which no comparable measures were found in research on turnover. However, it is consistent with the conceptual framework of this study that it should correlate with this variable. Altogether, across all the samples, a multiple regression showed age and job involvement to be the best predictors, explaining 35% of the total variance of intended length of service in the organisation.

Nevertheless, the predictors and their strength of prediction varied among the different occupational samples. For the group of psychiatric nurses, the best predictor was the desirability of the type work, followed by job satisfaction with pay (or age if this variable was included), and WRSE. These three variables explained 26% of the total variance. On the other hand, for the general nurses, the best predictor was age, followed by job satisfaction with pay with a predictive power of 41%.
In comparison with the rest of the samples, the multiple regression of the clerical staff yielded an incredible explanation of 71% of the total variance from just four variables: age, job involvement, and the desirability of the type of work in one's own eyes and in the eyes of significant others.

Age, like most of the socio-demographic variables, is seen by the author as a "distant" variable (see chapter 4, Jessor, 1973). Therefore, in order to try and get to the bottom of the more "proximal" variables, multiple regressions were also performed without the socio-demographic variables. In the case of the clerical staff, for example, when this was done, the best predictor was WRSE, followed by authoritarian orientation, both explaining 22% of the total variance, a poor figure in comparison with 71%. Nevertheless, if the aim is to understand, rather than find out the most efficient way of predicting turnover, the search for the "proximal" variables responsible for it are a must.

Besides the intended length of service in the organisation, the intention to change job within the organisation in the next six months was investigated. The results were not the same as for the former intention, since each of these deals with turnover of a different kind, and the strength of its prediction is much poorer. Factor analysis and smallest space analysis, for example, tended to show the intention to change job in the same dimension as the instrumental orientation, job satisfaction with pay, and performance appraisals. Its correlates were age (.24), marital status (-.31), and (non)instrumental orientation (-.19). The best predictors were being single, less satisfied with pay, the time that it takes to get to work, and satisfaction with the firm. Together, they explained 18% of the total variance.
It is strange that the time that it takes to get to work should be a predictor of turnover within the organisation and not of intended length of service. An explanation might be the long time scale in the latter as opposed to the limited six months of the first. As with intended length of service, this intention has different predictors for the various samples. In the sample of the psychiatric nurses, where 25% intended to change hospital within six months (half of which were S.R.N.s), the best predictors were: being single, less satisfaction with pay, and being younger. They accounted for 28% of the total variance. In contrast, the predictors for the clerical staff (in which only 5% wanted to change job within the organisation) were low desirability for the type of work in one's own eyes, little satisfaction with fellow workers, high job involvement, little satisfaction with the job itself, and high WRSE, explaining 37% of the variance. The fact that higher job involvement and WRSE were predictors of changing job (as being single in the sample of the psychiatric nurses) stresses to some extent the reasons for wanting to change job within the company rather than leaving it altogether. In the sample of the general nurses, 43% intended to change hospital in the next six months, with S.R.N.s accounting for a high proportion of these. In this case, the predictors were being younger, single, of a higher grade, and with a lower WRSE, explaining 23% of the total variance of the intention to change hospital.

The results regarding intentions for labour turnover as a whole show the effectiveness of socio-demographic variables, and in particular of age as good predictors. These, together with the psychological variables studied here, could in certain samples explain most of the variance of
intentions for turnover.

The results also show the relatively poor prediction (if any) of the different job satisfaction facets regarding the intention for labour turnover. In Porter and Steers' review, it is found that studies point out fairly consistently to the importance of perceived equity and met expectations as important forces in "future participation". This is accepted, though not entirely as expounded by them. It is their contention that the resulting satisfaction or dissatisfaction is part of the decision to remain or to search for preferable job alternatives. The findings obtained in this study do not give enough support to such a contention. As Pettman (1973) suggests, job satisfaction may be a sufficient condition for high labour turnover, but not a necessary condition. In contrast, desirability of the type of work was found to be more relevant. However, it is proposed here that it is quite possible that the mechanisms of perceived equity and weighing of variables by an employee in the light of his expectations, given his level of self-perceived contribution, are important in explaining the success of the socio-demographic variables as predictors, which are in turn only indicators of the factors which contribute to the intentions.

7.8 Absenteeism

Absences in nursing is an increasing problem and in industry, in general, it is said to be costing the United Kingdom about the same as the maintenance of the N.H.S. (Redfern, 1978).

At the onset of this study, the author was interested in having an objective measure of
behaviour at work. However, in order to guarantee trustworthy answers from the respondents, their confidence had to be assured. This was achieved by promising the respondents complete anonymity. Such a method prevented the author from gathering data on absences since this could have brought suspicion if the respondents had found out (impairing: the main objective). Only in the sample of one district hospital of general nurses it was possible to overcome this problem. This was possible because the management co-operated and assured the author that the respondents would not know that the information on individual absences would be released.

There is a variety of ways of measuring absences (16 of which are described in the Maplin Report DHSS, 1977)* but Chadwick-Jones, et.al. (1971) and Muchinsky (1977) found that, in general, the frequency of absences is fairly reliable (while a lost time index is not stable over time). This measuring method was used in the study at hand with three different criteria for the frequency of spells of absences, depending on their duration: short-term absence - one day medium-term absence - 1-3 days long-term absence - over 3 days.

(No distinction was made between certified and uncertified absences.)

Having made a distinction between the different duration of absences, the best predictors for each of the types was sought for. Each of the personal variables that was found in the literature to be relevant to absences (excluding medical, but including the time that it takes to get to work; the six different facets of job satisfaction; job involvement; WRSE; performance appraisals; intentions to change or leave the hospital, and
other variables studied in this thesis) was introduced at different stages of multiple regressions performed on absenteeism. The results clearly show different patterns of predictors for the different types of absence. As in the majority of studies, less job satisfaction with the job itself emerged as a main predictor of short-term (one day) absences.

In all but a few studies, overall job satisfaction has been found to be negatively related to absenteeism. Of the studies that examined facets of job satisfaction, satisfaction with the job itself was normally found to have a negative relationship with absences. However, this relationship was not replicated by a recent study by Nicholson et al. (1976). The other facets of job satisfaction have not been found to be related to absenteeism in most studies. In the specific case of nurses, Clark (1975) did not find job satisfaction to be a predictor of short-term absences. In this study, however, job satisfaction did not predict medium or long-term absences at all. Instead, lower grade was a significant predictor of medium-term absences. Most studies regarding grades of nurses reported that level of absence falls with seniority, but Clark (1975) points out inconsistencies regarding the State Enrolled Nurses (S.E.N.s).

The perceived inability to make decisions together with higher job involvement were the best predictors of long-term absences (which together with the intention to change hospital predict 12%). The unexpected finding that higher job involvement predicts absences is not so surprising when seen in conjunction with the perception that one is not able to make important decisions. These two variables (higher job involvement and the inability to make decisions)
are believed to cause stress and/or anxiety, leading to psychosomatic illnesses. In both, short (19% explained) and medium-term (15% explained) absences, perceived higher appraisals were a first predictor, while WRSE was the third best predictor of the short-term absences. This was a surprising and an unexpected finding which nevertheless, makes much sense. A person, or in this case a nurse, who thinks that her performance has been appraised highly, but is relatively dissatisfied with the job itself, can easily justify her short absence once in a while.

Similarly, it makes sense that someone in a lower grade allows herself to be absent from work for 2-3 days if she regards herself as being highly appraised. In this case, if performance appraisals is not included in the predictive equation of medium-term absences, "grade" becomes the best predictor. The latter is seen by the author as "distant" (i.e. not immediately responsible for the absences, but as indirectly covering those variables really responsible, in a more efficient way) and since none of the variables investigated made a better prediction, it is assumed that the causes for medium-term absences lie in organisational factors.

Regarding organisational factors, it was generally found that the larger the work group, the more frequent the absences, and also that attendance is better in those jobs offering a greater degree of autonomy and responsibility. Research on hospital general nurses found no systematic relation between absence and ward speciality, but it is possible that variations in management and organisational factors across units have a more important influence on absence than, for example, hospital size (Clark, 1975).

Lastly, the results of the multiple regression
of absences tend to support the assumption about absences leading to turnover. Three basic assumptions prevail in the literature (Muchinsky, 1977): 1) There is a continuum of withdrawal behaviour, progressing from absences to turnover. 2) Absences are an alternative to turnover, and 3) the two forms related or not, share common causes. Lyons (1972) found little empirical support to the notion of common correlates to both variables. However, at the individual level of investigation, and not at the group level, there seems to be support to the idea of progression of behavioural withdrawal from absenteeism to turnover (Muchinsky, 1977). Intention to change hospital was the third best predictor (although a weak one) of short-term absences, and the fourth best of long-term absences. This finding is in line with Burke and Wilcox's (1972) results of higher scores in absenteeism for those who left their company.

Muchinsky's (1977) review of absenteeism finds inconsistent results involving the relationship between the latter and age and with tenure, while Redfern's (1978) review finds these two to be generally powerful predictors of the frequency of absence spells, with older workers having fewer spells of absence, but each being of a longer duration. Muchinsky (1977) also mentions the positive links found between absences, travel distance, and family size. This study did not find age or tenure, travel distance or marital status as having any influence on absenteeism in a consistent way.

The implications of the findings of this study on absenteeism are therefore that (at least in the particular setting where the study was carried out) there is some room for the management to decrease the number of absences.

Regarding job satisfaction with the job itself, it might be possible to change the structure of the job so as to increase satisfaction with it.
But since such changes would still undoubtedly leave out employees who are dissatisfied with it, the changes should be made in conjunction with a selection procedure which will absorb only those who should be happy with the particular job (and having the appropriate qualifications does not ensure this). Management could also look at the same time at those aspects which make the lower grades more prone to medium-term absences. Since most of the personal variables which seemed relevant were included in the predictive equation, it is thought that what makes the lower grades more prone to absences must lie, to some degree, in organisational factors. The same applies to the perceived inability to make decisions. Lastly, as with job involvement, perceived performance appraisals can be a double-edged tool. High performance appraisals are desirable in themselves besides being instrumental in providing or keeping a high WRSE. On the other hand, high performance appraisals (whether realistic or not) can have, as this study seems to show, an adverse effect on short-term absences if they come in conjunction with little job satisfaction with the job itself, and on medium-term absences if they come with lower grades. In the same fashion, high job involvement is, on the one hand desirable, but on the other hand too much of it might be detrimental to the person and his performance, particularly if it comes in conjunction with the impression that one is not able to make decisions in that job. This last combination has been interpreted as particularly harmful since it is speculated that it leads to psychosomatic illnesses.
7.9 Performance appraisals

The subjective nature of this measure (see chapter 2) makes it necessary to be cautious when interpreting results obtained through it. Nevertheless, the validity of self-assessed performance is supported in recent research (Levin et. al., 1977) in which significant positive correlations were found between self-assessment and written test scores and supervisory ratings on corresponding performance dimensions (for example, typing scores correlated .62 or better with self-assessment, N=569).

Performance appraisals of the combined samples of this study were best predicted by WRSE and less job satisfaction with pay, which explained 9% of the total variance of this variable. The negative association between pay and appraisals could perhaps be explained along "equity" lines. (If someone gets high appraisals he might think he deserves better pay and be less contented with what he gets.)

For the sample of the general nurses, performance appraisals were also predicted by less job satisfaction with pay and higher WRSE, and in addition by less authoritarian orientation, predicting 26% of the variance in this variable.

In contrast with the above, in the sample of the psychiatric nurses (only half of the sample responded to this item) performance appraisals were best predicted by longer tenure, seeing one's job as suitable, and lower job involvement, explaining 24% of the total variance. This unexpected finding throws additional light on the concept of job involvement. It seems from this result that in certain jobs high job involvement can even have a negative influence, on at least self-perceived performance appraisals. The
criticism that such a finding might be the result of social desirability is rejected by the fact that scores on performance appraisals had a fairly normal distribution.

For the sample of the clerical staff, performance appraisals were best predicted by high WRSE, much job satisfaction with supervision and pay, explaining 15% of this variable.

As it can be appreciated from the results of the various samples, there is no unique set of variables predicting performance appraisals as measured in this study. This is so, to such an extent, that even the same variable (job satisfaction with pay) was found to be related positively to performance appraisals in one sample and negatively in another. There is no doubt that the measure used for performance is not ideal in the sense that it might not be related to an objective measure, if this were at all possible. On the other hand, from the psychological point of view, what is really important (when such an objective measure does not exist) is how the individual thinks he is being appraised which is, after all, the basis for his behaviour. If there is a discrepancy between actual and perceived performance, it is normally the management which has to be concerned with providing adequate feedback to the employee.

7.10 Limitations in design and in analysis of results

There is much room for methodological criticism in this study. The general lines of discussion over the respective merits of quantitative and qualitative approaches to data collection has been argued in chapter 3. The
survey is more "scientific" and produces more "hard" data. Participant observation brings the social scientist closer to the front lines of research—to the "real people"—and catches details missed by the more gross and blunt survey instrument. Each method provides a different and usually valid glimpse of reality. However, each is limited when used alone (Warwick & Osherson, 1973).

A major question was whether to limit the study to a small number of manageable variables (larger sample) that can be measured and handled in a methodologically sophisticated and sound way, or to try and embrace much of the situation at the expense of the depth and methodological quality. In view of the adoption of a multi-variable approach and in view of the exploratory nature of the study, it was decided to make a compromise between the two options. A relatively large population sample was utilized, and this was somewhat at the expense of the depth of the study.

A related criticism of the design of the study concerns the actual measurement devices. It is true that most cross-sectional studies are limited in the flexibility and complexity of questions asked. Analysis of such data is dependent on the assumption that holding constant the wording of single attitude questions automatically ensures that its meaning is the same for all respondents and can be so interpreted. The increasing body of multivariable research of attitudes points out the naivete of this assumption. This was partly overcome by using multiple items for each measure. In turn, this strategy leads to other criticisms regarding the summation of scores of various items in any one measure (although this is by far the most common procedure). The problem is particularly relevant
to this study's measure of WRSE. The summation of scores into a total assumes a basic underlying dimensionality among the items, while WRSE is seen as comprising of two main factors. Therefore, the summation scores of WRSE may not be comparable for different respondents. It is characteristic of most summary measures to lose information. Moreover, it is accepted, as Smith (1962) points out that "while tests of self-concept in which items are treated additively to obtain an overall positive or negative score may be fairly parsimonious instruments for getting a quick rough estimate of self regard, they overlook the subtler multifactorial value structure of the self concept" (p. 333).

Thus, the measure of WRSE is seen as most valuable, as a rough guide, and any other uses made of it should be made cautiously.

Another implication of the chosen methodology were the possible consequences of the effort to make subjects feel that their responses are anonymous. This may have had implications upon the results obtained concerning the motivational model behind WRSE. Korman (1976) states that consistency theory works best in situations of non-anonymity. It might have been this aspect which influenced the results mostly in supporting the self-enhancement model.

Regarding the interpretation of results, it has to be taken into account that generally, whenever results showed an approximately .00 linear relation between two measures, there could be three potential explanations for the lack of relationship: 1) there may be no systematic relationship between the two measures, 2) there is some systematic relationship between the two variables, but it is essentially nonlinear, and 3) the results may be an artifact of the limitations
of measurement. However, results had been interpreted only according to the first alternative. In addition, the size of the correlations would have been attenuated if the range of scores on either or both measures was restricted (similar to a "ceiling effect" on an experiment). A particular case of this was the distribution of scores in the measure of satisfaction with the type of work (TXIR) which was heavily lopped on one side. As a result, the interpretation of correlations with this measure may be erroneous. An additional general hazard in the interpretation of results was in determining the nature and strength of the relationships between two variables since the observed independent variable could be only one of several interrelated factors which contribute to variation in the dependent variable. This was partly overcome by "holding constant" other factors in the partial correlations and by interpreting the Beta scores in the multiple regressions.

In interpreting the analysis of correlations, there was also a danger that any simple measurement was only a partial and an inadequate reflection of individual variation on the dimension of interest. Scores obtained in one measure are made up of both "true score" and "error" components, the true score representing reliable, relatively stable characteristics of the individual, and the error representing random, temporary factors which affect a response only at a particular point in time, belong to "method" factors which are a function of the measuring technique being used rather than the variable being measured.

Similarly, partial correlations may indicate that two variables share a theoretical determinant which is not shared by the other, partialed-out variable. On the other hand, it may indicate that
the two predictors are both measures of the same common underlying variable, but which do not share the same source of error variation.

Although the measures used in this study were tested and redesigned to eliminate extraneous sources of variations, it is accepted that not all potential contributing factors can at present be adequately screened out and therefore there is always a danger of interpretation of correlations when testing conceptual variables without regard for the contribution of error.

In dealing with the additional measures (not the main focus ones), a similar approach to Fishbein's was attempted in order to discover connections between attitudes or beliefs about the type of work and intentions of staying in the organisation or changing job. The score of the measure of "Normbel" (the degree to which people who are important to the individual think that his type of work is desirable) multiplied by this study's coarse measure of "conformity" was expected to provide a measure assessing the normative pressures which Fishbein would have called "subjective norm" (see chapter 4). This resultant measure from the above multiplication was assumed to be a determinant of the person's intention. Subsequent analysis of the data has shown that such a measure of "subjective norm" as built in this study did not have the property of normal distribution. The reason for this, although not properly understood, probably lies in the building of the measure itself, or in the multiplicative approach suggested by Fishbein. Therefore, data obtained through correlations with this measure would have also been dubious.

Similarly, in an attempt to build a measure in the area of satisfaction with the type of work, respondents were asked to choose the factors that
were present in their work (from a list of 17 items) and rate their desirability. In this way, it was hoped to reach a measure which was not wholly preset by the researcher, but one in which the subject chose his own dimensions (though the initial list of 17 items was predetermined and built from items obtained in the pilot and in the relevant literature). In addition, it gave the subject not only the opportunity to choose his own dimensions, but also, it enabled him to rank order them according to the importance he attaches to each one of them (factors, dimensions). Unfortunately, analysis of the data shows that, like with the measure of "subjective norm", this was not a successful measure since no normal distribution was obtained, thus making doubtful the validity of any analysis that uses this measure.

In connection with the limitations of measurement scales, an attempt was also made to replicate results on the evaluation of Rosenberg's Global Self-Esteem Guttman scale. A coefficient of reproducibility (a measure of the extent to which a respondent's scale score is a predictor of one's response pattern) higher than .9 is considered to indicate a valid and unidimensional scale (Nie et.al., 1975; Wylie, 1974). The coefficient of reproducibility for Rosenberg's scale replicated in this study was only .86. The coefficient of scalability should be well above .6 if the scale is truly unidimensional and cumulative. In the sample of industrial workers this coefficient was .73. These results are not exactly the same as the ones obtained by Rosenberg (especially since a factor analysis of this measure by Kaplan and Pokorny, 1969 in Wylie 1974, produced two uncorrelated factors) and cast some doubt upon the validity of this Guttman scale.
A main dilemma of the researcher

Interpretation of results always embodies a particular set of values (see example in chapter 1, sec. 1.1, p. 14). It is the latter that exerts an influence on explanations and conceptualizations, while at the same time tempering the hard data into formative conclusions.

The holding of certain beliefs over others is further complicated when it reaches management decision making. Whatever philosophy the management holds on the nature of man (if any), it must make decisions within that philosophy, regarding its role as management, and order its priorities according to that role. If the management is to be realistic, and the organisation produces goods or services primarily for people outside that organisation, it has two main alternatives: Either to act as if 1) the top priority is production and profit, or 2) both, production, services and the work force matter to a great extent, and an equilibrium between material profit and employees' welfare is sought for. A third path is theoretically open when the management believes that, in the long run, taking care of the employees' welfare brings with it material profit.

A problem emerged during the pilot work for this study when the information obtained in the field work was asked to be released to the management. The problem was that the order of priorities, and therefore the value system of the management was not necessarily, or even rarely, the same as that of the researcher's. Therefore, the researcher's interpretative analysis of the information which he obtained from the data was not entirely of use to the management.

The researcher of this thesis hold the
belief or philosophy that all men have potentialities for "psychological growth" though the level, ability and direction of these are related to individual characteristics. Many of the latter depend on the individual's socialization and reference groups. Inherent in this view is that there are people who strive for psychological growth as well as people who resist being in a situation which thrusts responsibility upon them, like to depend on others, and desire to meet as few challenges as possible. This does not mean that there are two types of people, but that they can be found anywhere between the two extremes.

Any interpretation of results concerning individuals' characteristics would be made in accordance with the above philosophy. The conscious analysis of values and value system therefore becomes a prerequisite to any attempt to "objectify" the interpretation of the findings.

The management of the concern where the first stage of the study was carried out had a firm belief that job involvement is linked to quality and productivity at work. Based on this belief, the management decided about five years earlier to create conditions which would increase job involvement by redesigning the system of work. They expected to derive benefit by promoting an intrinsic orientation to work among its employees. They were disappointed with the resistance they encountered with the proposal to redesign. The resistance started with the works manager and ended with most rank and file workers.

The management foresaw certain economic advantages in the redesigning of the system of production. This, plus their firm belief that they were "morally right" in trying to bring about changes that would increase job involvement, enabled them to be persistent with their
plan in the face of strong resistance from the work force at their industrial plant.

Five years after the beginning of this change (in which both, management and employees were expected to profit), there was no objective or hard evidence of any material profit being gained. The management's sole consolation was that at least it might have increased the workers' satisfaction and had given more meaning to the work they were doing. The data collected from individuals in this industrial concern (only after the redesign) showed a near average degree of job satisfaction in comparison with standard norms of this measure for industrial workers in Britain.

A comparison between two plants doing exactly the same type of work, and with the same system of production, showed a difference between the two in the degree of job involvement. The plant that was considered by the management to be in very general terms (for example, number of problems for management, flow of work, general output) better, had less job-involved workers than its counterpart. The satisfaction scores for both plants was very similar and there was a higher percentage of people with high work related self-esteem in the plant which was considered "better".

What conclusions can be drawn from this part of the study? The management was not happy with just hard, factual information obtained in the study and it did not even want mere conclusions. What they wanted was to know what there was to learn and what steps and direction should be taken in the future. Though attainment of hard, factual data is a major part of the researcher's task, the conclusions that
he draws from that data will have already been coloured by his own values. What should be learned and what steps or direction should be taken in the future, in most cases depend entirely on the management's values and objectives. In this case the data seems to show quite clearly that overall job involvement is not important to the evaluation of what management considers a "better" plant. As it happens, this particular result seems to suggest that job involvement is inversely related to such an evaluation.

In order to understand the process by which the researcher reaches his conclusions, it is necessary to see how he perceives the situation he investigates. The type of work the industrial workers were doing was mostly unskilled and involved repetitive, short cycles of action. No matter how much this type of work is enlarged or enriched, it is very difficult to see how in the long run such jobs could become a central part of the persons performing it. There is of course, the subjective perception which may vary among individuals, but on the whole, the social factor is expected to be the only aspect of the job which would or might become central to these individuals. Apart from the important factor of possible pre-selection of low involvement jobs, there were also in the present sample a noticeable proportion of part-time female workers who regarded their role outside their jobs to be more important to their lives.

The interpretation of the counter intuitive finding of job involvement not being positively related to general performance or effectiveness in the context of at least certain types of work, seems plausible and common-sensical (as one worker said: "why should folding overalls be the most important thing in my life"),
There were no major differences in job satisfaction and authoritarian orientations between the two plants compared. The only individual difference which might give a clue as to the management's different evaluation of the two factories is the higher percentage of people with high work related self-esteem (WRSE) in the more highly evaluated plant.

Naturally, the suggestion to the management will be to try and increase, holding other things equal, the employees' WRSE. This would be done by increasing the two main factors or dimensions of which WRSE is composed: 1) control over one's environment, 2) increase of objective feedback about work performance, as well as, and probably at least as important, evaluative feedback of persons (like the traditional pat on the back), reminding the person that he or she is doing all right, even when doing nothing unusual. It is fairly clear how and when to increase feedback. However, when a suggestion is made to increase the employees' control over their environment, a conflict seems to emerge.

In the pilot work of this study, the industrial workers were found to be high in their authoritarian orientations. The scores of the vast majority of the workers were lumped on one pole of this measure, enabling no comparison within this sample between people high and low in this orientation. From the informal talks and the participant observation a general impression was obtained that the management had a strong legitimacy in the eyes of the work force. This supported the above finding. The literature supports the fact that industrial workers tend to be authoritarian. Moreover, people whose life experience and cultural values have created neither the expectation for,
nor the aspiration for "psychological growth" (mainly in the "traditional working class") might have the disposition to prefer a situation of dependence on, and domination by others. So a vicious circle is created. On the one hand, there are people, that because of their backgrounds, expose themselves, at least to some extent, to selective environments and certain standards of excellence, while these environments in turn, because of their structure, reinforce their previous socialization experiences.

There is a contradiction between wanting to increase the workers' control over their environment (part of WRSE) in order to improve their performance/efficiency, and the acknowledgement of their authoritarian orientation with the inclination toward dependence. The management could resolve this conflict by giving perfectly clear instructions to the workers as to what and how things should be done, leaving no room for doubt. Within the confines of such a set up, it could try to provide its employees with as much control over their environment as possible.

The problem of the management has apparently been solved; that is, if its major priority is production/efficiency. For the researcher, a problem remains. If this solution is given to the management and implemented, work (seen as an important socialization experience) will remain within a reinforcing authoritarian structure with few possibilities for what is called "psychological growth". True, work in the instrumental ethic is seen largely as a means to a steady rise of living standards (mainly in the material sense). Psychological growth is left to be influenced by activities outside work. As Dubin (1968) put it, for
probably a majority of workers and even for extending ranks of management, work does not offer experiences sufficiently meaningful to constitute a central life interest. However, the problem remains that certainly in terms of time spent, the work one does and its environmental structure, has a strong influence, whether reinforcing previous socialization or providing and/or constraining new experiences. These experiences will affect one's life outside work whether in the shape of attitudes, values, orientations (for example, authoritarian) or personality traits.

The area of labour turnover is another example which clearly shows the lack of attention to values, & the general consensus in holding management values. Labour turnover is considered a problematic occurrence which should be minimized as much as possible. This is partly related to the assumptions about the strong links that are presumed to exist between job satisfaction and turnover. Even in this study, high figures on labour turnover are seen as a severe problem, and certainly they are so, at least, from the management training cost point of view. However, turnover can also be seen as a positive phenomenon. For instance, it can be an indication for the need or will of individuals to advance and make a change that cannot be made at their present organisation. As such, from the societal point of view, perhaps turnover could be regarded as a price that has to be paid in order to maintain a certain quality of life.

Coming back to this study's findings on nurses' labour turnover, it is suggested here that it is probably the result of budget policies. At the time these policies were made increasing
the number of trained nurses in the U.K. was the objective. These policies, bringing about a concentration of trained nurses, would not have been carried out if the planners had regarded their consequence during subsequent years as undesirable. Nevertheless, it is difficult to say whether, or to what extent, the overall policy which led to this concentration of trained nurses (during the period in which the study took place) was the cause of great percentages of them intending to leave their hospitals. The findings that these nurses were concentrated in a certain grade (S.R.N.s) seems to suggest that this is so. However, the predictors of labour turnover of this group imply that certainly there are also other forces affecting their intentions.

7.12 Recapitulation

The descriptive design of this thesis brought about the reportive character of much of this chapter since it aimed at increasing the understanding of behaviour at work through the provision of empirical findings. These were then put in perspective to other findings in the literature (where this was possible) and conclusions were sought for mostly through the accumulation of results from a variety of findings which pointed in a fairly consistent manner, in the same direction.

Generally, attempts were made to interpret the findings as a whole rather than refer to each result as a separate unit. The different statistical analyses were seen as a means of ordering information so as to make it possible to put the findings in perspective and gain insights from the empirical data. In addition,
the various statistical analyses were used in order to validate one another. For instance, job involvement was found to correlate with the intended length of service in the organisation (labour turnover) only when moderated by WRSE and job satisfaction. When using multiple regressions, job involvement was the second best predictor of the intended length of service in the organisation. When using factor analysis and also when carrying out smallest space analysis, both job involvement and the intended length of service in the organisation were found to share the same dimension or factor. The consistency of such results, using different samples and statistical techniques made it possible to make confident interpretations of the findings.

The author attempted to construct a valid and reliable measure by which Work Related Self-Esteem of employees would readily be assessed. This attempt was, to a great extent, a success, enabling the writer to gather necessary empirical data, which had previously not been available, helping to clarify the concept of WRSE.

When dealing with a concept on which there had hardly been any previous information, it was important to find out what its dimensional structure and relationship to other relevant variables are. It was found in this study that WRSE is composed of two main factors, namely, power-powerlessness and feedback. In relation to other significant variables, WRSE and the intrinsic aspects of job satisfaction share the same dimension which is central to the individual.

Besides the theoretical structure of WRSE, it was also of much interest and need to reach a position as to what the motivational force behind it is. The interpretations of the results suggest fairly strongly that self enhancement,
rather than self consistency, is the motivational model behind WRSE.

Further support to the validity of WRSE is given by finding it to be a successful moderator and of it being best predicted by factors that have to do with the environment of work and with those partly brought to the work situation. Moreover, WRSE was the best predictor of performance appraisals (among the variables studied, which did not include, for example, skill or ability).

Job involvement, a theoretically related concept to WRSE, important in its own right, was felt to lack coherence. It was therefore necessary to clarify it and gather empirical evidence which would enable to make progress toward a more scientific stand on it. For instance, it was shown that the common assumption that job involvement is positively related to performance appraisals has no empirical basis, and that even the opposite might be true. It was also inferred from the data that a substantial proportion of job involvement is brought to the job (rather than being assumed at the job).

The relationships between various psychological variables, socio-demographic variables and behavioural intentions, based on empirical findings, were described and interpreted increasing somewhat the understanding of behaviour at work. Data was also gathered on a number of behavioural variables (absenteeism, labour turnover, and performance) which have much practical relevance to management. In connection with the controversy about the relationship between job satisfaction and performance, absenteeism, and turnover, the results show: 1) that it is futile to look for simple relationships, 2) that it is useful to make the distinction between intrinsic
and extrinsic aspects of job satisfaction, and 3) that even more complex analyses depict job satisfaction as a relatively poor predictor of the above variables.

Regarding the power to generalize from the predictions of the different variables investigated in this study, it was found that predictors varied according to the occupational groups. However, in general, some predictors were found to be good for generalization across the samples. For instance, while older age and job involvement are fairly good predictors for the intended length of service in the organisation, job satisfaction with pay is not, and in one sample (of the general nurses) it was actually less satisfaction with pay which was a predictor of intended length of service in the N.H.S. and performance appraisals.

An example of other recurrent findings which might prove to be of fairly important theoretical value is that correlations tend to emerge, or be stronger in circumstances when the main orientations of the individuals in the sample do not consist of the variables in the correlation. These results merit further search for evidence which would show under what conditions this is so.

Lastly, it might be pointed out that this thesis, dealing with a set of variables which were chosen to be examined, might have - out of necessity - given the impression of being or forming a detached and separate world. However, in reality the opposite is the case. The data resulting from the use of the measures constructed here, and from others already available should further the understanding of human behaviour as a whole rather than just the specific aspects that they cover. It is true that studies dealing with
Central Life Interest (CLI) have shown that a large percentage of people do not seek meaning and challenge in their work, but look for them outside. The significance of the world outside work is not underestimated by the writer, but simultaneously work is seen as having a substantial effect on people's lives. Although this study focuses on work, its implications are wider; whether people realize it or not, nowadays, work tends to have an effect on their lives as a whole. For example, it was found in the present study that psychiatric nurses, who are very much involved with their job, and feel that they have not enough opportunities for decision making, might be absent from work for long periods of time. This is interpreted as being a contributory factor to the appearance of psychosomatic illnesses obviously affecting the individual's whole life.

Another example is provided by the data from the sample of the industrial workers. In comparison to the psychiatric nurses, they were found to have little job involvement, but an overall high authoritarian orientation. This had some implications on the work design of these employees, which in turn constricted their potential for personal growth.

The disadvantageous background of the industrial workers, coupled with restricted opportunities for psychological growth at work, make it unlikely for them to look for or engage in such activities after eight to ten hours of work. On the other hand, if despite the disadvantageous background of these people the workplace had been designed so as to encourage the use of their potentialities (rather than maximize output and quality), the place of work could have been the turning point for their outlook on life.
As it can be seen, the findings also have implications which go beyond the work situation.

7.13 **Suggestions for further research**

One solution to overcome part of the problem of providing conditions for psychological growth is to hold more than one job. This is not seen as desirable by either employer and employees. Those who hold a belief against having more than one job, do so on the basis that job involvement would be impaired and therefore productivity, which have always been considered as part and parcel. Since the present thesis proves this not to be the case, it is recommended to carry out research to find out the feasibility of the above suggestion.

By decreasing the time spent in any one job, with the possibility of diversification in the nature of the jobs and environments, people could gain new experiences derived from an alternative system of work. Herzberg's job enrichment model suggests more diversification of tasks within the same environment of work system. This paper suggests to reconsider the popular assumptions about the link between job involvement and productivity, and to consider the creation of conditions for alternative ongoing experiences at work from different environments. (For example, work in industry together with work in either social services, government, sales, education, etc.).

Specific areas of self-esteem have been regarded to be of particular importance due to their relevance to the area of motivation, and in the influence they might have on the mental health and perceptions of people. The motivational model behind WRSE has been dealt with in this
paper, but not so the area of mental health. With regard to the latter, recent studies on psychological well-being (Bradburn, 1969\textsuperscript{1}, Warr, 1977\textsuperscript{2}) have differentiated between negative mental states and positive mental health. Warr (1977) sees the definition of mental health especially difficult "since the concept is both multidimensional and value-laden, but it is usually considered to include such features as favourable self-evaluation, growth and learning from new experience, a realistic freedom from constraints and some degree of personal success in valued pursuits".

It is in a definition of well-being such as Warr's that the present author finds a connection to WRSE. The words "favourable self-evaluation" actually constitute that link. Warr has found that unemployed people report significantly lower well-being than those who have work. Furthermore, he found that employment position is related to aspects of well being only for the "high work orientation group" which in the theoretical framework of this thesis could be seen as related to job involvement. The implication would be that WRSE is important and relevant to the area of mental health mostly for people to whom work is important to their self-esteem. Attempts to replicate Bradburn's (1969) popular measure of psychological well-being (Roy Payne\textsuperscript{3}) were only moderately successful and cast doubt on its validity. Furthermore, job satisfaction and self-esteem did not relate to the measures of psychological well-being.

\textsuperscript{1}Bradburn N.M. The Structure of Psychological Well Being, Chicago, 1969.
\textsuperscript{2}Warr, P. MRC Soc. & App. Psychol. Unit, Univ. of Sheffield. Memo 127.
\textsuperscript{3}Payne, R., MRC, Soc. & App. Psychol. Unit, Univ. of Sheffield, Memo 61.
The scope of this investigation did not allow for the study of the relationship between general measures of well-being and WRSE as well as the latter's influence on people's perceptions. It is recommended however, that future research should look into the relationships between the measure of WRSE and measures of well-being, while integrating in such an investigation measures of job involvement and orientations to work, and see how they affect other people's perceptions.
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APPENDIX

Definition of Tau correlational analysis
Tau is a measure of association between at least two ordinal level variables. It uses information about the ordering of categories of variables by considering every possible pair of cases in the table.

Definition of Chi square test of significance
Chi square ($X^2$) is a test of statistical significance. It helps to determine whether a systematic relationship exists between two variables. This is done by computing the cell frequencies which would be expected if no relationship is present between the variables given the existing row and column totals. The expected cell frequencies are then compared to the actual values found in the table. The chi square test of significance assumes that the two variables studied are measured only at a nominal level.

Three possible explanations for the link between job involvement and authoritarian orientation
1. This kind of work demands an authoritarian orientation in order to be involved in that work.
2. Both authoritarianism and involvement are fairly stable traits developed earlier in life, and result from a certain type of socialization (the Protestant ethic?).
3. Authoritarianism is a stable trait that tends to make it difficult for the individual to look into his own problems (anti-intraception), making him more prone to getting involved in events of the outside world, for example, work.
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NORTH WEST DISTRICT

Nurses Leaving Hospital Employment
(Not WTEs)

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<td>42</td>
<td>523</td>
<td>1322</td>
<td>39.6</td>
</tr>
</tbody>
</table>

- Includes Theatre

Monthly Average (Hospitals) - 44 persons leaving per month with a range of 30 - 60 persons.
Quarterly Average Oct.-Dec. - 48
Jan.-Mar. - 46
Apr.-June - 36
July-Sept. - 44

10.2.76
Do you feel that in the **type of work** you do, the following requirements are:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Of Great Importance</th>
<th>Of Some Importance</th>
<th>Little Importance</th>
<th>Of No Importance</th>
<th>Uncertain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
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<tr>
<td>Using physical effort</td>
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<td>Skill</td>
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<td>Using mental effort</td>
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<tr>
<td>Training</td>
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</tbody>
</table>

Please give your personal opinion about the degree to which you feel that the following factors are present in the **type of work** which you do.

- Not at all extent
- Some extent
- To a great extent
- Uncertain

- Integration with a work group
- Convenient hours
- Good working conditions
- Future security
- Opportunities for advancement
- Creativity
- Interest
- Working together with people
- Knowing in advance if you are doing a good/bad job
- Effect on other people's lives
- Good pay
- Social facilities

Please rank order the five most desirable items for you on the whole page. For example: if you feel that for you the most desirable item above is "training", you would put to its left the number 1; then if you think that the next thing most desirable to you after that is, e.g. "prospects", you would put to its left a number 2; and so forth.

Note that you cannot repeat the same numbers.

---

**Attitudes Survey**

**Strictly Confidential**

(Use for academic research only)

**Instructions:**

There are no right or wrong answers and this is not a test of intelligence or ability.

We are interested only in your opinions and feelings.

Most questions need only ticking (√) in the place you find most appropriate as an answer.

Please make sure of answering all questions or writing down what is not clear.

If in any doubt as to how to answer or where to tick, by all means ask the person who is administering this survey.

Thanks for your participation.

Remember: no one in your organization will have access to personal data obtained in this survey.
We would like to have your views on various aspects of your employment: on the firm as a whole, your pay, your opportunities for promotion, the work you do, your immediate superior, and your colleagues. For each of these areas we have listed a number of statements. Please read each statement in turn and think if it applies to the area in question. If it does, then place a tick (v) in the "yes" column. If it does not apply then place a tick in the "no" column. If you are not sure whether the statement applies or not then place a tick in the "not sure" column. Please tick all items.

<table>
<thead>
<tr>
<th>Statement</th>
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<tr>
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- **Worker Opinion**

Would like to have your views on various aspects of your employment:
- on the firm as a whole
- your pay
- your opportunities for promotion
- the work you do
- your immediate superior
- your colleagues

For each of these areas we have listed a number of statements. Please read each statement in turn and think if it applies to the area in question. If it does, then place a tick (v) in the "yes" column. If it does not apply then place a tick in the "no" column. If you are not sure whether the statement applies or not then place a tick in the "not sure" column. Please tick all items.

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6. The people you work with on the whole

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<thead>
<tr>
<th>YES</th>
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<tr>
<td>Easy to make friends</td>
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<tr>
<td>Hard working</td>
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<td>Some of them think they run the place</td>
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<td>Know their jobs well</td>
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<td>Work well as a group</td>
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<td>Stupid</td>
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<tr>
<td>Unpleasant</td>
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<tr>
<td>Do their share of the work</td>
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How do you consider your performance was rated at your birthday interview? (tick one)

Very good  Good  Average  Below Average  Poor

Do you consider that this assessment was fair?  Yes  No  Don't know

Maid/Female  Married/Singel  Age  Country of Origin

No. of dependant children in household (if any)

No. of previous jobs outside this company in the last three years

Brief description of present job

Full Time/Part Time  Grade

Educational courses attended or completed - (please tick one)

Up to and including (English or equivalent) G.C.E. "O" Level/OXN/OND/C

Up to and including (English or equivalent) G.C.E. "A" Level/HNC/IND

Higher (e.g. degree)

Others (please specify)

Name of Company

How long have you worked in this Company

Time that it take you to come to work (average)

Name

Please state your remarks (if any) on the questionnaire:

PLEASE CHECK THAT YOU HAVE ANSWERED ALL QUESTIONS.

Remember that no-one from this organisation will have access to personal data obtained in this survey.