

## CHAPTER 1

### QUALITY OF WORK LIFE IN CONTEXT

#### 1.1 INTRODUCTION

The holistic and eco-systemic conception views the world as an open, living system and emphasizes the interaction and interdependence of all phenomena, which implies that the individual organism always interacts with its physical and social environment (Capra, 1982). In a study of quality of work life, one could adopt an eco-systemic approach and try to list all possible variables, catalysts and influences with which someone could interact and which could contribute to his/her general state of being. One could also try to find and elaborate on a quality, which researchers have not yet exhausted, as a possible variable. However, perhaps it is as important to acknowledge that there are certain concerns that all people have in common, at least to some degree. Campbell (1981) considers twelve domains: marriage; family life; friendship; standard of living; work; neighbourhood; city, town or place of residence; the nation; housing; education; health; and the self.

Nordenfelt (1993) describes a human being's life as life in an environment with many parts. He enumerates the following:

- a physical environment - a habitat with its natural resources and its climate;
- a cultural environment - a society with its constitutions and codes of conduct, with its political system, its traditions and other cultural expressions;
- a psychological, close environment - consisting of relatives, friend and co-workers.

The different domains are not independent of each other; they tend to form clusters or subsystems within a bigger system.

According to Campbell (1981), the satisfaction people experience in the domains - self, standard of living, family life, marriage, friends and work - have

the greatest influence in accounting for the level of satisfaction people feel with their lives in general. Occupation, for example, will affect standard of living; it guarantees financial security; to a great extent it will have something to do with how satisfied people are with themselves in terms of their achievements, which, in turn, influences their self-esteem. Many friendships and associations are formed with colleagues and through contact with people with common interests while at work. These domains or subsystems are, therefore, interdependent.

Goodale, Hall, Burke and Joyner (1975) conducted interviews in which they asked the respondents how they would define the phrase 'quality of life'. The most frequently mentioned components defining quality of life were psychological well-being, the work environment, realizing or working towards one's aim in life and the social environment provided by other people. It is safe to conclude that the work environment is not only one of the most important domains in people's lives, but also contains many of the components of quality of life. Therefore, this domain plays an important part in the individual's general quality of life and sense of well-being.

Various elements of our lives are tied to the actions of organisations. Indeed, most adults organize their lives around work. Most individuals spend a good deal of their waking hours in work or job activities; it prescribes how their days are spent and places certain restrictions on them; it determines their living standards and affects their friendship patterns. Work goes beyond just influencing behaviour, however. It plays a major role in the adult's sense of self. Work can embody a number of stressors, but it can also provide satisfaction. Successfully managing or lacking the ability and resources to manage work stressors affects the self-esteem and impacts on health. When meeting a person, one of the first questions that come to mind is "What do you do for a living?" To a large extent, people define themselves and others in terms of their work (Deci & Ryan, 1985). Thus quality of work life in organisations is a major component of quality of life in general (Lawler, Nadler & Cammann, 1980).

An individual's work experience can have positive or negative effects on other spheres of his or her life. The more direct relevance of work to the total life

space is perhaps best expressed by Walton (1975) by the concept of balance. A balanced approach to work should incorporate work schedules, career demands and travel requirements which do not intrude on leisure and family time on a regular basis. Even advancement in the work place should not require repeated geographical moves. The reciprocal nature of work and family-life balance is debatable as far as cause-and-effect or symptoms are concerned. Sometimes, the employing organisation imposes demands that seriously affect the employee's ability to perform other life roles, such as that of spouse or parent. In other cases, however, work demands are used as an excuse to escape the responsibilities and anxieties of family roles (Walton, 1975). It is, therefore, not always certain which is a cause and which is a symptom.

Quality of work life is, however, not only the concern of the individual and of psychological researchers. This concern was demonstrated globally by the United Nations sponsored International Labour Organisation (ILO). At the core of the ILO's social agenda is the creation of more and better job opportunities. As far back as 1944, the ILO adopted the Philadelphia Declaration's principles, which made improving the quality of work life a priority, and committed all its member nations to achieving this goal through public policies and programmes. Among its aims were the following:

- full employment and rising living standards;
- employment in occupations that enable workers to enjoy the satisfaction of utilizing their skills and make a contribution to the common well-being;
- a just distribution of wages, hours and other benefits, including training opportunities;
- decent working conditions and the minimum living wage for all employed;
- recognition of the right to collective bargaining and to co-operation between management and labour; and
- safe and healthy work environments (Lowe, 2000).

According to Lowe (2000), these may be old themes, but they are even more relevant in today's global economic context. He expressed the concern that quantity may have become more important since the 1990s and that the

preoccupation with it may blind managers and policy makers to underlying problems, which can only be addressed by looking deeper than productivity. Lowe (2000) concludes that “high quality work” is work that is respectable, meaningful and life-enhancing, and, therefore, worker-centred. It, however, still offers benefits to employers and national economic prosperity. Indeed, quality of work affects the quality of life in families and communities, as well as the economic vitality of the nation.

## **1.2 QUALITY OF WORK LIFE AND MENTAL HEALTH**

A primary indicator of good or poor mental health is the level and quality of a person’s affective well-being. The primary concern here is with feelings of happiness, satisfaction, high self-esteem, interest in the environment and other positive emotions; or with anxiety, tension, depression, apathy, a sense of hopelessness and generalised feelings of distress (Warr, 1987). The ultimate evaluation of the quality of life is commonly regarded by researchers as ‘satisfaction with life’ or happiness. Some authors have come to the conclusion that the only legitimate definition of quality of life is a general feeling of happiness. Indeed, satisfaction and happiness are considered synonymous by some researchers; others suggest a relationship between the two (Mukherjee, 1989).

It is important to distinguish between ‘context-free’ mental health and that which is ‘work-related’. The former covers well-being and behaviour in one’s life-space generally, whereas the latter is restricted to the work environment. In examining work-related mental health, one might consider well-being in terms of, for example, job satisfaction, job-related anxiety or job-related depression (Warr, 1987).

However, as was stated before, all facets of one’s life are interdependent. Oshagbemi (1999) points out the relevance of job satisfaction to the physical and mental well-being of employees. He sees work as an important aspect of people’s lives because a large part of their lives is spent at work. Therefore, an understanding of the factors involved in creating work-related satisfaction is

relevant to improving the well-being of a significant number of people (Oshagbemi, 1999).

One of Argyris's (1987) findings (listed as 'propositions') is that there is a lack of congruence between the needs of healthy individuals and the demands made by a formal organisation. Therefore, an individual, if he is to maintain a minimum degree of health, has to preserve stability, while constantly adjusting and adapting to the formal organisation, as well as to the leadership ethic of that organisation.

There is more than enough evidence that a substantial relationship between work satisfaction and mental health exists. This was concluded from a number of studies, which demonstrate the effects of different jobs and work environments on individuals. Differing levels of satisfaction may be associated with various occupations and certain job features can be shown to affect mental and physical well-being. For example, jobs, which offer little opportunity for advancement towards leadership, seem to result in a work-related stress reaction. Medical professionals who treat individuals for various adjustment disorders note the frequency with which work-related issues appear to play a role in the etiology of the disorder (Warr, 1978; Landy, 1989).

### **1.3 MOTIVATION FOR THE RESEARCH**

In general, the overall motivation when studying satisfaction with quality of work life must encompass some sort of benefit to the organisation and its workforce. Normally, it is the concern of management to establish and meet certain expectations, whether these be making a profit or delivering a service efficiently and cost effectively.

It is increasingly being recognised that reaching organisational goals is not the only responsibility of the management or leaders of an organisation - they also bear the responsibility of the well-being of their subordinates (Thurman, 1977). To have committed, involved, responsible and motivated subordinates is a goal towards which most managers strive, and yet providing the conditions that

facilitate the development of these qualities is by no means easy. Managers must work to alleviate the stressors experienced by subordinates, but this is made difficult because the managers themselves are coping with the same stressors. Rarely do managers have a clear indication of the origin of stressors. It is also often difficult to identify the factors involved in hampering or enhancing employees' job-satisfaction, but it is this job-satisfaction that contributes to a healthier work environment.

Most research conducted in the field of the quality of work life has focused on increasing employees' motivation to work harder and produce more, fostering loyalty and creating more effective organisations. Studies have concentrated on reducing or eliminating costs involved in absenteeism and the subsequent loss in revenue, for the benefit of the organisation. At the same time, investigations have given attention to guaranteeing job security, better remuneration and a safer work environment for employees. In an article entitled *Strategic approaches to work/life balance* in *Worklife Report* (2000), mention is made of organisations, which have taken a strategic, systematic approach to addressing work/life issues. Such organisations were able to report significant business gains, such as greater retention, increased productivity and customer service and reduced absenteeism.

Some studies do find a consistent (though not extensive), positive relationship between satisfaction and performance (Chelte, 1983). Other positive effects, such as productivity, dedication, loyalty, involvement, effort and organisational identification were documented (Sirgy, Efraty, Siegel and Lee, 2001). Although the quality of life and the impact of work on the general well-being of employees did receive some attention, concern was heightened by research findings that job dissatisfaction is often connected with health problems and dissatisfaction with life in general (Thurman, 1977).

More value has been placed on a high quality of work life in recent years, simply because it is believed that people deserve it; that a satisfying work life is good in and of itself (Stein, 1983). The views, greater productivity versus quality as a value to be pursued for its own merit, do not have to be in conflict. It is important

to provide people with the highest quality of work life possible, whether or not it makes them more productive (Jennings, 1985).

The Worklife Report (2000) also mentions benefits to employees where strategic approaches were adopted by organisations to introduce work/life programmes and policies to integrate work and personal life more satisfactorily. There is universal agreement that the goal of nurturing a positive work life experience is a worthy one and is to be actively pursued (Andrews & Withey, 1976).

Similar studies were conducted with the purpose of identifying the positive and negative aspects of work life in the organisation. These data can be utilised as a diagnostic tool in the following ways:

They serve as a starting point from where problem areas that need immediate attention can be identified.

They serve as a point of comparison to assess the effectiveness of changes after implementation and to compare subsequent measures and trends of change that occur as a result of external influences.

Identification of the positive and negative influences serve as a barometer to determine whether the general tendency is towards more or less satisfaction with the organisation; whether there is more satisfaction in some areas and less in others; and whether there is stability in some areas and fluctuation in others.

They serve as an indicator of whether certain psychological needs of the members are being fulfilled.

They serve as a measurement technique to assess the quality of life of the members at the workplace (Thurman, 1977; Chelte, 1983; Andrews & Withey, 1976).

There is value in knowing how satisfactions and dissatisfactions are distributed within the organisation; how different subgroups feel; and whether or not some subgroups of the organisation change, while others remain stable.

They serve as an indicator of what aspects and needs are more important than others, in terms of satisfaction with quality of work life (Andrews &

Withey, 1976).

The gauging of needs and the quality of work life can determine the extent to which satisfaction with the quality of work life can be estimated from an assessment of need strengths and need satisfaction in work. This could be a useful tool for vocational counselling (Schaffer, 1953).

#### **1.4 PURPOSE OF THE RESEARCH**

This research will focus specifically on the quality of work life as experienced by members of the South African National Defence Force (SANDF). Research is conducted annually in the SANDF to appraise members' attitudes and opinions, in an effort to establish members' morale. This is intended to indicate areas that could cause low morale. Only descriptive feedback is given. It was, therefore, decided to do a more comprehensive study focusing on general satisfaction with quality of work life in the SANDF and also on how this is related to need. A more comprehensive description of the specific sub-group of the SANDF, from which the sample is taken, will be given in Chapter 3.

This research will differ from existing research in that it is conducted within a broader framework:

- a wide range of work-life facets will be covered;
- the research will determine what the needs and preferences of the members are;
- the study investigates the impact of not fulfilling those needs on people's satisfaction with the quality of their work life;
- this research will investigate a multitude of aspects that operate in unison on the feeling of satisfaction overall.

The research will put forward recommendations to the organisation in terms of areas on which to focus with reference to change and improvement in practices. In other words, because the objectives of the research remain consistent with the philosophy and practices of organisational development and continuous improvement in the SANDF, they could serve as a useful diagnostic tool.

As there is some critique concerning how *quality of life* is conceptualised, it may be advantageous to determine what members actually wish for. Mukherjee (1989), for example, comments on behavioural experts and management who, through policy and incentive systems, prescribe what the members of an organisation need. The mammoth task of letting people decide the total content of their basic needs has not been undertaken. People are given the opportunity to select from and prioritise the needs conceived of and tested by experts as basic.

The research will, therefore, aim at examining the roles of different variables in predicting satisfaction with the quality of work life. This investigation will be carried out not only on individual aspects, but also to determine whether there are certain combinations of factors that influence satisfaction to a greater or lesser extent.

## **1.5 RESEARCH QUESTIONS**

Certain questions originally triggered interest in this field of study and the answers will form the objectives of the research. Several aspects will be investigated.

**1.5.1** Which facets of work life can be distinguished as contributing significantly to satisfaction with quality of work life?

**1.5.2** Are there groups of members (according to rank, race, age, gender, level of education, geographic area, occupation) who are more satisfied or less satisfied with the quality of their work life?

**1.5.3** To what extent are the facets of work life regarded to be important for satisfaction with the quality of work life?

**1.5.4** What are the needs of the members of the organisation?

- 1.5.5** Do groups (rank, race, gender, age, educational level and occupation) differ with respect to how they prioritise their needs?
- 1.5.6** To what extent does the fulfilment of the individual's needs predict his or her satisfaction with the quality of work life?
- 1.5.7** Does the combination of satisfaction with facets of work life plus need fulfilment contribute significantly to satisfaction with the quality of work life?

Although specific quality of work life programmes do not exist in the SANDF in any real form, the findings generated by this study may be of significant value to the organisation in identifying problem areas and initiating possible solutions. Therefore, it is important to ask what factors contribute or interact to bring about satisfaction with the quality of work life and thus, presumably, a greater sense of well-being, amongst the members of an organisation. It is in this spirit that the present investigation is conducted. The research is conducted in the South African Army, and, in particular, the South African Army Engineer Formation.

## **1.6 OVERVIEW OF THE STUDY**

In **Chapter 2**, the theory regarding the quality of work life and needs is viewed through the perspectives of different authors and researchers. Aspects which are evaluated are all possible variables and factors with regard to satisfaction with the quality of work life. An overview of some major theories, concerning needs and how needs and satisfaction with the quality of work life interrelate, is offered.

**Chapter 3** describes the methodology that has been utilised in the study in general theoretical terms, in order to offer the rationale for its use. How the methodology was utilised to collect the data and produce results is also examined. The composition of the sample is further elucidated by means of frequency data (Appendix A).

**Chapter 4** covers the research results, presenting and discussing the data in

relation to the dependent variable, the overall satisfaction with the quality of work life, in the light of the various analyses in order to test the hypotheses.

**Chapter 5** concludes the research. Suggestions are made and possible recommendations are discussed.

## **CHAPTER 2**

### **LITERATURE SURVEY**

#### **2.1 INTRODUCTION**

A literature survey was conducted to become acquainted with the theoretical background regarding quality of work life and its predictors. General literature regarding well-being, quality of life and organisational behaviour was consulted, as well as more specifically quality of work life, job satisfaction and specific components of quality of work life. The latter will enable the researcher to identify a set of components to serve as constructs for the study and to be able to define each of the facets of work life.

The relevance of quality of work life for mental health will be reviewed. Different approaches and viewpoints of the satisfaction with quality of work life will be discussed briefly.

As it is hypothesized that need fulfilment is an important predictor of quality of work life, theories about needs will be reviewed and its importance for mental health will be considered. The relationship between need fulfilment and satisfaction with quality of work life will be explored. To be able to choose a set of needs to use in the study, a variety of needs, as described by different authors, will be considered.

#### **2.2 QUALITY OF WORK LIFE**

In an attempt to define the parameters of the quality of life, Mukherjee (1989, p. 23) denotes that it comprises “an infinite but enumerable field of concerns” and therefore, “the quality of life is treated as an all-inclusive notion of life and living.” Variables include those factors that are present in the work environment, the behaviour of the workers and their perceptions of the work environment. From the holistic point of view, namely, the whole is not just the summation of its parts, the assertion is that the integral whole cannot be appreciated by mere collection

of its components, whether or not these are examined as qualitative and/or quantitative variables. Nordenfelt (1993) is of the opinion that by quality of life is meant something that has to do with the values of welfare or well-being. A distinction can be made between external welfare, that is, those phenomena which surround us and continuously affect us, and, on the other hand, our inner well-being, in other words, our reactions to the external world and our experiences in general so that it is an interaction rather than a one way influence of external factors. According to Mukherjee (1989), the only way to appreciate the integral whole is by conducting a general survey, instead of following an analytical approach. However, from the point of view of explaining satisfaction with life as a whole, the analysis of satisfaction with life must be in terms of satisfaction with particular domains of life.

Quality of work life is a very broad concept with many different perceptions about it and, therefore, difficult to define. There are authors who are of the opinion that it is something that is defined by the people of the organisation. Many authors, psychologists and management consultants agree that it is difficult to give a clear definition of the term quality of work life, other than that it has to do with the well-being of employees (Lawler, 1975; Davis and Cherns, 1975; Sirgy, Efraty, Siegel and Lee, 2001). In Davis and Cherns (eds.) (1975) all the authors agree that quality of work life is not just job satisfaction, which is only one among its many aspects. All accept that different people will have different perspectives on what makes for high quality of work life. The impact of work life on the individual is the outcome of many interacting factors, of which the importance of each can differ from group to group and from time to time (Davis and Cherns, 1975).

Nadler and Lawler (1983) provided a working definition that defines quality of work life as a way of thinking about people, work and organisations. Its distinctive elements are a concern about the impact of work on people as well as on organisational effectiveness and the idea of participation in organisational problem solving and decision-making. They specifically emphasize the importance of the outcomes for individuals in that quality of work life is seen as something that does not just cause people to work better, but how work can cause people to experience a more satisfactory work life altogether.

According to Davis, Levine and Taylor (1984), quality of work life is defined by those aspects of work that the organisation's members see as desirable and as enhancing the quality of life at work. This could mean that for no two organisations the definition of quality of work life could be exactly the same. There could be no well-developed or well-accepted definition of the quality of work life, because the concept takes on different meanings for different sectors of the working population. In other words, even in the same organisation the perception of what quality of work life is can differ from group to group. Therefore, it is suggested by these authors that organisational members should participate in defining quality of work life in their own language and meaning. Although the nature and conditions of work vary considerably, just as perceptions of what is satisfactorily differ from person to person, there are important similarities that cut across these differences. People depend on work for money. They have to maintain a minimum level of effectiveness. Work is associated with beliefs of "must," "should" and "have to" and it is often described as difficult or stressful (Deci & Ryan, 1985).

Depending also what the vested interest is, quality of work life can be defined in terms of the degree to which an organisation's work environment motivates effective job performance, alternatively with the degree to which it safeguards the physical as well as psychological well-being of employees, and in other cases in terms of the degree to which it limits stress inducing factors. High quality of working life has been equated with high employee motivation and also with a high level of employee satisfaction (Lawler, 1975).

Warr (1987) depicts quality of work life as the absence of stressors in the work environment, although he gives credit to the role that motivational needs and the importance of growth needs as factors to be present in the work environment play to provide satisfaction. More recently, Hart (1994) investigated the positive and negative work experiences reported by teachers and how these contribute to their quality of work life. The theoretical model developed by Hart contends that it is psychologically meaningful to distinguish between positive and negative work experiences and that these operate along separate paths to determine quality of work life, positive experiences through morale and negative

experiences through psychological distress. Moen (2000) measured "effectiveness" of work life strategies in terms of psychological and personal well-being (what he referred to as life quality). These include: having a high level of perceived coping or mastery and generally experiencing low levels of conflict between work and personal life, stress and overload.

Oshagbemi (1999) conceptualises job satisfaction as a general attitude and, therefore, quality of work life can be described as work environment that is conducive to the forming of a positive attitude or emotional reaction towards the work environment.

In their paper on a new measure of quality of work life, Sirgy *et al.* (2001, p. 242), defines quality of work life as "employee satisfaction with a variety of needs through resources, activities, and outcomes stemming from participation in the workplace." They, therefore, consider need satisfaction that results from workplace experiences, as an important contributing factor to not only job satisfaction, but also satisfaction with other life domains.

### **2.2.1 Quality of Work Life Defined**

To conclude with an all-encompassing definition, it could be said that satisfaction with quality of work life is experienced when individuals are satisfied with interacting factors, such as optimal external conditions and social aspects, as well as being internally motivated by factors inherent in the work itself and which ultimately results in a sense of psychological well-being of employees.

### **2.2.2 Approaches to Quality of Work Life**

Landy (1989) gives a comprehensive summary of the background of how the theories regarding work satisfaction evolved up until 1989. Prior to 1930 there was little empirical research. Freud and Janet both felt that unconscious impulses were the cause of either positive or negative affect at the workplace. Factors, such as, esprit de corps or morale were considered by Freud. Janet was convinced that a lack of mental stimulation in factories caused negative

thoughts.

In terms of satisfaction or dissatisfaction with quality of work life, Landy (1989) considers many theories. In need theory, the impact of need satisfaction on behaviour is believed to be apparent. In instrumentality theory, it is suggested that satisfaction increases the value of a future reward and that dissatisfaction reduces that value. In self-efficacy theory, it is noted that individuals derive satisfaction from a favourable comparison of their behaviour with some standard that they have set for themselves and that they are dissatisfied when they compare themselves unfavourably to that standard. In equity theory, it is proposed that dissatisfaction results from the discrepancy between expectations and reality, although it could also be said that those expectations relates to a person's needs. This stream of thought, also mentioned by Andrews and Withey (1976), encompasses the wide variety of social judgment theories, equity theory, social comparison and the judgments people make based on values of fairness or justice and the perceived distribution of equities in a group, as well as social judgment encountered in reference group studies.

Landy (1989) further discusses early developments. The scientific management theory of the late nineteenth century, for which Frederick W. Taylor is well known, assumed that all workers valued money more than any other reward. Since about 1932, Viteles and other psychologists were convinced that work loses its meaning as it becomes routinised and standardised. One of the first substantial research efforts that made a break with this restricted view of the worker was conducted at the Hawthorne plant of the Western Electric Company in Cicero, Illinois. The "Hawthorne studies" brought forth a switch from the objective physical to the emotional aspects of work behaviour. Workers' perceptions of objective factors became a more important consideration in understanding behaviour than the facts of objective reality (Landy, 1989, pp. 444-445; Schaffer, 1953, p. 1).

One of the first theorists mentioned by Landy (1989), who emphasized variables within the individual as contributing to satisfaction and dissatisfaction, was Schaffer. In 1953 he was of the opinion that when certain needs of the individual

were not fulfilled, tension was created, the amount of tension being directly related to the strength of the unfulfilled need. Schaffer stated his theory as follows: "Over-all job satisfaction will vary directly with the extent to which those needs of an individual, which can be satisfied in a job are actually satisfied; the stronger the need, the more closely will job satisfaction depend on its fulfilment" (Schaffer, 1953, p. 3).

An alternative approach would focus on the behavioural outcomes produced by psychologically harmful jobs. Phenomena such as rates of turnover, absenteeism, drug abuse, mental illness, tension related physical illnesses and alcoholism would be measured. This has the advantage of focusing on more "objective" outcomes; however, it has the disadvantage of identifying conditions that produce dissatisfaction only after they have done their damage. Thus, where possible, it is important to identify poor work environments before there are serious negative outcomes. Potentially, measures of the actual physical work environment can also be used to identify poor conditions before problems arise. They also have the advantage of being objective. However, they do not take into account individual differences in how people react to the same work environment (Lawler, 1975, p. 126).

Mirvis (1980) saw the development in the understanding of work and working people as progressing from the notion that better wages, job security and working conditions contributed to improved performance to identifying the social motives of working people and the social purpose of their lives at work. At the time of his writing, work behaviour was found to be influenced not only by rewards and social relations, but also by jobs, information systems, and leaders. Mirvis found that all of these form part of most models used in assessing the quality of work life.

Mirvis summarized first conceptions of what a good job entails. Satisfactory work was thought to consist of repetitive and simple activities as it enabled the worker to work fast and accurately, thereby earning recognition. As these monotonous jobs were more thoroughly studied, researchers discovered that the workers performing them would get bored, work sloppily, or stay away from work.

The researchers speculated that it was lacking the motivating features of the tasks, the features that satisfied ego and growth needs. Since then researchers have specified the core characteristics of a good-quality job, measured and analysed them, and documented their beneficial effect on employee's motivation and work behaviour. As a consequence, a good-quality job was seen as one that offers variety and autonomy to the worker, a sense of identity with the task, and feedback on how well it is being accomplished. But Mirvis was still not satisfied that the definition of the quality of a job was complete. According to him, workers who know how it feels "to be absorbed in work, to be swept along by it, and to have their efforts in harmony with their endeavours" have found true satisfaction. He sees this feeling as "an integral and fundamental element of the quality of a job" (Mirvis, 1980, p. 473). This is not a job characteristic that can be described and measured rationally, it is not solely the result of more or less variety, autonomy, or feedback but has to be experienced and then filled with personal meaning.

Andrews and Withey (1976) described an approach postulated by Brickman and Campbell in 1971, which focused on hedonic level and adaptation as these processes apply to the quality of life. Their basic observation is that people seem to adapt to highs or lows, and, after a while, cease to experience them as extremes, even when the initial external conditions are still there.

People have different values and the implication may be that they evaluate differently with regard to work related factors (Andrews & Withey, 1976). According to Hartenstein and Huddleston (1984), for quality of work life to be a reality, management and workers must participate in identifying shared values that are essential to quality of work life and not counterproductive to this end.

Warr (1987) proposes three approaches, all to do with occupational stress. He distinguishes between physical stressors, such as noise, heat, vibration and those that are psychosocial, such as job demands and interpersonal problems. The second approach is to identify separate features in the environment that may give rise to strain. The third approach emphasizes that stress should be viewed in relational terms, as a process of interaction between the environment and the

person. Strain only arises in circumstances where an environmental feature is actively appraised as threatening; and people differ widely in their appraisals. This is often summarized in terms of a distinction between objective and subjective stressors. Different values can be obtained even from people working in the same job.

Warr (1987) also refers to the socio-technical systems theory. This perspective emphasises the fact that work organisations are human and technical systems, operating within a wider environment. Any working organisation may be viewed as a combination of technological elements (the formal task, the physical conditions, layout of work, equipment available) and social networks among those who perform the work. They are in mutual interaction, and to some extent each determines the other. In understanding the organisation, we have to think not only in technical, material and financial terms but also in terms of the motives, values, expectations and norms of the people within it. Just as an organisation cannot aim entirely to maximise member satisfaction, so must it avoid attempting only to maximise technical efficiency. This argument leads to the central concept of joint optimisation: when the attainment of a goal depends upon both the social system and the technical system, it is necessary to seek to optimise the two systems in interdependence with each other. Enhancement of employee mental health also depends upon joint consideration and modification of the two systems in interaction.

Warr (1987) as well as Chelte (1983) rely on Maslow's theory of higher-order and lower-order needs and Herzberg's Two-Factor Theory. Maslow's theory suggested the presence of several needs arranged in a hierarchical pattern. Once satisfied, a lower order need can no longer produce motivation in an individual. These needs range from physiological necessities through to self-actualisation. Thus, as lower order needs are satisfied the individual strives for self-actualisation, which can only be fulfilled through more interesting and challenging work. The implication of this approach is that extrinsic rewards are not sufficient to maintain high levels of motivation (Chelte, 1983). Herzberg's Two-Factor Theory (1976) subscribes to similar principles. His argument proposes that satisfaction and dissatisfaction result from different forces: that

dissatisfaction is attributable only to inadequate work conditions (extrinsic factors), while feelings of satisfaction are to be associated only with variations in intrinsically rewarding job factors. These notions emphasized the need to improve the content of jobs (Warr, 1987; Chelte, 1983). Whereas the human relations orientation focuses on the individual and interpersonal relationships, the human resources orientation has directed its attention to the nature of the job itself. The 'job itself' notion revolves around the fit between the job and individual needs as the basis of job satisfaction. The central feature of this approach to worker motivation is the concept of worker needs.

The humanistic perspectives have the assumption that intrinsic involvement in work is tightly connected to positive self-image, satisfaction and the quality of life. For Chelte (1983), therefore, it seems reasonable to argue that the quality of work has an extensive influence on the quality of life that is enjoyed.

The person-environment fit concept has received a lot of attention, and was apparently first proposed by French, Rogers, and Cobb in 1974. It suggests that a person's sense of satisfaction stems from the degree of congruency between the environment, as the person perceives it, and the person's needs or aspirations, as the person also perceives these. Each of the two perceived entities - environment and aspirations - is presumed to bear some relationship to objective reality, though it is granted that the relationship may be less than perfect owing to distortions introduced in the process of perception. The person-environment fit model suggests that satisfactions are probably the result of some comparison between a perception of the environment and a set of needs or aspirations, or criteria (Andrews & Withey, 1976). In his study of organisational commitment, job satisfaction and quality of work life, Chelte (1983) refers to Argyris' 1973 theory of the "mature personality" that also emphasizes the notion of individual needs and the lack of "fit" between organisational structures and these needs. According to this argument, modern organisations do not provide individuals with what they "need" from work (Chelte, 1983, pp. 6-7).

### **2.2.3 Satisfaction/Dissatisfaction with Quality of Work Life**

Satisfaction has emotional or affective components. In everyday language, satisfaction/ dissatisfaction is a feeling. According to Landy (1989), the most widely accepted theory of emotions has been suggested by Schachter and Singer in 1962. They proposed that there are two critical processes that compose any emotion - arousal and attribution. An event causes arousal and psychological changes, which are noticed by the person who looks to the environment for clues as to what caused the arousal and then decide on an emotional label that fits the clues. Further it means that any particular stimulus or situation is capable of producing either satisfaction or dissatisfaction. The particular emotional state will depend on how the individual interprets the signal in an attempt to account for the arousal (Landy, 1989; Schachter and Singer, 1962).

According to Seashore (1975), job satisfaction should be regarded as an attitude resulting from two concurrent, continuing evaluations in which the individual assesses his job and work environment as he perceives them; that is, whether they are likely to aid or undermine the realization of his basic values and the needs and life goals associated with it. Job satisfaction can change with time and, therefore, it is dynamic. Although it can be treated as a static attitudinal state at any given time of measurement, the fluctuation of satisfaction and dissatisfaction is emphasized as an expected condition to be considered in explaining the behaviour of individuals in relation to their jobs.

Seashore (1975 pp. 115-116) further states the tendency among “normal” workers toward experiencing satisfaction and the avoidance of experiencing dissatisfaction. It assumes that, if the worker experiences dissatisfaction with the job or some aspect of it, he or she will seek and find accommodation in some way. Thus, dissatisfaction is generally an unstable and transitional state, one that is changed. The dissatisfied job occupant will normally find ways to change his job or rationalize a change in his evaluation of it. For example, a worker may change his job and job environment through promotion or transfer,

seeking new employment or taking a package. A worker may modify his expectations and aspirations, reducing his goals to bring them in harmony with his perception of the realities of his situation and of feasible alternatives. The worker may further alter his perceptions of the situation, adapt to what he sees as necessary by simply accepting the situation, or may respond more negatively by aggressive attitudes and acts. A worker may gain partial psychological escape from a dissatisfying situation, usually by altering his values, for example, regarding income, skill usage, or find compensation in off-work activities.

Herzberg (1976) was particularly outspoken on the distinction between satisfaction and dissatisfaction in his Two-Factor Theory. The findings of his studies suggest that the factors involved in producing job satisfaction (and motivation) are separate and distinct from the factors that lead to job dissatisfaction. These two feelings are not opposites of each other. The opposite of job satisfaction is not job dissatisfaction but, rather, no job satisfaction; and, similarly, the opposite of job dissatisfaction is not job satisfaction, but no job dissatisfaction. Herzberg concluded that satisfaction and dissatisfaction were two completely different phenomena that develop from quite different sources (Landy, 1989).

Landy (1989) describes the Lawler Model of Facet Satisfaction in which the single most important process implied in the model is perception. Although this model describes the satisfaction an individual will experience with any particular aspect or facet of the job, for example, pay, co-workers or challenge, Lawler feels that the combination of the feelings a worker has about all aspects of the job defines overall job satisfaction. He qualifies this by saying that facets or aspects contribute to overall satisfaction according to their importance to the individual. In this respect, Landy (1989) mentions Locke's suggestion that job satisfaction is not the simple sum of satisfactions with individual elements of the job, but rather that the relative importance of each of the factors should be considered. This would mean that we should obtain a more accurate prediction of an individual's overall satisfaction if we weigh satisfaction with each specific job element by its importance. In other words, if something is relatively unimportant to a person, he or she will not be either very satisfied or very

dissatisfied with it. On the other hand, if a person values a particular job element very highly, then slight variations from optimal amounts of that element will produce wide variations in satisfaction.

The arousal of satisfaction or dissatisfaction as emotion and cognisance arising from the immediate situation as interpreted by past experience provides the framework within which one understands and labels feelings (Schachter & Singer, 1962). It is reasonable to assume that important factors are arousing factors, predisposing individuals to emotional reactions (Landy, 1989). If, in other words, an aspect of the job is important enough to bring about arousal and the individual is able to label it as dissatisfaction with the aspect, it will significantly influence that individual's job satisfaction.

Landy's opponent-process theory suggests another factor to consider when satisfaction with quality of work life is investigated. The theory proposes that an individual's satisfaction with a particular reward will systematically change over time, even though the reward itself remains constant. For example, a job tends to be more challenging in the beginning than it is after six years on the same job. An implication of the theory is related to the issue of boredom as the work itself diminishes in stimulation value. Opponent-process theory suggests that the stimulus value of the work itself remains unchanged, but the opponent process has become stronger. Further, the theory implies that a worker can become bored with any work-related stimulus, including co-workers, pay, and working conditions (Landy, 1989, pp. 459 - 462).

In 1987, Warr and his colleagues suggested a model of job satisfaction that is patterned after the notion of how various vitamins work on physical health. He suggests that like vitamins, we need some minimum daily "dosage" of certain attributes to remain satisfied with our jobs. Although meeting the minimum daily requirements will bring an individual to a state of positive health, too much of some of the attributes will lead to "toxic" reactions. In other words, too little of any attribute can be harmful, but too much of some of these attributes will also cause problems. Certain environmental attributes will not cause any harm in an overabundance, for example money, physical security, and valued social position. Other attributes, for example, externally generated goals, variety,

clarity, control, skill use, and interpersonal contact, can be the cause of overload and stress and will actually cause a decrease in emotional well-being. This model is unique in the sense that few other theories propose that too much of an attribute can cause problems in and of itself (Landy, 1989, pp. 462-463).

Workers' perception about the employers' intentions with certain interventions, for example job enrichment, plays an important role in satisfaction or dissatisfaction with the job itself. Many authors see satisfaction with the quality of work life as an individual disposition. It has often been suggested that some people are simply more satisfied with all aspects of life than others. It could, therefore, be that satisfaction is not always about the present objective characteristics of the job or work environment. It was even suggested that companies would do better employing people who are predisposed to be happy and satisfied than to put in endless efforts to change circumstances to make people happy. In this respect, Landy (1989) refers to data presented in 1985 by Staw and Ross.

Another hypothesis in job satisfaction research has been that certain individual differences are associated with levels of satisfaction or dissatisfaction. These have varied from the demographic (age, race or gender) to the functional (self-esteem or ability level). This implies that satisfaction is something that is inherent in the person rather than in the situation or the environmental stimuli (Landy, 1989).

#### **2.2.4 Components of Quality of Work Life**

A human being always functions within an environment composed of systems and subsystems, such as the physical environment, cultural environment, social environment and psychological close environment, as was discussed in Chapter 1. These environmental influences imply that when criteria are considered, a wide range of factors has to be taken into account. Different categories of job components are considered, namely extrinsic and intrinsic job factors, social factors and the organisational climate as a factor that influences the overall satisfaction with quality of work life. However, the diversity of the employees of an organisation implies that demographic variables should also be considered

as possible predictors.

#### 2.2.4.1 *Demographic Variables*

Different authors placed emphasis on different demographic aspects. Nordenfelt (1993) commented on environmental influences. The physical environment within which the individual functions, forms the basis for his or her actions, that is, it provides the opportunity to indulge in various activities. These opportunities vary in different parts of the country. Cities provide the opportunities for entertainment, better education, information and better medical facilities. Rural areas provide opportunities to be close to nature, clean air and open spaces (Nordenfelt, 1993). Faubion, Palmer and Andrew (2001) conducted a study among vocational rehabilitation counsellors to determine perceived differences between rural and urban employees. The results indicated that rural counsellors were more satisfied than urban counsellors with extrinsic factors, such as office location, safety in the office, parking and surrounding areas and safety in job related travel. Additionally, rural counsellors reported being more satisfied with the healthiness and various comfort factors of their work environment. However, no differences were found related to overall job satisfaction and other demographic variables, such as gender, race, age, education and work experience.

In the 1930's, Robert Hoppock found that different levels of satisfaction were related to different occupational levels, with the highest occupational level (professional, managerial and executive) being accompanied by the highest satisfaction. There were more unskilled manual workers who reported dissatisfaction than professionals (Landy, 1989). Koberg, Boss, Senjem and Goodman (1999) reported findings that individuals at higher levels of the organisation, who traditionally hold the most power, and individuals with more seniority in the organisation feel more empowered, while variables such as gender and race (Whites and non-Whites) had no significant effect on feelings of

empowerment. Their findings further suggest that workers who feel empowered, irrespective of position, have increased job satisfaction. Stouffer, Suchman, DeVinney, Star and Williams (1977) found that in the military, factors such as ambition to become an officer, level of education, a chance to choose the post and appointment in the chosen post to be important for job satisfaction. Satisfaction was also associated with formal status and with informal status (for example, men in more prestigious corps were more likely to be satisfied with their jobs than men in other branches). Contrary to his expectations, Pool (1997) did not find that professional orientation correlated with a significant positive effect on job satisfaction. As far as needs are concerned, it is generally proposed that management jobs require people to exercise power more than non-management jobs do, and that managers as a group have a higher need for power than most other workers (Medcof & Hausdorf, 1995). Schaffer (1953) also mentioned the possibility that certain common needs are associated with members of the same occupational groups, and that the occupation provides the opportunity to derive common satisfactions from it. Ducharme and Martin (2000) found that older workers and workers in higher status occupations are significantly more satisfied with their jobs. However, when job rewards were held constant, the significant influences were reduced to non-significance.

The period a person spends in a position can be useful for predicting or influencing the satisfaction if it is also considered how the person sees his or her chances to be promoted. A person who has just been promoted may be more satisfied than the individual who was not, while being within an established career ladder, with known advancement stages, for example, rank promotion in the military. Satisfaction will be affected by gradual awareness that these will or will not be realized. Another job aspect that can be influenced by the period in a position is that an initially challenging job may become less so as the occupant gains competence by experience and the novelty of new skill also gradually wears off. Promotion to a higher position also entails an increase in salary and the individual may initially be satisfied with his or her income, which after a number of years without a raise may not be as satisfactory any more (Seashore, 1975).

Another variable that was taken into account by Seashore (1975) is age. Normal life experience increases with aging, abrupt changes of economic inflation or changing levels of employment may alter the meaning a person attaches to a job and his or her satisfaction with it.

Early research on age and job satisfaction focused on attempts to prove and report a positive linear relationship between age and job satisfaction. However, a non-significant linear relationship may actually be a significant non-linear relationship. When Hochwater, Ferris, Perrewe, Witt and Kiewitz (2001) realized that previous research assessing the relationship between age and job satisfaction provided mixed results and no stable conclusions could be drawn from it, they statistically controlled variables, such as gender, supervisor and position status and affective disposition. Their results portrayed a U-shape relationship between age and job satisfaction. Reasons proposed for such a relationship are that younger employees have high expectations, have a limited understanding of what makes a satisfying job and earning money is enough satisfaction for them. Later on they may realize that their expectations are not met, they find out more about other types of job opportunities and the incentives may not be as enticing any more. More rewarding, upper level positions are not available to younger employees and more mature people who earned these positions experience more satisfaction. It was also suggested that the power and prestige inherent in senior positions contributes to higher levels of satisfaction among older people.

Mutran, Reitzes, Bratton and Fernandez (1997) researched gender differences against other variables, such as age, career phase, education and occupation in order to explore their assessment of the quality of time spent at work and their satisfaction with work. They had the expectation that men and women who are better educated, have higher income and may have experienced fewer difficulties with occupational mobility would be more likely to be satisfied with their jobs. They also surmised that highly educated individuals would be less satisfied with their work, because of elevated, but potentially unfulfilled expectations. On the other hand, it can be assumed that individuals with prestigious and higher paying jobs will be more positive in their subjective

responses to work. Their research results showed that there are no overall differences in the way that middle-aged working men and women perceive their jobs. In their research it was found that as far as work conditions go, men are more likely than women to hold upper-level occupations, to have more variety in their jobs, and to exert more self-direction in their work than women. As they expected, they found that those with the greatest education tend to be less satisfied with their work. They concluded that education contributes to having more alternatives to consider. They further found that it is more often women (African Americans more than Whites) than men who assess the quality of time at work in a positive light in terms of meaning and purpose. Married persons too have a positive assessment of their time at work, as well as those who have more autonomy and self-direction at work and those whose work is non-repetitive. Moen (2000) found that some characteristics of the work environment predict quality of work life differently for men and women. Autonomy on the job is positively related to coping or mastery for men and negatively related to their experience of overload. Having the option to negotiate work hours is related to lower overload for women, while being able to work at home tends to predict fewer stress symptoms for men. Working a varying job shift is associated with overload for men and tends to be linked to men's work/life conflict.

Nordenfelt (1993) refers to a study Veenhoven presented in 1984 where 245 studies by researchers, mainly psychologists, investigated the importance of various background conditions for happiness and satisfaction. The demographic factors did not come out as strong predictors, but the correlation between happiness and such factors as education, intelligence and general activity were still evident.

Looking at cross-cultural variations in predictors of satisfaction with life, Diener, Lucas, Oishi and Suh (1999) found that financial satisfaction was more strongly associated with satisfaction with life in poorer nations, whereas satisfaction with home life was more strongly related to satisfaction with life in wealthy nations.

From the literature it seems that no one demographic variable can be singled out as predictor, but rather that they may have a moderating effect or have an impact

in combination with other variables.

#### 2.2.4.2 *Intrinsic versus Extrinsic Job Factors*

Considerations in the distinction between intrinsic and extrinsic job factors, that have to do with satisfaction with quality of work life, are described by Warr (1987), Deci and Ryan (1985), Thomas and Velthouse (1990) and Snelders (1996). Extrinsic factors concern aspects of a job that form the background or context to the task itself. It consists of activities that are externally motivated by rewards and it is carried out only because of its effects. Examples of extrinsic job factors are pay, working conditions, working hours, procedures and job security. Intrinsic factors cover aspects inherent in the conduct of the job itself. It consists of activities that are intrinsically motivating, meaning that they are rewarding by themselves. The intrinsic motivation would be brought about by the feelings of competence and self-determination that someone experiences while engaging in a task, also known as content satisfaction. Intrinsic reward, such as enjoying the work itself or the feeling of satisfaction that something meaningful is accomplished, can be even more rewarding than tangible rewards (Snelders, 1996). Examples of intrinsic job factors are freedom to choose how to undertake the work (autonomy), amount of responsibility and initiative that is allowed, skill requirements and variety.

When people are intrinsically motivated, they experience interest and enjoyment and in some instances they experience a natural flow of energy. The antithesis of interest and energy is pressure and tension. Insofar as people are pressuring themselves, feeling anxious, and working with great urgency, it can be sure that extrinsic motivation is involved. Their self-esteem may be on the line, they may have deadlines, or some material reward may be involved (Deci & Ryan, 1985).

Although extrinsic and intrinsic job factors tend to be positively inter-correlated, many investigators emphasized their conceptual separation (Warr, 1987). However, in the literature, authors do not always deal with them separately.

#### *Extrinsic Factors*

*Adequate and fair compensation.* Even though accepted operational measures are not available to judge the adequacy of income from work and the fairness of compensation, the two factors are important determinants of the quality of working life: Adequate income: Does the income from full-time work meet socially determined standards of sufficiency or the subjective standard of the recipient?

Fair compensation: Does the pay received for certain work bear an appropriate relationship to the pay received for other work? (Walton, 1975)

A positive relationship between standard of living and mental health has been recorded in many national populations. Some research has found that people with higher incomes are more satisfied with their pay; and others have obtained similar results in respect of perceived fairness, relative to one's own and others' responsibility and skill level. In view of the central importance of money to meet the needs of oneself and one's family, it seems very probable that incomes judged to be inadequate would be associated with health and satisfaction (Warr, 1987).

*Physical Work Conditions.* The comfort dimension of job satisfaction assesses the employees' reactions to aspects of the job, which include travel to and from work, the physical surroundings, the work hours and sufficient time to complete assignments (Chelte, 1983). According to Payne (1987), the physical environment, such as architecture, equipment, noise, lighting, decoration and use of plants, is likely to make an impact upon a person's achievement, affective satisfaction, and psychological strain. Stein (1983) mentioned any decent working conditions, subject to the constraints of the particular setting, task, or technology. Moen (2000) studied effective work life strategies

regarding work conditions. Work-hour preferences were found to be a characteristic related to quality of life. A significant predictor of quality of work life is whether or not respondents are working the hours they see as ideal. Those wishing to work fewer hours on the job tend to experience more conflict between work life and personal life, more stress and more overload. Existing structural constraints, policies and practices prevent significant numbers of employees from working the hours they would like, with important consequences for their well-being.

*Promotion Prospects.* A worker who feels overqualified (for example promotion overdue according to promotion policy) for his job will almost always be concerned about his possibilities for promotion. There are of course reasons other than satisfaction for wanting promotion, the most obvious of which is more pay, but surveys reveal almost universally greater concern with promotion than with pay or other job aspects. With promotion, different needs can be involved such as more power, more pay, more status, sense of achievement and new challenges. Comparable questions, items and clusters show that this is generally the job aspect with which satisfaction is lowest (Thurman, 1977). The promotion dimension utilizes items such as the good chances for promotion, and the employer is interested in providing opportunity for advancement (Chelte, 1983).

*Benefits.* These are the usual benefits that flow from work, including pay, promotion or position, rank and status, privilege of position, security and fringe benefits (Chelte, 1983; Stein, 1983). Ducharme and Martin (2000) found extrinsic rewards to have a statistically significant effect on overall job satisfaction, but compared to other job stressors it had the least influence.

*Job Security.* Job security is associated with feelings of security about future employment, for example, feeling secure knowing that

one is not likely to get laid off (Sirgy *et al.* 2001). Moen (2000) studied effective work life strategies regarding work conditions, gender and life quality. Job insecurity was found to give rise to stress symptoms and overload, as well as higher levels of intra-personal conflict concerning work and personal life.

*Safe and healthy working conditions.* It is widely accepted in our society, as well as enforced by law, that workers should not be exposed to physical conditions that are unduly hazardous or detrimental to their health (Walton, 1975). Thurman (1977) also mentioned health and safety as important aspects.

*Resources adequacy.* Resource adequacy has to do with enough time and equipment, adequate information and help to complete assignments (Chelte, 1983).

*Job Demands.* Workers are required to accept certain goals, often imposed as task demands arising from their job description. This is one of the aspects that is a normal requirement of a job, but when there is too much of it, it can be experienced as stressful (Warr, 1987). Job demands can be described as psychological stressors. This refers to what the person is required to do, and particularly to the quantity and quality of work to be done. Jobs that simultaneously demand high quantity and high quality within little time can be particularly stressful. Such situations can be very challenging and exciting, so it all depends on the strength of the demands. Too little demand leads to boredom, just enough to excitement, and too much to breakdown (Payne, 1987; Janssen, 2000). Moen (2000) found that those in demanding jobs are especially vulnerable to overload and stress. Ducharme and Martin (2000) found that high job pressure is inversely and significantly related to satisfaction.

*Fellow Workers.* The emphasis on *esprit de corps* in organisations necessitates that we pay greater attention to the role

of co-worker relations in determining the nature and quality of work life. Hodson (1997) found that the effects of co-worker relations on job satisfaction and on good relations with management are substantial, often more than those of job characteristics. Conflict and infighting among fellow workers are associated with lower job satisfaction, while worker harmony is associated with greater job satisfaction. Supportive co-worker relations appear to be part of a favourable environment. A measure for relations with fellow workers is the amount of interpersonal contact and communication on the job (Chelte, 1983). According to Stein (1983), people need to be treated with dignity and respect under all circumstances. This could form part of one's satisfaction with fellow workers as respect is normally expected from people one works with.

*Supervisors.* Davis *et al.* (1984) made use of a step-by-step Delphi analysis to develop a definition and measure of quality of working life. Their results identified the degree to which superiors treat subordinates with respect and have confidence in their abilities as significant predictor of quality of working life. Koberg *et al.* (1999) found that feelings of empowerment are more likely in a work group with an approachable leader who encourages the worth of the group and that these feelings are positively correlated to job satisfaction. Superior leadership occurs when leaders broaden and elevate the interests of their followers and when they emphasize the purposes and mission of the group. The transformational type of leadership, as described by Bass (1990), is characterized by qualities such as consideration for followers, as well as the ability to inspire and intellectually stimulate followers. The transformational leader meets the emotional needs of each follower by paying attention to their particular development needs. Followers are assigned tasks with those needs in mind, as well as the needs of the organisation. People with high needs to develop, who need to be creative, to do challenging work and to master skills and achieve goals, will be particularly very satisfied with this

type of leader and their satisfaction with their work life will be increased.

Pool (1997) hypothesized that leadership behaviour indicating friendship and respect between the leader and subordinates would have a significant and positive impact on job satisfaction and it did prove to be a powerful predictor. He also suggested that an inverse and significant relationship would exist between the leadership behaviour in which the leader organises and defines the relationships in the group and job satisfaction. He demonstrated that the higher the level of this leadership behaviour, the lower the level of job satisfaction. When the leader dictates how the job is to be performed, this results in little room for autonomy and creativity. Frone (2000) developed and tested a model of interpersonal conflict at work in a sample of young workers. The model predicts that conflict with supervisors is predictive of organisationally relevant psychological outcomes, such as job satisfaction.

Bateman and Organ (1983) found a correlation between leader behaviour perceived as positive by workers and specific facets of satisfaction. Satisfaction with supervision and promotional opportunities was found to be more important than pay, co-workers and the work itself. The rationale seems to be that the immediate supervisor represents the most direct source of variance in events that arouse a felt need to reciprocate or that influence positive affect.

Yukl (1998) sees supporting, developing, recognizing, rewarding and conflict management supervisor behaviour as conducive to good quality working relationships. It is more satisfying to work with someone who is friendly, cooperative, and supportive than with someone who is cold, hostile or uncooperative. Some forms of supporting behaviour reduce the amount of stress in the job;

higher job satisfaction is likely to result and less unhealthy consequences such as alcoholism and drug use. Overall extensive research demonstrates that subordinates of supportive leaders are usually more satisfied with their leader and with their job. Yukl (1998) mentions the following behaviours that are associated with supportive leadership: acceptance and positive regard; polite and patient, not arrogant and rude; bolster self-esteem; recognition for achievements and contributions by each employee; assistance with the work when needed and help to overcome bureaucratic obstacles and willingness to help with personal problems.

A demanding job and job insecurity are associated with low life quality, while supervisor support appears to be an important component of high life quality. Moen (2000) found that employees with supportive supervisors experience far better quality of life.

### *Intrinsic Factors*

After analysing the data of international surveys, Thurman (1977) came to the conclusion that the major causes of dissatisfaction lay in the continuing lack of responsibility, autonomy and discretionary authority offered by most jobs, that results in limited opportunities to use knowledge and abilities. He also discovered that the job aspects about which workers express the least satisfaction and are frustrated with are career aspirations and the desire for interesting, fulfilling work. These are all intrinsic facets of work as they are embedded in the work itself. Other facets that fall in this category are:

*Job Content.* Thurman's (1977) analysis found several aspects of a 'good job.' These are variety, learning opportunities, the possibility of organising one's own work, mental challenge, growth and being given a chance to do the things one does best. He also found that there is a need to create jobs that are more meaningful

and creative and that such jobs are more satisfying and give a greater personal stimulus to development than specialized, routine tasks. Davis, Levine and Taylor's (1984) analysis to develop and define a measure of quality of working life resulted in the identification of variety in the daily work routine, challenge of work, good future work opportunities and contribution to society as significant predictors of quality of working life.

*Variety.* Observations of workers before and after the introduction of greater variety into their jobs made it clear that highly repetitive work gave rise to low satisfaction (Warr, 1987).

*Opportunity to use and develop human capacities.* With regard to opportunities to use and develop abilities and skills in a job, Walton (1975) questions whether a particular job allows for substantial autonomy and self-control relative to external controls; permits the learning and exercise of a wider range of skills and abilities, rather than a repetitive application of few skills; obtains meaningful information about the total work process and the results of one's own actions, in order to appreciate the relevance and consequences of one's actions; embraces a whole task in order to provide meaningfulness; embraces planning as well as implementation activities; contributes to maintaining and expanding one's capabilities; and provides the opportunity to use acquired knowledge and skills in future work assignments. Workers reporting no opportunity to use their abilities in their job exhibited significantly lower job satisfaction (Warr, 1987).

*Control or autonomy.* This is the degree to which a work environment permits an individual to control activities and events. Freedom of action, discretion, influence, power, participation in decision-making and decision latitude on the job is inseparable from a high quality of work life (Stein, 1983; Warr, 1987).

*Meaningfulness.* Spreitzer, Kizilos and Nason (1997) investigated the effect of dimensions of psychological empowerment on satisfaction. They report that most empirical research has shown a strong link between meaning and work satisfaction and this was also confirmed in their research. They base their choice of this dimension on literature that emphasises the importance of the degree to which an individual finds work personally meaningful as precondition for work satisfaction. They also refer to the link between meaning and satisfaction in the transformational leadership literature, where it is argued that a sense of meaning results in increased motivation and satisfaction.

*Autonomy.* Another dimension found by Spreitzer *et al.* (1997) as being a critical determinant of satisfaction and which is considered a key component of intrinsic motivation, is autonomy. In their study, Ducharme and Martin (2000) found autonomy to be the strongest predictor of overall job satisfaction compared to complexity, pressure and income. Reis, Sheldon, Gable, Roscoe and Ryan (2000) described activities related to autonomy as something not enforced by the external environment, but rather performed out of interest and enjoyment.

*Initiative.* High discretion tends to be associated with more loosely defined jobs, such as those given to senior managers. Some jobs can be clearly laid down, but leave the person discretion within the boundaries specified. Others may require even a manager to check with a senior before taking any decision that is not strictly a routine task. The balance between the degree of clarity in the role and the amount of discretion allocated to it is important, for between them they determine the degree of control the person has over his or her environment. Control is becoming a central concept in the stress literature, where lack of it seems to increase people's perceptions of stress which leads them to experience emotional strain (Payne, 1987). Some researchers

take a very strong position regarding the importance of personal control; they posit that persons are motivated to seek control and that the possession of control is necessary for the individual's well-being. As an important aspect of work, this will translate into the sense that people are given opportunities to use their own initiative in the execution of their work, are involved in participation in decision-making and are able to influence certain outcomes (Greenberger & Strasser, 1986).

*Recognition.* Recognition means being known as an individual and being visible not only personally but as a contributor (Stein, 1983). Recognizing is one of the behaviours of leaders mentioned by Yukl (1998). It involves giving praise and showing appreciation to others for effective performance, significant achievements and important contributions. According to Yukl, recognizing is one of the most neglected managerial practices, even though it can be one of the most effective for building commitment, increased job satisfaction and improving working relationships. Most studies that measured positive contingent reward behaviour using questionnaires found a positive correlation with subordinate satisfaction.

*Progress and development.* These are among the benefits we derive from work. They include the internal rewards available from the organisation: challenge, exercise of competence, development of skill and a sense of accomplishment (Stein, 1983).

*Challenge.* The amount of challenge a person has in a job is noticeable in development of abilities, freedom to decide on work control methods, degree of interesting work and a chance to see results of work (Chelte, 1983).

*The social relevance of work life.* Organisations seen not to be acting in a socially responsible manner, for example honouring

human rights, will cause increasing numbers of workers to depreciate the value of their work and careers which in turn affect their self-esteem (Walton, 1975).

*Clarity.* Low levels of clarity, or high uncertainty, are generally found to be detrimental, especially over long periods of time. Warr (1987) describes three types of clarity: information about the results of behaviour in the form of feedback about the consequences of action is a minimum requirement for the establishment and maintenance of personal control and for the development and utilization of skills; task feedback for learning promptly about outcomes; information about the future and information about required behaviour, also referred to as role ambiguity. Low clarity about future career developments was found to be significantly associated with high levels of job dissatisfaction, job-related depression and job related anxiety.

Payne (1987) considers the degree to which job content is specified and the degree to which the incumbent is given discretion about what, when and how he or she does the job. Roles can be very clearly defined with detailed written instructions, or they can be left unspecified and ambiguous. There is a correlation between role clarity, role ambiguity and role conflict. Clear jobs create less ambiguity and lead to less conflict among the role-holders of associated jobs. A meta-analysis of results relating these role variables to measures of job satisfaction shows that both role conflict and role ambiguity relate to lower satisfaction and more signs of psychological and physical illness.

#### 2.2.4.3 *Social Factors*

Since work and career are typically pursued within a framework of social organisations, the nature of personal relationships becomes an important dimension of the quality of working life.

*Social Support.* Membership in work groups marked by patterns of reciprocal help, socio-emotional support and affirmation of the uniqueness of each individual, could have an effect on individual's satisfaction. So too will a sense of community and the way members of the work organisation relate to one another about their ideas and feelings have a positive effect (Walton, 1975). The social climate can modify the effects of negative job conditions. At the individual level, the social relationships surrounding a person (climate) have been shown to have important consequences for mental health and even physical well-being. Social support occurs in the form of comfort and emotional security, direct help with things like money or practical assistance and information, which can help people to solve their problems and reach decisions about their situation (Payne, 1987).

Meir, Tziner and Glazner (1997) studied the importance of group membership to job satisfaction. They found that the importance of groups emerged more significantly as an independent predictor of job satisfaction over time. Because social support has its source in the work group, this may explain why groups may be a considerable factor in determining job satisfaction. Placing importance on the work group results from the perception that it can provide social identity and opportunities for social interaction and help in surmounting psychological and functional obstacles in organisational life.

In their study, Ducharme and Martin (2000) suggested that social support arises from affective support and instrumental support. Affective support provides the recipient with feelings of being accepted and cared for by co-workers, while instrumental support involves functional and material assistance in response to specific needs in the execution of work. They expected to find that workplace relationships may be a source of satisfaction and may

contribute directly to overall job satisfaction regardless of stresses and rewards encountered at work. In fact, when comparing the estimates for the two social support variables, both forms of co-worker support have significantly positive effects on job satisfaction, but instrumental support appeared to have made a relatively stronger contribution. In their study, it was the third strongest predictor of satisfaction with work.

*Friendship Opportunities.* Reported friendship opportunities at work are significantly positively correlated with job-related mental health. Support received from one's co-workers and boss is found to contribute significantly to a range of context-free variables, such as low anxiety, depressed and somatic symptoms and high self-esteem and subjective competence (Warr, 1987).

#### 2.2.4.4 *Organisational Climate*

Field and Abelson (1982) see job satisfaction and the climate of the organisation as related. They found that the more an area of work is valued, the higher is the relationship between the climate and satisfaction. They refer to experiments where different climates were created and it showed that different climates contribute to different levels of job satisfaction.

Organisational climate has been defined in terms of attributes, models, organisational context, structure, values and norms, as well as different facets of organisational and subgroup processes such as leadership, conflict, reward, communication and control. Normally it entails those attributes of a particular organisation that may be concluded from the way the organisation operates and deals with its members and its external environment (James and Jones, 1974). Forehand and Gilmer (1964) defined organisational climate as referring to the set of characteristics that describe an organisation and that distinguish the organisation from other organisations, are relatively enduring over time, and influence the behaviour of people in the organisation. Wilson and Wagner (1997) used Bennett's 1995 and Sherman and Bohlander's 1992 definitions in

describing organisational climate as the general internal organisational environment, which is determined by the structure, leadership, technology, social element, the physical environment, and economy. For organisational culture they refer to the elements identified by Deal and Kennedy in 1982: business environment, values, rites and rituals, heroes and cultural network. According to Wilson and Wagner (1997), culture prescribes the climate. The definition used by Lin (1999) is quite straightforward and adequate. It distinguishes organisational climate as the shared perceptions about organisational conditions, while organisation culture is the shared assumptions and values by group members. Organisational climate is a reflection of a dynamically interacting process involving organisational conditions, internal employees and management practices.

It was found that members of an organisation had more finely differentiated perceptions of their work climate than that of their total organisation's climate. Organisational attributes represent stimulus conditions, while perceived organisational climate represents a set of responses to the organisational characteristics and processes (James and Jones, 1974). According to Field and Abelson (1982), climate occurs on three distinct levels, namely organisational, group and individual level. Consensus on climate among a group's members and significant differences between the climate perceived by two or more groups within the organisation are criteria of group climate. Climate is, therefore, the perception by individuals of their organisational environment. They refer to opinions that assert that the individual acts as an information processor when forming climate perceptions, using data from the organisation and personal characteristics of the perceiver such as values and needs. Their model views climate as a perceptual phenomenon that occurs within individuals. They, therefore, call it psychological climate, as it is determined through the interaction of 'objective' facts and inter-subjectivity. Group and organisational climate occur if there is a consensus of climate perceptions by its members. These latter climates may differ from an individual's psychological climate perceptions, but if broader climates do exist, most individuals within the appropriate unit would view climate similarly.

Forehand and Gilmer (1964) defined these stimuli that confront the individual and place constraints upon the freedom of choice, as variations in the objects or events available to be perceived. Examples of such stimuli are social aspects, procedures, machine design, communication systems, competitiveness among work group members, security of employment and opportunity for development. A particular organisational property may influence all or almost all members and is termed “direct influence,” while “interactive influence” has a certain effect on some independent identifiable persons, but another effect, or no effect, on others. Joyce and Slocum (1982) describe psychological climate as referring to individual descriptions of organisational practices and procedures. Tustin (1993) concluded that an organisation should only be described in terms of the consensus amongst members about their perceptions regarding the organisational climate. This confirms that psychological climate becomes collective or group climate upon significant consensus of individuals’ climate perceptions: the greater the consensus, the greater the predictive power of climate.

Pool (1997) found organisational characteristics to have a significant and positive impact on job satisfaction. These organisational characteristics included cohesive work groups, advisory support from staff, organisational rewards not controlled by the leader and the distance between supervisor and subordinate. Subordinates who rated the organisational aspects high, exhibited higher job satisfaction than those who rated it low.

Kirsh (2000) carried out an analysis on the relationship of four variables to employment, namely empowerment, social support, organisational climate and person-environment fit. Items from the Workplace Climate Questionnaire were pooled together with other instruments in compiling the questionnaire measuring satisfaction with quality of work life. Results point to the importance of considering workplace climate and its congruence with individuals value systems in promoting positive vocational outcomes.

Different authors distinguished the following aspects of organisational climate that have an impact on its members and that can be perceived as satisfactory:

*Autonomy.* The extent to which employees are allowed to plan and schedule their work as they choose to, as determined by rules and regulations and actions of co-workers (Joyce and Slocum, 1982).

*Structure.* The debate with respect to structure centres mainly on “flat” (few layers in the hierarchy) versus “tall” (many layers) structures, although no conclusive evidence has been found that one contributes more towards satisfaction than the other. There was evidence, however, of interaction between size and shape of the organisation: in relatively small organisations the extent to which managers report their needs to be satisfied was higher for flat than for tall organisations, but in larger organisations reported need satisfaction was greater for tall organisations. Experimental studies indicate that satisfaction with job and results are greater in structures with a wider spread of participation. Participation, opportunities to contribute in a creative manner and to be able to use initiative and autonomy are factors that are influenced by structure (Forehand and Gilmer, 1964). According to Walton (1975), important contributing attributes to a member’s self-esteem are the absence of stratification in work organisations in terms of status symbols and/or steep hierarchical structures and the existence of upward mobility as reflected, for example, by the percentage of employees at any level who could qualify for higher levels.

James and Jones (1974) refer to the degree of structure imposed upon the position as closeness of supervision. The extent to which superiors actively direct or intervene in the activities of their subordinates has an effect on subordinates who value autonomy (Joyce and Slocum, 1982). This study will therefore focus more on initiative and autonomy than on satisfaction with the structure itself.

*Reward.* The reward system of an organisation is based on factors of reward, promotion opportunities and achievement orientation (James and Jones, 1974). Rewarding normally involves tangible benefits for effective performance, significant achievements and helpful assistance. Research indicated that contingent rewards often increase motivation and satisfaction although results were not significant in every study. It is essential to be fair and objective when deciding how to allocate rewards, otherwise it can give rise to more dissatisfaction than satisfaction. Rewards should be based on performance indicators that reflect a person's effort and competence (Yukl, 1998).

While merit pay plans are supposed to motivate and reward employees, the extent to which adequate rewards are available within the organisation and are contingent upon performance (Joyce and Slocum 1982) determines the effect. Theories of human motivation suggest that merit pay encourages employees to excel at their job and will produce positive results, but there are potential threats that may lead to negative outcomes. Whenever extrinsic rewards are used, it is probable that they will have a negative effect on the people's intrinsic motivation. Competitive-contingent rewards were said to be the most detrimental. However, rewards that are appropriately linked to performance, representing positive feedback in an informational context, ought not to be detrimental. The cost to the system, however, in signifying good performance through the use of performance-contingent rewards, is that many people end up receiving the message that they are not doing very well, and this is likely to be demotivating and give rise to dissatisfaction (Deci & Ryan, 1985).

Prendergast and Topol (1996) mention the possibility that organisations use bureaucratic rules in pay and promotion decisions to protect themselves from accusations of favouritism

and to limit the prospects of mismanagement of compensation practices. Another factor is that when money is involved there is a tendency toward leniency (Brody, Frank & Kowalczyk, 2001). Organisations tend to give too much weight to non-corruptible measures such as seniority in compensation and promotion decisions. From this it is clear that an organisation's reward system and how it is perceived in terms of fairness are closely related.

*Leadership.* Forehand and Gilmer (1964) asked the question whether leadership is truly characteristic of organisations rather than simply of certain individuals. There is some evidence that organisations can be reliably described in terms of typical leadership practices as persons in leadership positions control significant organisational properties. As the climate of an organisation is also supposed to prescribe what behaviours are acceptable and what not, a particular style can be more the acceptable norm than others. Field and Abelson (1982) see organisational climate as created by leadership styles. The degree to which management is sensitive to the interests, needs and aspirations of the managers reporting to them is one such leadership characteristic mentioned by Joyce and Slocum (1982).

Studies of leadership began around the 1930s. Earlier approaches, such as the situational or contingency models focused on identifying the behaviours or styles, which appeared to predict effective outcomes depending on various situational contingencies. However, when organisations were faced with constant change during the 1970s and 1980s these approaches did not provide all the answers. During the early 1980s a major paradigm shift in approaches to leadership from 'transactional' to 'transformational' transpired (Alimo-Metcalfe, 2001).

Burns was one of the first to distinguish transformational leaders

from transactional leaders in 1978. Where transactional leaders focus on rewards and punishments to influence followers, transformational leaders motivate followers by appealing to higher ideals. Bernard Bass, Distinguished Professor of Management and Director of the Centre for Leadership Studies at the State University of New York at Binghamton, built on Burns' notions of leadership. On the basis of research using the Multifactor Leadership Questionnaire (MLQ), that he and his co-researcher, Bruce Avolio, devised, Bass found the two approaches to be independent and complementary. According to Bass's theory, transactional leadership entails an exchange between leader and follower in which the leader rewards the follower for specific behaviours, and for performance that meets with the leader's objectives, while non-conformity is criticized or punished. On the other hand, superior leadership performance occurs when leaders broaden and elevate the interests of their employees, when they generate awareness and acceptance of the purposes and mission of the group and when they move their employees to look beyond their own self-interest for the good of the group (Bass, 1990). A range of studies, conducted across the world, substantiated the notion that transformational leadership has a strong positive relationship with a range of outcome variables, including objective measures of organisational productivity, as well as subjective evaluations, such as greater job satisfaction and commitment, and lower levels of stress (Alimo-Metcalfe, 2001).

Bass and Avolio (1990) elaborated on this basic definition and designed the Full Range Leadership model on which the leadership development programme employed in the SANDF is based. They proposed that transformational leadership comprises four dimensions. The first dimension is idealized influence and is described as behaviour that results in follower admiration, respect and trust. The second dimension, inspirational motivation, means that the leader communicates high standards of performance and

is reflected by behaviours that provide meaning and challenge to followers' work. The third dimension, intellectual stimulation, implies that leaders solicit new ideas and creative problem solutions from their followers and encourage alternative and new approaches for performing work. It makes it possible for followers to be more independent and autonomous. The fourth dimension is individualized consideration. This reflects leaders who listen attentively and pay special attention to follower achievement and growth needs. It is the goal of the SANDF to establish a transformational leadership style as part of the preferred culture by developing leaders to be more transformational in their behaviour.

Tracey (1998) investigated similarities between transformational leadership and fundamental managerial practices and found some empirical support for the validity of Bass and Avolio's transformational leadership construct. In using the Multifactor Leadership Questionnaire, researchers found significant relationships between subordinate ratings of leader effectiveness and satisfaction with their leader and transformational leadership across a number of settings. In addition, there is some evidence that transformational leadership is significantly related to other relevant outcome variables, such as follower perceptions of role clarity, mission clarity and openness of communication. Tracey (1998) concluded from his study that the behaviours that are unique to transformational leadership are non-traditional approaches to solving problems, making decisions and improving work; the focus on the personal development of followers and the promotion of a future orientation such as articulating a compelling vision and fostering a strong sense of purpose. In addition, a regression analysis showed that the composite transformational leadership measure accounted for a significant proportion of variance in ratings of leader effectiveness, beyond that accounted for by a managerial practices scales.

Transformational leadership has become one of the most prominent topics in current research and theory on leadership. Much empirical work on transformational leadership is being done, according to the many doctoral dissertations, theses and reports that are being gathered at the Centre for Leadership Studies of which many focus on satisfaction (Bass, 1995). Managers who behave like transformational leaders are more likely to be seen by their colleagues and employees as satisfying and effective leaders than are those who behave like transactional leaders, according to their colleagues', supervisors', and employees' responses on the Multifactor Leadership Questionnaire (MLQ). Similar results have been found in various organisational settings (Bass, 1990).

Lieutenant General Walter F. Ulmer Jnr (1997) of the US Army thinks that a healthy organisational climate enhances the development of individual leadership, while successful leadership contributes to the strength of the organisational climate. According to him, leadership and discipline go hand in hand and good leaders must establish themselves as firm, competent and fair. In troop units, he reckons, to be sensitive to people's needs is fine for moral reasons, but the emphasis should be on accomplishing the leaders' mission efficiently.

*Goals.* In the model of Field and Abelson (1982) the goals and the functions of the organisation form part of organisational climate. The goals of the organisation are a given and to some extent the satisfaction of the individual member will depend on how well his own needs and goals are aligned with that of the organisation. However, the aspect about goal direction that contributes most to satisfaction is the extent to which the sub-goals chosen to accomplish the overall goals are unambiguous and clearly defined (Forehand and Gilmer, 1964).

*Equity and Fairness.* Adams (1963) provides evidence that

equity is not merely a matter of getting paid fairly for work, nor is inequity simply a matter of being underpaid. There is an element of relative justice involved that exceeds satisfaction with pay and benefits and brings about perceptions of equity or inequity. Whenever any exchange takes place, there is the possibility that one party may feel that the exchange was inequitable. When employees exchange services for pay, they have education, intelligence, experience, training, skill, seniority, age, gender, ethnic background, social status, and perhaps most importantly, the effort that is expended, to offer. These are what they perceive as their contributions to the exchange for which they expect a just return, pay and benefits. These contributions are also called inputs. Inputs are as perceived by their contributor and are not necessarily the same as those of the other party to the exchange. This suggests that if either the owner or both members of the exchange recognize its existence, the attribute has the potentiality of being an input. Whether or not an input is an input, is contingent upon the owner's perception of its relevance to the exchange. If he or she perceives it to be relevant and expects a just return for it, it is an input (Adams, 1963). For example, where gender and ethnicity were previously considered an input for salary scale, new labour legislation rules out any form of discrimination on these lines and are no longer valid inputs with respect to salary and benefits and should not be except for the sake of affirmative action where appointments in senior positions are concerned.

On the other side of the exchange are the rewards received by an individual for his or her services. These outcomes, as they are termed, include pay, rewards, seniority privileges, fringe benefits and status. Outcomes too are perceived in terms of recognition and relevance. If the recipient considers it relevant to the exchange and it has some value for him or her, it is an outcome. For example commendation certificates may for some not be acceptable as a reward, because they have no usefulness for

them, whereas money can be utilized to buy necessities (Adams, 1963).

There exist normative expectations of what constitutes “fair” correlations between inputs and outcomes. The bases of the expectations are the correlations applicable to a reference person or group, for example a co-worker or group of members in the same or different organisation. A person may determine whether his or her inputs and outcomes are fairly correlated by comparing them with the relationship between the inputs and outcomes of others in the same position. In a bureaucratic organisation pay is fairly equal along seniority lines, but the allotment of performance awards are scrutinized for equity. When the normative expectations of the person making social comparisons are violated - when it is thought that inputs and outcomes are not in balance in relation to those of others, feelings of inequity result (Adams, 1963).

Runciman (1966 p. 10) described the term ‘relative deprivation’ as the authors of a large-scale social psychological study of the American army originally called it during the Second World War. Instead of a definition the following description is given: If A, who does not have something but wants it, compares himself to B, who does have it, then A is relatively deprived with reference to B. Similarly if A’s expectations are higher than B’s, or if he was better off than B in the past, he may when similarly placed to B feel relatively deprived by comparison with him. A strict definition is difficult but we can say that A is relatively deprived of X when (i) he does not have X, (ii) he sees some other person or persons, which may include himself at some previous or expected time, as having X, (iii) he wants X, and (iv) he sees it as feasible that he should have X. Possession of X may mean avoidance of or exemption from Y. To be able to judge whether one is being treated fairly, it is theorized that one must compare oneself with others who are

presumably getting more of what one wants.

Walton (1975) regards equity as part of the constitution of the work organisation. The constitution involves decisions regarding matters such as equal opportunity, privacy and the right to openly express opinions, as well as the right to equitable treatment in all matters including for example, the employee compensation scheme, symbolic rewards and job security.

Meindl (1989) affirms the opinion of other researchers and theorists that an equity-parity contrast exists. According to him, "equity" is relevant to perceived entitlements based on relative contributions or inputs, while "parity" is sometimes referred to as equality, calling for resources to be distributed equally to all.

Organisational justice is another concept related to equity and fairness and is described by Scandura (1999) in terms of distributive, procedural and interactional forms of justice. Distributive justice is defined as the individuals' perception that the outcomes that they receive are fair. Examples of distributive outcomes are pay increases, promotions and rewards for performance. Procedural justice is defined as an employee's perception that the procedures followed by the organisation in determining who receives benefits are fair. An example of procedural justice is whether or not consistent rules are followed in making decisions regarding rewards and allocation of resources. Research on justice has indicated that members will accept a decision if procedural justice is followed, even if the distributive outcome is less than what an individual expected. For example, a low pay raise would still be accepted if the organisation's procedures of performance appraisal and rewards were seen as being followed in the determination of the raise. Interactional justice involves the manner in which superiors communicate organisational justice to followers.

*Consideration, warmth and support.* James and Jones (1974), as well as Joyce and Slocum (1982) mention warmth and support, leader support and nurturance of subordinates and the degree to which supervisors maintain warm and friendly relations as important aspects in satisfaction. One aspect considered to be a sign of warmth and support in an organisation, is how effectively conflict is resolved. Suls, Martin and David (1998) refer to research that indicates that conflicts with other people are among the most frequent and potent sources of distress in daily life. However, they also maintain that there are individual differences insofar as conflict is experienced as distressing. According to their findings, individuals who are motivated to maintain positive relations with others became increasingly distressed as the number of interpersonal conflicts increased during the day.

*Initiative.* James and Jones (1974) considers factors in the organisation that are based on how members are treated in terms of individual responsibility and opportunities for exercising individual initiative as important for satisfaction with organisational climate.

*Motivation to Achieve:* The degree to which members of the organisation are viewed as attempting to excel, to address difficult problems, or to advance themselves will ultimately affect standards and consequently the satisfaction of members (Joyce and Slocum, 1982).

*Communication.* Communication may be the process most vital to the success of an organisation. It is through communication that employees learn what goals they are to strive for, what is expected of them, find out how to accomplish these goals and get feedback on the achievement of goals. Because the distribution and reception of information play such an important role in

organisational life, effective communication ought to contribute to the satisfaction of the members of the organisation. Orpen (1997) found that among managers, both job satisfaction and work motivation were positively affected by the quality of communication within their firms.

*Participative Management.* Forehand and Gilmer (1964) contend that an organisation in which personnel policies are participative, democratic and unstructured, will differ from one whose practices are non-participative, authoritarian or structured in that employee satisfaction will be higher. However, there is evidence that the hypothesis may be true for some jobs or some parts of an organisation, but not for others.

Participation is a process in which influence is shared among individuals who are otherwise hierarchically unequal. Participatory management practices the balance between the involvement of managers and their subordinates in information processing, decision-making or problem-solving endeavours. Many managers, leaders and a number of researchers share the belief that such practices have substantial, positive effects on performance and satisfaction at work (Wagner, 1994). Wagner's research suggests that participation can have statistically significant effects on performance and satisfaction, but the average size of these effects is small enough to raise concerns about practical significance.

Yukl (1998) sees the involvement of subordinates mainly as a responsibility of the leader. Participation is likely to increase the quality of decisions when participants have information and knowledge the leader lacks and the opportunity to have some influence over a decision usually increases commitment. Other benefits are increased acceptance of decisions by subordinates, decision-making skills are developed and conflict resolution and

team building is facilitated. The outcome criterion in most participation research was overall satisfaction and performance of subordinates, rather than satisfaction with the way a particular decision was handled or commitment to implement that decision effectively.

*Identification.* Tustin (1993) describes this dimension as a feeling that an employee belongs to an organisation and is loyal towards the organisation.

#### 2.2.4.5 *General Aspects*

Some research studies do not clearly distinguish between intrinsic and extrinsic factors or social and organisational climate factors but follow a more exploratory approach. Goodale *et al.* (1975) asked people about the most satisfying and the most dissatisfying part of their jobs. Greatest satisfaction was felt on contact with clients and co-workers, challenge, and autonomy. The most dissatisfying aspects were problems with supervisors and co-workers, shift work or working hours, and repetitive or dirty jobs. They compiled the following list of components: Social activity and participation, self-development activities, task success, physical health, physical and economic security, task involvement, task satisfaction, social involvement and feelings of relatedness, self-reported health, perceived security, fears and anxieties, and perceived growth and mastery. The work context was mentioned most often as a source of disliked activities, but ranked second for most-liked activities.

Most recent research studies are aimed at determining the moderating effect variables have on other variables and their outcomes. Norris (1999) examined and tested a model of the relationships between seven job characteristics and job satisfaction of nurses among others. The job characteristics were feedback from agents, autonomy, dealing with others, feedback from the job itself, skill variety, task identity and task significance. Professional experience, growth need strength and context satisfactions (satisfaction with pay, job security, co-workers, and supervisors) were investigated to determine their moderating effects on the relationships between job characteristics and two outcomes:

nurses' job satisfaction and their ethical practice. The job characteristics as described in Hackman and Oldham's 1980 theory provided a framework for this research.

This study produced three major findings. First, all seven job characteristics predict nurses' job satisfaction. Second, there is evidence that professional experience, growth need satisfaction, satisfaction with pay, satisfaction with job security, satisfaction with co-workers and satisfaction with supervision moderate some relationships between job characteristics and ethical practice.

## **2.3 NEEDS**

Needs have been described as instinct, necessary for the survival of the human race, as impetus for behaviour, as a motivational force and as personality traits. In the 1950's it became clear that much of human motivation is based not on drives, as the belief always was, but rather on a set of innate psychological needs (Deci & Ryan, 1985). For this study the needs of the members of the organisation will be investigated to determine what people want from their organisation, which needs are most prevalent and regarded as most important in what groups and how the fulfilment or non-fulfilment influences peoples' satisfaction with quality of work life. For this purpose the relevant need theories from the literature will be discussed shortly, needs will be defined, the relevance of needs to mental health will be discussed, the categories of needs will be looked into and a comprehensive list of needs, described in the literature, will be compiled. Lastly, consideration will be given to what the literature says about the relationship between need fulfilment and quality of work life.

### **2.3.1 Need Theories**

Freud's theory is described by Hjelle and Ziegler (1976) as a theory of human motivation, based entirely upon energy aroused by the body's tissue needs. He believed that the total amount of psychic energy deriving from tissue needs is invested in mental activities designed to reduce the excitation created by the need. Freud uses the term instinct, and the source of the instinct is the bodily

condition or need from which it arises. The aim of an instinct is always to eradicate or reduce the excitation deriving from its need. If the aim is achieved, the person then experiences a momentary state of blissfulness. Although there are numerous ways of attaining the aim of an instinct, there is a consistent tendency to maintain the state of excitation at minimal level.

Murray (1938) sees needs in terms of personality. According to him, individuals could be classified according to the strengths of various personality-need variables. These needs were believed to represent a central motivating force, in terms of both the intensity and the direction of goal-directed behaviour. A need was defined as a force in the brain, which organizes perception, intellect and action in such a way as to transform an unsatisfying situation (Steers & Porter, 1987).

Murray's work was mainly an endeavour to demonstrate the extensive effects of needs on human actions. Although needs were believed to be an innate motivational force, it was also believed to be activated by cues from the external environment. This conception closely resembles the concepts of "motive" and "drive" and can be compared to a state of disequilibrium. According to Murray, each need was composed of two factors: a qualitative or directional component, which represents the object toward which the motive is directed, and a quantitative or energetic component, which represents the strength of intensity of the motive toward the object (Steers & Porter, 1987; Hjelle & Ziegler, 1976).

To explain the above conception, Hjelle and Ziegler (1976) used the example of the need for achievement for describing and explaining what may underlie and direct a person's activities. A person with a high achievement need (the motivational force seated in the brain that organises perception) could either seek out situations in which he or she could achieve or simply be stimulated by outside events that would instigate their achievement motivation. It also serves to organise various psychological processes, such as perception. The high achievement person perceives an event as an opportunity to achieve; a low achievement person would perceive it in other terms, for example, a threat or waste of time. Needs organise the way people perceive, think, feel and act.

Steers and Porter (1987) point out that Murray viewed an individual's personality as being composed of many divergent and often conflicting needs that had the potential for motivating human behaviour. They also use the example of individuals with a strongly aroused need for achievement, who would typically attempt to engage in activities where they could excel and accomplish something important to them. According to this model, needs may be manifest ("activated") or latent. To say that a need is latent does not imply that the need is not strong, but only that it has been inhibited and has found no overt form of expression. Therefore, a person may have a high need for achievement, but such a need may not be strongly aroused because of impediments in the environment (such as the lack of a challenging task). The result would theoretically be poor performance. If sufficient arousal of the need were attained (by providing a challenging job), the resulting drive could be expected to energize achievement-oriented behaviour.

Hjelle and Ziegler (1976) further describe Murray's theories in terms of a constant dynamic interplay among needs, and his view that needs are arranged in a hierarchy of urgency. The most intense needs are those that come to the fore with the greatest urgency if they are not satisfied. Whenever a single course of action satisfies two or more needs simultaneously, there is a fusion of needs. For example, a person might satisfy both a need for affiliation and a need for nurturance through a single activity by joining a social group or doing volunteer hospital work. The two needs complement one another in that they are both expressed in the same behaviour. Substitution is another of Murray's principles governing need interaction. Basically, the principle states that certain needs are satisfied only through the fulfilment of other less demanding needs. For example, a need for achievement can be helped if one uses the need for affiliation with seniors by befriending them and gaining their acceptance, which may enhance the likelihood for promotion, which is the real need. Needs may often be in conflict with one another and, therefore, produce tension. Murray believes that most neurotic behaviour is a direct result of such inner conflict. An example would be the person with strong needs for autonomy and independence, who also wants to be accepted as one of the crowd. It is, therefore, not always possible to infer needs by casually observing people's behaviour (Hjelle &

Ziegler, 1976).

During the 1950s, Abraham Maslow proposed his well-known theories that human needs arrange themselves in a hierarchy. Basic needs are dominant and fundamental and people must first fulfil their basic needs for food and shelter; as these needs are met, they are then motivated by the higher needs for social support, belongingness, love, self-esteem, the respect for others, and finally self-fulfilment. The needs that are unsatisfied tend to create tension within people that lead them to behave in ways that are aimed at reducing the tension and restoring internal equilibrium. Once a certain need or set of needs becomes satisfied, it loses its potency as a motivating force until it again becomes manifest (Campbell, 1981; Steers & Porter, 1987).

Self-actualisation is defined as the process of actualisation of potentials, capacities and talents, as fulfilment of a mission or calling. Self-actualisation is realized in many different ways, since each person is different. If they constitute tensions, they are pleasurable tensions. Creative impulses and talents are desired, welcomed and enjoyed, meaning that the person who has the opportunity to use his talents and creativity will obtain satisfaction out of the process of creating (Maslow, 1968).

The needs for safety, belongingness and for respect can be satisfied only by other people, that is, only from outside the person, for example, co-workers in the organisation. In contrast, the self-actualising individual, whose basic needs are fulfilled, is far less dependent and anxious for honours, prestige and rewards, while being far more autonomous and self-directed (Maslow, 1968).

Another fundamental premise is that the needs which individuals pursue are universal across various populations and that they are arranged sequentially in hierarchical form, and as was mentioned, the individual moves up the hierarchy once the lower-order needs are satisfied to attempt to satisfy the next higher-order needs (Steers & Porter, 1987).

Graham and Balloun found support for this theory in 1973. The presumption was

that satisfaction of any given need should be negatively correlated with desire for satisfaction of that need (Kalliopuska, 1993). Kalliopuska tested the validity of the theory by rating students' sufficiency and willingness to improve satisfaction of physiological needs, needs of security, social needs and needs of self-actualisation. The data indicated that the more satisfied subjects were with their security needs, the less improvement they desired. The hypothesis was supported also among other needs.

Campbell (1981) recounted Erik Allardt's simplified version of this hierarchy. Allardt classified the basic human needs under having, relating (loving) and being. The need for having is satisfied through the material and impersonal resources an individual has and can master. The need for relating is concerned with love, companionship, and solidarity. The need for being denotes self-actualisation. The satisfaction of each of these needs is assumed to contribute independently to the individual's sense of well-being.

Steers and Porter (1987) discussed differences and similarities between Maslow's and Alderfer's theories. Alderfer proposed a modified need hierarchy theory that reduces Maslow's five levels into three. This model has become known as the "ERG theory," which stands for existence needs, relatedness needs and growth needs. Alderfer's model is similar to that of Maslow in that it suggests that individuals move up the hierarchy from existence needs to relatedness needs to growth needs, as the lower level needs become satisfied. However, it differs from Maslow's in two respects. Apart from the progression from one level in the hierarchy to the next as a result of satisfaction, Alderfer's ERG theory suggests that there is also a frustration-regression process. That is, when an individual is continually frustrated in attempts to satisfy growth needs, relatedness needs may re-emerge as primary and the individual may redirect his or her efforts toward these lower-order needs. The second difference is that Alderfer suggested that more than one need may be operative, or activated, at the same time. This aspect resembles Murray's manifest needs model.

Herzberg, in his Two-Factor Theory, suggests that every individual has two sets of needs. One set, labelled hygiene factors, relates to the physical and

psychological environment in which the work is done. Such persons or things as co-workers, supervisors, working conditions, and company policy would meet these needs. The second set of needs, labelled motivator needs, relates to the nature and challenge of the work itself. Things, such as the stimulation provided by job duties and responsibility attached to the job, will meet these needs (Landy, 1989).

Herzberg's theory was explained earlier in terms of the two sets of needs that give rise to satisfaction or dissatisfaction. He further explains that one set of needs stems from natural instincts plus all the learned drives which become conditioned to the basic biological needs and the other set of needs relates to the ability to achieve and, through achievement, to experience psychological growth. For example, hunger initially makes it necessary to earn money and then money becomes a conditioned drive even to earn more money than what is necessary to just feed oneself. The stimuli for the growth needs are tasks that induce growth; in the industrial setting, they are the job content. The growth or motivator factors that are intrinsic to the job are achievement, recognition for achievement, the work itself, responsibility and growth or advancement. The dissatisfaction-avoidance or hygiene factors that are extrinsic to the job include: company policy and administration, supervision, interpersonal relationships, working conditions, salary, status, and security (Herzberg, 1976).

In twelve different investigations, which included all different levels and occupational types, results indicated that motivators were the primary cause of satisfaction, and hygiene factors the primary cause of unhappiness on the job. Respondents were asked what job events had occurred in their work that had led to extreme satisfaction or extreme dissatisfaction on their part. Their responses were broken down into total positive job events and total negative job events. Motivators contributed 81% to job satisfaction and 31% dissatisfaction, while hygiene factors contributed 69% to dissatisfaction and 19% satisfaction (Herzberg, 1976).

Much attention has been directed to the notion of growth-need strength. This refers to the strength of a person's desire to obtain growth satisfaction from his

or her work. The latter is viewed in terms of the higher-order needs described by Maslow, and growth need strength is typically measured through items which tap a person's liking for work which presents challenges and which permits independence, creativity and personal development. Given that people differ in what they would like in a job, it may be expected that it would influence the way they feel about these job characteristics. Opportunity for control in a job is found to be more important for employees of high growth-need strength than for those of lower growth-need strength (Warr, 1987).

Deci and Ryan (1985) converged a variety of theories and came up with three types of innate psychological needs: self-determination, competence and interpersonal relatedness. They distinguished between intrinsic and extrinsic needs. Intrinsic needs differ from primary drives in that they are not based in physiological deficits and they do not operate cyclically, that is, breaking into awareness, pushing to be satisfied, and then loses its importance when satisfied and become latent. The intrinsic needs for competence and self-determination motivate an ongoing process of seeking and attempting to conquer optimal challenges. When people are free from the distraction of drives and emotions, they seek situations that interest them and require the use of their creativity and resourcefulness. The needs for competence and self-determination keep people seeking persistently for challenges that are suited to their competencies and that are neither too easy nor too difficult. When they find optimal challenges, people work to conquer them (Deci & Ryan, 1985).

Argyris (1987) describes personality as containing energy. The energy, located in the need systems, is always ready to release itself. When the boundary of the need system is strong enough, the energy will not release itself, but when the energy is stimulated enough, the need system is in action. Need systems that are quiet and not in action are inert needs or potential active needs. The more important a need, the more potential energy it has to release. This action has been called tension. Therefore, Argyris reasoned, a need that is in tension is a need in action.

According to Argyris (1987) all individuals strive to achieve their objectives, maintain themselves internally and adapt to their external environment. Since the

human personality is always at some or other stage of development, one can logically assume that, at any given moment in time, a person will be inclined to find expression for these developmental needs. It can, therefore, also be assumed that there are basic development trends characteristic of a relatively large majority of the population being considered, in spite of individual differences. Because of biological inheritance and socialization, people of the same culture tend to have some similar basic psychological characteristics and developmental trends, such as self-determination, independence, capability to behave in many different ways, interests in a process of seeking challenges with potential for intrinsic reward, to seek to secure the future, an awareness of and control over self and a sense of integrity and of self-worth. One of the most important needs of workers is to enlarge those areas of their lives in which their own decisions determine the outcome of their efforts. However, this does not prevent individuals to each express themselves in their own idiosyncratic manner (Argyris, 1987).

Nordenfelt (1993) sees needs as more complex than a common hierarchy of wants. Different wants have different importance to different people and some may be of vital importance. A person's desire to pass a course and be promoted may have a higher priority than to socialize with friends. As a result, he or she is more delighted if the former is realized than the latter. Many of our wants are logically related in hierarchies. One may want to have one to achieve the other. This, in turn, may be wanted for a further end, until an ultimate end wanted for its own sake is reached. A person may want to obtain promotion to earn more money to be able to afford a car to be able to take girls on dates to find the right girl to marry. Or he or she may want promotion to have more power and influence as an ultimate end. The question asked is how are these wants to be counted? Is it just one basic want or is each one a separate want? If only the basic abstract wants were counted, the result may be quite few entities, for example, have a marital partner or have power. Just as promotion and power can be construed as a single want, any number of contemporary wants can be reduced to one. Nordenfelt (1993) contends that the amount of satisfied wants do not necessarily bring happiness, but rather the priority of the want that is satisfied.

### **2.3.2 Needs Defined**

In Freudian theory, needs are defined as mental representations of bodily excitations reflected in the form of wishes and are termed instincts. An instinct, then, refers to an innate bodily state of excitation that seeks expression and tension release (Hjelle & Ziegler, 1976).

According to Murray's theory, a need was defined as a construct which stands for a force in the brain which organises perception, observation, comprehension, aspiration and action in such a way as to change an existing, unsatisfying situation in a certain direction (Steers & Porter, 1987).

Argyris' (1987) definition of need can be summarized as something that exists "in" the personality of the person; is related to all other needs; initiates and guides behaviour until the goal is reached, which destroys the tension, or until the tension is released in some or other way.

According to Deci and Ryan (1985), people are always looking for challenges to conquer that will fulfil their needs for competence and self-determination.

What they all agree on is that there must first be a deficiency of something that is necessary for well-being or optimum functioning and growth. This serves as inspiration or drive to do something directed at reaching a more preferred state, where the need no longer exists or is temporally fulfilled. Later authors defined needs more in terms of their different categories, such as physiological needs of the body or psychological or growth needs, for example, a need for achievement. Growth needs do not cease to exist, but are a continuous process and may differ from person to person.

### **2.3.3 Needs and Mental Health**

Maslow (1968) describes healthy people as those who have sufficiently gratified their basic needs for safety, belongingness and love, respect and self-esteem so

that they are motivated primarily by trends to self-actualisation. The self-actualising individual, by definition gratified in his basic needs, is less dependent, more autonomous and self-directed. Such people become far more self-sufficient and self-contained. The determinants that govern them are primarily inner ones, rather than social or environmental. They make independent choices about their potentialities and capacities, their talents, their latent resources, their creative impulses, their needs to know themselves and to become more integrated, more aware of what they really are and of what their purpose in life is to be.

Differing from early psychologists, who believed that the basic reason for life is to seek reduction of tension, recent researchers point out that people who seek only tension reduction are preoccupied with their own frustrations.

Psychologically healthy people, on the other hand, need satisfaction of the growth motives and usually have certain goals of self-actualisation or enhancement. They are willing to accept temporary frustration if it will help them in the long run. Thus, they may, at times, be more interested in sustaining and directing tension than in escaping from it (Maslow, 1968; Argyris, 1987; Kalliopuska, 1993).

Acton and Malathum (2000) investigated the relationship between basic need satisfaction, health-promoting self-care behaviour and selected demographic variables. Results of the study indicated that self-actualisation, physical and love/belonging need satisfaction accounted for 64% of the variance in health-promoting self-care behaviour. The findings of the study support Maslow's hypothesis that need satisfaction results in positive behaviour motivation. Results show that persons with higher scores on basic need satisfaction engaged in more health promoting behaviour and those with lower levels of need satisfaction reported fewer positive health related behaviours. As basic need satisfaction is positively associated with psychological health, it might free people to make better decisions about their health. Physical need satisfaction may free the person from anxieties about things such as hunger or finding secure living conditions that might occupy the mind and reduce actions towards a lifestyle that promotes health and well-being (Acton & Malathum, 2000).

Reis, Ryan and Sheldon (1996) conducted a diary study and examined the proposal that satisfaction of two psychological needs, competence and autonomy, leads to well-being. Independently, within-subject analyses showed that subjects experienced a good day when they felt more competent and autonomous in their daily activities, relative to their own baselines. Whereas competence involves feeling that one can act effectively and bring about goals, autonomy involves feeling that one's activities and goals are out of own choice and in accordance with intrinsic interests and values. Their hypothesis that autonomy and competence are both important and that greater well-being occurs when both these needs are fulfilled was supported.

A further study along these lines by Reis, Sheldon, Gable, Roscoe and Ryan (2000) investigated the hypothesis, based on Deci and Ryan's Self-Determination Theory, that personal well-being is a direct function of the satisfaction of basic psychological needs. They argued that the fulfilment of at least three needs is functionally essential to ongoing personal growth, integrity and well-being. These are the needs for autonomy, competence and relatedness. The need for competence is fulfilled by the experience that one can effectively bring about desired effects and outcomes, the need for autonomy involves perceiving that one's activities are endorsed by or congruent with the self, and the need for relatedness pertains to feeling that one is close and connected to significant others. Their findings provided clear support for relevance of these three basic needs to emotional well-being.

#### **2.3.4 Need Categories**

Apart from the biological and psychological categories of needs, Murray also classified needs as pro-active and reactive. Pro-active needs are aroused by some change of state occurring within the person. By contrast, reactive needs are evoked by environmental stimuli. As with any other classification system, however, some needs can be perceived as falling in both categories. The need for food is a good example; most of the time the need for food is a function of the

time interval as people are conditioned to eat three meals a day at set times (pro-active), while at other times it seems to rise directly in response to environmental stimuli (reactive), for example walking past a bakery and smelling freshly baked bread will entice one to go in and buy and eat bread (Hjelle & Ziegler, 1976).

Overt and covert needs constitute another of Murray's categories. Overt needs are allowed free expression by society. For example, in western societies one can freely express needs for achievement, affiliation or order. On the other hand, covert needs are not permitted open expression by the culture. Instead, they remain partly or completely unconscious and find their outlets primarily in dreams, fantasies, projections, and neurotic symptoms. Depending on social norms, needs for aggression and sex could easily fall in this category. It must be kept in mind that overt needs in one society may be covert in another (Hjelle & Ziegler, 1976).

The last of Murray's need categories is that of effect versus modal. An effect need is linked with some direct or specific goal state, usually motivated toward some identifiable goal or end result. The need or needs involved are directed toward some tangible result. Modal needs are those in which satisfaction is experienced throughout the activity rather than being linked only to its end result, for example writing a book. It is in the process of writing rather than seeing the end product that is the source of satisfaction. Murray describes this as the sheer pleasure function or the need to attain a high degree of excellence or perfection of performance. In Murray's system, then, how one satisfies a need is just as important as that one satisfies it (Hjelle & Ziegler, 1976).

Maslow took the lead in categorizing needs in terms of deficit or physiological needs and actualising or growth needs and most other theorists followed this trend. The deficit-needs are shared by all members of the human species and to some extent by others species as well. Self-actualisation is idiosyncratic since every person is different (Maslow, 1968).

Argyris (1987) makes two other distinctions, namely inner and outer needs and conscious and unconscious needs. An example of an inner need is the need to

maintain adjustment of the self in relation to the world in which it exists and is noticeable in the expression of emotion. The outer needs are closer to the surface of the personality. Little emotion is created if these needs become active. Whereas the inner needs give an indication as to what the person is, outer needs show what the person does. People are never aware of all their needs. Some needs, usually the most inner ones, are unconscious.

For the purpose of this study the categories that will be most relevant will be extrinsic and intrinsic needs. Extrinsic needs are related to the physical environment, rewards, and behaviour of others, while intrinsic needs can be satisfied in the job itself, for example when they allow for initiative, creativity, responsibility and variety. The latter relates to that unique human characteristic, the ability to achieve and, through achievement, to experience psychological growth. The stimuli for the growth needs are tasks that induce growth; in the industrial setting, they are the job content (Herzberg, 1976).

Deci and Ryan's (1985) theory, which describes three types of innate psychological needs, namely, self-determination, competence and interpersonal relatedness, also distinguishes between needs that can be associated with intrinsic and extrinsic motivation. Intrinsic motivation, according to them, is based in the innate, organismic needs for competence and self-determination. It energizes a wide variety of behaviours and psychological processes for which the primary rewards are the experience of achievement and autonomy.

### **2.3.5 Listed Needs**

Murray (1938) listed several needs. His listing does not imply that all people experience all needs to the same degree. Some people may never experience certain needs in their lifetime while the action of other persons is dominated by these same needs. Some individuals may be attracted to a particular need or set of needs and express the remaining needs only infrequently. On the other hand, some people may experience the entire range of needs within a relatively short period in their lives (Hjelle & Ziegler, 1976, 99).

The following list is a combination of needs mentioned by Murray (1938), Hjelle and Ziegler (1976) and Steers and Porter (1987) and includes those that are most relevant to the workplace:

*Achievement.* The person with achievement needs will aspire to accomplish something difficult; maintain high standards and be willing to work toward distant goals; responds positively to competition; be willing to put forth effort to attain excellence; to master, manipulate, or organize physical objects, human beings, or ideas as rapidly and independently as possible; to overcome obstacles.

*Affiliation.* People who have a need for affiliation enjoy being with friends and people in general; accept people readily; make effort to win friendships and maintain associations with people.

*Autonomy.* Generally people with this need will try to break away from restraints, confinement, or restrictions of any kind; avoid or quit activities prescribed by domineering authorities; enjoy being unattached, not tied to obligations; defy conventions; dislike to be tied down by a definite routine of work and love adventure and change.

*Dominance.* Domineering people attempt to control their environment; try to influence or direct the behaviour of others by suggestion, persuasion, or command; express opinions forcefully; convince others of the correctness of their opinion; enjoy the role of leader and may assume it spontaneously.

Other needs that were described are:

to submit passively to external force;

to enjoy combat and argument;

to master or make up for a failure by bouncing back and setting new objectives;

to admire and support a superior;  
to defend the self against assault, criticism and blame; conceal or justify a mistake, failure or humiliation; defend physically and verbally; interpret harmless remarks or actions as injustice.  
to be the centre of attention;  
to avoid pain, physical injury, illness and death;  
to avoid humiliation and embarrassing situations that may lead to belittlement;  
to give sympathy and comfort, and gratify the needs of a helpless person;  
concerned with keeping personal effects and surroundings neat and organised, dislikes clutter, confusion, lack of organisation;  
to distance oneself from inferior people;  
frequently seeks the sympathy, protection, love, advice, guidance and reassurance of other people;  
an ambitious attitude; a composite of achievement and recognition;  
to understand many areas of knowledge;  
like dramatics, humour, fantasy and play.

Play is seen here as something that free time is devoted to and is associated with various forms of amusement such as sports, dancing and drinking parties. It is stated as something as opposed to making an honest, decent living (Murray, 1938). There are others, however, who believe that people should have more fun at work, that it relieves stress and that it contributes to quality of work life (Melymuka, 1997). The need to play in this sense could also be a means to form associations and interpersonal relatedness. Wubbolding (1986) calls it a need for fun. Play is important to facilitate learning. The need for fun continues into adulthood and it is expressed in every human endeavour.

Steers and Braunstein (1976) developed an instrument to measure four specific needs following the need theory of Murray: "The Manifest Needs Questionnaire" uses behaviourally based scales to measure the needs of achievement, affiliation, autonomy and dominance. While achievement received the largest

share of attention in terms of work-related research, other investigations indicate that affiliation, autonomy and dominance can also represent important needs in determining work attitudes and behaviour. Achievement was related to people who are generally satisfied with their chosen career, affiliation was inversely related to desire to leave the organisation, autonomy was inversely related to career satisfaction, and dominance was positively related to career satisfaction. Only dominance was significantly related to supervisory rank.

Perhaps the most well known are the needs according to Maslow:

*Physiological needs.* These needs are thought to be the most basic needs and include the needs for food, water and sex.

*Safety needs.* These needs centres around the need to provide a safe and secure physical and emotional environment, and environment that is free from threats to continued existence.

*Belongingness needs.* These needs relate to one's desire to be accepted by one's peers and to develop friendship.

*Esteem needs.* Esteem needs focus on one's desire to have a positive self-image and to receive recognition, attention and appreciation from others for one's contributions.

*Self-actualisation needs.* The highest need category is the need for self-actualisation. Here the individual is concerned primarily with developing his or her full potential as an individual and with becoming all that is possible to become.

Schaffer (1953 pp. 4-5) structured a list of twelve needs. These needs had the same characteristics as the five need categories in Maslow's hierarchy or the three of Alderfer's model as well as some of the needs described by Murray (1938), although they are defined and named somewhat differently (Landy,

1989). The list of needs with the definition is presented below:

*Recognition and approbation.* The need to have one's self, one's work and anything else associated with one's self known and approved by others.

*Affection and interpersonal relationships.* The need to have a feeling of acceptance by and belongingness with other people. The need to have people with whom to form these affective relationships.

*Mastery and achievement.* The need to perform satisfactorily according to one's standards. The need to perform well in accordance with the self-perception of one's abilities.

*Dominance.* The need to have power over and control of others.

*Social welfare.* The need to help others, and to have one's efforts result in benefits to others.

*Self-expression.* The need to have one's behaviour consistent with one's self-concept.

*Socio-economic status.* The need to maintain one's self and one's family in accordance with certain group standards with respect to material matters.

*Moral value scheme.* The need to have one's behaviour consistent with some moral code or structure.

*Dependence.* The need to be controlled by others. Dislike of responsibility for one's own behaviour.

*Creativity and challenge.* The need for meeting new problems requiring initiative and inventiveness, and for producing new and original work.

*Economic security.* The need to feel assured of a continuing income.  
Unwillingness to take a chance in any financial matters.

*Independence.* The need to direct one's own behaviour rather than to be subject to the direction of others.

Argyris (1987) analysed the needs most frequently expressed by top management and, therefore, all of them may not be relevant to lower ranking members of an organisation. However, lower ranking individuals, who express these needs may have the potential to advance and achieve success. They are the following:

*Organisationally upward mobile.* Most people have a need for advancement in the organisational hierarchy.

*Directive.* The need for initiating action for others.

*Variety.* The need for many and different kinds of workflow activities.

*Challenge.* Accepting work that represents a challenge to the intellectual abilities.

*Success-seeking.* The need to achieve goals quickly and successfully.  
There is a tendency to overwork in order to reach the goal.

*Problem-solving.* The need to solve administrative problems continuously and to create new solutions.

Other authors and theorists described and researched the following needs:

*Achievement.* A person with a high need for achievement has a desire to excel, aspires to accomplish difficult tasks; maintains high standards and

is willing to work toward distant goals; responds positively to competition; willing to put forth effort and to assume responsibilities (Yukl, 1998; Medcof and Hausdorf, 1995). According to Yukl (1998) many studies have been conducted on the relationships of achievement orientation to leadership effectiveness. The results have not been consistent for different criteria and for different types of managerial positions.

*Affiliation.* A person with a high need for affiliation enjoys being with friends and people in general; accepts people readily; makes efforts to win friendships and maintain associations with people (Medcof and Hausdorf, 1995).

*Belonging or love.* The need to belong and to be involved with people is a force that drives all human beings. Wubbolding (1986) divided the need to belong into three forms - social belonging, work belonging, and family belonging - for the fulfilment of the need takes place in several settings. For Stein (1983), belonging means being part of a social unit and having shared goals and values.

*Creativity.* Sirgy *et al.* (2001) conceptualise quality of work life in terms of satisfaction of knowledge and aesthetics. The latter has to do with creativity at work, for example, opportunities to be creative in solving job related problems.

*Freedom.* The urge to make choices, to move from place to place and to be internally free (Wubbolding, 1986).

*Personal control.* Greenberger and Strasser (1986) stated that people have an innate need to be able to have control over their environment, and that people need to feel a sense of mastery and personal competence in their environments.

*Power (achievement, self-worth, recognition).* The need for power is

often expressed through competition with people. It is also expressed in achieving something. Making plans and following through on them can help fulfil the need for power (Wubbolding, 1986). A person with a high need for power attempts to control the environment and influence or direct other people and events; expresses opinions forcefully; enjoys the role of leader and is more likely to seek positions of authority (Medcof and Hausdorf, 1995; Yukl, 1998). According to Yukl (1998), a strong need for power is relevant to leadership roles involving the use of power and influence. People who are low in need for power usually lack the desire and assertiveness necessary to organise and direct group activities. Most studies find a strong relationship between need for power and advancement to higher levels of management in large organisations.

*Recognition.* Stein (1983) sees recognition as related to belonging, but in a way that it satisfies the need to be distinguished and differentiated from others in the group to which the person belongs.

*Valued social position.* There is some general agreement about the prestige ranking of jobs, and it is expected that people whose occupational roles are accorded very little social value will tend to experience dissatisfaction with their position (Warr, 1987). Stouffer, Suchman, DeVinney, Star and Williams (1977) identified status in the Army as a desire of the soldiers in the United States Army related to job satisfaction.

## **2.4 NEED FULFILMENT AND SATISFACTION WITH QUALITY OF WORK LIFE**

According to Downey, Hellriegel and Slocum (1975), there must first of all be congruence between an individual's personality characteristics, which also determines needs and preferences, and how the work environment is perceived as meeting those needs for the individual to experience satisfaction. Some conditions of work are so linked to universal human needs that sub-minimal

gratification insures dissatisfaction (Seashore, 1975).

Lawler (1975) saw the sense in it to equate a psychologically good work environment with one in which the individual's basic needs are satisfied. As it is believed that basic needs must be satisfied before people can be motivated by higher order needs, it is unacceptable when they are dissatisfied with the amount of security they have. On the other hand, it is psychologically acceptable when people are dissatisfied with their degree of self-actualisation, because people may feel dissatisfied with what they have achieved and still strive for more achievements, but at least they can feel satisfied that they do have the opportunities to achieve what they want to achieve. A worse situation would be when they are dissatisfied with their present situation, but see no way out of it. However, these are two quite different types of dissatisfaction; they often motivate different kinds of behaviour and they can produce different kinds of psychological effects. Feelings of insecurity, for example, are more likely to cause psychosomatic illnesses. With respect to higher-order needs, a high quality of working life is one where the pursuit of higher-order need satisfaction is within the grasp of those individuals who desire it (Lawler, 1975).

Ellis and Bernhardt (1992) examined the design of the job of teaching to determine the degree to which it meets the motivational needs of teachers. They used the 1974 Job Diagnostic Survey of Hackman and Oldham and found that teachers with high growth and achievement needs were significantly less satisfied with their jobs than were their colleagues with lower growth needs. Respondents pinpointed the lack of challenge as one major reason for this discrepancy.

Argyris (1987) describes the formal organisation in terms of its basic principles and concludes that formal organisations are not always conducive to fulfilment of human needs and satisfaction. For example task specialization requires that the individual use only a few of his abilities. This inhibits self-actualisation and provides expression for few, shallow abilities that do not provide the challenge desired by the healthy personality. Another example cited by Argyris (1987) is that the chain of command implies that leaders, whose primary responsibility it is

to control, direct, and coordinate, are the only ones who can fulfil needs such as dominance or power, while subordinate members must be motivated to be submissive. He concluded from this and other factors related to formal organisations that there is a basic incongruence between the growth trends of a healthy personality and the requirements of such an organisation.

Nordenfelt (1993) goes so far as to say that quality of life is anchored in psychodynamic theory and is based on the concept of human need. His idea is that a person has a high degree of quality of life, if and only if his or her fundamental needs have been satisfied. He refers to Maslow's theory of hierarchy of human needs. For Nordenfelt (1993), the fundamental need ought to be formulated in terms of all people having a need to realize their goals. To be kept busy in a meaningful way does not always serve a personal purpose or goal. However, if one can see the rationale for having to do it, it keeps one from feeling dissatisfied with the activity. The same sense of satisfaction may not be experienced, compared to when one is busy with something that serves a purpose in realizing own goals. However, Nordenfelt (1993) agrees with the theorists of need in claiming that there are common traits in human nature that determine some basic, minimal and common biological and psychological conditions of quality of life. There is, therefore, a great risk in trying to define quality of life in terms of the satisfaction of needs only.

Medcof and Hausdorf (1995) evaluated instruments that measure opportunities to satisfy needs on the job and the level of satisfaction of those needs. One fundamental assumption made by researchers in this area is that people gravitate to, and tend to remain in, jobs which fulfil their needs. A second basic assumption is that the greater the opportunity to satisfy a particular need on a job, the higher will be the reported level of satisfaction of that need by the incumbents of that job. It follows that there will be positive correlations between corresponding opportunities and satisfactions. Medcof and Hausdorf (1995) discuss specifically the needs for achievement, power and affiliation. It has been shown empirically that levels of these needs predict job satisfaction and competence in a number of occupations.

Sirgy *et al.* (2001) base their study on a new measure of quality of work life on satisfaction with a variety of needs relevant to the work place. Four need categories, including seven needs based on Maslow's hierarchy were covered by their measure. These are survival needs (security and pay), social needs (interpersonal interactions and membership in a social group), ego needs (self-esteem and autonomy), and self-actualisation needs. Their basic premise of the quality of work life construct and measure is that workers bring a cluster of their needs to their employing organisation and are likely to enjoy a sense of quality of work life to the extent that these needs are satisfied through work in that organisation. In their study need satisfaction was successful in predicting organisational commitment, job satisfaction and satisfaction in other life domains. Furthermore, job satisfaction together with satisfaction in other non-work life domains were significant predictors of life satisfaction.

## **2.5 CONCLUSION**

Considering the above, the question may be asked whether there is not much duplication in job factors, climate factors, as well as needs, although needs are dealt with as a separate set of variables. For example, the overlap of climate with other constructs within organisations, such as leadership, rewards and equipment adequacy, can be questioned. Climate is defined as being an abstract perception of the environment. The immediate supervisor, for example, is experienced much more directly and on a personal level, while the leadership of the organisation is an abstract perception. In the first instance, respondents go according to their own personal experiences with their present leader and in the second instance they must integrate these experiences as well as their impressions of various other leaders on higher levels. As far as this is concerned, Field and Abelson (1982) concluded that climate is independent both conceptually and methodologically of other constructs within organisations.

It was found that recent researchers frequently base their studies on the work and theories of the early fifties. For example, the concept of quality of work life described by Sirgy *et al.* (2001) has some resemblance to Hackman and Oldham's model of job satisfaction. Their model shows that five facets of

satisfaction - four extrinsic rewards and one intrinsic reward, determine job satisfaction. They further expanded the list of extrinsic and intrinsic rewards according to Maslow's theory of needs.

At this stage variables that are relevant to quality of work life have been explored. It was endeavoured to identify a wide variety of criteria that have been proved to have an impact on quality of work life. In the next chapter, as many of these criteria as possible will be formulated as questionnaire items and incorporated in a suitable research methodology.

## **CHAPTER 3**

### **METHODOLOGY**

#### **3.1 INTRODUCTION**

In the preceding chapter the literature was reviewed, clarifying and defining the concepts, satisfaction with quality of work life and fundamental needs of people in the work place. The role of the various variables contributing to satisfaction was described. In this chapter, methods will be explored by means of which these variables can best be measured and compared in order to reach empirically based conclusions.

#### **3.2 AIM OF THIS RESEARCH**

This study will attempt to investigate the current state of affairs in terms of satisfaction with quality of work life in an organisation. It will be attempted to identify the predictors of satisfaction with quality of work life from a wide range of facets of work life, that can be categorized as extrinsic, intrinsic, social and organisational climate factors, as described in Chapter 2. It is hoped to be able to point out specific indicators that have a significant effect and may constitute problem areas if dissatisfaction is experienced. Secondly, it will be determined to what extent the facets of work life chosen as variables for the research are regarded as important. Thirdly, the focus is on what people really need from their work environment and the relationship between satisfaction with quality of work life and need fulfilment will be investigated. In other words, it will be established whether the fulfilment of workers' most important needs have a positive effect on their satisfaction with quality of work life. Lastly, the combined effect of satisfaction with facets of work life and fulfilled needs on overall satisfaction will be investigated.

Additional objectives are concerned with the demographic characteristics of the respondents relevant to needs and quality of work life in order to determine what sub-groups exists according to their commonality of needs and perceptions of

the quality of work life. Interesting patterns will be explored with respect to levels of satisfaction and relationships between demographic characteristics and satisfaction with specific facets of work life.

### **3.3 RESEARCH APPROACH**

The following combination of approaches will be followed:

#### *Non-experimental approach*

A non-experimental approach will be used, as the researcher is conducting an empirical inquiry into variables and social phenomena, where events of interest have already manifested, and there will be no manipulation of variables (Kerlinger, 1986).

#### *Applied research*

As the study is undertaken with the purpose of identifying predictors of satisfaction with the quality of work life in a specific organisation, it could also be called applied research (Huysamen, 1994).

#### *Exploratory study*

Exploratory studies are usually conducted when new topics are investigated with the purpose to develop an initial understanding of some phenomenon, which is followed by a more refined research (Babby, 1983). Although there is sufficient existing theory from which to derive formal hypotheses regarding significant predictors of satisfaction with quality of work life, the inclusion of thirty-five different facets of work life, twelve different needs plus different demographic variables created the need to identify certain indicators initially on which to explore tendencies further. The research questions in Chapter 1 regarding the diversity of the population with respect to needs and the extent of satisfaction with facets of work life will be investigated in order to focus more specifically on certain areas. For example, it is not hypothesized that

senior ranks will be more satisfied with certain facets of work life than junior ranks, but whatever differences are found, will be explored further.

### *Survey research*

The research is undertaken by way of a survey. Survey research, as defined by Kerlinger (1986 p. 377), is the type of research that “studies populations by selecting and studying samples chosen from the population to discover the relative incidence, distribution and interrelations of sociological and psychological variables.” The social scientific nature of survey research is revealed by the nature of its variables, which can be classified as sociological facts and opinions or attitudes. Sociological facts are attributes of individuals that originate from their membership in social groups: gender, rank, educational level, race, occupation, etc. The psychological variables are the attitudes or feelings, satisfaction-dissatisfaction as in this case. Considering the aim of the research, survey research seems to be the ideal design, as it will enable the researcher to determine the incidence, such as needs and need strengths, satisfaction or dissatisfaction with certain factors and interrelations between need fulfilment and satisfaction with quality of work life, as well as the effect of other variables such as rank, race, sex, age, etc.

### **3.3.1 Research Strategy**

In his evaluation of social research into the phenomenon of quality of life, Mukherjee (1989) distinguishes between need-based research and want-based research. Need-based research is conducted according to the needs of people, formulated by the experts, who have the knowledge by means of education (presumably behaviour science experts). These experts advise the ‘elites’ (presumably management and those who prescribe policy) and structure systems, policy and procedures according to this advice. Want-based research, on the other hand, is concerned with eliciting what the people want and how they realize their wants without the knowledge and education in behavioural science, more specifically, fundamental human needs (Mukherjee, 1989, pp. 44-45).

It is also seen that the people allocate different priorities to those need items which are conceived by the experts as basic. The 'experts' have come to realize that the qualitative variables cannot be ignored, nor can the individual subjective perception of basic needs be neglected. People themselves should decide on the scope, content and priority of their own basic needs. A basic needs strategy includes mass participation of the people, both in defining basic needs and in the decisions taken to meet basic needs (Mukherjee, 1989, p. 39).

This research will rely on the knowledge and research done by the experts of the previous century. However, the 'uneducated' respondents will be given the opportunity to recognize from the theory certain fundamental needs and in spite of the experts' presumptions of what needs are important, are afforded the chance to choose which needs are most prevalent within themselves at the time of completing the questionnaires. What people want will be concluded from their choice of appropriate items in the questionnaire.

How the members of the organisation perceive their satisfaction with quality of work life will be measured by means of the Satisfaction with Quality of Work Life Scale. The questionnaire was structured by combining the findings of different research projects that were conducted in order to determine the different facets involved. It is attempted to include as many of the various components as possible that make for good quality working life according to these researchers. Therefore, the Satisfaction with Quality of Work Life Scale is based on constructs that were validated in other research studies. The researcher feels satisfied with the fact that the purpose of previous research was to find indicators that can be generalized to different populations and that the criteria for quality of work life should apply to a great extent to the population under investigation.

It was attempted to make use of a wide variety of criteria from the literature about measures of quality of work life, and then, as Andrews and Withey (1976) state, "cast the net widely" and "catch" as many components as possible, and then cluster them into meaningful groups on the basis of their empirical and conceptual relationships to one another. The number of possible components may be almost endless, and one would never know if one included all possible

criteria. In comparing the different studies in the literature and questionnaires in use, it may be more useful to set a goal to identify those aspects that are commonly held that are relatively broad in scope, and have significant impacts on people's sense of satisfaction. Since all human beings share much in the way of physical and psychological needs, it is not unreasonable to expect substantial commonality in the likes and dislikes people have (Andrews & Withey, 1976, p. 27).

### **3.4 RATIONALE FOR CHOICE OF METHODOLOGY**

#### **3.4.1 Basis for Criteria for Quality of Work Life**

This research relies on other researchers' and authors' findings, personal observations, experiences, values, and assumptions about human nature. To derive criteria for quality of work life, these researchers and authors used a combination of empirical methods, such as, surveys, observations and depth interviews to identify what aspects of the work situation significantly affect the overall quality of human experience in work roles (Walton, 1975). For this research, a composite set of criteria was constructed from the results of different researchers and a combination of items from different questionnaires.

The method used was firstly to assemble a large number of possible components of job satisfaction. The task of identifying components involved examining different types of sources, for example previous surveys, existing questionnaires and the literature about specific aspects of work in relation to satisfaction with work life. From own experience of conducting organisational diagnoses by way of questionnaires (Organisational Diagnostic Questionnaire based on Weisbord's Six-Box Model derived from the Pfeiffer Library), interviews and focus groups, a reasonable idea existed about what gives rise to dissatisfaction in general. Starting with the list of questionnaire items in previous surveys, supplemented where necessary by components drawn from the other sources, a preliminary clustering was performed to combine components that were similar. After rewording these to reduce differences in level of specificity, and phrasing them in the form of questions appropriate for

use in this study, a list of 35 items was compiled, and one item was added to enquire about members' overall feeling about their jobs.

### **3.4.2 Choice of Needs Applicable to Work Life**

After consideration of the theories of Murray, Maslow, Herzberg and the research of Schaffer (1953) as described in Chapter 2, it was decided to make use of the latter's list of twelve needs as it was particularly chosen against criteria suitable for inclusion in a questionnaire as well as applicable to the work place.

### **3.4.3 Measurement**

Measurement is the assigning of numerals to response objects according to rules. In some instances it has no quantitative meaning unless such a meaning is assigned (Kerlinger, 1986). The dependent variable measured in this study is the overall satisfaction with quality of work life. The definition of quality of work life that was arrived at in Chapter 2 can now be further elaborated on in order to understand what it is that is to be measured. It is assumed at this stage that overall satisfaction with quality of work life is experienced when individuals are satisfied with interacting factors, such as optimal extrinsic conditions, social aspects, organisational climate and being internally motivated by factors inherent in the job itself, as well as having one's most important work related needs fulfilled.

#### **3.4.3.1 *Characteristics of Measures***

To measure all of the above factors contributing to overall satisfaction meaningfully with the purpose to determine the significance of their contribution, certain criteria and standards of measurements have to be taken into account:

According to Lawler (1975), any method of measuring the psychological quality of work life and individual experiences should ideally include four characteristics:

The measure should be valid in the sense that it measures all the

important aspects of the psychological quality of work life accurately. Trouble was taken to include as many aspects as possible in order to comply with this requirement.

It should have enough face validity so that all involved will see it as a legitimate measure. Questionnaire items were adapted to be comprehensible to the members of the organisation. Only items that members can easily associate with and are relevant to the type of organisation were included.

It should be objective and, therefore, verifiable, and not subject to manipulation. Objectivity versus subjectivity will be discussed in more detail in paragraph 3.5.1. For the purpose of this study, only biographical data are objective. The rest of the survey concerns the members' subjective perception of the objective aspects.

It should recognize and take into account differences in how individuals respond to the same work environment. This will be adhered to in discussing the results.

Looking at the measurement of work related needs, one could consider what Steers and Braunstein (1976) regarded as important characteristics. According to them, research on individual needs in work settings must exhibit at least three characteristics:

It must measure in a reliable and valid fashion those needs found to be more important for work attitudes and behaviour.

It must measure the degree of potency of these needs within a work environment framework.

It must be sufficiently brief so as to require minimal completion time.

Unfortunately, no measure possesses all these characteristics. While always desirable, objective measures may be less useful than subjective self-report measures of the psychological quality of work life in some cases. Despite their subjectivity, they represent the most direct data available about the psychological state of a person. Further, they provide better data on individual differences than do many objective measures of working conditions. For example, all workers do not regard repetitive work or directive supervision negatively. Some individuals see them as part of a high quality of work life, while others see them as very negative and as part of a low quality of work life (Lawler, 1975).

Lawler's (1975) idea of how to take individual difference factors into account is to use self-reports of satisfaction and need strength and to compare what people want from the job situation with what they actually receive. This is a satisfactory method in those situations in which the individual is not motivated to report false data; but, when there is such motivation, this approach has problems because of the subjective nature of the data. Some uses to which measures of the quality of the psychological life in organisations might be put would create conditions inviting motivation for distortion. In such situations, self-report data would seem inappropriate unless measures are developed that cannot be manipulated. At this stage, no such measures exist, although some commonly used ones are more difficult to manipulate than others. For example, some difference measures (subtracting people's feelings of what they should receive from what they feel they do receive) are more difficult to falsify than are measures that simply ask people how satisfied they are or, for instance, how much opportunity they have to grow and develop on the job (Lawler, 1975).

The selection of the items included in this survey on the job satisfaction dimension was mainly guided by one concern, namely that the items should be meaningful to all employees. The ideal should also be that the items should have been validated. Although many items were taken from questionnaires that were validated, some reported better validity and reliability figures than others. It is probable that the validity and the reliability data will be affected as items are reworded or combined with other items.

### 3.4.3.2 *Measurement Techniques*

The research questions in this study require that the population be broken down into subsets. Section A, the Biographical Information will be used to divide the population, all members of the SA Army Engineer Formation, into different subsets. In the investigation of the different research questions, different sub-groups will be applicable for different questions.

For Sections B, C, D and E summated Likert type scales are used. A summated attitude scale consists of a collection of statements about the attitudinal object. In respect of each statement subjects usually have to indicate their degree of agreement or disagreement on a five or seven point scale. In the case of Section B, degrees of satisfaction are measured on a 7-point scale. Section C measures the importance of the job components and for this a 5-point scale is used. Section D, need strengths are measured in terms of likes or agreement on a 4-point scale. In Section E respondents have to indicate how much of the response object they have or if they don't have enough, how much more they would like. There is also a limited form of rank ordering. Each section of the questionnaire will be discussed in more detail.

There are many possible techniques that might be used in the measurement of need strengths. Schaffer (1953) chose not to tap unconscious needs, but rather those determined by conscious thought processes. In designing the items to measure need strength, maximum subtlety was a prime consideration for him. He also listed and defined twelve needs and had respondents rank or rate each of them in terms of their importance to him/herself. He designed questionnaires to measure three variables: (1) the importance of each of the twelve needs; (2) the degree to which each of the needs was being satisfied in the individual's job; and (3) an indication of overall job satisfaction. Schaffer used three different subsections to measure need strength. Only one of them will be used in this study. The other two variables are measured by means of the questionnaires already mentioned. Schaffer was able to determine that there is a fairly good

indication that the measure of the extent to which each person's most important needs are satisfied yields the best prediction of his overall satisfaction. The importance of his work was that there are reliable individual differences in the importance of needs (Landy, 1989, p. 451; Schaffer, 1953, pp. 16-17).

### **3.5 VARIABLES**

This study will be concerned with variables that represent quantifications of human characteristics, such as age or rank, needs, etc. The demographic characteristics of the members, satisfaction with different job factors and facets of work life, as well as individuals' perception of its importance, need strengths and the extent to which it is fulfilled are independent variables, while satisfaction with overall quality of work life will be the dependent variable. An independent variable presumably has an effect on the dependent variable and it is attempted to determine the effect of those on overall satisfaction with quality of work life (Kerlinger, 1986).

#### **3.5.1 Subjective versus Objective Variables**

In considering the measurement of a concept such as satisfaction with quality of work life and whether it is possible at all to have an objective measure or not, necessitates the following discussion of different opinions about the objectivity or subjectivity in such measurement:

In many psychological and sociological discussions it has been claimed that an adequate measurement of a person's quality of life must contain both so-called objective and subjective parameters (Nordenfelt, 1993). It has become common to divide social indicators into these two types. According to Andrews and Withey (1976), the quality of life is not just a matter of the conditions of one's physical, interpersonal and social setting but also a matter of how these are judged and evaluated by oneself and others. One's personal value framework is in itself the main determinant of one's assessed quality of life. In this regard it could be helpful to consider the extent to which people agree on how to characterize a given phenomenon, because even objective aspects of our

circumstances can be viewed differently (subjectively) by different people (Andrews & Withey, 1976, p. 5).

Psychologists and sociologists who experimented with measures of positive affect, quality of life and sense of well-being or happiness concluded that perceptions and feelings are certainly subjective but they are real to the person who experiences them. People are able to describe the quality of their own lives, not precisely or with as great a degree of interpersonal comparability as one might like, but with a kind of direct validity that more objective measures do not have. It is impossible to get anything but people's personal opinions ("subjective data") with a self-report questionnaire. When individuals evaluate their own satisfaction with their lives, they are not likely to judge themselves according to objective and factual standards. They depend on the quality of their own experience, their feeling of being happy and contented, and their sense of well-being. In this definition, satisfaction is entirely subjective, known directly to the individual person and the researcher can only obtain an indication through that person's response to questionnaire items (Campbell, 1981, pp. 12-14).

It has been suggested that about half of the variance in present measures of job satisfaction is explained by a relatively small number of environmental conditions and that there are systematic and predictable individual differences in satisfaction. Seashore (1975) seems quite convinced that the individual worker, whatever his background and status, is incapable of optimum judgment of his own life situation. His report of job satisfaction or dissatisfaction is clouded by self-deception, ignorance, social pressure, and perceptual distortion. Individuals can report satisfaction with work situations that are found to be life threatening, not conducive to family relationships and with no future prospects. Others can report dissatisfaction with work situations that have virtually all of the attributes generally valued by others and no attributes that are reasonably in need of improvement (Seashore, 1975, pp. 105-107).

The use of 'hard' data, for example, income, geographical area or size of office, for indicating or predicting well-being, presents serious limitations. Changes in income and in satisfaction with income are not always accompanied by corresponding changes in work satisfaction (Sheppard, 1975), especially

because of differences and needs and the value people attach to money. When organisational climate is considered, there is also a distinction between organisational attributes concerned with objective organisational characteristics and organisational processes and what is psychologically important to the individual, by which is meant how he perceives his work environment, not how it is objectively described (James & Jones, 1974, p. 1105). The causal variables (structure, objectives, supervisory practices, etc.) interact with personality to produce perceptions, and it is only through perceptions that the relationship between causal and end-result variables may be understood. This point of view suggests that climate should be measured indirectly via the perception of the individuals who are being studied (Forehand & Gilmer, 1964).

The dominant paradigm of the quality of work life in research and theory is based upon the assumption that the individual's own experience of satisfaction or dissatisfaction defines the quality of his work life. It is further proposed that some conditions of work can be defined in terms of how they are linked to universal human needs, and that it follows that the non-fulfilment of these needs will result in dissatisfaction (Seashore, 1975).

Among objective parameters that could be included in this study are such things as the person's salary scale and physical working conditions. Certain conclusions can be drawn from the demographic variables; for example, a person's pay scale and benefits in a senior rank should be more satisfactory than a person with no rank. However, the paradigm which believes that the job characteristics that are valued most by the individual, as well as depending on a person's needs and the extent to which the most important needs are fulfilled, is adhered to with the associated idea that the objective characteristics of the work situation induce feelings of satisfaction or dissatisfaction.

Therefore, the main measurement in this study will be of a subjective nature, even when objective aspects are considered, such as pay and physical working conditions. It is assumed that the experience of satisfaction or dissatisfaction arises from the objective qualities of jobs and job related conditions. The concern is how the individual feels about that aspect. The different aspects of

work life in the Quality of Work Life Questionnaire are introduced with the question: "How satisfied are you with ...". How people feel about their work seems to be a reasonable criterion for quality of work life. So-called objective factors are not the real issue, because what is intolerable to one may be fine or acceptable for another. For example, what constitutes good working facilities? The land surveyor may be most happy in the veldt, exposed to the elements, while others may think that air conditioned offices, tastefully decorated and with soft music constitutes a work place that will insure good quality of working life.

Without going too much into the subject of values, the influence of this variable is assessed by the respondents indicating those facets of work life that are important to them, as well as how important they are for the individual concerned. By adding a Personal Importance Scale, it can also be determined to what extent the chosen facets of work life are regarded by the subjects as important for experiencing overall satisfaction with quality of work life. The influence of need fulfilment was discussed in more detail in Chapter 2 and forms an important part of this research. The extent to which a persons needs are fulfilled is measured in a Personal Need Non-Fulfilment Scale and its effect on the overall satisfaction with quality of work life will be determined.

### **3.5.2 Other Considerations**

Factors that should be considered that might have an effect on the dependent variable, satisfaction with quality of work life, and how it is measured, are the following:

#### **3.5.2.1**      *Time Span of Measurement*

A consideration in the definition and measurement of the quality of work life is time span as individuals, organisations, and societies operate within a long time span. The quality of work life should accordingly be defined and measured with consideration for past events and conditions, consequences of events, changes and trends and future prospects (Seashore, 1975). An example of the time factor in the measurement of specific facets of work life is as suggested in the

opponent-process theory described by Landy (1989, p. 459). The theory asserts that an individual's satisfaction with a particular reward will systematically change over time, even though the reward itself remains constant. For example, a job tends to be more interesting in the first week than it is after six years on the same job.

The implications of these considerations are that studies of satisfaction with work life should be longitudinal rather than cross-sectional in nature. As the results from this study will only serve as a baseline to identify the significant factors that could be improved upon at the present time, future and longitudinal studies may be necessary. However, a large sample may indicate overall statistically significant trends. Furthermore the variable, "Time in the rank group" will help to determine the importance of this factor specifically with respect to promotion.

#### 3.5.2.2 *Facets of Work Life versus Overall Satisfaction with Quality of Work Life.*

Feelings about one's work have been extensively measured in terms of satisfaction, either through overall assessments (viewing one's job as a whole) or through sub-scales to tap specific facets of satisfaction. In the latter case, separate scores may be derived to measure satisfaction with different features, such as pay, supervision, promotion prospects, or the kind of work that is undertaken (Warr, 1987, p. 253).

The common assumption about the development of feelings and evaluations is that individuals react to the details and elements of human experience. Feelings about one's job are based on how one feels about the different aspects, for example technical, or management and administrative side of it. Therefore, the direction of influence is assumed to be from the specific to the general. However, once one has arrived at a set of general feelings about one's work, career, or profession and organised a set of expectations, skills and behaviours around it, it is likely that these feelings and behaviours will themselves influence future evaluations of some specific component of the job. For example, feelings

about the workplace are so organised that one can overlook occasional incidents of poor management and handle frustrations without altering one's general feeling about it. Therefore, influences both from specific-to-general and from general-to-specific occur and would need to be included in a dynamic model (Andrews & Withey, 1976).

Chelte (1983) noted in the literature that a single, one-item measure of job satisfaction is not sufficient or reliable. For this reason researchers can employ as wide a scope as possible with several indices that assess both overall reactions to a job as well as facet-specific aspects, in other words various components of the individual's job. The literature indicates that these approaches to the measurement of job satisfaction are important because, while both measures can be used to obtain the same overall result, the more global measure does not tell you how workers feel about specific job facets. This is a reasonable position when one considers that an individual's job is not an undifferentiated whole. That is, the aspect of the job one asks about has some effect on the amount of dissatisfaction that surfaces. Most people do have at least some complaints about certain features of their jobs. These complaints do not seem to prevent them from reporting satisfaction with their jobs as a whole, however (Chelte, 1983, pp. 26-27).

Thurman (1977) did an overview of international studies and found that surveys consistently find that workers are less satisfied with each of the specific aspects of their jobs than with the job taken as a whole. Probably it is psychologically easier to be negative about individual matters than to face up to aggregate dissatisfaction (Thurman, 1977, p. 254). If true, this should also be apparent in this study.

Oshagbemi (1999, p. 388) found that single-item measures overestimate the percentage of people satisfied with their work conditions, while they underestimate results obtained for dissatisfied workers and those who show indifference. This shows single-item measures to be less reliable estimators of work life satisfaction when compared with multiple measures of the same phenomenon.

A single-item measure has some advantages of which the simplicity of the measure and its applicability to miscellaneous occupations and organisations are relevant. This feature of simplicity is particularly useful in comparative studies, especially when the intention is to compare the satisfaction of workers of one grouping to another. The disadvantage of the use of single-item measures is that it does not provide the opportunity to record satisfaction or dissatisfaction levels on particular aspects of the same job. Single-item derived job satisfaction levels are often of little value to managers who are interested in taking some action towards improving the level of job satisfaction of workers in their organisations. This is because single-item measures of job satisfaction do not reveal areas of strength or weakness of an organisation in terms of aspects of its operations that workers enjoy or do not enjoy (Oshagbemi, 1999, p. 399).

When multiple-item job satisfaction measures are used, the information generated can provide managers with data with which to initiate action aimed at improving the overall job satisfaction of their workers. It also serves to inform managers on aspects of their operations which workers enjoy and which should be sustained as much as possible. In essence, it helps managers to improve on their human and organisational management (Oshagbemi, 1999, p. 400).

There are no disadvantages to the multiple-item measurements of job satisfaction as such, except that the specifics may sometimes make a general perception of workers' job satisfaction level difficult to ascertain. As a research tool, however, multiple-item measures of job satisfaction are also more difficult to conceptualise and formulate and, therefore, tend to be more costly to produce when compared with single-item measures. Since single-item measures are relatively simple and short, it is easy to combine them with multiple-item measures of job satisfaction studies. In this way, meaningful comparisons of job satisfaction studies are greatly enhanced (Oshagbemi, 1999, p. 401).

Whether an overall or facet-specific measure is used depends on the purpose of the research. If the intention is to find out only whether a person is satisfied with his/her quality of work life when his/her most important needs are fulfilled, an

overall measure would suffice. According to Schaffer (1953), overall satisfaction has everything to do with the extent to which the needs of an individual are satisfied. Since, however, another aim is to utilize the research for diagnostic purposes, to determine which specific areas need attention, a facet-specific measure is utilized as well as an overall measure.

Satisfaction with quality of work life in this study is assessed by using both measures:

Facet specific or multiple-item dimensions which assess employee reactions to the following broad areas: Extrinsic factors, Intrinsic factors, Social factors, and Organisational culture.

Global affective reactions toward the individual's job.

Several different formulations have been used for questioning workers about overall job satisfaction, the simplest and most usual of which is to ask the worker directly how he or she feels (Thurman, 1977, p. 251). In this study the last item (Item 36) of the Quality of Work Life Questionnaire (Section B, Appendix C) reads: "All things considered, how satisfied are you with how you experience the quality of your work life?" The response options are the same as the rest of the questionnaire, namely extremely dissatisfied, very dissatisfied, moderately dissatisfied, neither satisfied nor dissatisfied, moderately satisfied, very satisfied, extremely satisfied.

In this research where comparisons of the satisfaction of members in different groups according to the different variables (rank, age, race, gender, educational level, occupation and need strength) are made, the single-item measure will be used, while the multi-faceted questions will indicate aspects with which members are satisfied and dissatisfied. It was felt that both measures are better than using either one or the other. In comparative studies, the single-item measure will simplify matters and the multiple-item measures will provide more comprehensive information.

For the sake of clarity, a distinction will be made between the first thirty-five multi-

faceted items and the last item, (item 36) of Section B : Satisfaction with Quality of Work Life Scale. Item 36, the single item about the global, overall feeling of satisfaction will be referred to as Overall Satisfaction with Quality of Work Life, while the thirty-five items will be referred to as Facets of Work Life and measure Satisfaction with Facets of Work Live. Each of the thirty-five facets will be referred to as items when talking about something specific, for example item 1 about the rate of pay, and their sub divisions as sub-scales, for example, the sub-scales of the item concerning rate of pay. When talking about the four main categories, namely extrinsic, intrinsic, social and organisation climate, they will be referred to as the main categories.

### 3.5.2.3 *Organisational Change*

Certain changes may have different effects on different members. For example, affirmative action is likely to have a threatening connotation for some members, especially white males, while it may have a positive connotation for black members. This will have an effect especially on how people perceive job security or opportunities for promotion. According to Seashore (1975), changes in any society can provide generalizations useful for predicting or influencing the satisfaction of individuals going through similar changes. Groups may differ in terms of degree of satisfaction because of the effect of these changes rather than differences by virtue of group membership only. For example, in this study it could be possible that affirmative action has an effect on the satisfaction of white males with respect to promotion opportunities and job security.

### 3.5.2.4 *Culture*

Another problem that must be kept in mind when discussing job satisfaction and needs, is the danger of making culture-bound statements (Thurman, 1977, p. 250). The notion of quality of life rests upon what one has selectively inherited from the past, which is internalised as culture, and what one encounters externally in view of the current social forces. According to Mukherjee (1989, p. 33), culture represents “an aggregate of values and tradition which is deeply linked to the everyday life of the people, and in that sense it is a matrix of

perception which allows one to apprehend the world.” Therefore, culture and society determine the quality of life of an individual and establish commonality among individuals by group formation.

Mukherjee (1989) also wrote that groups could form on the basis of their commonality of individual perceptions of the quality of life, which could be different groupings than the predetermined groups, such as ethnic or cultural groups. In terms of different sets of needs or differential priorities allotted to the same set of needs, these appraisals define different value groupings. This will then be one of the aims of this study to find those different value groupings. For example, it could be assumed that people in the lower ranks and therefore, low income group, will probably value pay and other external factors more than intrinsic factors. Although Mukherjee also suggested that all the need items, basic or otherwise, are culture bound.

#### 3.5.2.5 *Diversity of Human Preferences*

Regardless of how one approaches the issue of the quality of working life, one must acknowledge the diversity of human preferences. Differences in subcultures and life styles are accompanied by different definitions of what high quality of working life is. Of two employees equally skilled in performing basic elements of their work, one may prefer autonomy and the other to be instructed in detail. Similarly, one may prefer to be closely integrated into a work team, for example, the extraverted personality type, while the other is relatively untouched by work relations, as would be an introverted personality type (Walton, 1975).

The way to accommodate this in this study is people’s preferences with respect to needs. Murray described personality in terms of needs and it is assumed, for example, that a person with a high need for affection and personal relations will feel more satisfied in a workplace that provides for this need. No other personality measures will, however at this stage be utilized as personality as a variable does not form part of the study.

### **3.6 HYPOTHESES**

The hypotheses given below are substantive hypotheses and speculative

statements are made regarding the dependent variable, overall satisfaction, and the independent variables that were measured. As the main scales are about measurement of satisfaction with individual facets of work life, overall satisfaction with quality of work life, importance of facets of work life, need non-fulfilment and the importance of the needs, these aspects are tested against existing theories in the hypothesis.

*Hypothesis 1 : There is a positive relationship between satisfaction with individual facets of work and overall satisfaction with quality of work life.*

*Hypothesis 2 : The overall satisfaction with the quality of work life is significantly higher than the mean of the satisfaction with facets of work life.*

*H<sub>0</sub> : There is no significant difference between overall satisfaction with the quality of work life and the mean of the satisfaction with the facets of work life.*

Various arguments regarding the measurement of facets of work life versus a single-item measure were discussed in paragraph 3.5.2.2. The confirmation of hypothesis 1 will give an indication whether the assumption that individuals react to elements in the work place and that feelings about one's job are based on how one feels about the different aspects (Andrews & Withey, 1976) can be considered valid. Hypothesis 2 will either confirm or contradict the finding of Thurman (1977) that subjects are less satisfied with the specific aspects of their jobs than with the job taken as a whole. A directional t-test will have to be executed to indicate whether or not the single item measure mean is significantly higher than the mean of the sum of the various facets of work life. It will also be possible to comment on Oshagbemi's (1999) finding that single-item measures overestimate the percentage of people satisfied with their work conditions, while they underestimate results obtained for dissatisfied workers and those who show indifference.

*Hypothesis 3 : There is a negative relationship between the non-fulfilment of needs and overall satisfaction with quality of work life, the less fulfilled workers' needs are, the less their satisfaction is likely to be.*

This hypothesis relates to Research Question 1.5.6, “To what extent does the fulfilment of the individual’s needs predict his/her satisfaction with quality of work life?”

Several authors, researchers and theorists emphasized the relationship between needs and satisfaction in the work place (Downey *et al.*, 1975; Argyris, 1987; Lawler, 1975; Seashore, 1975; Ellis and Bernhardt, 1992; Medcof and Hausdorf, 1995 and Sirgy *et al.*, 2001). Nordenfelt (1993) goes so far as to say that a person has a high degree of quality of life, if and only if his or her fundamental needs have been satisfied. The more specific statement that triggered the interest in the outcome of this hypothesis is by Schaffer (1953, p. 3): “Over-all job satisfaction will vary directly with the extent to which those needs of an individual, which can be satisfied in a job are actually satisfied; the stronger the need, the more closely will job satisfaction depend on its fulfilment.”

*Hypothesis 4: There is a significant relationship between the fulfilment of an individual’s most important need and overall satisfaction with quality of work life.*

As respondents are required to indicate their first, second and third most important needs, this hypothesis can take Hypothesis 3 one step further and determine the relationship specifically with respect to the fulfilment of a person’s most important need and satisfaction with overall satisfaction with quality of work life.

*Hypothesis 5: Satisfaction with facets of work life and need fulfilment contribute significantly to overall satisfaction with quality of work life.*

This hypothesis relates to Research Question 1.5.7 “Does the combination of facets of work life plus need fulfilment contribute significantly to satisfaction with the quality of work life?”

As the influences of the different facets of work life, as well as need fulfilment, are addressed in this research, it makes sense to test the effect of both in

combination on the dependent variable, overall satisfaction. Instead of investigating the effect of each separately, it is logical to speculate that a person who is both satisfied with the facets of work life and whose needs are fulfilled will be satisfied with the quality of his or her work as a whole. To test this hypothesis, a hierarchical regression analysis is done with overall satisfaction as dependent variable and satisfaction with the 35 facets of work life, as well as the non-fulfilment of the 12 needs as independent variables.

### **3.7 OTHER OBJECTIVES**

A further objective of the research is to distinguish between groups in terms of their satisfaction and needs. It will be determined whether there are significant differences between age groups, males and females, married and single people, senior and junior members, long term service members versus members who are medium and short term, race groups, educational level, occupational groups, officers, non-commissioned officers, troops, and public service act employees, number of years in service and different units in different geographical areas. Hence the Research Questions (1.5.2) “Are there groups of members who are more satisfied or less satisfied with the quality of their work life?” and (1.5.5) “Do groups differ with respect to how they prioritise their needs?”

Research Question 1.5.1, “Which facets of work life can be distinguished as contributing significantly to satisfaction with quality of work life?” indicates a more explorative approach. It is not hypothesized that there is a significant relationship between any particular facet of work life and overall satisfaction with quality of work life. The objective is rather to determine the most significant predictors of the quality of work life.

With respect to Research Question 1.5.3, “To what extent are the facets of work life regarded to be important for satisfaction with the quality of work life”, it can first of all be established whether or not the chosen variables has any face value in the form of how important they are regarded by the subjects. It can further be established if there is any difference in how the different facets are valued in

terms of the importance assigned to each and if it does, in what order. To expand on the questions regarding differences in groups (1.5.2 and 1.5.5), some exploring can be done with respect to it.

In order to keep to the intention to address Mukherjee's (1989) concern, that is not to be so presumptuous as to pretend to know as a result of education what the people need from their work, Research Question 1.5.4, explores which needs are regarded as most important by the members of the organisation in order to be able to make informed suggestions to the management of the organisation.

Once some specific facets of work life and need fulfilment are explored, it might be possible to answer Research Question 1.5.7 "Does the combination with facets of work life plus need fulfilment contribute significantly to satisfaction with the quality of work life?"

### **3.8 THE QUESTIONNAIRES**

In determining the degree to which the satisfaction with valued job aspects, or to what extent need fulfilment predicts the overall satisfaction with quality of work life of the members of the organisation, it must be determined which facets of work life and needs are regarded as important by the members and to what extent these aspects and needs are fulfilled. For this purpose the following questionnaires will be used. (Appendix C)

SECTION A: BIOGRAPHICAL INFORMATION

SECTION B: SATISFACTION WITH QUALITY OF WORK LIFE SCALE

SECTION C: PERSONAL IMPORTANCE SCALE

SECTION D: MEASUREMENT OF NEED STRENGTHS

SECTION E: PERSONAL NEED NON-FULFILMENT SCALE

#### **3.8.1 Section A : Biographical Information**

In Section A, several demographic items were included to represent the

variables in question and to facilitate the analysis of the hypotheses.

The relevant demographic characteristics are different rank groups, time in the rank group, different occupational groups, race, gender, age, geographic areas, and academic qualifications. For example, it may be possible that individuals of different educational levels may have different needs and might respond differently when exposed to the same objective conditions. These variables allow for the investigation of the correlates of satisfaction and needs and for general comparisons with earlier findings.

### **3.8.2 Section B : Satisfaction With Quality Of Work Life Scale**

In Section B, the items in the Satisfaction with Quality of Work Life Scale were selected from several standard sources. The items were first pooled and categorized according to the different facets of work life and then specific items that would fit into the format were selected or were adapted to fit. Some of the sources were only utilized to form an idea of most frequently used items. Most of the items used were reworded and adapted for the organisation under investigation. Items were selected from the following sources:

From the Survey Item Bank: Volume 1 Measures of Satisfaction. (1984) *Quality of Life Journal, Volume 1, Number 2* the following items were obtained:

Items from Cross' Pay Scale; Promotion Scale; Your Immediate Supervisor Scale; People You Work With Scale; The Job Itself Scale. The original source of these scales, as included in the Survey Item Bank, was obtained from The Worker Opinion Survey that was published in the Occupational Psychology volume 47 in 1973. The items were only used as an indication of the type of items to include and were not taken directly. Cross reported "adequate" validity and "good" reliability.

Items from Hackman and Oldham's Security Scale; Skill Variety Scale; Task Identity Scale; Task Significance Scale; Autonomy

Scale; Feedback from the Job Itself Scale; Feedback from Agents Scale; Dealing with Others Scale; Experienced Meaningfulness of Work Scale; Experienced Responsibility for Work Scale; Pay Scale; Security Scale; Social Scale; Supervisory Scale; Satisfaction with Growth Scale and Growth Need Strength Scale were selected. These scales were obtained from Hackman and Oldham's Job Diagnostic Survey (JDS) and were used to measure the intrinsic motivation of a job in order to distinguish jobs that are in need of redesign. The use of these items was only to determine facets of work that could lead to dissatisfaction and, for example where the JDS only asked: "How much variety is there in your job?", this survey is more concerned with the subjects' satisfaction with the amount of variety in his or her job. Hackman and Oldham reported varying degrees of reliability and validity, but which would not be relevant for this research, as it is not used in exactly the same manner.

Items from House and Rizzo's Job Pressure Scale were used. House and Rizzo used this scale to measure organisational effectiveness. The idea was derived from the scale that a discrepancy between the amount of work and the amount of time to complete it in could give rise to stress, which in turn would affect the satisfaction or dissatisfaction of the subject.

Only one item out of each of Litwin and Stringer's Job Standards Scale and Identity Scale were used. Litwin and Stringer reported poor reliability and validity for the Job Standards Scale and good reliability and validity for the Identity Scale, but as these scales were not used in the exactly the same manner, it is not relevant to this research.

Sub parts of Smith's Physical Conditions Scale and Kind of Work Scale were used and their reliability and validity cannot be depended on for the sake of this research.

Items from Warr, Cook and Wall's Job Satisfaction Scale; Perceived Intrinsic Job Characteristics Scale; Higher Order Need Strength Scale were used. Most of the intrinsic job factors were derived from these scales. The authors found very good reliability, but validity was not so good. Once again the scales were used as a guideline but not exactly in the same format.

Warr and Routledge's Prospects of Promotion Scale; Immediate Superior Scale and The Job Itself Scale were used just as an indication of types of questions to include. The Immediate Supervisor Scale was used most fully. The authors reported adequate reliability and validity.

Dunham, Aldag and Brief (1977) considered the JDS of Hackman and Oldham to be the most complete and widely used instrument to measure perceived task design. Hackman and Oldham administered the JDS to 658 workers from seven organisations. Within-scale item correlations were compared to between-scale item correlations in an attempt to establish discriminate validity of the scales. Internal consistency estimates were high (.56 to .88), while between-scale correlation medians were low (.12 to .28). They accepted this as evidence of multi-dimensionality. Dunham *et al.* (1977) tested the JDS on twenty widely varied samples of workers and factor analyses identified two, three, four, and five-factor solutions for various samples. They suggested that researchers should examine the dimensionality tapped by this instrument for each sample.

The criteria for inclusion of these items in the Survey Item Bank are the length of the scale and the psychometric properties of the scale. It is believed that a scale's reliability is related to its length and that fewer than five items could not adequately sample a given topic. Scales with acceptable psychometric properties were included with the exception where, for example, scales were still relatively new and validity data is

insufficient. As only parts of these scales were used and not in the same format, no reliability or validity can be concluded for the Satisfaction with Quality of Work Life Scale as it is used in this research. Some scales were only used as examples for structure and method of scoring. It must, therefore, be considered an untested scale.

Van der Doef, M and Maes, S (1999) compiled the The Leiden Quality of Work Questionnaire. This questionnaire measures eleven work characteristics and the outcome variable of job satisfaction in a reliable way. Items were used for measures of creativity, responsibility, variety, use of skills and abilities, autonomy, job/time pressure, job/role clarity, health and safety, job security, meaningfulness, immediate supervisor and work group. Again it was not used in the same manner and can it not be relied upon as indicator of reliability and validity of this research.

The research questions that Jennings (1985) focused on in her research on quality of work life was added to the item pool for selecting suitable items.

Weideman's (1991) quality of work life questionnaire was used just as a guideline for items to be utilized. Aspects regarding work group functioning, the behaviour of the supervisor and organisation climate was particularly of interest. Weideman calculated Cronbach's alpha coefficient to determine internal consistency. He found the internal consistency of his questionnaire to be acceptable and therefore his questionnaire to be reliable. For example, with a sample of 730, a coefficient of 0.93 was found for work group functioning; 0,96 for supervisor behaviour and 0.94 for organisation climate.

Bonnie Kirsh's (2000) Workplace Climate Questionnaire consists of 25 phrases describing various aspects of the social and structural work environment. These phrases were used in the item pool and some of them were rephrased and used. Cronbach's alpha suggested a high degree of internal consistency ( $\alpha = 0.903$ ).

Subscales of items regarding standards, rewards, organisational clarity, warmth and support, and leadership are based on the organisational culture questionnaire of Gordon (1999). Gordon made no mention of reliability or validity.

If reliability is determined by length, some items of the scale (Section B: Satisfaction with Quality of Work Life) may be more reliable than others. Of the 35 facets of work items, some consist of only one subscale while others of up to ten.

The questions in the questionnaire (Appendix C) are organised into topics. For example, first all questions concerning extrinsic job aspects, then intrinsic job aspects, followed by social aspects and organisational culture aspects. The final choice of job aspects according to item numbers is the following:

#### *Extrinsic Aspects*

1. *Rate of Pay*. Two items concerning how well pay and benefits cover expenses and needs and how sufficient it is in relation to skills and efforts.
2. *Physical Work Conditions*. Three items concerning appearance of the physical environment, comfort of working conditions and convenience of transportation.
3. *Chance of Promotion*. One item concerning opportunities to be promoted.
4. *Job Security*. Two items concerning certainty of a career in the near future and certainty of a career in the organisation.
5. *Job/Time Pressure*. Two items concerning amount of work for the amount of time and assistance, and the amount of hard physical labour the job requires.

6. *Health and Safety*. Four items concerning protection against injuries, exposure to pollution, exposure to dangers, risk of catching diseases.

7. *Equipment Adequacy*. Two items concerning the obtainability of equipment and the way in which equipment is maintained.

8. *Fellow Workers*. Three items concerning friendliness, respect, personal interest and support that one gets from fellow workers.

9. *Immediate Supervisor*. Ten items concerning patience, friendliness, politeness and respect from the supervisor; his/her knowledge and competence; feedback about performance; availability, willingness and reliability to give guidance and support; the confidence demonstrated in the subordinate; concern with development; setting an example, maintenance of moral values and deserving of respect; encouragement to express opinions; encouragement to develop new ways of doing things and concern for personal problems and welfare of subordinates.

#### *Intrinsic Aspects*

10. *Autonomy*. Two items concerning amount of independence and freedom in determining what should be done and chances to use personal initiative in deciding how to do work.

11. *Recognition*. One item concerning the way in which efforts are noticed and appreciation is expressed.

12. *Responsibility*. One item concerning degree of personal responsibility for work.

13. *Abilities*. One item concerning opportunities to use specific abilities and skills.

14. *Variety*. Two items concerning the amount of variety and alteration in routine.

15. *Job Itself*. Three items concerning time spent on tasks that are enjoyed, enthusiasm about the work, the extent to which work is interesting.

16. *Job/Role Clarity*. Two items concerning clarity with which responsibilities and objectives are defined and described, and the amount of information regarding work.

17. *Growth and Development*. Two items concerning opportunities to develop own special abilities, to learn new things and to grow and develop as a person.

18. *Task Significance*. One item concerning the extent to which many people can be affected by how well the work is done.

19. *Meaningfulness*. Two items concerning the feeling of accomplishment of something of personal value, and the feeling of making a worthwhile contribution to society.

20. *Challenge*. One item concerning the amount of challenge in the work.

21. *Creativity*. Two items concerning the extent to which the job requires creativity, and the extent to which imagination is allowed.

#### \_\_\_ *Social Aspects*

22. *Social Activities*. Two items concerning chances to get to know people, and opportunities to make friends.

23. *Work Group Functioning*. Seven items regarding members' skills

and abilities; involvement and commitment to the group and team work; sharing of feelings; listening to opinions; trust and confidence in each other; encouragement and planning and coordination of efforts in the work group.

### *Organisational Climate*

24. *Initiative*. Three items concerning initiative and personal responsibility to make decisions and solve problems; too many rules, procedures, etc instead of own initiative; and openness to the next higher level for ideas and suggestions.

25. *Standards*. Four items concerning the emphasis the organisation places on quality performance and outstanding production; challenging goals; how quickly and directly problems are resolved; continual encouragement or motivation to improve personal and group performance.

26. *Rewards Systems*. Two items concerning the degree to which the system allows for reward for good work and the way in which contributions are valued and recognition given.

27. *Organisational Clarity*. Two items concerning understanding of the purpose of the organisation, and the degree to which everything is well organised and goals clearly defined.

28. *Warmth and Support*. Four items concerning the value of friendliness; relationships necessary to do work; the manner in which conflict is resolved; and the degree to which employees' welfare and happiness are considered and concerns are responded to.

29. *Leadership*. Two items concerning the degree to which leadership is based on competence and expertise, and the efforts of the leaders result in fulfilment of purposes.

30. *Equity and Fairness*. Two items concerning the fairness of the pay scale, reward systems and benefits, and the fairness of the system of promotion.

31. *Continuous Improvement*. One item concerning attempts to improve and implement methods and working conditions.

32. *Identification*. One item concerning the degree to which people are proud of belonging to the organisation.

33. *Equipment and Resource Management*. One item concerning the processes to access equipment and resources.

34. *Participation*. Four items concerning decisions taken on a level where it is most appropriate and accurate information is available; people affected by a decision are consulted with; joint planning to coordinate activities; and the opportunity to express grievances.

35. *Communication*. Three items concerning proper information about what is happening in the organisation, changes that affect the job, and open communication lines between superiors and subordinates.

The items were presented as 7-point Likert scales, with 1 indicating that a person was 'Extremely Dissatisfied' and 7 indicating a person being 'Extremely Satisfied' with a particular aspect of his or her work. The middle value of the scale (4) indicated that a person was 'Not Sure'.

All items are keyed in the same direction and, therefore, the questionnaire might be prone to response style bias, in other words, always making choices in the middle area or choosing the alternative which is socially acceptable (Survey Item

Bank, 1984). Respondents were urged to be honest and choose “Not Sure” only if they really were not sure whether they were satisfied or dissatisfied in cases where it has no relevance for them or when they feel completely indifferent about the question.

### **3.8.3 Section C : Personal Importance Scale**

In Section C the main categories of Section B were used to determine the importance members attach to each of the 35 different aspects of work life. A 5-point scale is used with 1 indicating ‘Completely Unimportant’ and 5 indicating ‘Extremely Important’. The middle value of the scale (3) indicated that a person was ‘Not Sure’.

### **3.8.4 Section D : Measurement Of Need Strengths**

In Section D one of the measurements used by Schaffer (1953) for the strength of needs is utilized, as was discussed under “Techniques.” Some words and phrases in the original scale were replaced with words and phrases more familiar to the South African context without changing the meaning. For example “play” was replaced with TV drama, because few people in South Africa go and see a play, while everybody is much more familiar with TV dramas (Schaffer, 1953, p. 5 & pp. 24-25).

The items are designed to measure the strength of needs. The items are rated to indicate degree of agreement with the idea expressed. They are in a multiple-choice format, but with the difference that each response is rated, and it could be rated equally strong. First a situation is sketched and responses are given, which represent the different choices or responses possible to the situation, which in turn represent the different needs. There are 36 items; three are keyed to each of the need strength scales. The scales were changed slightly to include a 0, thinking that it would help in distinguishing between the needs. Problems experienced in this regard with this questionnaire will be discussed in the next

chapter. The following scale was used:

0 - Don't like/agree at all; 1 - Like/agree a little bit; 2 - Like/agree a lot; 3 - Like/agree completely.

To test for reliability, Schaffer compared this scale with two others that he used. Coefficients of concordance were computed to indicate agreement among the three sets of ranks "within" each individual. About three quarters of the full-scale estimated reliability of coefficients are 0.67 or greater.

The other question of reliability is the ability of an item to differentiate among groups of individuals. Analysis of variance was used to estimate reliability. The twelve scales had coefficients of reliability ranging from 0.41 to 0.82.

The twelve needs identified by Schaffer (1953) are used in this research. These needs had the same characteristics as the five need categories in Maslow's hierarchy or the three of Alderfer's model and also some of the needs described by Murray (1938), although they are defined and named somewhat differently (Landy, 1989, 451). Schaffer used the following six criteria in selecting the needs:

If present in a person, is likely to be a rather permanent and stable part of his basic personality structure - an ever-present factor in the determination of adjustment;

Is judged to be relatively important in the determination of adjustment, although differing in degree of importance among individuals;

Is present in many people;

Might conceivably be satisfied in a work environment;

Is definable and unique;

Is amenable to measurement by a paper-and-pencil questionnaire.

The list of needs with the definition is presented below. It is also indicated how it compares with other theories.

*Recognition.* The need to have one's self, one's work and other things associated with one's self known and approved by others (Schaffer, 1953). This need is described in Maslow's self-esteem needs. In interviews, Deci and Ryan (1985) observed a few factors that stood out as intensely stressful aspects of nearly all jobs. People complained about how closely they were being watched and evaluated. They also reported not having received recognition for their efforts. Their accomplishments and competencies have typically gone unacknowledged and the feedback they received was experienced as critical and demoralizing. The things they report lacking are the very things that have been shown to promote self-determination (Deci & Ryan, 1985). The self-actualising person would not be so much concerned with recognition from external sources, but would rather be intrinsically motivated and derive satisfaction from the job itself.

*Affection and interpersonal relationships.* The need to have a feeling of acceptance by and belongingness with other people. The need to have people with whom to form these affective relationships. Not only is this directly comparable with Maslow's need for belongingness, but similarly Deci and Ryan (1985) see interpersonal relatedness as one of the three innate psychological needs that human motivation is based on.

*Mastery and achievement.* The need to perform satisfactorily according to one's standards. The need to perform well in accordance with the self-perception of one's abilities. This can clearly be likened with Maslow's self-actualization or a motivator according to Herzberg. This could also be compared with Deci and Ryan's concept of self-determination and competence and the growth needs according to Alderfer.

*Dominance.* The need to have power over and control of others. The need for power is mentioned by Wubbolding (1986) in his theory. It is similar to the need to be directive in Argyris's (1987) analysis of the kind of needs expressed by top management and is also mentioned as a characteristic or competency of leaders as expressed by Medcof and Hausdorf (1996), as well as Yukl (1998).

*Social welfare.* The need to help others and to have one's efforts result in benefits to others. Norderfeldt (1993) would probably say this is only a means to an end. Favours are often performed in order to get recognition and earn love and respect, which is a means to affiliation. In some instances, for example, where people are in a service rendering position, they may take pride in the benefits they incur for others and it could be a form of self-actualising. This goes beyond self-interest.

*Self-expression.* The need to have one's behaviour consistent with one's self-concept. This could be compared to the need for freedom referred to by Wubbolding (1986).

*Socio-economic status.* The need to maintain one's self and one's family in accordance with certain group standards with respect to material matters. The self-esteem needs of Maslow are similar to this need.

*Moral value scheme.* The need to have one's behaviour consistent with some moral code or structure. There is no other need theory that describes a similar need. This need would be more pro-active than reactive. It does not derive from a deficiency and could fit better in an intrinsic category. It is neither an existence or relatedness need and probably more like self-determination or a form of competence need.

*Dependence.* The need to be controlled by others. Dislike of responsibility for one's own behaviour. Although this need is not

grounded in a physical deficiency, this could be a need for security, but also for affiliation; in other words in Maslow's hierarchy of needs, somewhere between safety and belonging needs. Murray (1938) mentioned a need for deference and succorance that is also comparable to dependence.

*Creativity and challenge.* The need for meeting new problems requiring initiative and inventiveness, and for producing new and original works. This need clearly falls in the category of growth needs according to Alderfer. Argyris (1987) also mentioned challenge as a need that managers have.

*Economic security.* The need to feel assured of a continuing income. Unwillingness to take a chance in any financial matters. The existence needs proposed by Alderfer, that consists of Maslow's lower order safety need, the need to make provision for a safe and secure physical and emotional environment is relevant in this instance.

*Independence.* The need to direct one's own behaviour rather than to be subject to the direction of others (Schaffer, 1953, pp. 4-5). From Murray's (1938) list of needs, the need for autonomy is similar to the need for independence. Autonomy goes hand in hand with self-actualisation and self-determination. The freedom notion of Wubbolding could also be the same as this need.

### **3.8.5 Section E : Personal Need Non-Fulfilment Scale**

In Section E the format of the Personal Non-Fulfilment Scale by Cook and Wall from the Survey Item Bank (1984) is used. Items were taken out and others added to make it comparable with Section D. The twelve needs used by Schaffer (1953) are stated as characteristics of work life and the respondent has to decide whether their situation offers as much of the characteristic as they would ideally like. The scale (1 - I have more than I really want; 2 - I have enough; 3 - I would like a little more; 4 - I would like much more; 5 - I would like very much more) is different from the others in that the positive aspect is indicated by the

lowest number, which necessitates the hypothesis of a negative relationship.

The chosen needs are worded as follow:

1. *Creativity and challenge*. The opportunity to think of new ways to complete difficult and challenging tasks and to create, invent or develop new things.
2. *Socio-economic status*. The status that the job has among friends and family and in the community.
3. *Recognition*. Appreciation and recognition for efforts to do a good job and achievements.
4. *Dependence*. To have a supervisor one can depend on to help and to show the right way to do the job.
5. *Self-expression*. The freedom to express ideas and to be able to be one's self without judgment for others.
6. *Mastery and achievement*. The chance to use and master more skills and abilities and the opportunity to achieve goals.
7. *Affection and interpersonal relationships*. Being part of a social group and the opportunity to make friends and have good relationships.
8. *Social welfare*. The opportunity to improve the circumstances of others and to do something meaningful for others' welfare.
9. *Economic security*. Certainty of a career in the future and financial security up to retirement age.
10. *Moral value scheme*. The opportunity to do work that supports moral values without having to sacrifice principles.
11. *Independence*. Independence from other people's control and making own

decisions about how to do the work.

12. *Dominance*. "In command" when working in a group and ability to influence (or dominate) opinions of others.

After rating the needs according to the extent to their fulfilment, respondents are asked to order the characteristics according to the items that are most important, second most important and third most important for them to feel satisfied with their work. Here the individual would respond in terms of his or her consciously perceived needs. This was used to determine the most prominent needs in the organisation, and also to determine how groups differ in terms of what they need, as well as the relationship between need fulfilment and overall satisfaction.

### **3.9 SAMPLING**

Research findings should ideally benefit a bigger realm than the particular domain available for sampling. Ecological validity, meaning the degree to which the results obtained are not restricted to the particular population from which the sample was taken, but may be generalized to the rest of the SANDF, is the ultimate objective. In the first instance, however, care had to be taken to draw a sample that would be representative of the particular Formation where the researcher has a responsibility, namely the South African Engineer Formation.

As the population is composed of various clearly recognizable sub-populations or strata that differ from one another in terms of the variables in question, a stratified random sampling was used (Huysamen, 1994). Samples were drawn from the different levels of the independent variables, for example, different rank groups, different levels of education, different age groups, etc.

As the sample was drawn from all the different units and the Headquarters of the Formation, as well as from the different strata, it could safely be said that the results can be generalized to the rest of the Formation. What makes this Formation slightly different from other Formations in the SA Army is the wide variety of occupational groups. Nevertheless, about 60% of the sample consists

of combat and support elements that are comparable to other Formations. What is important is that all come from the same organisation with the same culture and circumstances. Generalization to other organisations, especially the private sector, could be questioned.

The South African Army Engineer Formation has the mission to provide a combat ready engineering system that guarantees the mobility and survivability of landward forces of the SANDF, whilst denying enemy mobility. To be able to fulfil this mission, functions such as construction of roads, bridges and buildings, mine clearing, surveying and mapping, printing and supplying and purification of water are performed. The provision of combat ready manpower also entails training in these functions. The Formation also needs to have a rapid deployment ability in order to give direct support to the combat formations of the SANDF. In denying enemy mobility it entails destruction of roads and bridges. Apart from combat support, the SA Army Engineer Formation performs meaningful and humanitarian functions during peacetime as well. As a result of heavy rains in the Limpopo Province during February 2000, bridges were washed away causing many people to be isolated and cut off from services. Units of the Formation were tasked to construct temporary bridges and during ensuing periods of floods, temporary housing was erected in different areas. Members of the Formation are also deployed in parts of central Africa where their main functions are water purification and operational construction.

### **3.10 DATA COLLECTION PROCEDURE**

After all relevant authorities granted permission to conduct the survey, letters were sent to all Commanders and Section Heads, explaining the purpose of the research and requesting their co-operation and assistance by making available a representative number of respondents to complete the questionnaires. At Head Quarters level the two larger sections were chosen. One of the Section Heads volunteered his section to participate and the other was more than willing to participate on request. The Sections' main purpose is to manage all the different functions of the Formation. These two sections comprise of both genders, most occupational groups, most of the rank groups, but with more senior than junior ranks, and most of the other subgroups that are likely to be of

interest. The smaller sections mainly consist of a few officers and a secretary.

Dates were arranged with the Commanders of all the different Units and this was followed up with a letter with the necessary arrangements. The letter stated that the sample must include as wide a variety as possible with respect to race, gender, occupation and rank. An indication was given of the number of members per rank group required according to the size of the Unit, however, availability on the day of the survey was also a factor to consider. Commanders gave full co-operation, arrangements for participation was well organised by appointed members and no signs of reluctance to participate were observed. According to military culture, a commander's wish is respected and complied with.

The researcher personally addressed all respondents, explaining the purpose and the instructions for completing the questionnaires, stressing freedom of choice to participate, confidentiality, anonymity, and requesting respondents to express their own, honest opinions without discussing same with other participants. Each questionnaire was checked to make sure that there were no missing data.

### **3.11 THE RESPONDENTS**

A total of 398 members of the Formation completed the questionnaires. Appendix A: Tables A.1 to A.12.2 contain the frequency distribution of the respondents with regard to the variables included in the research. In Appendix B: Tables B.1 to B.4 a further breakdown is given by means of cross tabulations to indicate the relationships between the main demographic variables.

### **3.12 CONCLUSION**

In investigating the variables that predict satisfaction with quality of work life, a broad study is undertaken in which some hypotheses are formulated about the contribution of certain general factors. However, the study has a multiple purpose in the sense that it also explores a number of different variables or a

combination of variables that could predict satisfaction. The statistical techniques that will be utilized and the results obtained will be discussed in the next chapter.

## CHAPTER 4

### RESULTS

#### 4.1 INTRODUCTION

In the previous chapter the methods, techniques and procedures to be followed in order to obtain quantitative data were discussed. The aim of this chapter is to present and discuss the results of various analyses that were performed in order to test the hypotheses that were set for the research and thereby confirm or refute what was up to now merely assumptions based on previous findings in other areas. The research results will be reported in six sections. All sections involve measurements obtained from the survey as was discussed in Chapter 3 and are presented in the following order:

Data obtained from Section B, satisfaction with quality of work life - the relation between overall satisfaction with quality of work life and satisfaction with the facets of work life.

Section A, Demographic information, as related to overall satisfaction.

The relations found in the second part are explored in more detail.

Section C - Personal Importance Scale results.

Section D - Need Strength Scale.

Section E - Need Non-Fulfilment Scale.

## **4.2 SECTION B: SATISFACTION WITH QUALITY OF WORK LIFE SCALE**

When frequencies and percentages were calculated for the overall satisfaction of the total sample it was found that about 60% were satisfied, 7% of the sample members were not sure where they stand and 33% were dissatisfied. Of the 60% of satisfied subjects, 34% were moderately satisfied, 23% were very satisfied and 3% were extremely satisfied. Of the dissatisfied members 5% of the total sample were extremely dissatisfied, 13% were very dissatisfied and 15% were moderately dissatisfied. It appears that the majority were only moderately satisfied, which is not necessarily reason for concern.

Taking into account that satisfaction with quality of work life can be measured either through overall assessments (viewing one's job as a whole) or through sub-scales measuring specific facets of satisfaction, led to two separate speculations. Hypothesis 1 speculates with regard to the relationship between the two measures and Hypothesis 2 requires the investigation with regard to the differences between measures.

### **4.2.1 Relationship: Facets of Work Life and Overall Satisfaction**

When considering both facets of work life and subjects' general feeling regarding the satisfaction they experience with quality of work life, some speculation regarding the relationship between the two become a logical question and the following hypothesis was presented:

*Hypothesis 1 : There is a significant positive relationship between satisfaction with individual facets of work life and overall satisfaction with quality of work life.*

In Table 4.1 the correlations between each facet of work life and overall satisfaction with quality of work life is indicated. It also gives the relationship between the means of the categories, as well as the mean of all the facets and overall satisfaction.

Table 4.1: Correlations between Facets of Work Life and Overall Satisfaction

FACETS OF WORK LIFE		Correlation	
Intrinsic Items	Pay Physical Work Conditions	Promotion Opportunities	Job Security
Job Time	Health & Safety Equipment Adequacy	Fellow Workers Supervisor	Mean Extrinsic Items
		0,41**	0,39**
		0,32**	0,43**
		0,35**	0,19**
		0,24**	
		0,39**	0,52**
		0,56**	
Intrinsic Items	Autonomy Recognition Responsibility	Use of Abilities Variety	Job Itself
Job Role	Growth & Development Significance	Meaningfulness Challenge	Creativity
		0,44**	0,45**
		0,42**	0,42**
		0,44**	0,45**
		0,47**	
		0,53**	0,32**
		0,37**	0,38**
		0,48**	0,59**
Social	Social Activities	Work Group Functioning	Mean Social Items
			0,34**
		0,52**	0,51**

Table 4.1: Continue

Organisational Climate	Initiative Allowed	Standards	Reward Systems	Clarity of Goals	Warmth & Support Leadership
Equity & Fairness	Continuous Improvement	Identification with Org	Resource Management	Participation Communication	Mean Organisational climate Items
					0,43**
					0,47**
					0,30**
					0,45**
					0,50**
					0,52**
					0,40**
					0,40**
					0,43**
					0,28**
					0,57**
					0,58**
					0,61**
Mean of all Facets					0,66**

\*\* p < 0,01

There is a strong positive correlation between the satisfaction with facets of work life (mean of all the facets) and the overall satisfaction with quality of work life ( $r = 0,66$  significant at  $p = 0,01$ ). Hypothesis 1 is hereby confirmed.

#### 4.2.2 Difference: Facets of Work Life and Overall Satisfaction

The findings of Thurman (1977) led to the formulation of the following hypothesis:

*Hypothesis 2 : The overall satisfaction with the quality of work life is significantly higher than the mean of the satisfaction with facets of work life.*

*H<sub>0</sub> : There is no significant difference between overall satisfaction with the*

*quality of work life and the mean of the satisfaction with the facets of work life.*

Table 4.2: Satisfaction with Facets of Work Life - Overall Satisfaction with Quality of Work Life (QoWL)

	Mean	Std Dev	N
Satisfaction with Facets of Work Life	4,25	0,90	398
Overall Satisfaction with QoWL	4,35	1,60	398

A t-test was done to establish the significance of the difference between the two means and it was found to be not significant [ $t(794) = -1,058$ ;  $p = 0,290$ ].

Therefore, the hypothesis that overall satisfaction is higher than the mean of the satisfaction with individual facets of work is not confirmed, as the non-significant result implies that the difference is not greater than that which can be expected by chance.

The finding of Thurman (1977) that subjects are less satisfied with the specific aspects of their jobs than with the job taken as a whole, as well as the finding of Oshagbemi (1999) (Chapter 3, paragraph 3.5.2.2) that a single item measure overestimates the percentage of people who are satisfied with their work conditions, while it underestimates the results obtained for dissatisfied workers, could not be duplicated.

These means can now be used as a point of reference so that a comparison can be made with other measures and find that it is either more or less than the mean of the total sample. The mean of overall satisfaction will be used where groups are compared in terms of their overall satisfaction. Where satisfaction with the different facets is compared, reference can be made to the mean of the satisfaction of all the facets.

### 4.2.3 Effect of Categories of Work Life on Overall Satisfaction

To test which of the facets of work life, as independent variables, have an effect on the dependent variable, overall satisfaction, analysis of variance and regression analysis was done first with the main categories and then with the 35 facets and overall satisfaction was calculated separately. Thereby, it is attempted to answer Research Question 1.5.1:

*Research Question 1.5.1 : Which of the facets of work life can be distinguished as contributing significantly to satisfaction with quality of work life?*

Table 4.3: Satisfaction with Main Categories - Correlation with Overall Satisfaction

Categories	Mean	Std Dev	N	
	r			
Organisation Climate Factors	3,84	3,99	4,57	4,59
Extrinsic Factors	3,99	4,57	4,59	1,04
Intrinsic Factors	4,57	4,59	1,04	0,61**
Social Factors	4,59	1,04	0,61**	
Factors	0,96	1,12	1,12	
		0,56**	0,59**	0,51**

\*\* p< 0,01; \* p< 0,05.

Subjects are least satisfied with organisational climate factors. On the other hand, it correlates best with overall satisfaction and, therefore, it seems to be the better predictor of satisfaction with quality of work life. It could mean that when some positive changes are implemented in this area, overall satisfaction might improve.

The mean of the satisfaction with organisational climate factors and extrinsic factors are also lower than the mean of the satisfaction with all the facets of work life, while those of intrinsic and social factors are higher.

Multiple regression analysis is used as a method for studying the effects and the magnitudes of the effects of more than one independent variable (Rawlings, 1988), in this instance the main categories, on one dependent variable, overall satisfaction. In all instances the dependent variable is overall satisfaction with

quality of work life. Variables, such as satisfaction with different facets of work life, are independent variables.

Pearson’s product-moment correlations (as reported in Table 4.3) are used to determine the relationship between two variables only, ignoring the possible effect of all other influences. It is, however, also useful to consider the extent to which a dependent variable like overall satisfaction is related to a number of independent variables as a group. A multiple regression model is presented in Table 4.4 where the unique contribution of each independent variable to overall satisfaction can be determined, in terms of the partial correlation of each of the facets of satisfaction to overall satisfaction, which excludes the common variance already accounted for by other variables in the model.

Table 4.4: Multiple Regression Analysis - Main Categories of Work Life

Variables	Coefficient	Std Error	p - Value	Significance	
Extrinsic Intrinsic Social Org Climate	0,22 0,37 0,08	0,51 0,095	0,086 0,078 0,084	0,022 0,000 0,322 0,000	Significant at p<0,05 Significant at p<0,00 Not significant Significant at p<0,00

A multiple correlation coefficient of  $R = 0.67$  was found, which is highly significant ( $F(4; 393) = 80,89; p = 0,000$ ). The four categories of satisfaction measurements account for about 45% of the total variance of overall satisfaction ( $R^2 = 0.45$ ).

It is evident that when each category is considered on its own, they each related significantly to overall satisfaction. But as a group, where only the unique contribution of each category to overall satisfaction is considered (the partial correlations, which exclude overlap between categories; the fact that they are also correlated with one another), the social category does not make a significant contribution, and the extrinsic category only just. This implies that once the other three variables are added into the prediction model, the additional amount of variance that is explained by adding the social category is too little to matter.

Herzberg found in twelve different studies, which included all different levels and occupational types, that motivators were the primary cause of satisfaction, and hygiene factors the primary cause of unhappiness on the job. Respondents were asked what job events had occurred in their work that had led to extreme satisfaction or extreme dissatisfaction on their part. Their responses were broken down into total positive job events and total negative job events. Motivators or intrinsic factors contributed 81% to job satisfaction and 31% to dissatisfaction, while hygiene (extrinsic) factors contributed 69% to dissatisfaction and 19% to satisfaction (Herzberg, 1976, p. 59).

From the above it seems that one could agree with Herzberg on the finding that intrinsic factors contribute more than other factors to satisfaction with work life. Herzberg did not address organisational climate and social aspects as such. Aspects of organisational climate can be regarded as extrinsic, such as the reward system and resource management, while facets of work life, such as initiative and participation may have an indirect influence on how the job is experienced intrinsically. Social aspects form part of the context of work and can be seen as external to the job content.

#### **4.2.4 Effect of Facets of Work Life on Overall Satisfaction**

What follows is only the means of the measures on the individual facets to determine the level of satisfaction or dissatisfaction. It is arranged from low to high in Table 4.5. In other words, the facets that indicate the least satisfaction are indicated first.

As seen from Table 4.5, subjects are least satisfied with equity and fairness (2,67), followed by their opportunities to get promotion, their rate of pay and the reward system of the organisation. These could be regarded as causes for concern, however, it still has to be determined to what extent it contributes to overall satisfaction with quality of work life and what value is attached to the facets of work life.

Facets that respondents are most satisfied with are social activities, the

meaningfulness of their work and the job itself, etc.

It is further noted that intrinsic factors fall mostly on the satisfied side of the list; with satisfaction measures of 4,25 or above. On the dissatisfied side are mostly organisational climate facets and some extrinsic factors. This may be an indication that members are satisfied with the contents of their jobs, but not the conditions under which they have to do it.

Tests were also performed to see whether the means of the scores for the facets of work life differ significantly, to determine whether the facets of work life differ among themselves to a greater level than chance. The significance of these differences were tested by means of a one-way analysis of variance. The result was significant ( $F(34; 13895) = 57,14; p = 0,000$ ).

To determine their representation, the different facets were entered into a multiple regression model with overall satisfaction as the dependent variable. This was done to determine the extent to which overall satisfaction can be predicted from the mean scores, and of the relative contribution or importance of each facet to overall satisfaction.

A multiple correlation coefficient of  $R = 0.74$  was found, which is highly significant ( $F(35; 362) = 12,7; p = 0,000$ ). The 35 facets of satisfaction measurements account for about 55% of the total variance of overall satisfaction ( $R^2 = 0.55$ ). In Table 4.6 the relative contribution of each facet measurement to the overall model is indicated.

When all 35 facets were considered on their own, they were all related significantly to overall satisfaction. However, as a group, where their individual contributions to overall satisfaction is considered, it is only those indicated in Table 4.6 (\*\*  $p < 0,01$ ; \*  $p < 0,05$ ) that make a significant contribution.

Table 4.5: Satisfaction with Facets of Work Life

Categories	Facets of Work Life	Mean	Std Dev	
------------	---------------------	------	---------	--

N



0,965 0,946 0,001\*\* 0,012\* 0,006\*\* 0,009\*\*  
\*\* p< 0,01; \* p< 0,05.

From the above it seems that an organisational climate with a philosophy of participative management has the best chance of providing overall satisfaction with quality of work life to its members. If the members also identify strongly with the organisation and information is communicated efficiently, it enhances the chance of satisfaction.

This implies that if a person is satisfied with the facets singled out as significant in Table 4.6, his/her overall satisfaction will be high; it gives an indication of what is most important to keep people satisfied; and it is what overall satisfaction is made up of. Although those facets explain most of the variance in overall satisfaction, it must also be kept in mind that if all of these are satisfactory, other aspects may become more important as people's perception of their situation changes as each and every facet positively correlates with overall satisfaction (Table 4.1). However, as was indicated in Table 4.5, of all of these significant facets it is only Health and Safety aspects that were in general regarded as satisfactory with a mean higher than 4,25.

Further multiple regression analyses were done with the facets of work life in the four categories:

A multiple correlation coefficient of  $R = 0.62$  was found for extrinsic facets and it accounts for about 38% of the total variance of overall satisfaction. The significant predictors are:

- Rate of Pay ( $p = 0,001$ )
- Job Security ( $p = 0,000$ )
- Health and Safety ( $p = 0,013$ )
- Equipment Adequacy ( $p = 0,045$ )
- Immediate Supervisor ( $p = 0,000$ ).

A multiple correlation coefficient of  $R = 0.62$  was found for intrinsic facets and it accounts for about 38% of the total variance of overall satisfaction. The significant predictors are:

- Recognition ( $p = 0,000$ )
- Growth and Development ( $p = 0,000$ )

Creativity ( $p = 0,045$ ).

A multiple correlation coefficient of  $R = 0.53$  was found for Social aspects and it accounts for about 28% of the total variance of overall satisfaction. The significant predictors are:

Social Activities ( $p = 0,006$ )

Work Group Functioning ( $p = 0,000$ ).

A multiple correlation coefficient of  $R = 0.66$  was found for Organisation Climate and it accounts for about 44% of the total variance of overall satisfaction. The significant predictors are:

Clarity of Organisational Goals ( $p = 0,021$ )

Leadership ( $p = 0,026$ )

Identification ( $p = 0,001$ )

Participation ( $p = 0,000$ )

Communication ( $p = 0,000$ ).

These findings make it possible to make comprehensive suggestions with respect to which areas the organisation should focus on in order to improve the general sense of good quality working life.

### **4.3 SECTION A: BIOGRAPHICAL INFORMATION**

In this section, the information obtained in Section A, as well as the measure for overall satisfaction will be utilized in order to address Research Question 1.5.2.

*Research Question 1.5.2 : Are there different groups of members (according to rank, race, gender, age, educational level, occupation, geographic area) who are more satisfied or less satisfied with their quality of work life?*

The data obtained from Section A: Biographical Information as related to overall satisfaction with quality of work life is presented and discussed with the objective of distinguishing which groups differ from each other. Where two groups are compared, a t-test will be used to establish whether a significant group effect

exists. Where there are more than two groups, analysis of variance will be used to compare the groups, and where applicable, a Scheffé post hoc testing will be conducted to determine the exact nature of the differences, if an overall difference is found.

### 4.3.1 Units and Geographical Area

Table 4.7: Unit - Overall Satisfaction with Quality of Work Life

Unit	Geographic Area	Mean	Std Dev	n
Printing Unit	Combat Unit	Logistical Support Unit	Head Quarters Construction	
Unit Survey & Mapping Sub-Unit	Construction Sub-Unit	Training Unit	Combat/Constr	
Sub-Unit	Gauteng - Pretoria	Free State - Rural	Gauteng - East Rand	
East Rand	Gauteng - Pretoria	Gauteng - East Rand	Gauteng - Pretoria	Limpopo Province - City Free State - Rural
Northern Cape - Rural	3,84	4,04	4,35	4,49
4,51	4,55	4,59	4,62	4,92
1,85	1,60	1,72	1,40	1,60
1,32	1,74	1,46	1,31	
43	92	51	22	67
47	27	37	12	

Most units boast a higher or the same mean as the mean of overall satisfaction ( 4,35). Only two units have a lower mean. There does not seem to be a pattern as far as an obvious difference between urban and rural units is concerned, although the Gauteng units are grouped quite close together. However, it should be noted that the unit with the highest mean also has the smallest number of respondents (n = 12), which could have an effect. According to the law of large numbers, the larger the sample, the closer the true value of the population is approached. This becomes a problem where different groups are compared with numbers that differ greatly. The Northern Cape Unit is actually only a sub-unit and all the available people at the time participated.

To determine whether these units differ significantly, a one-way analysis of variance was done and the result does not indicate a significant difference (F (8; 389) = 1,622; p = 0,117) and, therefore, the overall satisfaction level of the units can be considered to be the same.

Satisfaction can, however, be influenced by a person's ability to adapt to a new environment or on the other hand, people can become dissatisfied by a lack of

new challenges that a new environment would provide. By including a variable such as the period of time in the present unit, it can be established to what extent people are influenced by the length of time spent in a particular unit. To obtain an indication whether a significant influence exists, only one unit, the largest in number of subjects, was selected to perform an analysis of variance on.

Table 4.8: Number of Years in Unit - Overall Satisfaction with Quality of Work Life

Number of Years in Unit	Mean	Std Dev	n
3 - 5 Years	4,23	0,92	20
6 - 10 Years	4,81	1,61	41
< 1 Year	5	1,92	13
1 - 2 Years		1,42	16
10+ Years		0	2
		3,50	3,90

The difference with respect to the number of years in the unit is not significant ( $F(4; 87) = 1,86; p = 0,124$ ) and, therefore, does not seem to be related to overall satisfaction.

#### 4.3.2 Rank Groups

One of the most distinguishing features of a military organisation, which also contributes to its culture, is its uniform, ranks and insignia. It can, therefore, be assumed that rank will represent an important distinction, especially in terms of the comparison among officers, non-commissioned officers and the troop level (i.e. Sappers with no rank). Because of the fact that public service members do not wear uniform, they also form a distinctive group. For the purpose of analysis, ranks were grouped in two ways. The first grouping were the groups as just mentioned, but they in turn are divided into junior and senior ranks. Lieutenants and Captains are junior officers, while Major to Colonel are senior officers. With respect to NCOs, from sergeant up are considered senior and up to Corporals as junior. Public Service Administration Personnel (PSAP) members are senior above Level 4. The PSAP ranks consist of small numbers, which, according to the law of large numbers, will not be as representative as the ranks that consist of larger numbers and, therefore, it is attempted to address that problem by this way of categorizing.

One distinction that could have an effect is that of power and social status. Officers have more power and social status than the other groups, although the Warrant Officers also have a fair amount. Where it comes to decision-making power, officers do have the most say. There is more social status connected to rank groups than for instance occupational and educational groups. For example, a senior officer with only a matriculation qualification has more power than the junior officer with a professional or higher qualification. The higher rank will still have more status. Remuneration is also directly connected to rank. Senior ranks will, therefore, be in a better financial position than junior ranks. These benefits associated with seniority could also be linked with the needs, dominance, social status and financial security that will still be discussed and it will be indicated to what extent the fulfilment of these needs makes a significant contribution to overall satisfaction. The importance that is attributed to rate of pay will also be further investigated. Another facet that could be of importance is the amount of responsibility the subjects have, how they value it and how satisfied they are with what they have.

Table 4.9: Rank - Overall Satisfaction with Quality of Work Life

Rank Group	Mean	Std Dev	n
Sappers PSAP NCO's Officers	3,73 4,11 4,60 4,69	1,70 1,63 1,53 1,38	102 36 195 65

A one-way analysis of variance was executed and the result is  $F(3; 394) = 8,43$ ;  $p = 0,000$ , which is quite significant. A post hoc Scheffé test will reveal where the most significant differences are. The fact that officers are on average more satisfied with their quality of work life than the other ranks, followed by NCO's was as expected. Further exploration of these differences might point to some underlying contributing factors.

Scheffé post hoc comparisons revealed a significant difference in overall satisfaction for Sappers and NCOs ( $p=0,000$ ), and for Sappers and Officers ( $p=0,002$ ). None of the other comparisons provided a significant result.

Table 4.10: Scheffé comparisons of overall satisfaction for rank groups

	1 Sapper	2 PSAP	3 NCO	4 Officer
1 Sapper 2 PSAP	3 NCO 4 Officer	-	0,654 -	
	0,000 ** 0,396 -	0,002 ** 0,362	0,982 -	

\*\* Significant on the 1% level

When ranks were divided according to seniority, the following results were obtained:

Table 4.11: Junior/Senior Ranks - Overall Satisfaction with Quality of Work Life

Rank Group	Mean	Std Dev	n
Junior Ranks Senior Ranks	4,08 4,88	1,65 1,36	
	265	133	

The mean of the senior ranks is higher than the mean of the total sample, while the mean of the junior ranks is lower. The significance of this difference was confirmed by a t-test [ $t(1; 396) = 4,82; p = 0,000$ ].

### 4.3.3 Career Related Variables

The most prominent career related variable is occupation. Some occupations have a limited career path in the Defence Force in the sense that certain functions are executed on the lower levels and to progress, the individual sometimes has to make a choice between specializing or take up a staff (managerial) or command position. It could imply that they have to forsake doing the work they enjoy most for the sake of promotion, advancement and a better financial position. Specialist knowledge and qualifications take a back seat to military qualifications and it is only the latter that is taken into account for promotion. It is also not taken into account at all in determining a remuneration package. In the past, technical allowances were still applicable, but this was done away with and everybody now falls under the same occupational dispensation, namely military practitioners. This applies specifically to SA Army and, therefore, it forms part of the reward system of this particular organisation.

Different dispensations exist to a greater extent in other Arms of Service. In theory there is, therefore, only one occupation as everybody is administered the same, but as they execute different work, they are treated in this study as different groups. According to Schaffer (1953), there is a certain similarity among the members of one particular occupational group in that their occupation provides common satisfaction for them.

With occupational groups only the specialist occupations, which are small in numbers were grouped together. Specialists in the mapping and printing environment are cartographers, lithographers, photographers, desktop programming operators, etc. Professionals are architects and land surveyors. Senior Staff Officers are part of the executive management irrespective of what their previous occupations were. It does not seem logical to group them with any other group because of the special type of responsibility they have.

Table 4.12: Occupation - Overall Satisfaction with Quality of Work Life

Occupation	Mean	Std Dev	
n			
Technical Field Engineers (Combat) Artisans Support Staff Professionals			
Specialists Senior Staff Officers (SSO) Construction Machine Operators (CMO)	3,52	4,25	4,26 4,38
	4,56	4,57	5,33 5,38
	1,50	1,42	0,58 1,15
			21 137 54 105 16 46 3
			16

According to the statistics in Table 4.12, a person's occupation does have a significant influence on the experience of overall satisfaction ( $F(7; 390) = 2,21; p = 0,032$ ). A Scheffé test for post hoc comparisons showed no differences among any of these occupational groups, in spite of the overall F-value being significant (and  $p=0,032$  is not very significant, only on 5% level). The largest difference,  $p=0,093$ , was found between CMOs and Technical personnel.

One could surmise that the Senior Staff Officers should be the most privileged and their overall satisfaction is quite high in relation to the other groups, but for the construction machine operators. What do they have that other members don't have? They seem to be quite an ordinary group with only a third of them

having a matriculation, their ages range from 26 to 50, they cover all of the NCO ranks from Sapper to Warrant Officer (about half junior, half senior), about half of them has been in the same rank for more than six years, two-thirds of them are black, and yet there are only three out of a possible sixteen who do not feel satisfied with their quality of work life. It may even not have to do with the type of job that they are doing. They are able to manoeuvre a big machine and they are able to see the results of their work very concretely. It is easy for them to take pride in their work and see the significance of the task they are doing. It will be explored in Section 4.4 whether occupational groups differ significantly with respect to the satisfaction they experience with the meaningfulness of their work (paragraph 4.4.6).

Technical occupations' mean is the lowest and as was mentioned before, this may have something to do with their career planning and opportunities for advancement in the organisation.

Another factor that affects a person's career is the term system.

Table 4.13: Term - Overall Satisfaction with Quality of Work Life

Term	Mean	Std Dev	n
Short and Medium Long	4,11 4,61	1,62 1,56	
	210 188		

In the previous chapter it was mentioned that subjects who are in the long-term service have more job security than those in the medium and short-term service. Whatever the reason for more satisfaction in the long-term subjects, it was proved to make a significant difference by means of a t-test [ $t(1; 396) = -3,15; p = 0,002$ ].

During the life span of any career there come times when the option to leave is considered. When it does not seem to be a viable option and there are no other better options, people tend to accept what they have and according to Thurman (1977) it can result in a higher expressed level of satisfaction. The reality, especially for white males, is that there are not many other options. The longer

they are in the organisation the more they also have to consider their pension contributing years. It could be assumed that those who are still in the organisation in the longer periods, are those who were not dissatisfied enough to leave the organisation or not fortunate enough to be able to go for a better position in another organisation. It could, therefore, be surmised that either subjects in the longer period are still in the organisation because they are satisfied with their career or that they are not satisfied, but have accepted their circumstances and therefore express more satisfaction. Either way the longer period could yield more satisfaction.

The number of years served in the organisation could have an influence and for the purpose of finding out by means of one-way analysis of variance, the sample was divided into three periods as indicated in Table 4.14 below.

Table 4.14: Period in the SANDF - Overall Satisfaction with Quality of Work Life

Number of Years in the SANDF	Mean	Std Dev	n
11 - 20 Years	4,22	1,67	125
0 - 10 Years	4,31	1,58	230
21+ Years	4,91	1,44	43

As was assumed the period of more than 21 years does contain a higher rate of satisfaction and the difference is significant ( $F(2; 395) = 3,12; p = 0,045$ ) at  $p < 0,05$ . However, a Scheffé test revealed no significant differences.

Another career related variable, educational level, did not reveal any significant effects.

Table 4.15: Education Level - Overall Satisfaction with Quality of Work Life

Education Level	Mean	Std Dev	n
Post Matric Education	4,27	1,57	71
Matric	4,31	1,62	197
Less than Matric	4,44	1,60	130

Mutran *et al.* (1997) had the expectation that employees who are better educated, have higher income and may have experienced fewer difficulties with occupational mobility would be more likely to be satisfied with their jobs.

Although, they also surmised that highly educated individuals would be less satisfied with their work, because of elevated, but potentially unfulfilled expectations. In this case, however, the difference in terms of educational groups is not significant ( $F(2; 395) = 0,34; p = 0,714$ ).

#### 4.3.4 Personal Attributes

It is assumed that race as a personal attribute might have a meaningful influence on the experiencing of overall satisfaction. Satisfaction and race is sometimes discussed in terms of expectations. After integration of different forces into the current SANDF there were definite expectations of having it much better than before or just as well as the relative prosperity of the more fortunate communities. For some these expectations might have realized, but for some it may not have been the case and they will remain discontented with their lot until they have succeeded in catching up. On the one hand, a person who has been led to expect advancement in quality of life, will be more dissatisfied if he fails to achieve it than a person whose expectations have not been similarly heightened. On the other hand, if people have no reason to expect or hope for more than they can achieve, they might be less discontented with what they have, or even grateful simply to be able to hold on to it, as in the case of the effects of affirmative action. According to Runciman (1966), this is a natural reaction that is related to how expectations occur. It is, therefore, expected that blacks may be less satisfied than whites. The race-rank relationship is also of relevance (Appendix B). More blacks are in the junior ranks: 89% of Sappers are black, while only 24% of officers are black. Until this discrepancy has been wiped out this will remain a source of discontent.

Table 4.16: Race - Overall Satisfaction with Quality of Work Life

Race	Mean	Std Dev	n
Blacks	4,17	1,71	250
Whites	4,61	1,37	137
Coloureds	5,09	1,04	11

Blacks are least satisfied, although only slightly below the mean of the total sample. The coloured group seems to be most satisfied, but because of the low

n this should be interpreted with caution. To determine whether these differences are in fact meaningful, a one-way analysis of variance was performed. The result [ $F(2; 395) = 4,53; p = 0,011$ ] is significant. A Scheffé post hoc testing revealed a significant difference between the black and white groups ( $p = 0,038$ ) but not between the black and coloured group ( $p = 0,174$ ) or white and coloured group ( $p = 0,623$ ). The fact that there is a significant difference between black and white groups, but not between the black and coloured groups, even though the absolute difference in means is greater in the latter case, can be attributed to the small sample size of the coloured group.

Age is another personal variable that may have an influence on how people view and experience their work life. As people become more mature and progress in life, normal life experience increases and they learn to accept more, it may change the meaning a person attaches to a job and his/her satisfaction with it (Seashore, 1975).

Table 4.17: Age - Overall Satisfaction with Quality of Work Life

Age group	Mean	Std Dev	n
31-35 ≤25 26-30 ≥51	36-40 41-45 46-50	4,06 4,08 4,32 4,50 4,53 4,71	
5,42	1,65 1,55 1,57 1,95 1,59 1,55 0,93		124 38
	113 18 47 34 24		

The most satisfied group are older than 36 and the younger group up to 35 are the least satisfied. Judging from the wide distribution of responses of 51 and older, the mean could be brought about by responses ranging from very dissatisfied to very satisfied. This distinction was found to be significant ( $F(6; 391) = 3,15; p = 0,005$ ). Only one of the Scheffé test results proved to be significant: that between the 31 to 35 age group and the 46 to 50 age group ( $p = 0,023$ ).

It is clear that the relationship between age and overall satisfaction is not strictly linear, although the aim was to detect group differences rather than relationships of any kind. According to the results displayed in Table 3.14 - Age-Rank Relationship, the three most senior and prestigious post incumbents fall in the age group 36 - 45, which is not the most satisfied age group. The most satisfied

group (age group 46 - 50) consists of mostly senior non-commissioned officers. The age group 51 and older consists of senior NCOs as well as civilians on a low level. Most Sappers fall in the age group 26 - 36. As a rank group they are the least satisfied. Rank usually goes according to age, but the Sappers are relatively older than what would be expected and that in itself could have an effect; being not so young and in the lowest rank. Age alone cannot be said for certain to have the major effect on overall satisfaction. (The correlation of age category and overall satisfaction is  $r = 0,15$ , which means that age only explains about 2% of the variance in overall satisfaction). Hochwater *et al.* (2001) found that the relationship between age and job satisfaction provided mixed results and contended that other variables should be controlled in such a case.

No significant differences were found between male and female ( $p = 0,435$ ), and married and single people ( $p = 0,056$ ) and, therefore, these groups do not warrant any further discussion.

#### **4.4 SECTION B: FACETS OF WORK LIFE EXPLORED**

The facets of work life that subjects were most dissatisfied with fell in the organisation climate and extrinsic categories. The lowest mean for a facet was attributed to equity and fairness, followed by opportunities for promotion, rate of pay and the reward system of the organisation.

##### **4.4.1 Equity and Fairness**

Because satisfaction in equity and fairness is in general low, it might warrant further investigation. Seeing that people usually judge whether they are treated fairly by comparing themselves and what they have with another group, according to the theory of social comparison as was discussed in Chapter 2, the question arose that if inequity is perceived, what groups are seen to be favoured and would presumably be more satisfied. This cannot be answered directly from the existing data. It could only be asked whether there are groups who are more dissatisfied. As the biggest difference in terms of overall satisfaction was within the ranks, the effect of rank group on satisfaction with equity and fairness was

first investigated, and the following results obtained:

Table 4.18: Relationship Rank - Satisfaction with Equity and Fairness

Rank	n	Mean	Std Dev
PSAP Spr LCpl - Cpl	102	2,49	1,43
Maj - Lt Col - Col	98	2,50	1,43
Sgt - SSgt	24	2,57	1,34
Lt - Capt	65	2,69	1,49
WO2 - WO1	41	2,79	1,38
	32	2,85	1,56
	36	3,28	1,44

The difference between the ranks in terms of satisfaction with equity and fairness is not significant ( $F(6; 391) = 1,6; p = 0,144$ ).

Satisfied that there is no significant relationship between rank and satisfaction with equity and fairness, the more contentious question is whether there is a relationship between race and satisfaction with equity and fairness. The group statistics are reported in Table 4.19, but an analysis of variance found no significant difference between the three ethnic groups ( $F(2; 395) = 1,199; p = 0,302$ ).

Table 4.19: Relationship Race - Satisfaction with Equity and Fairness

Race	n	Mean	Std Dev
Black	250	1,47	1,43
White	137	1,38	1,34
Coloured	11	1,56	1,44

It, therefore, cannot be said that one group experiences inequity in the organisation more negatively than the other. The question whether they perceive other groups as being treated more favourably, or whether they just experience the system as treating people in general unfairly cannot be answered in this research. From the scope of this research, the conclusion must be the latter. At least no group seems to have the feeling that they are being favoured.

When looking at the sub-scales of the item, equity and fairness, the one with the lowest mean, (2,39) reads, "How satisfied are you that the system of promotion is fair?" It is further noted that the aspect that closely follows on equity and fairness with a mean score of 2,76 is the item about satisfaction with the chance

of promotion. One cannot but wonder whether the catchword is not 'promotion' and if the dissatisfaction is not more with promotion than with the fairness of the system. Sure enough, a correlation of 0,40 was found, but it only means that the two items share 16% of their variance, as can be expected because in a way they both concern promotion. Just to put it to rest, a t-test was done on the means of the two items and a p-value of 0,001 was found. So the means of the scores of the two items do differ significantly and must be concluded that it does measure different aspects of promotion - opportunity and fairness of the system.

#### **4.4.2 Promotion**

Seashore (1975) suggested that the period that a person has remained in the current rank can be useful for predicting or influencing the satisfaction if it is also considered how the person sees his/her chances to get promoted. A person who has just been promoted may be more satisfied than the individual who was not. Within an established career ladder, with known advancement stages, such as rank promotion in the military, satisfaction will be affected by unrealised hopes of getting promoted at an expected time. There is a minimum period a person has to serve in a rank before promotion can be considered and then it may occur only after the person underwent prescribed qualifying training successfully. When all the requirements are met, it is reasonable to expect that a promotion will follow, but at this stage the availability of a suitable post becomes the determining factor. The number of people who qualify at any given time for promotion usually exceed the number of promotional posts, and only a few will get the chance of promotion. Another aspect, which can be influenced by the period in a position, is that an initially challenging job may become less so as the occupant gains competence by experience and the novelty of new skills also gradually wears off. Promotion to a higher rank also entails an increase in salary and he/she may initially be satisfied with pay, which after a number of years without a raise may not be as satisfactory any more (Seashore, 1975, p. 114). It can, therefore, be assumed that the period in rank can have a significant influence on people's satisfaction with promotion prospects.

Table 4.20: Relationship Period in Rank - Satisfaction with Promotion

Period	Mean	Std Dev	n
6 - 10 Years	3,23	1,54	125
10+ Years	4,00	1,59	28
3 - 5 Years	2,18	1,69	115
1 - 2 Years	2,21	1,76	100
< 1 Year	2,81	1,66	30

Although the subjects who have been promoted within the past year are least dissatisfied their means are still below the mean of all the facets of work and can still not be regarded as satisfied. However, the standard deviation suggests a relatively wide range of responses. As can be expected the two longest periods are also the two with the lowest mean as well as the least deviation. A one-way analysis of variance gives evidence of a significant difference ( $F(4; 393) = 10,83; p = 0,000$ ).

The Scheffé test reveals the most significant difference to be between the less than one year and 6 to 10 year groups.

Table 4.21: Scheffé tests for satisfaction with promotion by period in rank

	6 - 10	> 10	3 - 5	1 - 2	< 1
6 - 10 > 10	0,603 -	0,0002 **	0,085	0,441 -	0,9999 -
3 - 5 1 - 2 < 1	0,014 *	0,290 -		0,0000 **	0,002 **

\* Significant on the 5% level \*\* Significant on the 1% level

Since the year groups can be placed in an ordinal scale, it is possible to calculate the correlation. An increase in years in rank should coincide with decrease in satisfaction with promotion. A significant negative correlation of -0,30 was found ( $p < 0,01$ ).

The question that can now be asked is the following: seeing that even the recently promoted are dissatisfied, is there any group that is not dissatisfied with

opportunities for promotion? It could be that people in senior ranks are less obsessed with their prospects, especially Warrant Officers who don't have much further to go.

Table 4.22: Rank - Satisfaction with Promotion

Rank groups	Mean	Std Dev	n
Sapper Public Service Administration Personnel Lance Corporal - Corporal			
Major - Colonel Lieutenant - Captain Sergeant - Staff Sergeant Warrant Officer Class 1 and 2	2,14	2,55	2,66
	2,79	3,14	
	3,21	3,81	
	1,56	1,61	1,73
	1,34	1,67	
	1,80	1,95	
	102	36	98
	24	41	65
			32

There is a significant difference between the ranks with respect to satisfaction with promotion [ $F(6; 391) = 5,68; p = 0,000$ ] although all the means indicate a greater than average level of dissatisfaction. Seniors may feel resentful, because their chances of promotion are very slim. From where they are, the more senior positions are drastically less than the number of contenders. As expected, the Warrant Officers are almost reaching a satisfaction level. Some of them may already have reached their top (WO1 is the highest rank in the NCO ranks), but others may also still strive for promotion. In these ranks it is the coveted appointment as Regimental Sergeant Major that is competed for, but will only befall a few.

The Sappers are the most dissatisfied group. As the bottom level of the hierarchy is the largest in numbers, it is not possible that all of them will have a chance to move upward in the organisation. Therefore, most defence forces have a system of either conscription or short-term service. The situation in South Africa is such that most members in the force want a career in the army, because there is a scarcity of jobs and while they are in the force they can at least provide for their families. Inflation and increasing family demands make it difficult for them to survive on a Sapper's salary and the only way out of their dilemma that they see, is to get promotion.

The more senior positions are usually reserved for military personnel for command and control purposes. Therefore, PSAP members may be better

qualified than uniform members for the positions, but they don't have the same opportunities for advancement, which may result in their dissatisfaction with this facet. There are two significant differences on the Scheffé test: Sappers with Sergeant to Staff Sergeant ( $p = 0,014$ ) and Sappers with Warrant Officers ( $p = 0,000$ ).

#### 4.4.3 Rate of Pay

Rate of Pay is the next facet of work that subjects are generally dissatisfied with. There are two sub-scales in this item. One deals with satisfaction with the way in which pay and benefits cover expenses and needs, and the other deals with satisfaction with the way pay is a sufficient reward in relation to skills and effort put into the job. It could be assumed that subjects at the lower levels will be more dissatisfied with the first and subjects with higher qualifications might be more dissatisfied with the second. Of the two, the most dissatisfaction was with the second.

First it is determined whether there are rank groups who are significantly more dissatisfied.

Table 4.23: Rank - Satisfaction with Rate of Pay

Rank	Mean	Std Dev	n
Sapper Public Service Administration Personnel Lance Corporal - Corporal Sergeant - Staff Sergeant Major - Lieutenant Colonel Lieutenant - Captain Warrant Officer Class 1 and 2 Colonel	2,55 2,81 2,88 3,78 3,86 4,10 4,37 4,33	1,39 1,51 1,40 1,46 1,32	102 36 98 65 21 41 32 3

It can be said with certainty that there is a significant difference in the way the different ranks experience satisfaction with their rate of pay ( $F(7; 390) = 12,4; p = 0,000$ ).

Colonels and Warrant Officers are the only ones that appear to be satisfied. Satisfaction levels seem to coincide with increase in rank. Warrant Officers

should earn more or less the same or more than Lieutenants and Captains.

It would have made sense to collapse 'Col' into the 'Maj - Lt Col' because of the small category size as was done with satisfaction with promotion, however, there is a big difference in salary between Majors and Colonels. For the Scheffé test, however, Colonels were grouped with Maj to Lt Col:

Table 4.24: Scheffé tests for Satisfaction with rate of pay by rank groups

	Sapper	PSAP	Lcpl-cpl	Sgt-ssgt	Maj-col	Lt-capt	
WO2-WO1							
Sapper	PSAP	Lcpl - Cpl	Sgt - Ssgt	Maj - Col	Lt - Capt	WO2 - WO1	-
	0,996 -	0,593	0,996 -	0,000**	0,034*	0,022* -	
	0,009**	0,175	0,252	0,999 -	0,000**	0,005**	0,003**
0,996 -	0,000**	0,001**	0,000*	0,739	0,915	0,996	-

\* Significant on the 5% level; \*\* Significant on the 1% level

Sappers differ significantly from all other ranks except PSAP members. Most significant differences are between junior and senior ranks.

Apart from the rank group Major to Lieutenant Colonel, who seem out of place with being less satisfied than lower ranking groups, it could be concluded that the deciding factor is more towards the way the rate of pay covers needs. The rank group Maj to Lt Col may fall in the second category of being more dissatisfied with the way they are remunerated according to their skills and effort. It can be established by means of a t-test whether or not this rank group distinguishes significantly between the two sub-scales and by comparing it with the lowest income group, the Sappers.

Table 4.25: Rate of Pay - Major - Lieutenant Colonel

Rate of Pay Sub-Scales	Mean	Std Dev	n
Pay 1.2 Reward skills and effort. Pay 1.1 Cover needs and expenses.	3,29	1,49	21
	4,29	1,55	21

As assumed, this rank group is more or less satisfied with the way their rate of pay covers their needs and expenses, but are dissatisfied with the way they are rewarded sufficiently for what they put into the job. This difference is significant ( $t(40) = 2,13; p = 0,039$ ).

Table 4.26: Rate of Pay - Sappers

Rate of Pay Sub-Scales	Mean	Std Dev	n
Pay 1.1 Cover needs and expenses.	2,39	1,54	102
Pay 1.2 Reward skills and effort.	2,64	1,55	102

Sappers are more dissatisfied with the way their pay covers their needs and liabilities, but according to the t-test the difference is too small to be regarded as more than chance ( $t(202) = -1,13; p = 0,258$ ).

#### 4.4.4 Reward System

As far as the Reward System of the organisation is concerned, all the ranks' means fall below the overall mean for the facets of work life of 4,25, but with a p-value of 0,256 the difference between the rank groups is not significant and it could only be concluded that there is wide spread dissatisfaction with this facet of work life.

Not to focus on the facets of work life that subjects are dissatisfied with only, the two facets that subjects are most satisfied with, i.e. social activities and the meaningfulness of the work will also be investigated.

#### 4.4.5 Social Activities

The item concerning social activities consist of two sub-scales, one that refers to the chance to get to know other people and the other to opportunities at work to make friends.

Table 4.27: Rank - Social Activities

Rank Groups	Mean	Std Dev	n
Sapper Sergeant - Staff Sergeant	4,66	1,48	5,21
Lance Corporal - Corporal	4,93	1,33	5,59
Administration Personnel Lieutenant - Captain	5,15	1,31	6,17
Major - Lt Col Warrant Officer Class 1 and 2 Col	5,15	1,26	5,17
	5,17	1,17	

0,99 0,66 0,28

102 65 98 36 41 21 32 3

All rank groups fall above the mean of 4,25. There is a significant difference between the rank groups ( $F(7; 390) = 2,79; p = 0,007$ ), with senior officers and Warrant Officers most satisfied and junior NCOs least satisfied.

#### 4.4.6 Meaningfulness

This facet of work life concerns the extent to which subjects feel that they accomplish something that they personally value and makes them feel good as a person as one sub-scale of the item, and the extent to which they feel that they are making a worthwhile contribution to society through their work, as the other sub-scale. The mean of the satisfaction with the first is 4,89 and with the second 5,09, overall the second highest mean for a sub-scale.

Although all the rank groups are on average satisfied with the extent to which they do meaningful work, it appears that seniority plays a role. Sappers and Corporals are the junior ranks in the NCO ranks and Lieutenants and Captains are the junior officers. PSAP members are both junior and senior. The difference between the means of the ranks is significant ( $F(6; 391) = 4,27; p = 0,000$ ).

Table 4.28: Rank - Meaningfulness

Rank Groups	Mean	Std Dev	n
Sapper Lieutenant - Captain	4,56	1,60	102
Lance Corporal - Corporal	4,78	1,32	65
Sergeant - Staff Sergeant	5,01	1,45	98
Warrant Officer Class 1 and 2	5,25	1,14	36
Major - Colonel	5,38	0,79	41
Public Service Administration Personnel	5,50	1,22	21
	5,53	1,11	32
			3

As this concerns what a person does in his or her job it makes sense to compare occupational groups with respect to their satisfaction with the meaningfulness of their work. There is still the unanswered question about the relatively high job satisfaction of the CMOs (see paragraph 4.3.4).

According to the data in Table 4.29, CMOs are next to SSOs the occupation group that is the most satisfied with the meaningfulness of the work they do. The difference among the meaningfulness scores for the occupational groups is, however, not significant ( $F(7; 390) = 1,23; p = 0,286$ ). However, at this stage it seems to be the best possible explanation for the high level of satisfaction among CMOs.

Table 4.29: Occupation - Meaningfulness

Occupation Groups	Mean	Std Dev	n
Field (combat) Engineers Artisans Technical Support Specialists Professionals			
Construction Machine Operators Senior Staff Officers	4,78	4,94	5,09
5,12 5,24 5,31 5,37 5,67	1,45	1,55	1,30 1,34 1,12
1,45 0,88 0,57			137 54 21 103 48 16 16

3

#### 4.5 SECTION C: PERSONAL IMPORTANCE SCALE

In the previous section the effect of the different facets of work life on overall satisfaction was investigated. In this section the importance of the same 35 facets of work life is considered. Research Question 1.5.3 was formulated as follows in Chapter 1:

Research Question 1.5.3 : To what extent are the facets of work life regarded to be important for satisfaction with the quality of work life?

Personal importance of the facets of work life was measured on a 5-point scale varying from completely unimportant (a score of 1) to extremely important (a score of 5). The absolute mean for this scale will, therefore, be a score of 3.

In Section C the 35 scales, facets of work life, of Section B is duplicated (without

the sub-scales). However, in Section C the scales measure the importance of the facets and not the individual's satisfaction. (Refer Chapter 3 paragraph 3.8.3).

#### 4.5.1 The Importance of Main Categories

The 35 scales are combined in the same way as before (Section B) to create four main categories. It is first established how the main categories compare with respect to their importance:

Table 4.30: Main Categories - Personal Importance (5-point scale)

Categories	Mean	Std Dev	N
Social Factors	3,91	0,75	398
Extrinsic Factors	4,08	0,71	398
Intrinsic Factors	4,10	0,69	398
Organisation Climate Factors	4,13	0,74	398

\*\* p < 0,01; \* p < 0,05.

Although the means seem to be very close, they were found to differ significantly ( $F(3; 1588) = 7,96; p = 0,000$ ). As can be seen from the standard deviations, there is a high degree of agreement among respondents regarding the distribution of the scores within each of the categories.

The categories in Table 4.30 are arranged in order of least important to most important. However, all categories seem to be regarded as important.

#### 4.5.2 The Importance of Facets of Work Life

In Table 4.31 the 35 items of the personal importance scale is ordered from least to most important. Note that all the means of the 35 facets are above the absolute mean of 3. Even the least important of these (Social Activities with a mean of 3,82) differ significantly from 3 (on a t-test with  $p = 0,000$ ). All the other differences should be significant too.

The difference between the means is quite significant ( $F(34; 13895) = 8,49; p =$

0,000). The high degree of importance assigned to the facets of work life is an indication of the face validity of the constructs.

Table 4.31: Facets of Work Life - Personal Importance (5-Point Scale)

Categories	Facets of Work Life	Mean	Std Dev	
N				
Social Intrinsic Org	Cult Extrinsic Intrinsic Extrinsic Org Cult Extrinsic	Social Org		
	Cult Intrinsic Extrinsic Org Cult Intrinsic Extrinsic Org Cult Org Cult Extrinsic			
	Intrinsic Org Cult Intrinsic Extrinsic Intrinsic Org Cult Intrinsic Intrinsic Org Cult			
	Intrinsic Intrinsic Extrinsic Intrinsic Org Cult Extrinsic Org Cult Org Cult Social			
	Activities Autonomy Warmth & Support Immediate Supervisor Variety Job/Time			
	Pressure Initiative Physical Work Condition Work Group Functioning Standards			
	Recognition Chance of Promotion Continuous Improvement Job/Role Clarity			
	Rate of Pay Resource Management Reward System Equipment Adequacy			
	Creativity Clarity of Organisational Goals Challenge Fellow Workers Growth &			
	Development Participation Task Significance Ability Equity & Fairness			
	Meaningfulness Responsibility Job Security Job Itself Leadership Health &			
	Safety Identification Communication	3,82 3,82 3,90 3,93		
		3,93 3,95 3,96 3,98 3,99 4,02 4,04 4,04 4,07 4,07 4,08 4,08 4,09 4,10 4,10		
		4,11 4,11 4,12 4,14 4,15 4,18 4,18 4,18 4,19 4,21 4,25 4,26 4,26 4,29 4,35		
		4,41 0,94 0,91 0,99 1,04 0,95 0,86 0,93 1,00 0,91 0,96 1,00 1,22		
		0,97 0,91 1,07 0,89 1,04 0,87 0,85 0,94 0,93 0,87 0,94 0,84 0,90 0,91 1,10		
		0,88 0,87 0,95 0,93 1,03 0,88 0,92 0,92 398 398 398 398		
		398 398 398 398 398 398 398 398 398 398 398 398 398 398 398		
		398 398 398 398 398 398 398 398 398 398 398 398 398 398		

It was already established that significant difference exists regarding overall satisfaction with quality of work life between junior and senior ranks and it will be established how groups differ in terms of their prioritising of needs. Although no research question or hypothesis was formulated regarding differences in groups with respect to importance, it may shed more light on the differences among groups in general.

When comparing junior and senior rank groups over the 35 facets of the personal importance scale with a multivariate analysis of variance, the results

were as follows: (The tables will show which specific facets differ for the junior and senior rank groups).

Table 4.32: Multivariate Analysis of Variance : Importance : Extrinsic facets

Personal Importance Scale: Extrinsic facets		Senior Mean	Junior
Mean	p		
Pay	Physical Work Conditions	Promotion Opportunities	Job Security
Job/Time Pressure	Health & Safety Equipment Adequacy	Fellow Workers	Immediate Supervisor
4,27	4,20	4,44	4,23
4,05	3,79	4,37	4,53
** 0,0000	** 0,0008	** 0,0001	** 0,0001
		0,0181	* 0,0002

\* p < 0,05; \*\* p <

0,01

There is a significant difference between seniors and juniors in the importance assigned to all extrinsic facets (Wilk's Lambda = 0,920; Rao's R (9;388) = 3,710 with p= 0,000). Note how the Junior rank group is consistently lower in the importance they give to any particular facet. Taking into consideration that junior members may be expected to be more pre-occupied and concerned with extrinsic facets such as pay, promotion opportunities and job security, it is interesting to note that senior members regard it as significantly more important than junior members.

Comparing the 12 Intrinsic facets for the personal importance scale produced the following result:

Table 4.33: Multivariate Analysis of Variance : Importance : Intrinsic facets

Personal Importance Scale: Intrinsic facets		Senior Mean	Junior
Mean	p		
Autonomy	Recognition	Responsibility	Use of Abilities
Role Clarity	Growth & Development	Significance	Meaningfulness
Creativity	Challenge		
4,34	4,33	4,27	4,21
4,04	4,11	4,15	4,06
		4,06	4,06
		0,0006	** 0,0021
		** 0,0096	** 0,0011

\*\* 0,5996 0,1311 0,0313 \* 0,0029 \*\* 0,0186 \* 0,1894  
 0,1391 0,1381  
 \* p < 0,05; \*\* p < 0,01

Not all the facets differentiate between Junior and Senior rank groups here (Wilk's Lambda = 0,935; Rao's R (12; 385) = 2,226 with p= 0,0102). As senior members regard all intrinsic facets as more important than juniors do, it is more meaningful to take note of those facets in which no significant differences exist. In other words there is no difference in how seniors and juniors view facets such as variety, the job itself, meaningfulness, challenge and creativity in terms of importance.

Comparing the 2 Social facets for the personal importance scale produced the following result:

Table 4.34: Multivariate Analysis of Variance : Importance Scale : Social facets

Personal Importance Scale: Social facets	Senior Mean	Junior
Mean		
Social Activities Work Group Functioning	3,77 4,21	3,83 3,89
	0,5274	0,0007**

\* p < 0,05; \*\* p < 0,01

Only work group functioning is regarded by seniors as more important (Wilk's Lambda = 0,962; Rao's R (2; 395) = 7,779 with p= 0,0005).

Social activities are regarded by both seniors and juniors as least important of all facets with no significant difference between them, while it is experienced by members in general as most satisfactory. It could be argued that junior members are more dependent on their work group's functioning than seniors do as juniors are more often working in teams and seniors are more likely to work independently. However, such as the case with all the other facets, seniors seem to attach more value to this facet. Another way of looking at it is that seniors have a work group as subordinates and the effectiveness and efficiency of these work groups can be very important for the success of the function they manage.

When the 12 Organisational Climate facets of the personal importance scale was compared for junior and senior rank groups, the result was as follows:

Table 4.35: Multivariate Analysis of Variance : Importance : Organisational Climate

Personal Importance Scale: Climate facets												Senior Mean		Junior	
Mean												p			
Initiative Allowed	Standards	Reward Systems	Clarity of Goals	Warmth & Support	Leadership	Equity & Fairness	Continuous Improvement	Identification with Org	Resource Management	Participation	Communication	4,06	4,38		
4,30	4,32	4,03	4,62	4,45	4,22	4,51	4,32	4,25	4,57	3,91	3,83	3,98	4,02		
3,84	4,09	4,05	3,99	4,27	3,97	4,10	4,33			0,1356	0,0000	**			
0,0041	**	0,0015	**	0,0571		0,0000	**	0,0006	**	0,0322	*				
0,0158	*	0,0002	**	0,1032		0,0145	*								

\* p < 0,05; \*\* p <

0,01

Although significant differences exist, not all the facets differentiate between Junior and Senior rank groups here (Wilk's Lambda = 0,878; Rao's R (12; 385) = 4,452 with p= 0,0000). It is interesting to note that the same value is attached for the amount of initiative allowed and for participation. These are aspects that one would expect that will increase in importance with seniority, while warmth and support is an element that one would expect would affect juniors more.

The only inference that can be made of the consistently higher regard for the facets of work life by seniors, is that they have more to do with a general attitude towards work than with actual differences regarding the different facets. Overall it seems that seniors regard the aspects that a work life is made up of as more important than juniors. As the seniors are also more satisfied, it could be that after completing Section B on a more positive level that they continued to do so in Section C.

#### 4.6 SECTION D: NEED STRENGTH SCALE

It was intended to use one of Schaffer's (Part C) (1953) questionnaires (Section D in this research) to measure need strength. In this questionnaire the items are

designed to obtain the strength of needs through identifications, value judgments and projections. The reason why Schaffer's scale was appealing to use is because of its subtlety. The format and scales were discussed in Chapter 3, paragraph 3.8.4.

The same set of twelve needs is used in Section E to determine need non-fulfilment. After responding by indicating to what extent needs are fulfilled, the respondents are explicitly asked to rank these needs in terms of importance to them personally (most important; second most important and third most important). This serves as a second technique of measuring need strength, but it means that respondents are now responding in terms of their consciously perceived needs.

The tendency, as discussed by Schaffer (1953), for respondents to use high or low or middle of the range ratings consistently, became apparent after the first 96 subjects completed the questionnaires. The effect of this response bias on the results of the need strength questionnaire is that respondents' most important needs do not show clearly and in most cases, the most important need could not be distinguished. This would make testing the hypothesis (Hypothesis 4) that there is a significant negative relationship between the fulfilment of an individual's most important need and overall satisfaction with quality of work life difficult if not impossible.

A second factor that led to the reservation with the results of Section D is the fact that the need strengths measured in Section D differed from the needs as prioritised in Section E, especially with regards to the needs for security, dependence and dominance. (Table 4.36). An example of the responses of two subjects' scores on Section D compared to their first, second and third choices in Section E is given in Table 4.37. However, the difference could be as a result of the different methods - subtle versus direct questioning.

Yet another observation that caused doubt, was that some members indicated both independence and dependence as equally strong needs. The assumption is that if a person has a strong need for depending on a supervisor, the person

would not also have a strong need to be independent from other's control. It can only mean that there was a tendency towards response bias or some misconception.

Another factor to consider is that Schaffer's sample consisted of a large concentration of professionals, semi-professionals, clerical and sales people, very few semi-skilled and no representation from the unskilled occupations. To test whether it will be practical to make use of the results of Section D, the respondents were categorized as unskilled, semi-skilled and skilled according to the biographical variables, educational level, rank level and occupation. As the largest number of respondents consists of unskilled and semi-skilled members, it could be assumed that a large percentage of respondents would find it difficult to understand the concept utilized in this questionnaire.

After taking everything into consideration, it was decided that to use Section D, Need Strength Questionnaire, would not be feasible as it does not give a clear indication of what the need strengths of the respondents are. With frequency counts obtained from the results from Section E it can still be determined what the most dominant needs are and how the groups differ in terms of what they regard as important. More importantly, it will be possible to test Hypothesis 4.

Table 4.36: Comparison - Rank Order Section D - Section E

Section D	Section E
1 2 3 4 5 6 7 8 9 10 11 12	Achievement Welfare
Relationships Creativity Dominance Recognition Self-Expression Moral Value Security Social Status Independence Dependence	1 2 3 4 5 6 7 8 9 10 11 12
Security Recognition Relationships Achievement Dependence Welfare Self-Expression Moral Value Creativity Social Status Independence Dominance	

Table 4.37 : Example Section E / Section D

1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	Section E	Section D
			Creative Status	

RecognDependExpressAchieveRelateWelfareSecureMoralIndepndDom RelateSecureR  
ecogn966439694969 WelfareSecureRelate355332332135

The first subject's scores show high need strength for 5 needs, moderate need strength for 4 needs and low need strength for 3 needs. The second subject's score shows only moderate need strength for 3 needs while the other 9 needs are all of low strength. Neither of their Section E choices are among their strongest needs in Section D.

#### 4.7 SECTION E: PERSONAL NEED NON-FULFILMENT SCALE

Section E of the questionnaire was described in Chapter 3, paragraph 3.8.5. The twelve needs are stated as characteristics of work life and the respondents have to decide whether their situation offers as much of the characteristic as they would ideally like. A 5-point scale is used, of which 1 and 2 indicates need fulfilment, while scores of 3 to 5 would give an indication of unfulfilled needs in degrees of wanting little more (3) to wanting very much more (5). This scale differs from the others in that the positive aspect, fulfilled needs, is indicated by the low scores, while unfulfilled needs are indicated by high scores. Therefore, it is hypothesized that there is a negative relationship between the non-fulfilment of needs and overall satisfaction with quality of work life.

After rating the needs according to the fulfilment or non-fulfilment, respondents are asked to rank order the needs according to their choices of which are most important, second most important and third most important for them to feel satisfied with their work. This was used to answer Research Questions 1.5.4 and 1.5.5.

##### 4.7.1 Frequency Distribution of Need Preferences

The frequencies with which subjects chose the needs presented to them in Section E, as first choice and as first, second and third choice respectively are indicated in Table 4.38, which also gives a clear indication of what the needs of

the members of the organisation are, which answers Research Question 1.5.4:

*Research Question 1.5.4 : What are the needs of the members of the organisation?*

Table 4.38: Frequency Distribution of Need Preferences

Need	Freq 1 <sup>st</sup> Choice Only	%	Freq 1 <sup>st</sup> 2 <sup>nd</sup> or 3 <sup>rd</sup> %		
To be creative; challenging tasks.	22	5,3	63		
		5,3			
Social status.	14	3,5	43		
		3,6			
Appreciation and Recognition.	45	11,3	177		
		14,8			
A supervisor to depend on (dependence).	31	7,8	91		
		7,6			
Freedom to express ideas (self-expression).	21	5,3	89		
		7,5			
To master skills; achieve goals (achievement).	47	11,8	141		
		11,8			
Good relationships.	61	15,3	121		
		10,2			
To do something for others' welfare.	23	5,8	96		
		8			
Career/ financial security.	99	24,9	225		
		18,8			
Work that support moral values.	22	5,5	70		
		5,9			
Independence from others' control.	7	1,7	45		
		3,8			
In command; influence others (dominance).	6	1,5	33		
		2,7			
TOTAL	398		1194		

As first choice only Security, Relationships, Achievement and Recognition are

the top four. As 1<sup>st</sup>, 2<sup>nd</sup> or 3<sup>rd</sup> choice Security, Recognition, Achievement and Relationships are the top four choices.

Dominance, Status and Independence are the least preferred choices according to both methods of organising the ratings. There is very little difference in rank order between the two.

If the two percentage values are averaged the following rank order is obtained.

- 1 Career/ financial security.
- 2 Appreciation and Recognition.
- 3 Good Relationships.
- 4 To master skills; achieve goals (achievement).
- 5 A supervisor to depend on (dependence).
- 6 To do something for others' welfare.
- 7 Freedom to express ideas (self-expression).
- 8 Work that support moral values.
- 9 To be creative; challenging tasks.
- 10 Social status.
- 11 Independence from others' control.
- 12 In command; influence others (dominance).

Cross tabulations, a numerical tabular way of displaying the data in frequency and/or percentages, were compiled for groups according to rank, race, occupation, education level, age and gender showing the frequencies of their 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> choices of needs. Variables are cross-partitioned in order to reflect the relations between them. To distinguish between the different groups in terms of their needs, cross tabulations provide a means of making it visible and thereby answering Research Question 1.5.5:

*Research Question 1.5.5 : Do groups (rank, race, gender, age, educational level, occupation) differ with respect to how they prioritise their needs?*

From these tables it was apparent that there is not much difference between the

groups. Still the most frequent preference was for financial security and second most for recognition. Exceptions are graduates and post graduates who prefer work that supports moral values in the educational level groups; in race groups, coloureds prefer to do something for others' welfare; in occupation/rank groups senior staff officers (colonel) prefer to be creative, to do something for others' welfare and financial security to the same extent. (See Tables 4.39.1 to 4.39.6).

Table 4.39.2: Occupation-Need Relation (Frequency of 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> choices)

Occup N	Cre	Stat	Rec	DepS-Exp	Ach	Rel	Wel	Sec	Mor
IndDomTotal	Spec	15526	17%13	8%73	47%42	27%38	24%57	37%49	32%30
19%89	57%24	15%16	10%8	5%465	Fld Eng	13721	15%24	17%58	42%26
19%31	23%53	39%36	26%34	25%72	53%25	18%15	11%16	12%	
411	SSO	32	67%0	0%1	33%0	0%0	0%1	33%1	33%2
0%9	Supprt	10314	14%6	6%45	44%23	22%20	19%30	29%35	33%30
60%21	20%14	14%9	9%309	Total	39863	5.3%43	3.6%177	14.8%91	7.6%89
7.4%141	11.8%121	10.1%96	8%225	18.8%70	5.9%45	3.8%33	2.8%1194		

Table 4.39.3: Gender-Need Relation (Frequency of 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> choices)

Gender N	Cre	Stat	Rec	DepS-Exp	Ach	Rel	Wel	Sec	Mor
IndDomTotal	Female	687	10%4	6%36	53%18	26%16	24%21	31%17	25%17
7%204	Male	33056	17%39	12%141	43%73	22%73	22%120	36%104	31%79
24%182	55%54	16%41	12%28	8%990	Total	39863	5.3%43	3.6%177	14.8%
91	7.6%89	7.4%141	11.8%121	10.1%96	8%225	18.8%70	5.9%45	3.8%33	2.8%1194

Table 4.39.4: Education-Need Relation (Frequency of 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> choices)

Educat N	Cre	Stat	Rec	DepS-Exp	Ach	Rel	Wel	Sec	Mor
IndDomTotal	-Matric	13020	15%19	15%60	46%33	25%25	19%56	43%39	30%29
22%61	47%20	15%15	11%13	10%390	Matric	19731	16%21	11%89	45%45
23%50	25%57	29%61	31%47	24%119	60%35	18%20	10%16	8%591	Cert
428	19%2	5%20	48%10	24%8	19%15	36%12	29%12	29%28	67%5
12%4	10%2	5%126	Dipl	224	18%	0	0%7	32%2	9%4
18%11	50%8	36%6	27%14	63%5	23%4	18%1	4%		
66	Degree + Post	70	0%1	14%1	14%1	14%2	29%2	29%1	14%2
29%3	43%5	71%2	29%1	14%21	Total	39863	5.3%43	3.6%177	14.8%91
7.6%89	7.4%141	11.8%121	10.1%96	8%225	18.8%70	5.9%45	3.8%33	2.8%1194	

Table 4.39.5: Race-Need Relation (Frequency of 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> choices)

Race N	Cre	Stat	Rec	DepS-Exp	Ach	Rel	Wel	Sec	Mor
IndDomTotal	Black	25040	16%35	14%112	45%57	23%56	22%87	35%88	35%57
23%122	49%41	16%29							

12%26 10%750 Color 111 9%0 0%3 27%1 9%5 46%2 18%3 27%7 64%5  
 46%5 46%1 9%0 0%33 White 13722 16%8 6%62 45%33 24%28 20%52  
 38%30 22%32 23%98 72%24 18%15 11%7 5%411 Total39863 5.3%43 3.6%  
 177 14.8%91 7.6%89 7.4%141 11.8%121 10.1%96 8%225 18.8%70 5.9%45  
 3.8%33 2.8%1194

Table 4.39.6: Age-Need Relation (Frequency of 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> choices)

AgeN	CreStat	RecDep	S-Exp	AchRel	WelSec	Mor	IndDom	Total	≤25	387	18%3
8%	15	39%7	18%10	26%13	34%11	29%13	34%24	63%5	13%3	8%3	8%
114	26-30	11317	15%10	9%56	50%37	33%27	24%37	33%33	29%21	19%61	
54%19	17%13	11%8	7%339	31-35	12419	15%16	13%54	43%25	20%24		
19%41	33%47	38%31	25%65	52%21	17%15	12%14	11%372	36-40	4711		
23%6	13%21	45%7	15%13	28%22	47%7	15%10	21%27	57%8	17%5	11%4	
8%141	41-45	344	12%5	15%15	44%7	21%6	18%13	38%8	23%10	29%18	
53%8	25%5	15%3	9%102	46-50	244	17%2	8%8	33%5	21%6	25%10	42%5
21%10	42%16	67%3	12%2	8%1	4%72	≥51	181	6%1	6%8	44%3	17%3
28%10	56%1	6%14	78%6	33%2	11%0	0%54	Total39863	5.3%43	3.6%177		
14.8%91	7.6%89	7.4%141	11.8%121	10.1%96	8%225	18.8%70	5.9%45	3.8%			
33	2.8%1194										

**4.7.2 Relationship: Need Fulfilment and Overall Satisfaction**

In Chapter 1 the research question was posed to what extent the fulfilment of a person’s needs predicts his or her satisfaction with quality of work life, which also led to the hypothesis that a negative relationship exists between non-fulfilment of needs and overall satisfaction with quality of work life.

As was mentioned in Chapters Two and Three, several authors, researchers and theorists emphasized the relationship between needs and satisfaction in the work place (Downey *et al.*, 1975; Argyris, 1987; Lawler, 1975; Seashore, 1975; Ellis and Bernhardt, 1992; Medcof and Hausdorf, 1995 and Sirgy *et al.*, 2001; Nordenfelt, 1993), but it was the statement by Schaffer (1953, p. 3) that over-all job satisfaction will vary directly with the extent to which those needs of an individual are satisfied, that led to the following hypothesis:

*Hypothesis 3 : There is a negative relationship between the non-fulfilment of*

*needs and overall satisfaction with quality of work life.*

In Table 4.40 the highest mean indicates the least fulfilment. According to Table 4.38 in paragraph 4.7.1 it was indicated that the need for career and financial security was most frequently chosen as the most important need, then the need for appreciation and recognition, third, the need for good relationships and fourth, the need to master skills and achieve goals. According to the non-fulfilment scores in Table 4.40, apart from the need for good relationships, the other three needs are also the least fulfilled.

Although there is a negative relationship with overall satisfaction as expected, it is not significant, except in the case of the need to do work that supports moral values and independence from others' control. There is, however, a correlation of  $r = -0,14$  between the means of overall satisfaction and average need fulfilment ( $p = 0,005$ ), which would answer Hypothesis 3. This would imply high satisfaction goes with high fulfilment of needs. But its contribution to a prediction model is too small to matter, since only about 2% of the variance in overall satisfaction is explained ( $r^2=0,0196$ ).

Table 4.40: Need Non-Fulfilment - Overall Satisfaction with Quality of Work Life

	Need	Mean	Std	Dev	Nr
Career/ financial security. To master skills; achieve goals (achievement).					
Appreciation and Recognition. To be creative; challenging tasks. To do something for others' welfare. Freedom to express ideas (self-expression). Work that support moral values. Social status. A supervisor to depend on (dependence). Independence from others' control. Good relationships. In command; influence others (dominance).		4,07	3,85	3,76	3,58
		3,53	3,52	3,48	3,42
		3,29	3,24	3,14	
		0,96	1,08	1,06	1,00
		1,16	1,11	1,08	1,20
		1,09	1,18	1,06	
		398	398	398	398
		398	398	398	398
		398	398	398	398
		398	398	398	398
		-0,13	-0,08	-0,08	-0,07
		-0,12	-0,15	-0,20*	0,01
		-0,15	-0,16*	0,04	-0,06

\*\*  $p < 0,01$ ; \*  $p < 0,05$ .

There is a significant difference between the means of need fulfilment of the twelve needs [ $F(11; 4764) = 23,61$ ;  $p = 0,000$ ].

### 4.7.3 Comparison : Need Non-Fulfilment with Overall Satisfaction

To determine whether there is a relationship between the fulfilment of individuals' most important needs and overall satisfaction and thereby testing Hypothesis 4 below, respondents' level of fulfilment of their most important needs and their level of overall satisfaction were cross-partitioned in a cross tabulation (Table 4.41).

*Hypothesis 4: There is a significant negative relationship between the non-fulfilment of an individual's most important need and overall satisfaction.*

As respondents are required to indicate their first, second and third most important needs, this hypothesis can take Hypothesis 3 one step further and determine the relationship specifically with respect to the fulfilment of a person's most important need and overall satisfaction with quality of work life.

With the data available it can be tested whether there is a significant relationship between need fulfilment and overall satisfaction by correlating each need with overall satisfaction and one can establish whether need fulfilment in general correlates with overall satisfaction or which needs correlate best with overall satisfaction. By doing multiple regression analysis one can determine to what extent need fulfilment acts in concert with other variables to predict overall satisfaction or one could regress overall satisfaction onto the twelve needs to see which contributes most to overall satisfaction. This will be done, but what would really be of interest to know is whether or not a relationship exists between the fulfilment of the most important need of the individual and his or her overall satisfaction. The only way to determine this is by doing a cross tabulation and determine the significance of the relationship by means of a chi test.

The obtained frequencies,  $f_o$ , are given in each cell; the percentages in the right hand column and bottom row are calculated as percentage of the total sample.

Table 4.41: Relationship - Need Non-Fulfilment - Overall Satisfaction

	FULFILLED	NOT FULFILLED	TOTAL
SATISFIED	25	215	240
60,3%			
NEITHER/NOR	4	25	29

7,3%

DISSATISFIED	16		113		129
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32,4%

TOTAL	45	11,5%	353	88,5%	398
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From Table 4.41 the following conclusions are evident:

45 of the respondents' (11,5%) needs are fulfilled. Out of these respondents there are slightly more respondents (25) who are satisfied than dissatisfied (16).

353 of the respondents' (88,5%) needs are not fulfilled, however out of these respondents there are far more (215) that are satisfied than dissatisfied (113). This (the larger category of the two) does not suggest that a negative relationship exists between non-fulfilment of needs and overall satisfaction.

240 respondents (60,3%) are satisfied and out of these only 25 reported fulfilled needs, while 215 respondents needs are not fulfilled. Once again this is not an indication of a negative relationship.

Out of 129 dissatisfied (32,4%) respondents, the larger number's needs are not fulfilled, which could on the other hand indicate a negative relationship.

According to the Chi test,  $p(X > \chi^2)$ , the chi-square is statistically significant at 0,003 (Chi-square = 47,66 at 24 degrees of freedom;  $p < 0,01$ ).

Therefore, the proportions in the cells depart significantly from the proportions to be expected from chance.

However, the hypothesis would suggest that the larger percentage of the population whose needs are fulfilled are satisfied, and the majority of the members whose needs are not fulfilled, should be dissatisfied. These results indicate that the majority of the population (88,5%) report non-fulfilment of needs, but most of them are still satisfied with their quality of work life. Therefore Hypothesis 4 cannot be confirmed.

#### **4.7.4 Effect of Need Fulfilment on Overall Satisfaction**

The partial correlation coefficients, presented in Table 4.40, indicate the unique contribution of each variable to the overall model. To answer Research Question 1.5.6 below, it was necessary to perform a multiple regression analysis.

*Research Question 1.5.6 : To what extent does the fulfilment of the individual's needs predict his/her satisfaction with quality of work life?*

A multiple correlation coefficient of  $R = 0,31$  was found, which is highly significant ( $F(12; 385) = 3,51; p = 0,000$ ). The non-fulfilment measurements of the 12 needs account for about 10% of the total variance of overall satisfaction ( $R^2 = 0,10$ ).

Table 4.42: Multiple Regression Analysis - Needs

Variables	Coefficient	Std Error	P -
	Value		
Creativity	0,22	0,095	0,095
Social Status	-0,17	0,096	0,102
Recognition	0,03	0,102	0,095
Dependence	0,095	0,093	0,091
Self-Expression	0,096	0,095	0,801
Achievement	0,109	0,504	0,001**
Relationships	0,447	0,353	0,024*
Welfare	0,024*	0,092	0,778
Security	0,092	0,778	
Moral Value	0,28	0,088	0,102
Independence	-0,08	0,09	-0,09
Dominance	-0,02	0,19	-0,06
	-0,09	-0,16	0,07

\*\*  $p < 0,01$ ; \*  $p < 0,05$ .

Although there seems to be a significant relationship between the independent and dependent variables in the instances of Social Status and Relationships needs, to be of importance it should have been negative relationships. In this case it seems that people whose needs for social status and good relationships are not fulfilled are satisfied with their quality of work life. It, therefore, rather has to be assumed that need fulfilment in these two needs does not predict satisfaction with quality of work life. But such is the same with all the other needs except for moral value.

Looking at the result of the regression analysis, there is a significant relationship

(statistically significant at  $p < 0,01$ ), but this could also be due to the high significance of the non-fulfilment of relationship needs.

#### **4.7.5 Effect: Facets of Work Life plus Need Fulfilment**

If it is also hypothesized, as in Hypothesis 5 below, that satisfaction with job aspects and need fulfilment influence overall satisfaction, then we have a multiplicity of factors, and possibly further multiplicity in how any given factor is represented (Cohen & Cohen, 1983).

*Hypothesis 5: Satisfaction with facets of work life and need fulfilment contribute significantly to overall satisfaction with quality of work life.*

This hypothesis also relates to Research Question 1.5.7:

*Research Question 1.5.7: Does the combination of satisfaction with facets of work life plus need fulfilment contribute significantly to satisfaction with the quality of work life?*

A hierarchical regression analysis was performed to see if needs make a significant contribution to the ability to predict overall satisfaction, over and above that which was provided by the 35 facets of work life. With only the facets of work life variables included in the model, the results are significant ( $R = 0,74$ ;  $F(35; 362) = 12,70$ ;  $p < 0,000$ ).

Table 4.43: Hierarchical Regression Analysis: Facets of Work Life Plus Need Non-Fulfilment

N 398	Coefficient (β )		St Err of	β	B	St	
	Err of B		t (362)	p - level			
SECTION B	Intercept	Pay Phys	Work Cond	Promotion	Job Security	Job Time	
	Pressure Health & Safety Equipm Adequacy Fellow Workers Supervisor	Autonomy Recognition Responsibility Use of Abilities Variety Job Itself Job Role	Clarity Growth & Develop Significance Meaningfulness Challenge Creativity	Social Activities Work Grp Funct Initiative Allowed Standards Reward Systems	Clarity of Goals Warmth & Support Leadership Equity & Fairness Improvement	Identification Resource Manage Participation Communication	0,10
	0,01 -0,05 0,13 0,03 -0,09 0,05 -0,04 0,04 0,10 0,04 -0,00 -0,11 0,02 0,07 0,05	0,08 -0,00 0,07 -0,03 0,08 -0,00 0,10 -0,06 -0,04 -0,12 0,04 0,00 0,10 0,02 -	0,01 0,17 -0,13 0,17 0,16	0,05 0,05 0,05 0,05 0,05 0,05 0,05 0,05 0,04 0,05	0,07 0,06 0,05 0,05 0,06 0,06 0,06 0,05 0,06 0,05 0,05 0,06 0,06 0,04 0,06	0,06 0,06 0,05 0,05 0,06 0,05 0,05 0,05 0,05 0,05 0,06 0,06	0,38
	0,10 0,01 -0,05 0,13 0,04 -0,11 0,05 -0,04 0,04 0,11 0,04 -0,00 -0,11 0,02 0,08	0,06 0,07 -0,00 0,08 -0,03 0,08 -0,00 0,12 -0,08 -0,04 -0,12 0,05 0,00 0,11 0,02	-0,01 0,16 -0,15 0,22 0,17	0,46 0,05 0,06 0,04 0,05 0,06 0,06 0,04 0,06	0,07 0,06 0,05 0,05 0,06 0,06 0,07 0,06 0,06 0,05 0,06 0,06 0,06 0,05 0,07	0,07 0,08 0,05 0,06 0,08 0,06 0,06 0,05 0,05 0,05 0,08 0,06	0,82
	2,14 0,21 -1,10 2,56 0,74 -1,93 1,20 -0,70 0,56 1,82 0,80 -0,08 -1,87 0,28 1,16	0,90 1,32 -0,07 1,30 -0,44 1,29 -0,56 1,67 -1,09 -0,58 -2,38 0,74 0,05 1,96 0,31	-0,14 3,54 -2,80 2,67 2,69	0,414 0,033* 0,834 0,274 0,011* 0,457	0,054 0,230 0,485 0,573 0,069 0,425 0,935 0,063 0,780 0,245 0,367 0,188	0,941 0,194 0,659 0,199 0,956 0,096 0,278 0,560 0,018* 0,463 0,957 0,051	0,754 0,888 0,000** 0,005** 0,008** 0,007**

Table 4.43 (Continued)

Creativity Social Status Recognition Dependence Self-Expression		
Achievement Relationships Welfare Security Moral Value Independence		

Dominance	-0,04 0,12 -0,07 -0,00 -0,01 -0,01 0,12 -0,12 0,05 -0,07 -
0,06 0,08	0,04 0,05 0,05 0,05 0,05 0,05 0,05 0,05 0,04 0,05 0,05
0,05	-0,07 0,18 -0,11 -0,00 -0,01 -0,01 0,16 -0,19 0,08 -0,10 -
0,09 0,12	0,07 0,07 0,07 0,06 0,08 0,08 0,07 0,08 0,07 0,07 0,08
0,07	-0,98 2,53 -1,57 -0,03 -0,15 -0,19 2,49 -2,45 1,05 -1,40 -
1,12 1,72	0,325 0,012* 0,117 0,972 0,880 0,852 0,013* 0,015*
	0,296 0,163 0,265 0,086

When 12 need non-fulfilment measurements from Section E were added (47 variables altogether), a multiple correlation coefficient of  $R = 0,77$  was found, which is highly significant ( $F(47; 350) = 10,54; p < 0,000$ ).

A test was performed to establish whether there is a significant increase in the ability of the model to predict overall satisfaction from the satisfaction with the facets of work life, if need non-fulfilment scales are added. The result is as follows:

$F_H(12; 350) = 2,45$  with  $p = 0,005$  (significant).

It can, therefore, be concluded that the need measurements make a significant contribution to the original model; the ability to predict overall satisfaction is increased significantly.

The specific measurements of needs that are of importance to overall satisfaction can be distinguished by looking at the significant beta-values in Table 4.43. It seems that three of the needs, social status, relationships and welfare, are important.

## 4.8 CONCLUSION

In this Chapter it was endeavoured to answer the research questions and test hypotheses. Satisfaction with the facets of work life seems to have the most prominent effect on overall satisfaction. The ability to predict overall satisfaction

is increased when need fulfilment is added to the model. However, the facets of work life seem to represent what people want judging from the high rate of importance assigned to each.

With respect to research questions, it was determined that the most important grouping of the sample can be distinguished along ranks and especially with regard to seniority. The other main findings with respect to categories and facets of work life that respondents are most and least satisfied with and that contribute most to overall satisfaction with quality of work life, will be summarized and discussed in Chapter 5.

## **CHAPTER 5**

### **CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 INTRODUCTION**

The research was originally sparked off by research questions in Chapter 1, which led to the hypotheses outlined in Chapter 3 about the contribution of facets of work life and need fulfilment in the prediction of quality of work life.

In order to find answers to these questions, research was done by means of questionnaires. Information was gathered which includes biographical data that describes different groups that are found in the population, the degree of satisfaction with and importance of different facets of work life and the degree to which needs are fulfilled and prioritised. The methods followed were described in Chapter 3 and the results were discussed in Chapter 4. The purpose was to determine what independent variables predict satisfaction with quality of work life best, in order for the organisation to focus resources and energy on those aspects that could make a significant difference. The main purpose was to obtain data that will enable the management to improve the well-being of the people of the organisation. The relationship between facets of work that predict overall satisfaction with quality of work life, as well as the benefits of satisfaction to the well-being and mental health of members of an organisation were discussed in Chapter 2.

In this Chapter, the main findings will be summarized and discussed in relation to the literature survey that was reported in Chapter 2. The problems that were encountered will be mentioned, certain recommendations made and suggestions will be made for future studies.

#### **5.2 MAIN FINDINGS**

The main findings will be summarized in terms of answers to research questions, aspects that members are most satisfied with, most dissatisfied, regard as most important and least important, most and least preferred needs, conclusions with respect to the hypotheses and lastly, certain patterns will be highlighted.

## **5.2.1 Summary of Main Findings**

### *5.2.1.1 Best Predictors Of Satisfaction With Quality Of Work Life*

It has been determined that the facets of work life are the best predictors of overall satisfaction with quality of work life. Research Question 1.5.1 specifically enquired about the facets of work life that contribute most to satisfaction with quality of work life.

*Research Question 1.5.1: Which facets of work life can be distinguished as contributing significantly to satisfaction with quality of work-life?*

When overall satisfaction was regressed on the main categories of the facets of work life, organisational climate seems to be the best predictor, followed by intrinsic job factors, the social category does not make a significant contribution, and the extrinsic category only just. Overall satisfaction was in turn regressed on the facets of each of the four main categories separately and the following list presents the variables that make a significant contribution in each of the cases:

#### *Organisational climate*

*Participation.* Decisions are taken on the appropriate level where accurate information is available, people affected by a decision are consulted with, joint planning is done and opportunities exist to express grievances.

*Communication.* The degree to which members are informed and lines of communication are open between superiors and subordinates.

*Identification.* The degree to which people are proud of belonging to the organisation.

*Clarity of Organisational Goals.* The degree to which the organisation's mission is clearly defined.

*Leadership.* The degree to which the leadership of the organisation is competent and results in fulfilment of its purposes.

#### *Extrinsic facets*

*Rate of pay.* The way in which pay and benefits cover expenses and needs and is sufficient reward in relation to skills and effort.

*Job security.* The degree of security of a future in the organisation.

*Health and Safety.* The degree of health and safety conditions in the workplace.

*Equipment Adequacy.* The condition and availability of the equipment necessary for the job.

*Immediate Supervisor.* The characteristics and behaviours of the immediate supervisor.

#### *Intrinsic facets*

*Recognition.* The way in which efforts are noticed and appreciation is expressed.

*Growth and Development.* Opportunities to develop own special abilities and to learn new things and to grow and develop as a person.

*Creativity.* The opportunities to be creative and imaginative in the work place.

#### *Social factors*

*Work group functioning.* The extent to which the work group has the necessary training and skills, are committed, share feelings, listen to and encourage each other, plan and coordinate efforts, is the best predictor.

*Social Activities.* Opportunities for social activities that are created in the work environment.

#### 5.2.1.2 *Facets of Work Life: Most Satisfaction*

The ten facets that respondents were most satisfied with, are:

*Social Activities.* The extent to which social activities are created to get to know people and make friends.

*Meaningfulness.* The feeling that something of personal value is accomplished and a worthwhile contribution is made to society.

*Job Itself.* The amount of time spent on enjoyable tasks, enthusiasm is felt and work is interesting.

*Responsibility.* The degree of personal responsibility for work.

*Challenge.* The extent to which the job presents challenging work.

*Task Significance.* The extent to which many people are affected by how well the job is done.

*Job/Time Pressure.* The amount of work for the time and assistance and the amount of hard physical labour.

*Fellow Workers.* The friendliness, support and respect from co-workers.

*Creativity.* The opportunities to be creative and imaginative in the work place.

*Clarity of Organisation Goals.* The purpose is understood, everything is well organised and goals are clearly defined.

The majority of these facets are intrinsic factors. The only extrinsic factors that are represented among the top ten facets are fellow workers and job/time pressure.

#### 5.2.1.3 *Facets of Work Life: Most Dissatisfied*

The ten facets that respondents were most dissatisfied with, are:

*Equity and Fairness.* The degree to which the pay scale, reward system, benefits and system of promotion treat people fairly and equitably.

*Chance of Promotion.* Opportunities to be promoted to the next rank and higher.

*Rate of Pay.* The way in which pay and benefits cover expenses and needs and is sufficient reward in relation to skills and effort.

*Reward System.* The degree to which members are rewarded and recognized for good work and the way contributions are valued.

*Job Security.* Certainty of a job in the near future and a career in the organisation.

*Leadership.* Leadership based on competence and expertise and efforts result in fulfilment of purposes.

*Identification.* The degree to which people are proud of belonging to the organisation.

*Participation.* Decisions are taken on the appropriate level where accurate information is available, people affected by a decision are consulted with, joint planning is done and opportunities exist to express grievances.

*Initiative.* The extent to which initiative is allowed to make decisions and solve problems, policies are not restrictive and suggestions can be made to higher levels.

*Communication.* The degree to which members are informed and lines of communication are open between superiors and subordinates.

The majority of these facets are organisational climate factors. There are no intrinsic and social factors among the ten facets that members are most dissatisfied with.

The distinction between intrinsic and extrinsic facets of work life was discussed in Chapter 2 (paragraph 2.2.4.2). According to authors Warr (1987), Deci and Ryan (1985), Thomas and Velthouse (1990) and Snelders (1996), extrinsic factors concern aspects of a job that form the background or context to the task itself. It concerns aspects such as externally motivated rewards, pay, working conditions, working hours, procedures and job security. Intrinsic factors consist of activities that are inherent in the job itself. They are rewarding by themselves

and satisfaction with them is experienced as positive feelings while engaging in a task, also known as content satisfaction. Examples of intrinsic job factors are freedom to choose how to undertake the work (autonomy), amount of responsibility and initiative that is allowed, skill requirements and variety. Organisational climate can, therefore, provide a context for both extrinsic and intrinsic factors. It provides the framework for how everything is done in the organisation, from policies prescribing most of the extrinsic facets and the approach to how people are allowed to execute their work, for example, the amount of initiative that is allowed. Although organisational climate facets are not intrinsic as such, they have an indirect influence on intrinsic facets.

From the facets that are indicated as most satisfying and most dissatisfying, it seems that the respondents are more satisfied with those aspects that concern their immediate work environment and the work they are doing than with aspects that they don't have any control over and are imposed on them from the external environment.

Herzberg (1976) proposed that dissatisfaction is caused by unsatisfactory work conditions (extrinsic factors) only, while feelings of satisfaction are to be ascribed to intrinsically rewarding job factors only. Although it is not suggested here that his findings that the factors involved in producing satisfaction are separate and distinct from the factors that lead to job dissatisfaction, it is interesting that the respondents in this study find intrinsic facets of work life more satisfying, while more dissatisfaction is expressed with extrinsic facets.

#### *5.2.1.4 Group Differences*

The second research question enquires about the differences between groups in terms of their overall satisfaction with quality of work life.

*Research Question 1.5.2: Are there groups of members (according to rank, race, age, gender, level of education, geographic area, occupation) who are more satisfied or less satisfied with the quality of their work life?*

No significant differences were found between the following groups:

*Different Units.*

*Educational groups.*

*Gender.*

*Marital status.*

Significant differences were found between the following groups:

*Rank.* Rank groups differ significantly with respect to their overall satisfaction. A post hoc Scheffé comparison revealed the biggest differences between Sappers and Non Commissioned Officers and between Sappers and Officers. There is also a significant difference between Senior and Junior ranks.

*Occupational Groups.* In spite of a significant difference produced by a F-test, with Technical Personnel being least satisfied and Construction Machine Operators most satisfied, a post hoc Scheffé test revealed no significant differences.

*Long-Term vs Medium and Short-Term Service.* Long-term service members are significantly more satisfied than medium and short-term members.

*Years Service in the SANDF.* Members with service longer than 21 years proved to be more satisfied, however, a post hoc Scheffé test revealed no significant difference.

*Race.* The different races differ significantly with respect to their overall satisfaction. A Scheffé test showed the biggest difference between Blacks and Whites, but no significant difference between Coloureds and Whites and Coloureds and Blacks.

*Age.* The age group 36 and older proved to be more satisfied, however, a post hoc Scheffé test revealed no significant difference.

#### *5.2.1.5 Importance of the Facets of Work Life*

The facets of work life have been proved to be significant predictors of satisfaction with quality of work life, but it is also important to know how subjects view them in terms of importance. Facets that are regarded as important should also be seen as facets that are critical for members to be satisfied with. Dissatisfaction in valued facets of work life might be a cause of concern for the organisation.

*Research Question 1.5.3: To what extent are the facets of work life regarded to be important for satisfaction with the quality of work life?*

All the facets of work life were regarded as important as the means of the 35 facets are above the absolute mean of 3. Even the least important of these (Social Activities with a mean of 3,82) differ significantly from 3.

Of the four main categories, Organisational Climate was regarded as most important, then intrinsic factors, followed by extrinsic factors and lastly, social aspects.

#### *5.2.1.6 Most Important Facets of Work Life*

The ten facets of work life that respondents indicated as most important, are:

*Communication.* The degree to which members are informed and lines of communication are open between superiors and subordinates.

*Identification.* The degree to which people are proud of belonging to the organisation.

*Health and Safety.* Protection against injuries, not exposed to pollution and dangerous materials.

*Leadership.* Leadership based on competence and expertise and efforts of the leaders result in fulfilment of purposes.

*Job Itself.* The amount of time spent on enjoyable tasks, enthusiasm is felt and work is interesting.

*Job Security.* Certainty of a job in the near future and a career in the organisation.

*Responsibility.* The degree of personal responsibility for work.

*Meaningfulness.* The feeling that something of personal value is accomplished and a worthwhile contribution is made to society.

*Equity and Fairness.* The degree to which the pay scale, reward system, benefits and system of promotion treat people fairly and equitably.

*Ability.* The extent to which opportunities exist to use specific abilities and skills that are liked best.

Organisational climate facets are best represented, followed by intrinsic facets and then extrinsic facets. There are no social facets among the ten most important facets.

#### 5.2.1.7 *Least Important Facets of Work Life*

The ten facets of work life that respondents indicated as least important, although still important, are:

*Social Activities.* The extent to which social activities are created to get to know people and make friends.

*Autonomy.* The amount of independence and freedom to determine what should be done, as well as initiative or judgment in deciding how to carry out work.

*Warmth and Support.* The manner in which friendliness is valued, good relationships prevail, conflict is resolved, employees' welfare is considered and concerns responded to.

*Immediate Supervisor.* The behaviour and characteristics of the immediate supervisor.

*Variety.* The extent to which many different things are required to be done and there is alteration in routine.

*Job/Time Pressure.* The amount of work for the time and assistance and the amount of hard physical labour.

*Initiative.* The extent to which initiative is allowed to make decisions and solve problems, policies are not restrictive and suggestions can be made to higher levels.

*Physical Work Condition.* The appearance of the work place, comfort of

physical work conditions and convenience of transportation.

*Work Group Functioning.* The extent to which the work group has the necessary training and skills, are committed, share feelings, listen to and encourage each other, plan and coordinate efforts.

*Standards.* The degree to which quality performance and production are emphasized, challenging goals are set, problems are resolved promptly, improved performance encouraged.

Both the social facets are among the ten least important facets. The other categories are more or less equally represented.

#### 5.2.1.8 Causes for Concern

If one should juxtapose those facets that are the best predictors, those that are experienced as the most dissatisfactory and those that are regarded as most important, it should give a good indication of which facets need intervention. In Table 5.1 the aspects indicated in bold type appear in all three columns and can be regarded as causes for concern. Those predictors that people are also dissatisfied with are indicated in italics.

Table 5.1: Causes for Concern

Best Predictors (Regression of 35 Facets)	Dissatisfaction	Most Important	Most
<b>Identification</b> <i>Participation</i> <b>Communication</b> Resource Management Work	Group Functioning Reward System Health & Safety <b>Job Security</b> Rate of Pay	Equity & Fairness Promotion Rate of Pay	
Reward System <b>Job Security</b> Leadership <b>Identification</b> <i>Participation</i> Initiative	<b>Communication</b>	<b>Communication</b> <b>Identification</b> Health & Safety	
Leadership Job Itself <b>Job Security</b> Responsibility Meaningfulness Equity & Fairness Ability			

Although Leadership is not among the predictors when the 35 facets of work life were regressed on overall satisfaction, it was one of the predictors when organisational climate facets were regressed separately. It also appears in the most dissatisfied and most important columns.

#### 5.2.1.9 *Most Preferred Needs*

In answer to Research Question 1.5.4 the following:

*Research Question 1.5.4: What are the needs of the members of the organisation?*

*Economic security.* Certainty of a career in the future and financial security up to retirement age.

*Recognition.* Appreciation and recognition for efforts to do a good job and achievements.

*Affection and interpersonal relationships.* Being part of a social group and the opportunity to make friends and have good relationships.

*Mastery and achievement.* The chance to use and master more skills and abilities and the opportunity to achieve goals.

*Dependence.* To have a supervisor one can depend on to help and to show the right way to do the job.

Economic Security is the most prominent need among all the groups in the sample, while Job Security as a facet of work life is one of the predictors, people are generally dissatisfied with it and it is regarded as very important. It is only the need for mastery and achievement that can be described as a higher order or growth need. The other needs concern safety, belongingness and respect and can be satisfied only by other people, that is, only from outside the person, for example, co-workers in the organisation.

#### 5.2.1.10 *Least Preferred Needs*

The needs that were least frequently chosen as first, second or third most

important, are:

*Dominance.* “In command” when working in a group and influence (dominance) opinions of others.

*Independence.* Independence from other people’s control and making own decisions about how to do the work.

*Socio-economic status.* The status that the job has among friends and family and in the community.

*Creativity and challenge.* The opportunity to think of new ways to complete difficult and challenging tasks and to create, invent or develop new things.

*Social welfare.* The opportunity to improve the circumstances of others and to do something meaningful for others’ welfare.

The least preferred needs lean more towards self-esteem and self-actualisation. In contrast with the above, these needs are not dependent for fulfilment from outside the individual.

#### *5.2.1.11 Group Differences with respect to Needs*

Research Question 1.5.5 required an investigation into how groups differ in their prioritising of the needs that were presented to them in Section E.

*Research Question 1.5.5: Do groups (rank, race, gender, age, educational level and occupation) differ with respect to how they prioritise their needs?*

With the use of frequency tables it could be established that there are not much differences between the groups. The most frequent preference among most of the groups was for financial security and second most for recognition.

Exceptions are graduates and post graduates who prefer work that supports moral values in the educational level groups; in race groups, coloureds prefer to do something for others’ welfare; in occupation/rank groups senior staff officers (colonel) prefer to be creative, to do something for others’ welfare and financial security to the same extent. The significance of these differences were not

tested, as only frequency counts for members' first, second and third choices were gathered. After some consideration, the use of the Need Strength Scale, that could have provided statistical data, was dismissed.

#### *5.2.1.12 Needs as Predictors of Overall Satisfaction*

Needs as predictors were considered in Research Question 1.5.6.

*Research Question 1.5.6: To what extent does the fulfilment of the individual's needs predict his or her satisfaction with the quality of work life?*

According to multiple regression analysis, a significant correlation was found. The non-fulfilment measurements of the 12 needs account for about 10% of the total variance of overall satisfaction. However, the only significant negative relationship is between moral value and overall satisfaction.

#### *5.2.1.13 Hypotheses*

The following hypotheses were formulated and the conclusions were as follow:

*Hypothesis 1: There is a positive relationship between satisfaction with individual facets of work and overall satisfaction with quality of work life.*

Not only was a strong positive correlation found between each of the 35 facets of work life ( $p < 0,01$  in each instance) but also between the mean of the mean of all the facets and the overall satisfaction with quality of work life ( $r = 0,66$  significant at  $p = 0,01$ ). Hypothesis 1 was therefore confirmed.

*Hypothesis 2: The overall satisfaction with the quality of work life is significantly higher than the mean of the satisfaction with facets of work life.*

Although the mean of the measure of overall satisfaction (4,35) was higher than the mean of the facets of work life (4,25), the difference was not significant. The

non-significant result implies that the difference is due to chance and the null hypothesis of no difference cannot be rejected.

*Hypothesis 3: There is a negative relationship between the non-fulfilment of needs and overall satisfaction with quality of work life, the less fulfilled workers' needs are, the less their satisfaction is likely to be.*

Although there is a negative relationship with overall satisfaction as expected, it is not conclusive, except in the case of the need to do work that supports moral values and independence from others' control. There is, however, a correlation of  $r = -0,14$  between the means of overall satisfaction and need fulfilment ( $p = 0,005$ ) - which would answer Hypothesis 3. This would imply high satisfaction goes with high fulfilment of needs.

*Hypothesis 4: There is a significant negative relationship between the non-fulfilment of an individual's most important need and overall satisfaction with quality of work life.*

The hypothesis would suggest that the larger percentage of the population whose needs are fulfilled are satisfied, and the majority of the members whose needs are not fulfilled, should be dissatisfied. The results indicate that the majority of the population (88,5%) report non-fulfilment of needs, while 60% of the population is satisfied with their quality of work life. Most of the members whose needs are not fulfilled are satisfied with their quality of work life. Out of the small percentage (11,5) whose needs are fulfilled, there are more satisfied than dissatisfied members.

*Hypothesis 5: Satisfaction with facets of work life and need fulfilment contributes significantly to overall satisfaction with quality of work life.*

This hypothesis goes hand in hand with Research Question 1.5.7.

*Research Question 1.5.7: Does the combination of satisfaction with facets of work life plus need fulfilment contribute significantly to satisfaction with the quality of work life?*

When a hierarchical regression analysis was performed to see if needs make a significant contribution to the ability to predict overall satisfaction, over and above that which was provided by the 35 facets of work life, it was found that increase in the prediction of overall satisfaction is significant. It can, therefore, be concluded that the need measurements make a significant contribution to the ability to predict overall satisfaction.

#### 5.2.1.14 *Interesting Patterns*

Most people have a need for economic security, while there is widespread dissatisfaction with job security, the rate of pay and reward system of the organisation. As a need financial security is not a predictor of satisfaction with quality of work life, while the facets of work life that are related to this need, namely job security and rate of pay, are significant predictors.

There is dissatisfaction with identification, participation and communication, while they are the best predictors of satisfaction with quality of work life. They are also among the facets regarded as the most important.

Social activities are seen both as least important and most satisfactory facet of work life. There is low importance allocated to social activities, while need for good relationships are high. It could be that because social activities are seen as less important, that it is easier to be satisfied with.

Low need for dominance in all the rank groups, while leadership is an important characteristic of the culture of a military organisation.

The need to have one's behaviour consistent with some moral code or structure is the only significant predictor out of the twelve needs. Only one

group, graduates and post-graduates indicated it as a most preferred need.

## **5.2.2 Discussion**

In Chapter 2 the findings and theories of several researchers and authors were considered. The findings of this study are now discussed in relation to the findings according to the literature survey:

### *5.2.2.1 Facets of Work Life versus Overall Satisfaction with Quality of Work Life*

Chelte (1983) criticized the use of a one-item measure, such as item 36 of Section B, Satisfaction with Quality of Work Life Scale. He noted in the literature that he perused that a one-item measure of job satisfaction is not sufficient or reliable. He also stated that the more global measure does not tell you how workers feel about specific job facets and advised in favour of employment of a wide scope, covering various components that assess both overall reactions to a job as well as facet-specific aspects. While not completely denouncing the use of a single-item measure, Oshagbemi (1999) found that it overestimated the percentage of people satisfied with their work conditions. It was suggested that single-item measures are less reliable estimators of work life satisfaction when compared with multiple measures of the same phenomenon, such as the 35 items in the above-mentioned scale. It was found in this research that the measure of the single-item is not significantly higher and that there is a significantly positive relationship between the multiple-item part of the scale and the single-item measure.

The Lawler Model of Facet Satisfaction is based on the belief that the combination of the feelings a worker has about all aspects of the job defines overall job satisfaction (Landy, 1989). It might be true that the average of the facets of work life could be calculated to obtain the same overall result, but both a single-item measure and facet-specific measure served a purpose in this research. In this way, meaningful comparisons of job satisfaction studies are

greatly enhanced. It was decided to use both measures because of the simplicity of working with a single-item when comparing groups and because the information generated by multiple-item satisfaction measures can provide valuable data with which to initiate action aimed at improving the overall satisfaction with quality of work life in the organisation, as Oshagbemi (1999) suggests.

The average satisfaction of facets of work life was found to be 4.25, while the average of overall satisfaction with quality of work life for the total sample of 398 members was 4.35 (Table 4.1) and the difference between these averages was not significant according to a t-test. This finding, therefore, is not in accordance with what Thurman (1977) found after executing an overview of international studies. He explained his conclusion that workers are less satisfied with each of the specific aspects of their jobs than with the job taken as a whole, saying that it is probably a matter of members being more willing to express being negative about individual matters than to admit to being overall dissatisfied.

The answer to the question, how satisfied people are as a whole, all things considered, is subjective and can be considered unreliable, but as Campbell (1981, pp. 12 - 14) put it, it has a kind of direct validity that more objective measures do not have. Chelte (1983) found that although most people are dissatisfied with certain aspects of their jobs, it does not seem to prevent them from reporting satisfaction with their jobs as a whole. As was reported, most members in this research were dissatisfied with a number of facets of work life, but the larger percentage were still satisfied as a whole.

#### 5.2.2.2 *Facets of Work Life as Predictors of Overall Satisfaction*

In the regression of overall satisfaction of quality of work life as dependent variable on the 35 facets of work life, the following facets were found to be the significant predictors in order of strongest to weakest:

Participation (Organisational Climate) ( $\beta = 0,18$ )

Identification (Organisational Climate) ( $\beta = 0,16$ )

Communication (Organisational Climate) ( $\beta = 0,16$ )

Work Group Functioning (Social) ( $\beta = 0,15$ )  
Job security (Extrinsic) ( $\beta = 0,10$ )  
Rate of Pay (Extrinsic) ( $\beta = 0,09$ )  
Reward Systems (Organisational Climate) ( $\beta = -0,11$ )  
Resource Management (Organisational Climate) ( $\beta = -0,12$ )  
Health & Safety (Extrinsic) ( $\beta = -0,12$ ).

The negative loadings for the last three facets are difficult to explain, seeing that the ordinary correlation coefficients are all significantly positive. These loadings are the unique contribution of each facet when interactions with other facets have been removed or suppressed. According to the correlation coefficients in Table 4.1, the relationships between Health and Safety, Reward Systems and Resource Management and overall satisfaction are among the weakest (0,19; 0,30 and 0,28 respectively). With a mean of 4,52, satisfaction with Health and Safety is above the mean for overall satisfaction (4,35), while Reward System is among the lowest (3,48) and Resource Management is also below the mean with 3,99. Seeing that a large percentage of the members in the SA Army Engineer Formation are involved in construction work, they rely a lot on safety and equipment and it could be that their evaluation of these aspects is slightly different from the general tendency.

### *Organisational Climate*

Organisational climate correlates best with overall satisfaction, and is the best predictor, while it is also the category in which the most dissatisfaction is experienced.

Pool (1997) found organisational characteristics to have a significant and positive influence on job satisfaction. Kirsh (2000) measured satisfaction with quality of work life and results point to the importance of considering workplace climate and its congruence with individuals' value systems in promoting positive work related outcomes. This only indicates the importance of organisational climate as part of a study. From these authors, as well as Tustin's (1993) paper, it appears that it is necessary for management to be informed on the

organisation's climate in order to acquire an understanding of members' behaviour so that the workforce can be managed effectively and efficiently.

The question arises whether this finding can be generalized to the rest of the organisation or is it only applicable to the SA Army Engineer Formation. It was first believed that organisational climate is an objective construct and that it consists of attributes such as structure, context and processes and that it can affect employees indirectly. More value is now attributed to individual perceptions and on describing organisational climate in terms of the members' perception rather than on the objective characteristics of the organisation (James & Jones, 1974; Forehand & Gilmer, 1964; Tustin, 1993). These perceptions come more from the immediate work environment than from the bigger organisation's influences (James & Jones, 1974). Field and Abelson (1982) distinguished three levels, namely organisational, group and individual levels on which these perceptions occur. According to Field and Abelson (1982) there has to be consensus on climate among a group's members and that significant differences can exist between the climate perceived by different groups even within the same organisation. Tustin (1993) also based his research on this view and found that an organisation should not be described in terms of a unique climate if it was not determined whether there is consensus on this right throughout the whole organisation. According to these views and findings, the organisational climate of the SANDF can only be established if there is a consensus of climate perceptions by its members. In this research the organisational climate has not been evaluated objectively, but rather it is the perceptions of the respondents that are considered. If also considering levels of perception, the perceptions of the respondents may be more true for their immediate work climate than on the higher level, the organisation as a whole.

Tustin used cluster analysis techniques to identify different collective climates. However, it was not the purpose of this research to determine organisational climate per se, but rather to identify which factors contribute most to overall satisfaction. It is, however, possible to make some inferences from the existing data. The average measure for satisfaction with organisational climate factors (Table 4.3) was 3.84 with a standard deviation of 1.04 for a sample of 398. This

can be considered a fair amount of agreement. If the above argument is taken into consideration, all that can be safely said is that the satisfaction/dissatisfaction as perceived by the respondents reflects the organisational climate of the SA Army Engineer Formation, and it cannot be generalized to the SANDF as a whole.

### *Participation*

Forehand and Gilmer (1964) concluded that an organisation in which personnel policies are participative, satisfaction will be higher than one whose practices are non-participative, but that it may be true for some jobs or some parts of an organisation, but not for others. Nadler and Lawler (1983) defined quality of work life as a way of thinking about people, work and organisations, with participation in organisational problem solving and decision-making as distinctive elements. Although widespread belief exists that participative practices have substantial, positive effects and Wagner's (1994) research suggests that participation can have statistically significant effects on performance and satisfaction, the average size of these effects is small enough to raise concerns with him about practical significance. The outcome criterion in most participation research was overall satisfaction and performance of subordinates, rather than satisfaction with the way a particular decision was handled or commitment to implement that decision effectively (Yukl, 1998). In this research, participation was found to be the strongest predictor of satisfaction with quality of work life.

### *Communication.*

Communication as an organisational climate facet that predicts overall satisfaction with quality of work life, is regarded as the most important facet and it is among the facets that members are dissatisfied with. Orpen (1997) emphasized communication for both its importance to the success of an organisation and the satisfaction of the members of the organisation.

### *Identification*

In recent literature the only references to identification were found to be as a part of a dimension of organisational climate included in questionnaires, mostly with its origin in the scale first developed by Litwin and Stringer in 1968 (for example Tustin, 1993). Gunter and Furnham (1996) studied employees' perceptions of the climate of their organisations as independent variables influencing feelings of job satisfaction and pride in the organisation. Instead of identification as an independent variable, where the extent to which members identify and express pride to belonging to the organisation, as in the present research, they dealt with pride as a dependent variable. Multiple regression analysis produced climate variables as predictors of pride.

### *Work Group Functioning*

It was found that the social factor, work group functioning, contributes significantly to overall satisfaction with quality of work life. Work group functioning can be compared to the social support type, instrumental support as described and researched by Ducharme and Martin (2000). They found that instrumental social support influences satisfaction more than affective social support, which suggests that consideration can be given to their recommendations. Although their research investigated the influence of variables, which included four job stressors and two types of social support, they also found that instrumental support is a stronger predictor than extrinsic rewards, such as pay and job security in this case. They suggest that although attempts to increase worker integration on a social level alone, is not unimportant, it should be augmented with attention to improving work orientated relationships. This means that social activities, such as parties, golf days and informal socials could be beneficial, but it would be more constructive and to the advantage of the organisation if it is combined with efforts aimed at building effective work teams. This will be of particular value when work demands are higher than what can be comfortably coped with. It is the opinion of Ducharme and Martin (2000) that efforts to promote both friendship and functional associations among co-workers will

enhance worker relationships and may ultimately improve job performance.

### *Leadership*

Leadership and the immediate supervisor are not revealed as significant predictors in the general regression model, but do come up if the four categories are regressed separately; leadership as organisational climate facet and immediate supervisor as extrinsic facet. Leadership is, however, also a facet in which both low satisfaction and high importance was measured. According to the results in Table 4.5, members seem to be more satisfied with their immediate supervisors (4,22) than with the organisation's leadership (3,84) as a whole.

In Chapter 2 (Section 2.2.4.4) it was explained that it is the goal of the SANDF to establish a transformational style of leadership as part of a preferred culture. For this purpose Bass and Avolio's (1990) model of leadership is utilized in developing the transformational style of leadership. According to their model, transformational leadership comprises four dimensions, namely idealized influence, inspirational motivation, intellectual stimulation and individualized consideration. The behaviours and characteristics involved were explained in Chapter 2. The ten questionnaire items for *Immediate Supervisor* relate to these dimensions, but especially to individualized consideration and intellectual stimulation. The two items for *Leadership* are more general and relate to the competence, expertise and the extent to which leaders' efforts result in the fulfilment of the organisation's purposes. These two aspects can also be related to transformational leadership. Satisfaction with the degree to which the leadership of the organisation is based on the degree of competence and expertise of the leaders, implies that followers will have respect and admiration for the leaders and would like to identify with them, which forms part of the idealized influence dimension. The extent to which leaders' efforts result in the fulfilment of the organisation's purposes imply a motivational aspect and future orientation as described by the inspirational motivation dimension.

During presentation of transformational leadership programme, informal surveys indicated that the organisation's members regard transformational leadership

behaviours as having a positive impact and that they are generally satisfied with leaders with transformational attributes. Fuller, Morrison, Jones, Bridger and Brown (1999) recognize the findings of other authors that transformational leadership is related to a number of organisational outcomes including job satisfaction. However, they also found that empowerment enhances the relationship between transformational leadership and job satisfaction.

Psychological empowerment was described as a process of enhancing feelings of self-efficacy among organisational members through the identification of conditions that foster powerlessness and through their removal by formal organisational practices. Aspects such as meaning (the value of a work goal); competence; self-determination (choice in initiating and regulating actions) and impact (influence over strategic, administrative, or operating outcomes) were mentioned as areas to address.

With respect to organisational culture of the SANDF, the organisation has spent much time, money and effort in creating a value system and inculcating the transformational leadership philosophy. The United States Army also invested resources in leadership development without major results, but Lieutenant General Ulmer Jr (1997) is of the opinion that they may have to direct more of the development effort to the analysis of the current organisational climate in which they lead than on individual leadership methods, although both are necessary. He gives recognition to the fact that there is a mutual beneficial effect between a healthy climate and successful leadership. A transformational leadership philosophy promotes aspects of organisational climate, such as allowing for initiative and participation and developing pride in members.

### *Reward Systems*

Bass (1990) asserts that transactional leadership, which is less active and effective than transformational leadership, entails an exchange between leader and follower in which the leader's influence is dependent on the rewards the follower receives when objectives are reached and the sanctions that are applied in cases of lack of achievement. Such exchanges serve as reinforcement for the self-interest of followers (Bass, 1990; Alimo-Metcalf,

2001). The Reward System is another organisational climate facet that is a significant predictor, while dissatisfaction is expressed with it. If incessant leadership development in the transformational style of leadership is successful, it should have the effect that workers care less about the rewards and more about the mission of the group. According to Bass (1990), transformational leadership occurs when leaders broaden and elevate the interests of their employees, when they generate awareness and acceptance of the purposes and mission of the group, and when they inspire their employees to look beyond their own self-interest for the good of the group. It seems to be difficult to introduce a reward system that will be accepted by all members as fair. Yukl (1998) addressed this aspect. The popular notion is that contingent rewards should increase satisfaction and motivation, but according to a number of studies the results to this effect were not always significant. It is essential to be fair and objective when deciding how to allocate rewards, otherwise it can give rise to more dissatisfaction than satisfaction (Joyce and Slocum, 1982; Yukl, 1998).

### *Equity and fairness*

Equity and fairness is the facet of work life that the members are most dissatisfied with. The questionnaire items enquire about satisfaction with the degree to which the pay scale, reward system and benefits as well as the system of promotion is fair. If Scandura's (1999) description of organisational justice is considered, these items address distributive (pay and benefits) and procedural (reward system, system of promotion) justice. Low satisfaction in both communication and equity may suggest that the real dissatisfaction may lay in the way aspects concerning these systems are communicated, for example, the rationale for the actual distribution of rewards to members by superiors. Therefore, this aspect of equity and fairness relates to interactional justice as described by Scandura (1999).

No significant differences could be found between rank and race groups concerning satisfaction with equity and fairness in the organisation. Considering the theory discussed by Adams (1963), inequity exists when a person perceives his or her inputs and outcomes to compare unfavourably with the inputs and

outcomes of another person. This suggests that there must be a comparison and conclusion derived from the observation of inputs and outcomes of a comparison group. If all groups in the same organisation experience the same negative affect regarding the perception of inequity of rewards and reward systems, it is unclear what comparisons are made. It can only be concluded that the subjectivity of these observations are of such a nature that everybody compares themselves unfavourably to their co-workers or other groups in the organisation or that they are comparing themselves with members in other organisations. It could also mean that a lack of clear communication, in other words, a perception of an absence of interactional justice, gives the impression of inequity even while it might not exist in an objective sense.

It was determined that organisational climate is very much a case of perception and, therefore, it should be asked what the conditions are that lead to certain perceptions. Because such widespread dissatisfaction was found and members were specifically asked about their perceptions about the reward system and system of promotion, the conclusion is that members' perception about these systems are affected. Prendergast and Topol (1996) analysed the effect of favouritism on compensation in organisations. The underlying premise of their paper is that accurate and objective measures of a worker's performance are typically unavailable. Instead performance is gauged from subjective opinions provided by supervisors. This subjectivity opens the door to favouritism. An additional feature of their analysis is that favouritism depends on the incentives offered to the worker, since stronger incentive pay for workers reduces the accuracy of supervisors' reports. This arises because supervisors distort their evaluations more when their decisions substantially affect subordinates' welfare. These types of distortions can give rise to perceptions of inequity.

The responses of the managers who participated in Meindl's (1989) research, suggest that the allocation of resources according to strict equity principles will often be undesirable and inappropriate. For example, allocations that are more equal are preferred to equity principles when the tasks to be performed essentially increase the interdependence among the co-workers. According to

these managers, equity principles are unfair and harmful under task conditions that emphasize group interdependence that results in collective productivity levels. This is the perception of the managers, but it could very well be that members of the organisation may regard it as unfair if their individual contribution is not appropriately recognized. The situation is further complicated when equality principles become policy with respect to allocation of performance rewards, opportunities for development as well as promotions.

While a great deal of research exists as to how merit pay should be applied in practice, and how successful or unsuccessful companies have been in achieving the desired results, it is clear that there is no consensus as to the effectiveness of merit pay plans. While some plans have been very successful in motivating and rewarding employees, others have produced opposite or dysfunctional results as employees become discouraged and view the merit process as unfair and ineffective (Brody *et al.*, 2001). Equity and fairness in this research relates to the extent that members perceive the reward system as fair. In the SANDF, the reward system includes a system of merit bonuses. Both equity and fairness and the reward system are perceived to be dissatisfactory in the Engineer Formation, which complies with the policies and procedures of the larger organisation.

Merit pay systems are designed to induce workers to perform at high levels. In theory, workers are paid for extraordinary performance. The critical factor is the manner in which the programme is implemented. If merit pay is too closely aligned with seniority or evenly distributed across employees (such as a quota system across groups), merit pay loses its motivational force (Brody *et al.*, 2001). For example where it is decided that equal numbers of employees in different groups are to receive a merit bonus. It can, therefore, happen that a person in one group who has performed better than one in another group may not be rewarded.

#### 5.2.2.3 *The Importance of Facets of Work Life for Overall Satisfaction*

The notion that if satisfaction with valued facets of work life is experienced, it will

have a positive influence on overall satisfaction with quality of work life, is based on Locke's (1976) Value Theory as described by Landy (1989). Therefore, in this research, one would expect that communication, which is very important to most members, should play a greater role in determining overall satisfaction than social activities, which are regarded as less important. This was true in the case of communication as it is one of the best predictors of overall satisfaction with quality of work life ( $\beta = 0.16$ ;  $p = 0.01$ ), while the influence of social activities proved to make no significant contribution ( $\beta = -0.00$ ;  $p = 0.83$ ) in the multiple regression analysis (see Table 4.6). Identification, the second most important facet, also contributes significantly to overall satisfaction. However, all facets were rated relatively important and correlated positively with overall satisfaction. Health and safety was rated third most important, members are relatively satisfied with it, but in the regression model it makes a negative unique contribution to the prediction of overall satisfaction with quality of work life. This phenomenon may require further investigation in order to explain it.

Locke's suggestion that if a facet of work life is relatively unimportant an individual will not be either very satisfied or very dissatisfied with it could be questioned considering the finding in this research that members regard social activities least important of all, while it is the facet that most satisfaction is experienced with. This would rather imply that something that is unimportant is easier to be satisfied with than something that is important. Communication that is most important is also one of the facets that the least satisfaction is experienced with, and it could be argued that because it is so important it is difficult to satisfy member's expectations about it. However, this is not a phenomenon that is consistently found in this research. Locke's suggestion that job satisfaction is not the simple sum of satisfactions with individual elements of the job, but rather that the relative importance of each of the factors should be considered is a worthwhile suggestion to note.

#### 5.2.2.4 *Needs*

Results indicate a greater preference for deficiency and relatedness needs, such as economic security, recognition and interpersonal relationships. According to

the deprivation/domination proposition this would mean that the deprivation or deficiency is high in these areas, which increases the importance, strength or desirability (Wahba & Bridwell, 1976). Only one growth need was indicated as a preference, namely mastery and achievement. Wahba and Bridwell (1976) found that the validity of Maslow's need classification scheme could not be established, except that deficiency and growth needs may form some kind of hierarchy. They could also not find strong evidence to support the deprivation/domination proposition except with regard to self-actualisation. If a person is inclined towards a need for security, what happens when temporarily that need is not an issue or threatened? Does it go away and make room for other needs to emerge?

The opponent-process theory suggested by Landy (1989) may also be applicable here. According to this theory, satisfaction can change over time. For example a person's financial position can change. After a salary increase has occurred, the person may not obsess about money for a while and when given a choice of needs, economical security may not be the first to enter his or her mind. In a time when downsizing is on the table and members are given a choice of taking a severance package, they are forced to think in terms of financial security. People with a tendency towards a need for economical security will hesitate, while people with a natural tendency towards challenges might take the plunge. At the time of the survey, many members were still uncertain about their future in the organisation. Most members who were ready to take up new challenges, already made the decision and some had already left. The implications of the opponent-process theory suggest that studies of job satisfaction should be longitudinal rather than cross-sectional in nature and this may apply to need non-fulfilment as well (Landy, 1989).

The idea that needs can be seen as personality traits was mentioned by Murray (1938). According to him, individuals could be classified according to the strengths of their needs. Needs may be activated or latent. A need is latent when it has been inhibited by circumstances, but did not disappear (Steers & Porter, 1987). Argyrus (1987) also describes personality in terms of energy located in the need system. When the energy is stimulated enough, the need

system is in action. Need systems that are not in action are inert needs or potential active needs. Argyris (1987) speculated much about needs in terms of development or growth needs and suggested that a person will always be inclined to seek expression for developmental needs, such as self-determination, independence, seeking challenges and to seek to secure the future. The latter is the only one that members in the present study seem to relate to.

Quite significant in this study is the low preference for dominance even among senior ranks. It is particularly significant because the results were obtained in a military organisation where leadership is emphasized. Steers and Braunstein (1976) found in their research that dominance was significantly related to supervisory rank.

Major Michael Russel (2000) wrote in an article in the Military Review that there are two major personality types to be found in the military, namely Type B and Type C. The Type B style is characterized by positive features such as adventuresome, imaginative, innovative, daring and decisive. Type C is described by positive characteristics such as dependable, conscientious, detail oriented, punctual and selfless. Those personality attributes associated with good leadership in combat situations are primarily from Type B. This would be the type of soldier who chooses creativity, achievement, dominance and independence, the ego-assertive needs, as priority needs. They would also value job aspects such as autonomy, creativity, challenge and variety. They thrive on challenge and require constant stimulation, but they are not very good at staff work. They are drawn to join the military by the potential for excitement and adventure. When opportunities for these abate, they will move on to other employment. On the other hand Type C personality style does thrive and is excellent with staff work. They are drawn to the security of the military system and the guaranteed employment. Russel (2000) also calls Type B wartime and Type C peacetime personalities.

Judging from the research results regarding the most important needs, it is typical of a peace time military organisation to have a high number of members who have a strong need for security. Regarding importance of facets of work

life, health and safety and job security also received more prominence than creativity and challenge. Therefore, it can be quite a reasonable conclusion that economic security is a strong need with members of the organisation, but it could also be strengthened by present circumstances and is active rather than latent.

### 5.3 RECOMMENDATIONS

Originally in Chapter 1 it was envisioned that the overall goal for studying satisfaction with quality of work life must have some sort of benefit for the organisation and its workforce. To meet this expectation the findings and conclusions of the research will be of assistance in making recommendations that will guide management in their responsibility to create an organisational climate that will benefit the well-being of their subordinates.

Intervention is needed in the identified problem areas. It is recommended that the results of this research serve as a baseline and as a point of comparison after changes have been implemented to assess their effectiveness.

*Communication, Identification* and *Job Security* were identified as the areas that are most in need of attention.

Because of the predictive power of organisational climate factors, such as practicing *participative management*, *people's sense of pride in identifying with the organisation* and *the way information is communicated* in the organisation, these should be the focus in creating a healthy climate. It is also recommended that attention be paid to the members' low level of satisfaction with *equity and fairness* and the *reward system*. In combining these factors for maximum results, open lines of *communication* should be created that will enhance the creation of *participation* and interactional justice. Interactional justice involves the manner in which superiors communicate organisational justice to followers (Scandura, 1999) and can enhance the perception of *equity and*

*fairness* in the organisation. Members' inputs can be solicited with regard to improving the *reward system* that will be acceptable and regarded as *fair* with respect to the distribution of it and the procedures that are followed. It should be clearly *communicated* on all levels what *equitable and fair reward systems* entail, what the criteria are and pros and cons of different systems should be delineated. There should be understanding with regard to what the organisation is capable to offer. After inputs have been made, regular feedback must be given on the progress of development of a fair system and the rationale for the eventual choice of a system must be communicated on all levels. It is important to note that it is the perception people have regarding *equity and fairness in reward and promotion systems* that should receive attention. An image of managers as interested in justice and the fair treatment of subordinates in the execution of their roles is one that should be taken very seriously.

Yukl (1998) sees the involvement of subordinates mainly as a leader responsibility. *Participation* is likely to increase the quality of decisions when participants have information and knowledge the leader lacks, the opportunity to have some influence over a decision usually increases commitment. Other benefits are increased subordinate acceptance of decisions, decision-making skills are developed and conflict resolution and team building is facilitated. *Resource Management* can also be greatly enhanced by utilizing participative management. Financial planning and decisions regarding the acquisition and the maintenance of equipment is often done on the higher levels while those who have to use the equipment are not involved.

Wilson and Wagner (1997) are of the opinion that because the culture prescribes the climate, any changes in this regard should be aimed at the culture. The expression of the organisations values and the habits and rituals should be targeted as vehicles for this effort. The organisation's internal organisational development consultants should gather information regarding the members' degree of satisfaction with organisational climate components on all levels, the degree of agreement between measures in different groups should be compared to determine how much consensus exists regarding these perceptions in order to determine what changes are needed. All corporate

goals and objectives should reflect the creation of a climate that will instil pride in the members. Practices and policies should support the accomplishment of these objectives, for example, *participation* in deciding what to change and how to change it.

*Communication* and organisational development efforts should be combined in order to build effective work teams and thereby improve *work group functioning*. The emphasis should be on efforts that enhance co-workers' abilities and opportunities to provide better cooperation in the work context. The ultimate outcome to strive for is that members experience the benefits of access to both affective support and instrumental support. As Ducharme and Martin (2000) suggest, affective support provides members with feelings of being accepted and cared for by co-workers, while instrumental support involves functional and material assistance in response to specific needs in the execution of work. This should provide a counter effect for stresses encountered at work. This will have the additional advantage that it enhances the efficient functioning as well as contributes better to the sense of well-being of the members.

*Leadership* development may have a more far-reaching effect if aspects of *communication* are included and the compelling influence of it is stressed. Bass (1990) found that mass *communication* directed toward individual employees is much more likely to have an impact if the messages are reinforced face-to-face by their supervisors at all organisational levels.

*Rewards* should be appropriately linked to performance indicators that reflect a person's effort and competence, representing positive feedback (Deci & Ryan, 1985; Yukl, 1998). A properly designed *reward system* is a requirement in any organisation, but if it is the only system that is emphasized it will foster a transactional system. Where a *reward system* is concerned, the pitfalls are many. For example, adequate rewards should be available (Joyce and Slocum 1982); extrinsic rewards can potentially have a negative effect on the people's intrinsic motivation; many people end up receiving the message that they are not doing very well and this is likely to be demotivating and give rise to dissatisfaction (Deci & Ryan, 1985).

*Leadership* development programmes should not be seen as the only method of enhancing a healthy climate, such as the institutionalising of a transformational culture. It should be supported and further enhanced by the empowerment of leaders. In other words, not only should transformational leadership behaviours, such as inspiring members, stimulating them intellectually and giving individual consideration continue to be fostered, but the organisational climate could be further augmented by empowerment practices, such as participative management.

With today's external environment and the effect it has on the organisation with respect to *job security*, it is not possible to eliminate the cause and efforts should rather be focused on the effect. No organisation can really guarantee its members a lifelong career. According to Moen (2000), job insecurity gives rise to stress symptoms. The only intervention for this dilemma is to do life skill development in which effective life strategies are taught to counter the effect of insecurity and stress. Examples are Rational Behaviour Training and Emotional Intelligence, but even problem solving techniques and self-motivation techniques could be beneficial. When people are sufficiently prepared to deal with any kind of adversity, they will also be able to deal with insecurity. Functional training and development should also enable people to obtain suitable qualifications that are relevant in any organisation.

As in the situation mentioned above, the high need for *economic security* and the fact that it is unfulfilled is something the organisation cannot change.

Members will have to take more responsibility for their own future planning.

However, Bass (1995) believes that superior *leadership* performance occurs when leaders are successful in altering their subordinates' interests.

*Transformational* leaders achieve this by inspiring them; they may meet the emotional needs of each employee; and/or they may intellectually stimulate employees. In this way transformational leaders produce in their followers a higher sense of *meaningfulness* in their work and lives. By engaging follower self-concepts and arousing non-conscious motives of followers, the transformational leaders selectively arouse followers striving for achievement

and higher order motives.

The fulfilment of need that was depicted in this study as significant predictor of satisfaction with quality of work life, the need to have one's behaviour consistent with some moral code or structure, should deserve consideration. The institutionalisation of a code of conduct as part of the transformation process should contribute to enhance the fulfilment of the need. The principles incorporated in the code of conduct have to be integrated into policy and practices and be part and parcel of everyday conduct.

In conclusion, not all contextual factors can be successfully changed in order to ascertain a positive improvement in the satisfaction of quality of work life, but efforts can be directed at the individual through leadership development and empowerment to elevate the value attached to intrinsic factors and rewards and thereby improving satisfaction levels.

#### **5.4 PROBLEMS ENCOUNTERED IN THE RESEARCH**

In Chapter 3 it was foreseen that certain factors, such as time span, culture and organisational changes might have an influence on the research. These are normal influences and unless great care is taken in controlling certain variables there will always be the possibility of unwanted influences.

##### **5.4.1 Drawbacks of Questionnaires**

Since questionnaires are pre-structured they are not adaptive; if the questions are not appropriate for the specific respondent, they cannot be changed during the administration. Once the individual has been given the questionnaire, the questions are fixed and set. Questionnaires may pose questions to which respondents cannot or will not respond adequately, while missing other areas where a rich store of information is present (Lawler, Nadler, & Cammann, 1980). However, making use of as big a sample as possible, pre-structured questionnaires are a practical form of survey research.

Self-report questionnaires are often open to problems of response biases. Respondent's reports may be either consciously or unconsciously biased. In questionnaires these biases may include things such as a tendency to give the same answer to questions that are next to each other on the form, the tendency, as discussed by Schaffer (1953), for respondents to use high or low or middle of the range ratings consistently and a tendency to answer questions later in the questionnaire with less care than earlier questions. Especially with lengthy questionnaires that require concentration and perseverance to complete, the responses to the last parts of the questionnaire may be less accurate. Long questionnaires result in respondent fatigue and resistance and poor-quality data (Lawler *et al.*, 1980).

Problems were experienced with Schaffer's scale (Section D: Need Strength Scale) in determining need strength. This was described in Chapter 4. The method of prioritising needs by asking members to prioritise the needs in Section E was not the best way of testing need strength. Persevering with Schaffer's scale did not seem feasible at the time to achieve the objective of distinguishing most important needs of individuals, but it may have had better results for determining in general what needs are prevalent in the organisation. As indicated in the descriptive data of need strengths, (Tables 4.39.1 to 4.39.6) obtained from Section E, it can be considered strange to find higher frequencies of needs such as a need for good relationships, dependence and for helping others, than for instance dominance, in a military environment. As Schaffer (1953) stated, these needs have in common the deference of the ego and the restraining of assertive or aggressive impulses. Psychoanalytically, the expression of such needs might be interpreted as defences against the recognition of aggression or hostility, while in the military it could be considered more acceptable than in any other organisation. The need to be in command and influence the opinions of others is considered a necessary quality for leaders in a military organisation and is reinforced in formative development and evaluated positively in behaviour assessments. Schaffer's scale has the potential to bring out the ego-assertive needs better because of its more subtle method.

The questionnaires covered many variables, which left possibilities for exploration, but without a proper analysis plan for all of them. This complicated the research and much literature had to be reviewed. All variables did not receive the attention that would validate their inclusion (Lawler *et al.*, 1980).

The development of the surveys for this research involved adapting previously used questionnaire items. The items were derived from a variety of questionnaires with varying records of validity and reliability. The questionnaires are, therefore, not standardized and not validated. The advantages of standardized questionnaires, such as that they have a predetermined set of questions useful in almost any situation, developed and defined over a period of time, based on a model of organisational functioning, pretested, and in many cases have normative data available that allow comparisons with other organisations, was absent in this research (Lawler *et al.*, 1980).

#### **5.4.2 Positive and Negative Affect**

Certain dispositional traits, including negative affectivity, may be responsible for employees' reports of dissatisfaction. Hochwater *et al.* (2001) refer to researchers arguing that there are a genetic basis to job satisfaction. Instead of work related variables, some researchers focused on identifying personality variables that explain variance in job satisfaction scores. Evidence was found that positive affect (PA) and negative affect (NA) are powerful personality dimensions that represent the propensity towards job satisfaction or dissatisfaction. Specifically, PA reflects the tendency to experience positive affective states, whereas NA reflects the tendency to experience negative states.

Consistent with this argument, past studies have shown that PA is positively correlated and NA negatively correlated with job satisfaction. Controlling for the impact of PA and NA appears to be warranted in job satisfaction research. Hochwater *et al.* (2001) is of the opinion that any research utilizing predictors of job satisfaction other than dispositions will provide more meaningful contributions if the potentially biasing effects of PA and NA are controlled. Ducharme and Martin (2000) were of the same opinion. The outcome variable in their research is a measure of employees' affective reactions to their jobs and

therefore they deemed it necessary to control for affective states that individuals bring with them to the workplace.

## **5.5 OPPORTUNITIES FOR FURTHER RESEARCH**

A fair amount of research has been conducted on satisfaction with quality of work life around the globe and with good results. From this study there are a few considerations that can be taken into account when similar research is attempted.

A standardized, valid, reliable, scientifically recognized, contemporary and culturally free questionnaire should be used to measure need strength and a need fulfilment scale that measures the same needs used in concordance with it. The method of determining need strength by prioritising was simple and explicit, but could be representing needs that are frustrated and most prominent in the minds of people. It was also needs that were presented for prioritisation and not necessarily the personal needs of the people. A more subtle way of measuring may be necessary. A qualitative study to find what people really need in the organisation at present may also be considered.

The questions also remains, is it needs or is it personality first that determines the needs that predicts satisfaction with quality of work life. A look at the relationship between personality types and satisfaction with quality of work life may be necessary. For future research it is recommended that the influence of personality on the experience of satisfaction with quality of work life be investigated. Negative affect and positive affect are dispositions that should either be controlled or included as variables to see what their effect is in determining overall satisfaction with quality of work life.

The Satisfaction with Quality of Work Life Scale seems to have very good face validity, judging from the importance that was awarded each and every item in the Personal Importance Scale. It could prove to be a valuable diagnostic tool, but the scale still has to be properly tested for validity and reliability. As it is, the scale is quite lengthy and can probably be streamlined and refined by finding

items that are related and are redundant and dropping them from the scale.

A longitudinal study is advised. Lawler *et al.* (1980) suggested that because organisations are complex and acting systems, they change over time and are characterized by cycles of events. Therefore, organisations need to be considered in dynamic rather than static terms.

Because so little is known about the dimension, identification with the organisation, it may be a worthwhile subject for research to further explore.

The value of the Satisfaction of Quality of Work Life Scale in the future could be doubled if it could be determined whether attention to the areas diagnosed as problem areas not only brings about more satisfaction, but also more efficient functioning and productivity.

## **5.6 A FINAL WORD**

It was suggested that a psychologically healthy work environment is one in which the individual's needs are fulfilled and that organisational members experience quality of work life when facets of work life that they regard as important are satisfactory. This research did not find conclusive confirmation for these suppositions, but did find that the satisfaction in the various facets of work life contribute to overall satisfaction. Therefore, the attention was focused on those facets that are seen as possible problem areas and certain suggestions were made.

It is important that the leadership of the organisation accept the responsibility to provide people with a high quality of work life for the sake of well-being and health, whether or not it makes people more productive. However, according to The Worklife Report (2000), organisations that did implement programmes to improve work life satisfaction also experienced improved efficiency. It is especially hoped to see an eventual outcome where members of the organisation can report to be proud to belong to the organisation. For this reason more effective research and organisational surveys should be

investigated and utilized continuously to focus improvements in areas where a positive change can become operative.

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## APPENDIX A: SAMPLE DISTRIBUTION ACCORDING TO INDEPENDENT VARIABLES

Tables A.1 to A.12 give a description of the composition of the sample according to biographical data (Section A).

Table A.1: Units and geographical areas

Unit	Region	Number	%
Head Quarters Training Unit	Construction Unit	Combat Unit	Logistic Support Unit
Printing Unit	Survey & Mapping Unit	Construction Sub-Unit	Combat Sub-Unit
	Gauteng, Urban Free State, Rural Gauteng, East Rand Free State, Rural Gauteng, East Rand	Gauteng, Urban Limpopo Province, Urban Northern Cape, Rural	Gauteng, Urban
27	12	22	37
		67	92
		51	43
		47	27
		5,5%	9,3%
		16,8%	23,1%
		12,8%	10,8%
		11,8%	6,8%
		3,1%	
TOTAL		398	
		100%	

All the units in the Formation were included. There was, therefore, no random selection or any other method used to choose these units. Each unit has some sort of specialty and if it was left out, an important source of occupations might also have been affected. For example, at Head Quarters level the functions are mostly of a managerial nature, although because the specialist functions are managed from here, it also consists of specialists and professionals. The construction units have artisans and technicians, construction machine operators and some professionals. The logistical support unit does have a larger component of support personnel, but because of the specialists' functions that are supported, it is often also specialists that provide the logistical support service. One Unit has specialists and professionals in the field of survey and mapping and another in printing. One unit is responsible for providing direct combat support during operations and consists mostly of field engineers. It also covers different geographical areas, although it is restricted to where the units actually are. For example there are no engineer units in the Western or Eastern Cape or in Kwa-Zulu Natal. Five units are in Gauteng, Pretoria and East Rand, one in the Limpopo Province (also regarded as a city). Two units are in Free State rural towns and one in rural Northern Cape.

Table A.2: Years of Service in the SANDF

Number of Years	Number	%	Comments			
Less than 1 Year	1 - 2 Years	3 - 5 Years	6 - 10 Years	11 - 15 Years	16 - 20 Years	More than 20 Years.

0 5 39 186 98 27 43 0% 1,3% 9,8%  
 46,7% 24,6% 6,8% 10,8%  
 New members are usually involved in basic training and it could be that they were away from the unit at the time of the survey. It is, however, a reality that the organisation has to reduce numbers and that new intakes are small.

Table A.3: Years of Service in Unit.

Nr of Years in Unit	Number	%	Comments	
Less than 1 Year	1 - 2 Years	3 - 5 Years	6 - 10 Years	More than 10 Years

46 70 102 148 32 11,6% 17,6% 25,6% 37,2%  
 8,0%  
 This variable was included because it takes time to adapt to a new environment, which could affect satisfaction in new members. If people are seriously unhappy in a unit, they normally ask for a transfer and will not stick it out for long periods of time.

Table A.4: Gender.

Gender	Number	%	Comments	
Female	Male	68 330	17% 83%	This large difference in numbers between male and female is representative of the population.

Table A.5: Rank

Military Ranks						
Rank	Number	%	Comments			
Colonel (Col)	Major - Lieutenant-Colonel (Maj - Lt Col)	Lieutenant - Captain (Lt - Capt)	Warrant Officer Class 2 - Warrant Officer Class 1 (WO2 - WO1)	Sergeant - Staff Sergeant (Sgt - SSgt)	Lance Corporal - Corporal (L/Cpl - Cpl)	Sapper (Spr)
	3 21	41 32	65 98 102	0,8%	These percentages should come very close to that of the population. The percentages of ranks of the population are not known to the researcher, but care was taken to instruct units to make respondents available proportionately. Military ranks also far outnumber Civilian personnel, true to a military organisation.	
	5,3%	10,3%	8,1%	16,3%	24,6%	25,6%

Total Military Ranks	362	91%	Public Service Administration Personnel (PSAP) (Civilian Personnel)			
Rank	Number	%	Comments			
Level 10 - 11	Level 8 - 9	Level 6 - 7	Level 4 - 5	Level 2 - 3	Level 1	2 0 8 2 18
6			0,5%	0,0%	2,0%	0,5% 4,5% 1,5%

These small numbers will present a problem. When statistical significance is tested, ranks will be grouped together.

Total PSAP Ranks	36	9%	
------------------	----	----	--

The highest rank in the Formation is that of Brigadier General. Because there is only one person representing this rank, it was decided not to include the bearer of the rank into the study. The next rank, namely Colonel, consists understandably also not of a large number. Members of this rank make up the Senior Staff Officers and Commanders of Units. The three members who participated are all Senior Staff Officers and are part of the executive decision-making body of the Formation. In this respect, where it only concerns rank, for example when the independent variable is senior officers, they will be grouped with the Majors and the Lieutenant-Colonels. As occupation they are considered on their own, as their scope of work and responsibilities differ considerably from the other officers.

Table A.6: Years of Service in Present Rank.

Number of Years		Number	%	Comments					
Less than 1 Year	1 - 2 Years	3 - 5 Years	6 - 10 Years	More than 10 Years	30				
100	115	125	28	7,5%	25,1%	29,0%	31,4%	7,0%	This variable was included because of the experience in the organisation that promotion is always a concern mentioned by members. The influence of it on satisfaction will be worthwhile to test.

Table A.7: Service Term System

Term	Number	%	Comments						
Long-term	Medium-term	Short-term	Part Time	188	186	24	0	47,2%	46,7%
6,1%	The objective reality is that medium and short-term members have less job security than long-term members. Whether there is a significant relationship with satisfaction will have to be tested.								

According to the system, members can join for a short-term of two years, after which they can re-apply up to two times, which eventually give them a period of six years. But from term to term they are not certain whether or not their application will be rejected or not. Although medium term members have longer periods of certainty, they are usually of a more senior rank and presumably older and with more financial liabilities. Not knowing what their future holds, could

have an effect on their satisfaction with job security, which could affect their overall satisfaction. How much influence these factors have, will be tested.

Table A.8: Age.

Age	Number	%	Comments																					
20 Yrs and Younger	21 - 25 Years	26 - 30 Years	31 - 35 Years	36 - 40 Years	41 - 45 Years	46 - 50 Years	51 Years and Older	2	36	113	124	47	34	24	18	0,5%	9,1%	28,4%	31,2%	11,8%	8,5%	6%	4,5%	It is particularly noteworthy that such a small percentage represents the age group younger than 20. This is where a professional Defence Force, with only voluntary service, departs significantly from other systems, such as the previous system of national service.

0,5% 9,1% 28,4% 31,2% 11,8% 8,5% 6% 4,5% It is particularly noteworthy that such a small percentage represents the age group younger than 20. This is where a professional Defence Force, with only voluntary service, departs significantly from other systems, such as the previous system of national service.

Table A.9: Marital Status

Marital Status	Number	%	Comments															
Married	Unmarried	Divorced/ Separated	Widowed	Living Together	Engaged	224	135	12	3	22	2	56,3%	33,9%	3,0%	0,8%	5,5%	0,5%	To deal with the small numbers, members will be divided into two groups only for statistical testing, namely single and married. Every body that is not married will be categorized as single.

224 135 12 3 22 2 56,3% 33,9% 3,0% 0,8% 5,5% 0,5% To deal with the small numbers, members will be divided into two groups only for statistical testing, namely single and married. Every body that is not married will be categorized as single.

Considering the ages, it is a surprisingly high number of respondents who are unmarried. As marriage has a strong cultural connection, there is a strong possibility that members have common law wives not living with them. In other words they are not married according to the western culture and this could have been confusing for them. This is a consideration for a category to be included in future questionnaires.

Table A.10: Race

Race	Number	%	Comments									
Asian	Black	Coloured	White	0	250	11	137	0%	62,8%	2,8%	34,4%	The numbers reflect the proportions in the Formation. Given the law of large numbers, the data in respect of Blacks will always be more representative.

0 250 11 137 0% 62,8% 2,8% 34,4% The numbers reflect the proportions in the Formation. Given the law of large numbers, the data in respect of Blacks will always be more representative.

Table A.11: Educational Level

Educational Level	Number	%	Comments									
Less than Matric	Matric Certificate	Diploma	Degree	Post Graduate	130	197						

42 22 4 3 32,7% 49,5% 10,5% 5,5% 1% 0,8% Given the nature of the functions of the Formation, there may be more members with certificates and diplomas than in other Formations in the SA Army. The high percentage of members with less than matric and the low percentage of graduates has diagnostic value in itself.

Table A.12.1: Occupation Groups (Main Functions)

The groups according to their main functions are given first and then it is indicated out of which occupations the functions consist.

Function	Number	%	Comments
Technical Field Engineers (Combat) Artisans Support Staff Professionals	21 137 54 105 16 46 3 16	5% 34% 14% 26%	
Specialists Senior Staff Officers (SSO) Construction Machine Operators (CMO)			See explanation Table A.5 Ranks See Table A.1 Units for explanation.
	4% 12% 1% 4%		

Table A.12.2: Occupations

Occupation	Number	%	Function
Artisans Cartographers Construction Machine Operators (CMO) Draughtsmen	54 12 16 11 2 7 137 3 2 3 8 16 3	13,6% 3% 4% 2,8% 0,5% 1,8%	
Driver Desk Top Printing Operators (DTP) Combat (Field) Engineers			
Geographical Information System Operators (GIS) Lithographers Photo			
Lithographers Photographers Professional Senior Staff Officers Support			
Services Technical			
103 21			Artisans
34,4% 0,8% 0,5% 0,8% 2% 4% 0,8% 25,8% 5,3%			
Specialist CMO Specialist Support Specialist Field Engrs Specialist Specialist			
Specialist Specialist Professionals SSO Support Technical			

## APPENDIX B : RELATIONSHIPS BETWEEN VARIABLES

In the next group of data, it will be indicated by means of cross tabulations what the relationship between some of the variables are. As Rank forms a very important distinguishing factor in a military organisation, it will be indicated how ranks are represented in terms of gender, race, age, and education.

Table B.1: Rank-Gender Relation.

Gender	Male		Female		Total	
Rank	Frequency	%	Frequency	%	Frequency	%
Col	3	100%	0	0%	3	0.8%
Maj - Lt Col	19	90,5%	2	9,5%	21	5.3%
Lt - Capt	30	73,2%	11	26,8%	41	10.3%
WO2 - WO1	27	84,4%	5	15,6%	32	8.1%
Sgt - SSgt	53	81,5%	12	18,5%	65	16.3%
L/Cpl - Cpl	86	87,8%	12	12,2%	98	24.6%
Spr	99	97,1%	3	2,9%	102	25.6%
Level 8+	2	100%	0	0%	2	0.5%
Level 6 - 7	2	25%	6	75%	8	2%
Level 4 - 5	1	50%	1	50%	2	0.5%
Level 2 - 3	5	27,8%	13	72,2%	18	4.5%
Level 1	3	50%	3	50%	6	1.5%
Total	330	83%	68	17%	398	100%

Frequencies and percentages are calculated per rank group. The last two columns indicate the frequencies and percentages of the rank out of the total sample.

It is noted that the highest number of females are found in the middle ranking groups among military ranks and not many in the highest and lowest ranks. There are more females than males in the PSAP ranks. Traditionally in the military, females were only allowed as civilian support staff. However, for some time now females have been taken up as uniformed members, but in the first place also more so as support staff. It is only lately that there is no restriction. It is still less complicated for men than women to take on the long residential promotional courses. Members who are not situated in Pretoria have to leave their homes and families for six to ten months to attend such courses.

Table B.2: Rank-Race Relation

Race	Black		Coloured		White		
	Total						
Rank	Freq	%	Freq	%	Freq	%	
Col	0	0%	0	0%	3	100%	
	3						
Maj - Lt Col	4	19%	0	0%	17	81%	
	21						
Lt - Capt	12	29,3%	2	4,9%	27	65,8%	
	41						
WO2 - WO2	9	28,1%	3	9,4%	20	62,5%	
	32						
Sgt - SSgt	36	55,4%	0	0%	29	44,6%	
	65						
L/Cpl - Cpl	77	78,6%	3	3%	18	18,4%	
	98						
Spr	91	89,2%	2	2%	9	8,8%	
	102						
Level 8+	2	100%	0	0%	0	0%	
	2						
Level 6 - 7	1	12,5%	1	12,5%	6	75%	
	8						
Level 4 - 5	1	50%	0	0%	1	50%	
	2						
Level 2 - 3	11	61,1%	0	0%	7	38,9%	
	18						
Level 1	6	100%	0	0%	0	0%	
	6						
Total	250	62,8%	11	2,8%	137	34,4%	

Since the survey one of the colonels took a severance package and was replaced with a white officer and one was transferred and replaced by a black officer. During the previous two years a number of black officers, including a black lady, attended the senior staff course and are being qualified to take up the senior positions, which make up the executive committee of the Formation. Otherwise there is still a majority of white members in the senior ranks as opposed to a majority of black members in the junior ranks. National Service was only compulsory for whites and that served as a source of manpower as many joined the permanent force after completion of national service. Now very few white youngsters join the Defence Force and, therefore, there is a disparity of races in the lower ranks. On the other hand, the period before integration in 1994, more white members joined the organisation and are by now in more senior ranks. With the integration of the former SADF and other non-statuary forces utilization in previous forces, and to a certain extent own choice, determined to a large extent the allocation to rank and corps in the new SANDF.

Table B.3: Rank-Age Relation.

Age	-20		21 -25		26 - 30		31 - 35		36 - 40		
	f	%	f	%	f	%	f	%	f	%	
Col	0	0	0	0	0	0	0	0	0	0	Maj-Lt
Col	0	0	14,81	152,44	19314,31	4,814,82	1				Lt
Capt	0	0	1536,61	741,54	9,724,92	4,912,40	41				WO2-
WO	1000	0004	12,55	15,65	15,61	237,56	18.832				Sgt-
SSgt	0	0	11,52	132,31	827,71	1015,48	12,369,21	1,565			L/Cpl-
Cpl	0	0	1010,23	232,74	545,95	5,155,100	1198				Spr
L8+	0	0	0	0	0	0	0	0	0	0	L6-
L7	0	0	0	0	0	0	0	0	0	0	L4-5
L2-3	0	0	0	0	0	0	0	0	0	0	L2-
Total	20,53	69,11	1328,41	2431,24	711,83	48,52	46184,53	98			

Specifically take note of the relatively high ages of members in junior ranks. This can both be demoralizing for the member, but it is also not a good sign for the organisation. In the military the junior soldiers need to be young and virile.

Table B.4: Rank-Education Relation

Edu- Matric Matric Certificate Diploma Degree Post Graduate Total

Rank f %F%P%P%P%P% Col00133,3133,3133,300003 Maj-Lt  
 Col00942,829,5838,114,814,821 Lt-  
 Capt002765,9614,637,337,324,941 WO2-  
 WO11546,91443,726,313,1000032 Sgt-  
 SSgt1523,13350,81116,969,2000065 L/Cpl-  
 Cpl3535,75455,188,211000098 Spr4443,1504987,8000000102 L8+  
 000000210000002 L6-7337,5337,52250000008 L4-  
 5001501500000002 L2-  
 31477,8316,715,500000018 L1466,7233,3000000006 Total13032,719749,5  
 4210,5225,54130,8398

Note that the highest educated groups are Lt - Capt. It could be an indication that members with degrees and postgraduate qualifications only stay for a period of time to build up experience and then leave for better propositions in other organisations. It could also be that there is not enough done to retain educated people, because there is no distinction in salary between members with only a matric and those with a higher education.

### **APPENDIX C : QUESTIONNAIRES**

The purpose of this questionnaire is to

Assess the quality of work life of members;

Find out what aspects are important;

Find out what members need most;

Serve as indicator whether the needs of members are being fulfilled;

Identify areas that need attention in the present state.

You are invited to participate in this survey. To this end you are asked to answer ALL questions honestly. Your opinion is very important as it will contribute to the abovementioned purpose.

Your answers will be treated with the utmost confidentiality. To ensure this - DO NOT WRITE YOUR NAME ANYWHERE ON THE QUESTIONNAIRE.

PLEASE FOLLOW THE INSTRUCTIONS CAREFULLY AND REMEMBER TO ANSWER EACH QUESTION AS HONESTLY AS YOU CAN. PLEASE ASK IF

THERE IS ANYTHING YOU DON'T UNDERSTAND.

Thank you for your participation and co-operation in this study.

## SECTION A: BIOGRAPHICAL INFORMATION

(Indicate with a cross in the appropriate block)

1. At what Regiment/Unit and town are you stationed?

Regiment / UnitTown

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2. Indicate your years of service in the SANDF.

Less than one year	1 - 2 years	3 - 5 years	6 - 10 years		11 -
15 years	16 - 20 years	More than 20 years			

3. Indicate your years of service in the above-mentioned unit.

Less than one year	1 - 2 years	3 - 5 years	6 - 10
years	More than 10 years		

4. Gender?

Male	Female

5. Rank Group/Post Level?

Military Ranks	Public Service Admin Personnel
Col - Brig Gen	Deputy Director
Maj - Lt Col	Level 10 - 11
Lt - Capt	Level 8 - 9
WO2 - WO1	Level 6 - 7
Sgt - Ssgt	Level 4 - 5
LCpl - Cpl	Level 2 - 3
Spr/Pte	Level 1

6. Indicate your years of service in your present rank / post level.

Less than one year	1 - 2 years	3 - 5 years	6 - 10 years	More than 10 years

7. In what category do you serve in the SA Army?

Long-term system	
Medium-term system	
Short-term system	

8. Age?

20 yrs younger	21 - 25 years	26 - 30 years	31 - 35 years	36 - 40 years	41 - 45 years	46 - 50 years	51 yrs or older

9. Marital Status?

Married	Unmarried	Divorced/ Separated	Widowed
Living Together			

10. To which culture/ethnic group do you belong?

Asian	
Black	
Coloured	
White	

11. Indicate your educational level.

Less than Matric	
Matric	
Certificate (one to two years post matric)	
Diploma (three years post matric)	
Degree	
Post Graduate	

12. Indicate your occupational group.

Architect		Plumber	
Binder		Printer	
Brick layer		Photographer	
Carpenter		Photo Lithographer	
Cartographer		Quantity Surveyor	
Construction Machine Operator		Secretary	
DTP Operator		Support Services	
Draughtsman		Surveyor (Land)	
Engineer (Professional)		Staff Corps	
Field Engineer		Technical	
GIS Operator		Topo draughtsman	
Lithographer		Typist	
OHS		Welder	
Painter			
Other (Not mentioned above) Specify:			

## SECTION B : SATISFACTION WITH QUALITY OF WORK LIFE SCALE

### INSTRUCTIONS

The following statements concern various aspects of your work environment. Please tell us how satisfied or dissatisfied you feel with each of the features of your work situation.

Each question must be answered on the questionnaire itself. In this questionnaire there are seven answers to choose from. Choose one and mark with an X.

There are no right or wrong answers. Please give your honest opinion on each one of the statements. Please do not discuss your replies with others. It is your opinion which matters. Even though it may be hard to decide, be sure not to miss any question.

### Example:

Standard of Coaching. This section concerns the extent to which you are satisfied or dissatisfied with the standard of sport coaching in your sport club:

- a. How satisfied are you with the knowledge of the coach?

If you are Very dissatisfied with the knowledge of the coach, mark your response as follows:

Extremely Dissatisfied 1	Very Dissatisfied 2 X	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
	Extremely Satisfied 7		

Now answer the following questions in the same manner.

1. Your Rate of Pay. This section concerns the extent to which you are satisfied or dissatisfied with the money you earn and other benefits you receive.

1.1 How satisfied are you with the way in which your pay and benefits (pension, medical, housing) cover your expenses and needs?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
	Extremely Satisfied 7		

1.2 How satisfied are you with the way in which your pay is sufficient reward in relation to your skills and the effort you put into your job?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
	Extremely Satisfied 7		

2. The Physical Work Conditions. This section concerns the extent to which you are satisfied or dissatisfied with the physical environment you are working in.

2.1 How satisfied are you with the appearance of your work place (building, office, surroundings)?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

2.2 How satisfied are you with the comfort of your physical conditions for the work you do?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

2.3 How satisfied are you with the convenience of transportation and travelling to and from work?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

3. Your Chance of Promotion. This section concerns the extent to which you are satisfied or dissatisfied with your chances to get promotion.

3.1 How satisfied are you with your opportunities to get promotion to the next rank and higher?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

4. Your Job Security. This section concerns the extent to which you are satisfied or dissatisfied about the security of your future in the organisation.

4.1 How satisfied are you with the certainty you have of a job in the near future?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

4.2 How satisfied are you with the certainty you have of a career in the organisation?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

5. Job/Time Pressure. This section concerns the extent to which you are satisfied or dissatisfied with the amount of effort, either physical or mental, your job demands, also considering the time available.

5.1 How satisfied are you with the amount of work you have for the amount of time and assistance?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	

Extremely Satisfied 7

5.2 How satisfied are you with the amount of hard, physical labour your job requires?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

6. Health and Safety. This section concerns the extent to which you are satisfied or dissatisfied with health and safety conditions in your workplace.

6.1 How satisfied are you with the degree to which you are protected against injuries while working with dangerous tools, machinery or equipment or dangerous work methods?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

6.2 How satisfied are you with the degree to which you are exposed or not exposed to pollution (e.g., dust, smoke, fumes or fibres)?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

6.3 How satisfied are you with the degree to which you are exposed or not exposed to things stored dangerously (e.g., explosives, poison, chemicals, etc)?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

6.4 How satisfied are you with the extent to which your work environment is healthy and without risk to catch disease on the job?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

7. Equipment Adequacy. This section concerns the extent to which you are satisfied or dissatisfied with the condition and availability of the equipment you have to use on your job.

7.1 How satisfied are you with the manner and ease with which equipment is obtainable to make it possible for you to do your job?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

7.2 How satisfied are you with the way in which equipment is maintained?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

8. Your Fellow Workers. This section concerns the extent to which you are satisfied or dissatisfied with the people you work with.

8.1 How satisfied are you with the friendliness and the way you get along with the people you work with?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

8.2 How satisfied are you with the respect you get from the people you work with?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

8.3 How satisfied are you with the extent to which people you work with take a personal interest in you and support you?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

9. Your Immediate Supervisor. This section concerns the extent to which you are satisfied or dissatisfied with the characteristics and behaviours of your immediate supervisor.

9.1 How satisfied are you with the patience, friendliness, politeness and respect of your supervisor towards you?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

9.2 How satisfied are you with your supervisor's knowledge and competence and the degree to which your supervisor maintains high standards of performance in his/her own work?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

9.3 How satisfied are you with the way your supervisor gives you feedback about your performance on the job?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

9.4 How satisfied are you with your supervisor's availability, willingness and reliability to give support and guidance with work related problems?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

9.5 How satisfied are you with the confidence your supervisor has in you?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
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Not Sure 4    Moderately Satisfied 5    Very Satisfied 6  
 Extremely Satisfied 7

9.6 How satisfied are you with your supervisor's concern for your development?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

9.7 How satisfied are you with the extent to which your supervisor sets an example, maintains high moral values and deserves the respect of subordinates?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

9.8 How satisfied are you with the extent to which your supervisor encourages people to express their opinions when they don't agree with a decision?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

9.9 How satisfied are you with the extent to which your supervisor encourages subordinates to develop new ways of doing things?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

9.10 how satisfied are you with the extent to which your supervisor is concerned about your personal problems and welfare?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

10. Autonomy. This section concerns the extent to which you are satisfied or dissatisfied with the amount of autonomy in your job. That is, the extent to which your job permits you to decide on your own how to go about doing things at work.

10.1 How satisfied are you with the amount of independence and freedom in determining *what* should be done?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

10.2 How satisfied are you with the chances you get to use your personal initiative or judgement in deciding *how* to carry out the work?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

11. Recognition. This section concerns the extent to which you are satisfied or dissatisfied with the amount of recognition you get for good work.

11.1 How satisfied are you with the way in which your efforts are noticed and appreciation is expressed when you have done a good job?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

12. Responsibility. This section concerns the extent to which you are satisfied or dissatisfied with the amount of responsibility you are given.

12.1 How satisfied are you with the degree of personal responsibility you have for the work you do on this job?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

13. Abilities. This section concerns the extent to which you are satisfied or dissatisfied with the opportunities you have to use your abilities.

13.1 How satisfied are you with the extent to which you have the opportunity to use your specific abilities and skills and the things you do best?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

14. Variety. This section concerns the extent to which you are satisfied or dissatisfied with the amount of variety in your job. That is, the extent to which your job requires you to do many different things at work, using a variety of your skills and talents.

14.1 How satisfied are you with the amount of variety in your work?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

14.2 How satisfied are you with the extent to which there is alteration in the routine on your job?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

15. Job Itself. This section concerns the extent to which you are satisfied or dissatisfied with the job itself.

15.1 How satisfied are you with the amount of time you spend on tasks that you really enjoy?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
--------------------------	---------------------	---------------------------	--

Not Sure 4    Moderately Satisfied 5    Very Satisfied 6  
 Extremely Satisfied 7

15.2 How satisfied are you with the extent to which you feel enthusiastic about your work?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

15.3 How satisfied are you with the extent to which the work is interesting?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

16. Job / Role Clarity. This section concerns the extent to which you are satisfied or dissatisfied with how clearly your job objectives and responsibilities are defined.

16.1 How satisfied are you with the clarity with which your responsibilities and objectives are defined and your job tasks are described?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

16.2 How satisfied are you with the amount of information you receive regarding your work?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

17. Growth and Development. This section concerns the extent to which you are satisfied or dissatisfied with the amount of personal growth and development you get in your job.

17.1 How satisfied are you with the opportunities you have to develop your own special abilities and to learn new things about your work?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

17.2 How satisfied are you with the opportunities you have to grow and develop as a person?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

18. Task Significance. This section concerns the extent to which you are satisfied or dissatisfied with how significant or important your job is. That is, the degree to which the results of your work are likely to affect the lives or well-being

of other people significantly.

18.1 How satisfied are you with the extent to which your job is one where a lot of people can be affected by how well the work is done?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

19. Meaningfulness. This section concerns the extent to which you are satisfied or dissatisfied with the meaning of your job. That is, the feeling of doing something which is not trivial, but really worthwhile.

19.1 How satisfied are you with the extent to which you get the feeling that you accomplish something that you personally value and makes you feel good as a person?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

19.2 How satisfied are you with the extent to which you feel that you are making a worthwhile contribution to society through your job?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

20. Challenge. This section concerns the extent to which you are satisfied or dissatisfied with the amount of challenge in your job. That is, the opportunities you get to do work that is increasingly more complex and demands more skill and knowledge.

20.1 How satisfied are you with the extent to which your job presents challenging work?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

21. Creativity. This section concerns the extent to which you are satisfied or dissatisfied with the opportunities to be creative and imaginative in your work.

21.1 How satisfied are you with the extent to which your job requires you to be creative?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

21.2 How satisfied are you with the extent to which you are allowed to use your imagination?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
--------------------------	---------------------	---------------------------	--

Not Sure 4    Moderately Satisfied 5    Very Satisfied 6  
 Extremely Satisfied 7

22. Social Activities. This section concerns the extent to which you are satisfied or dissatisfied with the opportunities for social activities that are created in your work environment.

22.1 How satisfied are you with the chance to get to know other people while on the job?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

22.2 How satisfied are you with the opportunities you get to make friends?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

23. Work Group Functioning. This section concerns the extent to which you are satisfied or dissatisfied with the way your work group is functioning.

23.1 How satisfied are you with the extent to which members have the necessary training, skills and abilities to do their work?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

23.2 How satisfied are you with the extent to which members are involved when a decision has to be made and committed to the group and team work?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

23.3 How satisfied are you with the extent to which members openly share their feelings?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

23.4 How satisfied are you with the extent to which members listen to each others' opinions?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

23.5 How satisfied are you with the extent to which members trust and have confidence in each other?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

23.6 How satisfied are you with the extent to which members encourage each other to do their best?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

23.7 How satisfied are you with the way planning and co-ordination of efforts is done in the work group?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

24. Initiative. This section concerns the extent to which you are satisfied or dissatisfied with the extent to which initiative is allowed in the organisation.

24.1 How satisfied are you with the extent to which members of the organisation are given initiative and personal responsibility to make decisions and solve problems to achieve their part of the organisation's goals without checking with superiors each step of the way?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

24.2 How satisfied are you with the extent to which members feel that there are many rules, procedures, policies and practices to which they have to conform rather than being able to do their work as they see fit?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

24.3 How satisfied are you with the extent to which the next higher level is open for ideas and suggestions from lower levels?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

25. Standards. This section concerns the extent to which you are satisfied or dissatisfied with the standards of the organisation.

25.1 How satisfied are you with the degree to which the organisation places emphasis on quality performance and outstanding production?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

25.2 How satisfied are you with the degree to which the organisation is setting challenging goals for itself and communicating these goal commitments to members?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	

Extremely Satisfied 7

25.3 How satisfied are you with the degree to which work problems are resolved quickly and directly?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

25.4 How satisfied are you with the degree to which members are continually encouraged or motivated to improve personal and group performance and to take pride in it?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

26. Reward System. This section concerns the extent to which you are satisfied or dissatisfied with the reward system in the organisation.

26.1 How satisfied are you with the degree to which the organisation's reward system allows for members to be recognised and rewarded for good work rather than being ignored, criticised or punished when something goes wrong?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

26.2 How satisfied are you with the way contributions from individuals or work groups are valued and recognition given to?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

27. Organisational Clarity. This section concerns the extent to which you are satisfied or dissatisfied with the degree to which the organisation's mission is clearly defined.

27.1 How satisfied are you that you understand the purpose of your Regiment/Section?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

27.2 How satisfied are you with the degree to which everything is well organised and goals are clearly defined rather than being disorderly, confusing or chaotic?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

28. Warmth and Support. This section concerns the extent to which you are satisfied or dissatisfied with the degree to which warmth and support is valued in the organisation.

28.1 How satisfied are you with the manner in which friendliness is a valued norm in the organisation?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

28.2 How satisfied are you with the degree to which good relationships prevail in the work environment and that you have established the relationships that you need to do your work properly?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

28.3 How satisfied are you with the manner in which conflict is resolved in the organisation?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

28.4 How satisfied are you with the degree to which employee's welfare and happiness are considered and concerns are responded to?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

29. Leadership. This section concerns the extent to which you are satisfied or dissatisfied with the leadership of the organisation.

29.1 How satisfied are you with the degree to which leadership is based on competence and expertise?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

29.2 How satisfied are you with the extent to which the efforts of the leaders of the organisation result in the fulfilment of its purposes?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

30. Equity and Fairness. This section concerns the extent to which you are satisfied or dissatisfied with the stance of equity and fairness in the organisation.

30.1 How satisfied are you with the degree to which the pay scales, reward system and benefits of the Department of Defence treat people of the organisation fairly and equitably?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	

Extremely Satisfied 7

30.2 How satisfied are you that the system of promotion is fair?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

31. Continuous Improvement. This section concerns the extent to which you are satisfied or dissatisfied with efforts to improve the organisation.

31.1 How satisfied are you that attempts are made to improve methods and working conditions and that these are continuously implemented?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

32. Identification. This section concerns the extent to which you are satisfied or dissatisfied with the degree to which members identify with the organisation.

32.1 How satisfied are you with the degree to which people are proud of belonging to this organisation?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

33. Equipment and Resource Management. This section concerns the extent to which you are satisfied or dissatisfied with the management of equipment and resources in the organisation.

33.1 How satisfied are you with the processes necessary to access equipment and that resources are effectual, practical and productive?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

34. Participation. This section concerns the extent to which you are satisfied or dissatisfied with the degree of participative management in the organisation.

34.1 How satisfied are you that decisions are taken on the level where they are most appropriate and accurate information is available?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

34.2 How satisfied are you that people affected by a decision are consulted with, approached for an opinion or suggestions when the decision is taken?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

34.3 How satisfied are you with the degree to which different sections and divisions do joint planning to co-ordinate their activities?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

34.4 How satisfied are you with the extent to which you have the opportunity to express grievances?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

35. Communication. This section concerns the extent to which you are satisfied or dissatisfied with how information is communicated in the organisation.

35.1 How satisfied are you with the degree to which your work group is informed properly about what is happening in the organisation?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

35.2 How satisfied are you with the degree to which you are kept informed of changes that affect your job?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

35.3 How satisfied are you with the extent to which open communication lines between superiors and subordinates exist?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

## OVERALL SATISFACTION

36. All things considered, how satisfied are you with how you experience the quality of your work life in general?

Extremely Dissatisfied 1	Very Dissatisfied 2	Moderately Dissatisfied 3	
Not Sure 4	Moderately Satisfied 5	Very Satisfied 6	
Extremely Satisfied 7			

CONTINUE WITH SECTION C ON NEXT PAGE

## SECTION C : PERSONAL IMPORTANCE SCALE

### INSTRUCTIONS

You have just had the opportunity to rate aspects of your work in terms of how satisfied you are. In this questionnaire you are requested to rate the same aspects in terms of how important it is for you to have those features in your work life. There are five answers to choose from. Choose one and mark with an X.

There are now right or wrong answers. Please give your honest opinion on each one of the statements. Please do not discuss your answers with others. It is your opinion which matters. Even though it may be hard to decide, be sure not to miss any questions.

How important is it for you to feel satisfied about the following aspects of your job?

1. Your rate of pay?

Completely Unimportant 1	Unimportant 2	Not Sure 3	Important 4	
Extremely important 5				

2. The physical work conditions?

Completely Unimportant 1	Unimportant 2	Not Sure 3	Important 4	
Extremely important 5				

3. Your chance of promotion?

Completely Unimportant 1	Unimportant 2	Not Sure 3	Important 4	
Extremely important 5				

4. Your job security?

Completely Unimportant 1	Unimportant 2	Not Sure 3	Important 4	
Extremely important 5				

5. The amount of work you have for the amount of time and assistance?

Completely Unimportant 1	Unimportant 2	Not Sure 3	Important 4	
Extremely important 5				

6. Health and safety?

Completely Unimportant 1	Unimportant 2	Not Sure 3	Important 4	
Extremely important 5				

7. Equipment adequacy?

Completely Unimportant 1	Unimportant 2	Not Sure 3	Important 4	
Extremely important 5				

8. Your fellow workers?

Completely Unimportant 1	Unimportant 2	Not Sure 3	Important 4	
Extremely important 5				

9. Your immediate supervisor?

Completely Unimportant 1	Unimportant 2	Not Sure 3	Important 4	
Extremely important 5				

10. The amount of autonomy in your job?

Completely Unimportant 1	Unimportant 2	Not Sure 3	Important 4	
Extremely important 5				

11. Recognition?

Completely Unimportant 1	Unimportant 2	Not Sure 3	Important 4	
Extremely important 5				

12. The amount of responsibility you have?

Completely Unimportant 1	Unimportant 2	Not Sure 3	Important 4	
Extremely important 5				

13. The opportunities you have to use your abilities?

Completely Unimportant 1	Unimportant 2	Not Sure 3	Important 4	
Extremely important 5				

14. The amount of variety in your job?

Completely Unimportant 1	Unimportant 2	Not Sure 3	Important 4	
Extremely important 5				

15. How you enjoy the job itself?

Completely Unimportant 1	Unimportant 2	Not Sure 3	Important 4	
Extremely important 5				

16. How clearly your job objectives and responsibilities are defined?

Completely Unimportant 1	Unimportant 2	Not Sure 3	Important 4	
Extremely important 5				

17. Growth and development?

Completely Unimportant 1	Unimportant 2	Not Sure 3	Important 4	
Extremely important 5				

18. The significance of importance of your job?

Completely Unimportant 1	Unimportant 2	Not Sure 3	Important 4	
Extremely important 5				

19. The meaningfulness of your job?

Completely Unimportant 1	Unimportant 2	Not Sure 3	Important 4	
Extremely important 5				

20. The amount of challenge in your job?

Completely Unimportant 1	Unimportant 2	Not Sure 3	Important 4	
Extremely important 5				

21. To be creative and imaginative in your work?

Completely Unimportant 1	Unimportant 2	Not Sure 3	Important 4	
Extremely important 5				

22. Social activities?

Completely Unimportant 1	Unimportant 2	Not Sure 3	Important 4	
Extremely important 5				

23. The way your work group is functioning?

Completely Unimportant 1	Unimportant 2	Not Sure 3	Important 4	
Extremely important 5				

24. The amount of initiative and responsibility that is allowed in the organisation?

Completely Unimportant 1	Unimportant 2	Not Sure 3	Important 4	
Extremely important 5				

25. How standards are upheld?

Completely Unimportant 1	Unimportant 2	Not Sure 3	Important 4	
Extremely important 5				

26. Reward systems that give recognition for good work?

Completely Unimportant 1	Unimportant 2	Not Sure 3	Important 4	
Extremely important 5				

27. Clearly defined purpose, goals and objectives?

Completely Unimportant 1	Unimportant 2	Not Sure 3	Important 4	
Extremely important 5				

28. Warmth and support?

Completely Unimportant 1	Unimportant 2	Not Sure 3	Important 4	
Extremely important 5				

29. Strong leadership?

Completely Unimportant 1	Unimportant 2	Not Sure 3	Important 4	
Extremely important 5				

30. Equity and fairness?

Completely Unimportant 1	Unimportant 2	Not Sure 3	Important 4	
Extremely important 5				

31. Continuous improvement?

Completely Unimportant 1	Unimportant 2	Not Sure 3	Important 4	
Extremely important 5				

32. To be proud to belong to this organisation?

Completely Unimportant 1	Unimportant 2	Not Sure 3	Important 4	
Extremely important 5				

33. Effective equipment and resources management?

Completely Unimportant 1	Unimportant 2	Not Sure 3	Important 4	
Extremely important 5				

34. Participation?

Completely Unimportant 1	Unimportant 2	Not Sure 3	Important 4	
Extremely important 5				

35. Communication?

Completely Unimportant 1	Unimportant 2	Not Sure 3	Important 4	
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Extremely important 5

## SECTION D : MEASUREMENT OF NEED STRENGTH (Schaffer, 1953)

### INSTRUCTIONS

In this part you will find items relating to your personal likes and dislikes. Here you are to rate each item on how much you like or dislike or how closely you agree or disagree with the idea of each item. There are four answers to choose from. Choose one and mark with an X. The answers are the following:

- [0] Don't like or agree with the idea at all.
- [1] Like or agree with the idea a little bit.
- [2] Like or agree with the idea a lot.
- [3] Like or agree with the idea completely.

Rate every item independently. Be sure to rate every item by marking with an X in the appropriate block.

#### 1. When I see a TV drama or movie, I usually like, or at least feel sympathetic with the individuals who

1.1 do what they think is right regardless of personal consequences; those who never go against their principles of life;

Don't like / agree at all 0	Like / agree a little bit 1	Like / agree a lot 2	Like / agree completely 3
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1.2 seem to be the leaders; the ones who can tell others what to do and who are respected and followed by their subordinates;

Don't like / agree at all 0	Like / agree a little bit 1	Like / agree a lot 2	Like / agree completely 3
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1.3 have done all right for themselves; the ones who have managed to make enough money to live the way they want and have social and economic position;

Don't like / agree at all 0	Like / agree a little bit 1	Like / agree a lot 2	Like / agree completely 3
-----------------------------	-----------------------------	----------------------	---------------------------

1.4 say what they think. Act as they feel and never do things just because others think them more proper.

Don't like / agree at all 0	Like / agree a little bit 1	Like / agree a lot 2	Like / agree completely 3
-----------------------------	-----------------------------	----------------------	---------------------------

#### 2. A really enjoyable way to spend free time is

2.1 being with family and friends; it is not so much what you are doing, just as long as you can spend time with the people you like;

Don't like / agree at all 0	Like / agree a little bit 1	Like / agree a lot 2	Like / agree completely 3
-----------------------------	-----------------------------	----------------------	---------------------------

2.2 working on some hobby or skill, trying to improve your ability; whether it is practising sport or working on a craft, the important thing is to keep getting better at it;

Don't like / agree at all 0	Like / agree a little bit 1	Like / agree a lot 2	Like /
-----------------------------	-----------------------------	----------------------	--------

agree completely 3

2.3 doing something where you can kind of let yourself go and not worry what others might think about it.

Don't like / agree at all 0	Like / agree a little bit 1	Like / agree a lot 2	Like /
-----------------------------	-----------------------------	----------------------	--------

agree completely 3

### 3. The most pleasant kinds of day-dreams are those concerning

3.1 getting to be well-known and recognised for something I have done which is really appreciated by others;

Don't like / agree at all 0	Like / agree a little bit 1	Like / agree a lot 2	Like /
-----------------------------	-----------------------------	----------------------	--------

agree completely 3

3.2 making money and getting into a good social position;

Don't like / agree at all 0	Like / agree a little bit 1	Like / agree a lot 2	Like /
-----------------------------	-----------------------------	----------------------	--------

agree completely 3

3.3 a long life of economic security, free from any worry about economic matters;

Don't like / agree at all 0	Like / agree a little bit 1	Like / agree a lot 2	Like /
-----------------------------	-----------------------------	----------------------	--------

agree completely 3

3.4 getting to be a stronger, more influential person, having more ability to direct others and have them follow me;

Don't like / agree at all 0	Like / agree a little bit 1	Like / agree a lot 2	Like /
-----------------------------	-----------------------------	----------------------	--------

agree completely 3

3.5 the heavy responsibility somewhat taken off my shoulders; someone to do my worrying for me and to help me do the right things.

Don't like / agree at all 0	Like / agree a little bit 1	Like / agree a lot 2	Like /
-----------------------------	-----------------------------	----------------------	--------

agree completely 3

### 4. The things which must make being a child a very happy time are

4.1 not having to worry about making a living; you know that your parents will support you and you don't have the worries about money as adults have;

Don't like / agree at all 0	Like / agree a little bit 1	Like / agree a lot 2	Like /
-----------------------------	-----------------------------	----------------------	--------

agree completely 3

4.2 you get more genuine love from your family than you ever get again in your life;

Don't like / agree at all 0	Like / agree a little bit 1	Like / agree a lot 2	Like /
-----------------------------	-----------------------------	----------------------	--------

agree completely 3

4.3 when you are a child you can play around with adults and older children and can depend on them to help you out and teach you some things; when you

are an adult you are more or less on your own and getting help from others is not acceptable;

Don't like / agree at all 0	Like / agree a little bit 1	Like / agree a lot 2	Like /
-----------------------------	-----------------------------	----------------------	--------

agree completely 3

4.4 getting recognised is easier in a group of children than in a group of adults; sometimes you can really shine in the eyes of your friends by doing something that is really easy for you; it is much harder to do that when you are an adult.

Don't like / agree at all 0	Like / agree a little bit 1	Like / agree a lot 2	Like /
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agree completely 3

## 5. When I select a hobby the important thing to consider is

5.1 will it require enough skill so that I can really get some satisfaction from using my abilities;

Don't like / agree at all 0	Like / agree a little bit 1	Like / agree a lot 2	Like /
-----------------------------	-----------------------------	----------------------	--------

agree completely 3

5.2 will my efforts produce anything worthwhile in terms of happiness for others (e.g., fixing things for needy people;

Don't like / agree at all 0	Like / agree a little bit 1	Like / agree a lot 2	Like /
-----------------------------	-----------------------------	----------------------	--------

agree completely 3

5.3 will it give me a chance to express myself; will it be an opportunity to give expression of how I really am and not what others want;

Don't like / agree at all 0	Like / agree a little bit 1	Like / agree a lot 2	Like /
-----------------------------	-----------------------------	----------------------	--------

agree completely 3

5.4 will it give me a chance to make new acquaintances and meet new friends through interests in common things.

Don't like / agree at all 0	Like / agree a little bit 1	Like / agree a lot 2	Like /
-----------------------------	-----------------------------	----------------------	--------

agree completely 3

## 6. When I have a new job to do, something which I have never done before, I usually like to

6.1 be left on my own to try it, whether or not I can do it correctly right away;

Don't like / agree at all 0	Like / agree a little bit 1	Like / agree a lot 2	Like /
-----------------------------	-----------------------------	----------------------	--------

agree completely 3

6.2 have to do some thinking and planning in an effort to figure out the right way to do it;

Don't like / agree at all 0	Like / agree a little bit 1	Like / agree a lot 2	Like /
-----------------------------	-----------------------------	----------------------	--------

agree completely 3

6.3 have somebody show me the right way to do it so I will be sure to do it right.

Don't like / agree at all 0	Like / agree a little bit 1	Like / agree a lot 2	Like /
-----------------------------	-----------------------------	----------------------	--------

agree completely 3

## 7. I admire and would like to be like the kind of person who

7.1 lives his or her life in accordance with a set of principles which always points out the right way of life for him or her;

Don't like / agree at all 0	Like / agree a little bit 1	Like / agree a lot 2	Like /
-----------------------------	-----------------------------	----------------------	--------

agree completely 3

7.2 always seems to make enough money to afford many things which I sometimes can't afford;

Don't like / agree at all 0	Like / agree a little bit 1	Like / agree a lot 2	Like /
-----------------------------	-----------------------------	----------------------	--------

agree completely 3

7.3 is always able to invent and create new things; who can meet new problems and solve them by his or her skills;

Don't like / agree at all 0	Like / agree a little bit 1	Like / agree a lot 2	Like /
-----------------------------	-----------------------------	----------------------	--------

agree completely 3

7.4 seems to have the skill and knack for leading others and getting others to follow his or her directions;

Don't like / agree at all 0	Like / agree a little bit 1	Like / agree a lot 2	Like /
-----------------------------	-----------------------------	----------------------	--------

agree completely 3

7.5 is always trying to help others; the person who gets his/her pleasure by giving happiness to others.

Don't like / agree at all 0	Like / agree a little bit 1	Like / agree a lot 2	Like /
-----------------------------	-----------------------------	----------------------	--------

agree completely 3

## 8. Assuming that I have my choice, I would want my epitaph (writing on tombstone) to read somewhat like

8.1 "... always interested in the welfare of his/her fellowmen. His/her greatest satisfaction came with helping others."

Don't like / agree at all 0	Like / agree a little bit 1	Like / agree a lot 2	Like /
-----------------------------	-----------------------------	----------------------	--------

agree completely 3

8.2 "... lived in accordance with his/her ideals of righteousness. A man/woman who did not deviate from his/her principles."

Don't like / agree at all 0	Like / agree a little bit 1	Like / agree a lot 2	Like /
-----------------------------	-----------------------------	----------------------	--------

agree completely 3

8.3 "... completely free. His/her life was not influenced by most of the pressures of life. He/she remained independent of ..."

Don't like / agree at all 0	Like / agree a little bit 1	Like / agree a lot 2	Like /
-----------------------------	-----------------------------	----------------------	--------

agree completely 3

8.4 "... known and respected by many. His/her works were a constant source of admiration for him/her by the many who appreciated them."

Don't like / agree at all 0	Like / agree a little bit 1	Like / agree a lot 2	Like /
-----------------------------	-----------------------------	----------------------	--------

agree completely 3

8.5 "... breaking new ground by disregarding present methods and inventing

new ones ...”

Don't like / agree at all 0	Like / agree a little bit 1	Like / agree a lot 2	Like /
-----------------------------	-----------------------------	----------------------	--------

agree completely 3

**9. If I were keeping a personal diary - one which nobody but me would ever see - the kind of entry which would give me satisfaction would be:**

9.1 “At last I have a decent, permanent job with an adequate income. Now, finally, I can relax and enjoy things without the constant worry about whether I will be able to get by on my income.”

Don't like / agree at all 0	Like / agree a little bit 1	Like / agree a lot 2	Like /
-----------------------------	-----------------------------	----------------------	--------

agree completely 3

9.2 “Today I got transferred off that routine job. This one is tougher, but it sure feels good to have to try a little in order to do the work correctly.”

Don't like / agree at all 0	Like / agree a little bit 1	Like / agree a lot 2	Like /
-----------------------------	-----------------------------	----------------------	--------

agree completely 3

9.3 “At last my supervisor is not hanging around as much as he/she was at first. It sure feels good not to have him/her around telling me how to do my work.”

Don't like / agree at all 0	Like / agree a little bit 1	Like / agree a lot 2	Like /
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agree completely 3

CONTINUE WITH SECTION E ON NEXT PAGE

**SECTION E : PERSONAL NEED NON-FULFILMENT SCALE** BY Cook and Wall (Adapted - Items added)

**INSTRUCTIONS**

It is a fairly obvious truth that people differ from one another in what they need and expect to get from different areas of their lives. Please think about the work you do and because most jobs are not perfect, consider what would make it a better job from your point of view.

For each of the following characteristics, try to answer the question whether your job and work life offers as much of the characteristic as you would ideally like. There are five answers to choose from. Choose one and mark with an X.

1. The opportunity to think of new ways to complete difficult and *challenging* tasks and to *create*, invent or develop new things.

I have more than I really want 1	I have enough 2	I would like a little more 3
I would like much more 4		I would like very much more 5

2. The *status* that the job has among my friends and family and in the community.

I have more than I really want 1	I have enough 2	I would like a little more 3
I would like much more 4		I would like very much more 5

3. Appreciation and *recognition* for my efforts to do a good job and my achievements.

I have more than I really want 1	I have enough 2	I would like a little more 3
I would like much more 4		I would like very much more 5

4. To have a supervisor I can *depend* on to help me and show me the right way to do my job.

I have more than I really want 1	I have enough 2	I would like a little more 3
I would like much more 4		I would like very much more 5

5. The freedom to *express* my ideas and to be able to be myself without judgement from others.

I have more than I really want 1	I have enough 2	I would like a little more 3
I would like much more 4		I would like very much more 5

6. The chance to use and master more skills and abilities and the opportunity to *achieve* my goals.

I have more than I really want 1	I have enough 2	I would like a little more 3
I would like much more 4		I would like very much more 5

7. Being part of a social group and the opportunity to make friends and have good *relationships*.

I have more than I really want 1	I have enough 2	I would like a little more 3
I would like much more 4		I would like very much more

5

8. The opportunity to improve circumstances of others and to do something meaningful for others' *welfare*.

I have more than I really want 1	I have enough 2	I would like a little more 3
I would like much more 4		I would like very much more

5

9. Certainty of a career in the future and *financial security* up to retirement age.

I have more than I really want 1	I have enough 2	I would like a little more 3
I would like much more 4		I would like very much more

5

10. The opportunity to do work that supports my *moral values* and without having to sacrifice my principles.

I have more than I really want 1	I have enough 2	I would like a little more 3
I would like much more 4		I would like very much more

5

11. *Independence* from other people's control and making my own decisions about how to do the work.

I have more than I really want 1	I have enough 2	I would like a little more 3
I would like much more 4		I would like very much more

5

12. "In command" when working in a group and influence (*dominance*) opinions of others.

I have more than I really want 1	I have enough 2	I would like a little more 3
I would like much more 4		I would like very much more

5

Which of the items above is most important, second most important, third most important for you to feel satisfied with your work. Rank order the items according to their importance.

For example, if Being part of a social group and the opportunity to make friends and have good relationship is the most important aspect for you to be able to be happy in your work environment, write down 7 in the space next to Most Important. Do the same with the numbers of the statements that are the second most important and third most important to you.

Most Important .....  
 Second Most Important ....  
 Third Most Important ....