THE RELATION BETWEEN CAREER
ANCHORS, OCCUPATIONAL TYPES AND JOB
SATISFACTION OF MIDCAREER EMPLOYEES

BY

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THE RELATION BETWEEN CAREER ANCHORS, OCCUPATIONAL TYPES AND JOB SATISFACTION OF MIDCAREER EMPLOYEES

by

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I declare that

THE RELATION BETWEEN CAREER ANCHORS, OCCUPATIONAL TYPES AND JOB SATISFACTION OF MIDCAREER EMPLOYEES

is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.
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THE RELATION BETWEEN CAREER ANCHORS, OCCUPATIONAL TYPE AND
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SUPERVISOR : PROFESSOR A M G SCHREUDER

KEYWORDS
contemporary careers, person-environment fit, midcareer, managers, non-managers, career
anchor, occupational perception, occupational type, general job satisfaction, intrinsic job
satisfaction, extrinsic job satisfaction.

SUMMARY
The study was designed to provide further empirical data on the career anchor construct. An
individual in todays times is likely to make more than one career choice. If the career anchor
construct can be used to accurately predict a person environment fit, the construct could prove
useful as a diagnostic tool for midcareer individuals.

In the study, 300 midcareer employees (managerial and non-managerial) completed questionnaires
determining their dominant career anchor, dominant perception of occupational type and levels
of general, intrinsic and extrinsic job satisfaction. Specific aims of the study were, firstly, to
determine whether in midcareer there is a relation between career anchor and occupational type
(For the purposes of the study, occupational type was measured in terms of the individuals
perception of the main aspect that dominates his occupation) and secondly, to determine whether
there is a difference in general, intrinsic and extrinsic job satisfaction between midcareer
employees with a fit between career anchor and occupational type and midcareer employees with
no such fit.
Results of the study indicated a significant relation between career anchor and occupational type for the total sample as well as for the managerial and the non-managerial groups, for almost all of the eight career anchors. A significantly higher level of general and intrinsic job satisfaction was found for the fit group than for the non-fit group, however no such difference was found in extrinsic job satisfaction. No significant differences were found between the managerial and non-managerial groups.

On the basis of the results the conclusion can be made that the career anchor construct can be used effectively to assist midcareer managers and non-managers to make career choices. Career choices based on a fit between career anchor and occupational type are likely to yield a higher level of general and intrinsic job satisfaction.
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CHAPTER 1: BACKGROUND TO AND OVERVIEW OF THE RESEARCH

This dissertation focuses on the relation between career anchors and occupational types and how a fit or a lack thereof between the two constructs can be related to general, intrinsic and extrinsic job satisfaction.

1.1 INTRODUCTION

"And all our knowledge is, ourselves to know."

An essay on man. Alexander Pope (1688-1744)

This quote is as true now as it was then. The primary responsibility of the careerist is self-insight (Schein, 1990a). Constructive career management is of paramount importance, when one considers how central work is in the lives of most people. An individual's career consists of the sequence of occupations and jobs he may hold over a forty or fifty year period of work. During this period, he may spend eight to ten hours a day, over ten thousand days of his life, at work - and much of the time when not at work thinking about it, worrying about it, and recuperating from it (Feldman, 1988). Because such a large proportion of an individual's life revolves around work, people choose work that will enable them to fulfill interests, meet needs and express themselves.

The last few decades have seen extensive research in the field of career theory into why work plays such a central role in the life of the individual. One of the main reasons that has emerged from this research is that work in contemporary society provides a way for people to stabilise and give direction to their lives. It may, in fact, be the single most important source of identity for the individual living in modern industrial societies. Another reason is that work provides a setting for satisfying practically the whole range of human needs - "physiological, safety, social, ego and self actualisation (using Maslow's typology); achievement, affiliation and power (using McClelland's

1In this thesis, the male pronoun is usually used inclusively. It can however be assumed that many of the early studies were conducted primarily on men, whereas more recent studies included women.
Research within the field of career psychology has been conducted from different perspectives and different constructs have been emphasised, but all stress the importance of self-understanding in the process of career management. In today's changing world, the importance of self-knowledge assumes even greater significance. Rapid changes in the environment are leading to a change in the concept of a career. The traditional concept of a career that spans a lifetime doing one type of work in one organisation no longer exists. Job changes are necessary and it is likely that an individual may have three or four careers in the span of his work life (Arthur, 1992; Hall & Mirvis, 1995a & b; Schein, 1993; Super, 1992). The responsibility of career management in a 'contemporary career' falls on the individual himself. In order to make the right choices, self-insight is required (Schein, 1990a). As Alexander Pope wrote centuries ago, the most valuable knowledge we can acquire is to "know ourselves" (Pope, 1924).

The change in the nature of careers over the last few decades has been caused by changes in the environment. The changes in the environment - political, economic, technological and sociocultural - have led to the need for much greater flexibility in contemporary career planning (Super, 1992; Schein, 1990b; Arthur, 1992). An increasingly complex environment is forcing organisations to become more flexible. This has led to:

* constant corporate restructuring and downsizing due to economic recession, global competition and deindustrialisation (Hall & Mirvis, 1995a & b);
* flatter organisations with more project activity and more functional units (Schein, 1992);
* an increase in automation and technological development (Schein, 1993; Brown, 1990).

These changes have affected the job market in the following ways:

* Fewer jobs are available. This is due to reduced hiring, trimmed staff and shutdown facilities (Hall & Mirvis, 1995a & b).
* Organisations need more specialists and the rate of people becoming technically obsolete has increased. There are fewer senior management jobs, and more posts available for technical people (Schein, 1992).
* There is a change in the nature of work in organisations. This is as a result of
technological advancement (Brown, 1990; Schein, 1993a & b).

* Jobs are less clear and defined - work has become more fluid (Schein, 1993a & b).

In the light of these changes, the need for self-insight in terms of career decisions is also becoming increasingly important. The job market has changed and is continuing to change rapidly. Previous policies such as apartheid created social and economic imbalance in the workplace. With the emergence of a democratic society, programmes such as affirmative action, black advancement and managing diversity programmes have been designed to level the playing fields for members of South African society (Ferndale, 1993). The emerging trend in career planning for organisations in South Africa is one of adopting policies that reduce disparities between groups in terms of gender, race and ethnicity (Luhabe, 1993). The ultimate objective is to transform organisations into structures that reflect the demographics of South Africa (Ndlovu, 1993). In the organisational climate that exists in South Africa today, where career opportunities within organisations are often based on political and economic considerations, rather than on an individual's personal characteristics, the responsibility for adapting one's career to the environment and job market falls on the individual himself. The critical quality required for the career management of today's career is self-insight and a deeper sense of identity (Hall & Mirvis, 1995a & b; Schein, 1990b; Super, 1992). Only once the individual has this self-knowledge, will he be able to judge whether the opportunities that are available will provide him with a satisfying career.

Research on contemporary careers indicates that self-insight is achieved not only by understanding the career choices an individual makes, but also by understanding why he makes them and how he feels about them (Arthur, 1992; Hall, 1976; Collin & Young, 1986; Kaplan, 1990; Schein, 1990a; Savickas, 1992; Feldman, 1988). There has therefore been an increasing emphasis on the distinction between an internal and external career. "The internal career involves a subjective sense of where one is going in one's work life, as contrasted with the external career, the formal stages and roles defined by organisational policies and societal concepts of what an individual can expect in the organisational structure" (Schein, 1996, p. 80). Research indicates that the individual's subjective experience of perceptions, feeling and values is often ignored and misunderstood in the process of career choice and is one of the major causes of job dissatisfaction (Collin & Young, 1986; Schein, 1980a). In order for the individual to adapt to the fast-changing
environment, there is a need to shift from external to internal career thinking, i.e. to cease interpreting careers according to organisational position and status and rather rely on a personal interpretation of ones shifting and cumulative work experience (Arthur, 1992). By viewing careers from a subjective perspective, the accuracy of predicting a match between the individual and his occupation can probably be increased (Savickas, 1992).

The ultimate goal of career psychology is to achieve a synthesis between the person and his occupation (Super, 1957). Career choice theories in the past have focused on constructs such as interests, personality and self-concept. The aim has been to predict career choice and success based on these criteria (Hall & Mirvis, 1995a). Career development theories have dealt with the same concept (finding a match between the person and his occupation), but have taken into account how the individual's career is influenced by his life stages (Hall & Mirvis, 1995a). As the current environment of work is however perpetually changing, successful satisfying careers in the future will therefore only result from a process of matching the ever-changing needs of organisations with the ever-changing needs of individual career occupants (Schein, 1993b). Careers in the future will be based on matching the person and his life's work, rather than specific jobs and organisations (Hall & Mirvis, 1995a). Individuals' life's work incorporates the full range of life interests and situations, including "work" as spouses, parents and members of various committees (Hall & Mirvis, 1995a; Schein, 1993a).

It is therefore necessary that the field of career psychology expands to include research and theories that accommodate the constantly changing conditions that most individuals are subjected to in the course of their "life's work". Models of this nature would provide people with the tools to manage their own careers constructively, i.e. with sufficient self-insight to make good career choices in the constantly shifting conditions that prevail.

The changes that result from organisations attempting to cope with increasingly turbulent environments lead to mounting career stresses. These stresses differ at different career stages (Schein, 1995). The midcareer period is highlighted by career developmental theorists as having a large impact on the career of the individual. This period is significant in that it is a period of assessment for the individual and may provide opportunities for growth as well as stress. Levinson, Darrow, Klein, Levinson and Mckee (1978) believe that at this time, it is common for
choices they are making are right for them (Schein, 1995).

1.2 PROBLEM STATEMENT

In the background to this chapter, the central role that work plays in the lives of individuals is outlined. As the rapidly changing environment becomes more turbulent and uncertain, the nature of careers has changed from a lifetime job in one organisation to the possibility of three or four career changes in a lifetime (Hall & Mirvis, 1995a). This situation is particularly relevant in South Africa where political and economic change has led to uncertainty in the permanence of jobs for certain sectors of the workforce.

Career psychology has therefore become more complicated in contemporary times. The neat, orderly research designs predicting career choice, development, progress and outcomes do not always fit the increasingly complex working environment. Although these theories have made an important contribution to the understanding of the process of constructive career management, no one approach provides an adequate explanation of the individual's career in contemporary times. Research designs that can successfully predict career choice and development in today's times must accommodate the following issues:

* successful, satisfying careers in today's times result from a matching process between the individual and his life's work;
* contemporary careers must be understood more in terms of peoples skills, flexibility and self-identity;
* career choice is influenced not only by job related factors, but also by experience and activities outside of the work arena.

In order for the individual to make the correct career choices under these conditions, he needs to gain a deeper sense of identity. Self-insight is therefore of vital importance to the individual in guiding him to make the correct choices (Hall & Mirvis, 1995a).

Career psychology has traditionally focused on two main research paradigms. The first is career choice and the second is career development. The subject of career choice has been researched thoroughly. The basis of this type of research is that individuals are categorised according to specific constructs and a match is made between the individual and his occupation in terms of
those specific constructs. Examples of these constructs are interests, self-concept, personality, needs, values and social background. A variable that was thoroughly researched in career psychology was interests (Hall, 1976). The basic assumption of the most well-known research theory on interests, Strong's (1943) theory, is that certain occupations involve work activities which enable an individual to pursue a range of interests. People in a particular occupation would have similar interests to other members of that occupation and different interests from people in other occupations (Strong, 1943). A second widely researched and used construct is self-concept. Super, who is regarded as the originator of this concept, describes self-concept as a person's image of himself - his abilities, interests, needs, values, past history and aspirations. He describes the various stages in a career according to the development of the self-concept (Super, 1957, 1992). A third construct related to career choice is personality (including needs and values). Holland, who is regarded as the main theorist in this field, based his theory on the assumption that people gravitate to environments that are congruent with their personality types. His central hypothesis is that an individual's personality profile will be a good predictor of his career choice (Holland, 1985). The construct of needs has also had a great influence on research in career choice. Theories based on needs, such as that of Roe, are based on the assumption that there is a link between the fulfilment of childhood needs and subsequent career choice (Roe, 1957, 1990). Social background is a fourth variable that is often researched as a determinant of career choice. This research is based on the premise that social experiences influence personality development, which in turn orients the individual to particular fields. The social and economic conditions of occupational opportunity influence the attainment of career choices (Osipow, 1990).

The subject of career development has also played a great role in the understanding of careers. Central to the concept of career development is that the individual's career is influenced by the life stage he is in (Super, 1957). Each stage has specific tasks that must be fulfilled. Much research has been devoted to the midcareer stage, which stands out as a stage that has significant impact on many people's careers. During this stage the individual tends to assess his progress, and evaluate his career. Whereas there is a tendency for career choice theorists to view career choice as occurring relatively early in life and then remaining firmly fixed for the remainder of the individual's working life, career development theorists view careers as being shaped by the developmental stage that the individual is in. Midcareer is regarded by career developmental
theorists as an important milestone in an individual's career. It is a time when he often evaluates his progress against his hopes and may want to make a career change. It is often only at this stage that an individual may have gathered sufficient working experience and self-knowledge to make the correct choice (Schein, 1978, 1990a; Levinson, 1978; Sheehy, 1976; Hall, 1976; Strumpfer, 1985). Research indicates that increasing numbers of people are making significant changes in their plans during the midlife period (Isaacson, 1985). These changes can be involuntary (a result of technological development or being discharged as a result of unsatisfactory performance) or voluntary (a result of greater insight and self-understanding, a clearer conceptualisation of values or changing needs, and new opportunities) (Isaacson, 1985).

The impact of changing times on midcareer individuals can lead to:

* high levels of tension when companies restructure. Certain organisational changes such as mergers and acquisitions may have the most severe impact on the midcareer person. If an individual is made redundant, the remaining options of either starting over again or early retirement are poor alternatives (Schein, 1990b);
* expensive midcareer shifts (re-education and training) especially if an individual is in a career where his anchor is mismatched with his occupation in the first place (Schein, 1990b).

These changes emphasis the need for self-knowledge even more, as well as the necessity of research on constructs relating to values, needs and motives, which will probably broaden the individual's self-insight which could enable midcareer employees to make better choices. Where many previous researchers have tried to predict person/environment fit of employees in general as well as midcareer employees in particular, by means of variables such as aptitude, personality and interest, the present research is aimed at evaluating the contribution of the career anchor (a value that an individual would not give up when making a career choice) in this regard. Schein (1996) stated as follows "The concept of career anchors becomes especially applicable in today's turbulent world as more and more people are laid off and have to figure out what to do next in their lives" (p. 81). Schein (1996) stated further that it is expected that the content of the anchor will have shifted in the 1990's and will continue to shift as people are speculating about the 21st century. The metamorphosis organisations are undergoing today have serious implications for career development and to research constructs, such as career anchors, which holds the internal
career together when dramatic changes are experienced in the external career, makes the present research relevant and applicable. As Schein (1996) indicated, one might expect that the content of the career is shifting and the question that arises from this is what those shifts will be and is there evidence that they are already occurring. As a result of these trends, research on a construct such as "career anchor" becomes even more relevant.

The theory behind the career anchor construct is based on identifying a growing area of stability within the individual, as he develops more insight based on life experience (Schein, 1978). Although Schein does not specify an exact point where the individual will have consolidated his self-image (presumably because it varies from individual to individual), he refers to a time frame of approximately 10 years working experience as the minimum period required to establish a dominant career anchor. The midcareer stage of a career (at the age of 35 years to 45 years) is often referred to as the stage in an individual's career when he has gathered sufficient experience to assess his progress and make decisions about his career (Schein, 1978). It is therefore more likely that this will also be the stage where an individual has had sufficient experience to consolidate his self-image and determine his dominant career anchor. Research on career anchors based on a sample of midcareer individuals is therefore more likely to be accurate. Most research on career anchors is based on samples of individuals that have have reached certain career stages (at least 5 years to 10 years), but the researcher has found no studies that have specifically only used a sample of individuals in the midcareer age range (35 years to 45 years).

The goal of this research is therefore to provide further empirical data on the career anchors of midcareer employees in particular, in the expectation that the use of this construct as a diagnostic tool will increase the accuracy of predicting a match between the individual and his occupational type. It will hopefully provide valuable information with regard to the career anchors of midcareer employees. It is anticipated that this type of research will assist the efforts of practitioners to develop practical tools of career management.

The career anchor construct was selected as the basis of this research study for the reasons set out below.
* It is based on the individual's self-insight (Schein, 1990a). Contemporary career researchers believe that self-insight is the key to constructive career management. In order for an individual to identify his dominant career anchor, he requires an explicit understanding of himself and the qualities he may not have thought about or may have taken for granted (Schein, 1990a).

* It is a subjective concept (Schein, 1990a). Contemporary career researchers believe that viewing careers from a subjective perspective will increase the predictive accuracy of career assessments (Savickas, 1992). The career anchor reflects the individual's self-perceptions of his talents, values and needs (Schein, 1978). This perception may be independent of organisational or external definitions of what his career is about.

* It is based on experience and systematic self-diagnosis (Schein, 1993a). An individual is only likely to develop an understanding of what he wants from his career, as he acquires experience and practices self-diagnosis (Schein, 1993a). If he is likely to have three or four careers in his lifetime, it is important that the experience he acquires in each career is incorporated into his self-concept.

* It is broader in definition than the typical concept of a value or need (Schein, 1990a). The construct not only reflects the needs and values of an individual, but also his talents. Instead of reducing career choice to just one concept such as motives, values or abilities, the career anchor construct is used to highlight the gradual integration of motives, values and abilities in the person's total self-concept (Schein, 1978). People learn to be better at those things they value, and are motivated to do and learn to value and be motivated by those things they happen to do well (Schein, 1990a).

Research studies on career anchors have been carried out both overseas and within South Africa. Most of these studies have investigated the relation between career anchors and occupational types. The goal of this study is also to establish the relation between the career anchors and occupational types. If a link between career anchors and occupational types can be established and the correlates of this link determined, such as job satisfaction, it would contribute further to the
model's predictive power.

To a large extent links between career anchors and occupational types have been established. Schreuder (1989) examined the fit between career anchor and occupational type and then determined how this fit was related to quality of life. He established that those with a fit between career anchor and occupational type experienced a higher level of quality of life. Kaplan (1990) examined the career anchors of 14 different professional groups (which could be regarded as different occupational types) and measured the level of job satisfaction in each group. His research indicated that the dominant value held by members of various occupational types (professional groups) does not necessarily bring the most job satisfaction and suggested that the person-environment fit be considered in the design of future research. His research also highlighted the contrast in the relation between career anchors and different types of job satisfaction (general, intrinsic and extrinsic). His study also analysed the individual contribution of each career anchor to job satisfaction. He found that certain career anchors were stronger predictors of job satisfaction than others.

From the aforementioned issues, the following research questions were formulated.

* Is there a theoretical relation between career anchors and occupational types and what are the implications for career choice and career development practices for midcareer employees?
* Will a person-environment (P-E) fit (based on a fit between career anchor and occupational type) result in a higher level of general, intrinsic and extrinsic job satisfaction?
* Is there a difference between the managerial and non-managerial groups of employees in terms of levels of job satisfaction (general, intrinsic and extrinsic) of the fit and non-fit groups?

1.3 AIMS OF THE RESEARCH

From the above research questions, the aims were set out below:

The general aim of this research is to examine the relation between career anchors and
occupational types for midcareer managerial and non-managerial employees and to determine whether a fit between the two constructs would result in a higher level of general, intrinsic and extrinsic job satisfaction.

In terms of the literature survey the specific aims are:

* to define the concept of career in terms of how the concept has evolved over the last few decades; to discuss career choice theories in terms of various constructs such as interests, self-identity, personality (personality types, needs and values) and social background; to discuss theories of life/career stages with particular reference to the midlife/midcareer stage; to clarify why new models of career choice and stages are needed for contemporary career choice and development practices;

* to define the career anchor concept; to describe how career anchors develop; to describe the eight categories of career anchors as well as current trends in career anchor research and the implications thereof for current career choice and development practices;

* to clarify the relation between career anchors and related aspects such as:
  - midcareer
  - occupational types, different hierarchical levels and other constructs such as needs, values and self-concepts
  - job satisfaction (general, intrinsic and extrinsic)
and to define the implications for career choice and development practices;

* to postulate a theoretical relation between career anchors and occupational types and how a fit between the two constructs would result in higher levels of job satisfaction, and to define the implications for career choice and development practices.

In terms of the empirical study the specific aims are:

* to ascertain the relation between career anchors and occupational types of managerial and non-managerial midcareer employees;
Step 4: The theoretical relation between career anchors, occupational types and general, intrinsic and extrinsic job satisfaction are postulated. The implications for career choice and development practices are discussed.

1.4.2 Phase two: Empirical Investigation

The empirical investigation consists of 11 steps, namely:
Step 1: Determination and description of the sample population
Step 2: The psychometric battery
Step 3: Administration of the psychometric battery
Step 4: Scoring of the psychometric battery
Step 5: Research design and statistical processing of data
Step 6: Formulation of the research hypotheses
Step 7: Reporting and interpretation of results
Step 8: Integration of research findings
Step 9: Discussion on the limitations of the research
Step 10: Conclusions of the research
Step 11: Formulation of recommendations

1.5 CHAPTER DIVISION

The chapters will be presented in the following manner:
Chapter 2: Theories on career choice and stages
Chapter 3: Career anchors
Chapter 4: Career anchors and related research
Chapter 5: Empirical study
Chapter 6: Results
Chapter 7: Limitations, Conclusions and Recommendations

1.6 CHAPTER SUMMARY

This chapter discussed the background to the research and presented the problem statement, aims, research design, research method and chapter division. Chapter two presents a literature survey of career choice and stages with particular reference to midlife/midcareer.
CHAPTER 2: CAREER CHOICE AND STAGES

Chapter 2 represents the first aim of the literature survey, namely: to define the concept of a career in terms of how the concept has evolved over the last few decades; to discuss career choice theories in terms of various constructs such as interests, self-concept, personality (personality types, needs and values) and social background; to discuss traditional theories and new trends in life/career stage theory with particular reference to the midlife / midcareer stage; to discuss the midlife / midcareer stage in terms of traditional theories as well as new trends and their implications for midcareer employees; and to clarify why traditional models of career choice can no longer be considered adequate in today's increasingly complex environment.

2.1 INTRODUCTION

The evolution of the concept of a career is evidenced in the difference between Hall's definitions of 1976 and 1995. In 1976 (p.4), Hall defined a career as "the individually perceived sequence of attitudes and behaviours associated with work related experiences and activities over the span of the person's life". In 1995a (p. 349), Hall and Mirvis define a career as "a whole set of activities (part-time jobs, self employed undertakings, temporary assignments, three year team projects, work at home periods, sabbaticals and so forth), which may not and probably will not come neatly packaged and defined as a 'job' in one 'organisation' but which can constitute full employment, provide adequate compensation, and afford deep satisfaction to the individual". Hall & Mirvis (1995a) add that a focus on life's work also takes account of how people's activities as spouses, parents, neighbours and volunteers shape work choices, add to skills, promote or tax adaptability, and otherwise influence their self-pictures.

Most career theory is based on developments before recent changes in the nature of the work force and of organisations. Career choice theory is based on various constructs (interests, self-concept, personality) that can be matched with compatible occupations/environments, while career development theory is based on a sequence of choices throughout the whole or a part of the life span i.e. the development of the career. Increasing emphasis has been placed on viewing careers not only from a cross-sectional point of view, i.e. a one-off match between an individual and his occupation, but also from a longitudinal perspective (Fitzgerald & Rounds, 1989; Hackett, Lent
& Greenhaus, 1991; Hall, 1976; Scarpello & Ledvinka, 1988; Super, 1980). When considering careers from a developmental perspective, the midlife / midcareer period is regarded as a critical stage in the life and career of the individual (Levinson, 1978; Sonnenfeld, 1978; Schein, 1990a). The career preference approach to research on careers, such as Schein's career anchor theory, can be regarded as another approach to research on careers (Scarpello & Ledvinka, 1988; Schein, 1990a; Hall & Mirvis, 1995a). This approach clarifies employee career preferences and their match with organisations' staffing requirements. This approach is becoming important as the work environment becomes increasingly complex and individuals become increasingly responsible for the management of their own careers (Hall & Mirvis, 1995a).

2.2. **CAREER CHOICE THEORIES**

Career choice theorists can be classified according to the criteria for career choice that they adopt. Four of the most commonly referred to constructs are interests, self-concept, personality and social background. In this literature survey, some of the well recognised theories that are based on constructs that are relevant to the career anchor model will be discussed in greater detail. Although all the constructs contribute individually to the explanation of career choice, no one construct can be regarded as being solely responsible for the determination of career choice (Brown, 1990; Gati, 1989; Osipow, 1990). Four of the most commonly referred to constructs will be discussed in turn.

2.2.1 **Interests**

A consistent definition of interests is difficult to attain because constructs such as interests, traits and values often overlap (Super, 1973). Super (1973, p. 190) defines interests as "the specific activities and objects through which values can be attained and needs met". Strong's definition of interest is one of the most familiar ways of defining interests (Hall, 1976). Strong (1943, p. 6) defines an interest as "a response of liking: an aversion is a response of disliking". He defines a vocational interest as "the sum total of many interests that bear in any way upon an occupational career" (Strong, 1943, p. 21). He believes that by defining the construct in this way and not as a single choice, it can be regarded as possessing a degree of permanence. The Vocational Interest Blank (Strong, 1943) is one of the most commonly used methods to determine interests (Hall, 1976). The rationale behind the use of the interest blank can be expressed as follows: "Men
engaged in a particular occupation have a characteristic set of likes and dislikes which differentiate them from men in other occupations. The Vocational Interest Blank is a device by which such patterns of interest may be determined " (Strong, 1943, p. 57). Strong (1943) believed that measurement of the interests construct is necessary, because it reveals information that is not disclosed by measuring other constructs such as ability and achievement. In fact, interests play a central role in career development but are often not stated explicitly in theories of career choice (Osipow, 1973). They are more likely to be regarded as another aspect of the person-occupation equation that can be assessed but not necessarily analyzed, for example, Holland (1985) and Roe (1957, 1990) tie interests directly to occupational behaviour, whilst Super (1992) views interests as an aspect of the self-concept.

Barak (1981); Barak, Librowsky and Shiloh (1989) have combined the construct of interests with ability and achievement (as suggested by Strong, 1943), by constructing a model concerning the development and maintenance of interests. Barak (1981) reviewed the relation between interests and other variables such as ability, success and satisfaction. He found no direct relation between interests on the one hand and abilities and performance on the other but did find a relation between interests and satisfaction. On the basis of his findings, he proposed a model of interests development and modification. This model proposes that there are certain modifying constructs which have a direct causal relation to interests and therefore modify the individual's interests. The main modifying constructs are expected success, anticipated satisfaction and perceived abilities (Barak, 1981). Barak, et al (1989) tested Barak's 1981 theoretical model. Their studies supported the theoretical model, in that they found that interests were highly related to perceived abilities, expected success and anticipated satisfaction. On the basis of these results they define an interest as "an affective and a motivational subjective response to a perceived stimulus which is a product determined by the process of an individual evaluating his or her degree of ability to perform a specific activity, the degree he or she expects to succeed in performing it, and the degree he or she anticipates being satisfied from this performance".

Swanson and Hansen (1988) measured the interests of individuals over the course of 4 - year, 8 - year and 12 - year intervals in order to establish their stability. They used the Strong-Campbell Interest Inventory in order to establish if interests could be regarded as trustworthy guides to
career choice. Results indicated that there was a strong degree of stability of interests over the three time periods, but the process of stability or change in patterns of interests over long-term intervals was still not clearly established.

2.2.2 Self-concept

Super (1957) defines self-concept as a person's image of himself - his abilities, interests, needs, values, past history and aspirations. In developing and implementing a self-concept the individual will ask the following questions:

What sort of person do I think I am? How do I feel about myself as I think I am? What sort of person would I like to be? What are my values and my needs? What are my aptitudes and interests? What can I do to reconcile my self-ideal with my real self? What outlets are there for me with my needs, values, interests, and aptitudes? How can I make use of these outlets? (Super, 1957, p.196)

Subsequently, however, Super made it clear that people may not necessarily have just one self-concept, but rather constellations of self-concepts (Super, 1992). He expanded his original theory to demonstrate this concept in the 'life career rainbow' which represents the importance of different roles the individual adopts, at different points in the life cycle (Super, 1992).

In this section Super's (1957, 1980, 1992) self-concept construct is discussed for the following reasons:


* It is relevant to the concept of the career anchor - both concepts deal with how the individual's understanding of himself influences career choice. The degree of satisfaction people attain from work is proportional to the degree to which they have been able to implement their self concepts (Minor, 1992; Schein, 1990; Super, 1957, 1980, 1990).

Super's theory is regarded as "segmental" rather than an integrated, comprehensive theory. His
writings are dominated by two themes, self-concept and developmental psychology (Brown, et al, 1990; Osipow, 1973, 1990; Super, 1992). His theory of self-concept will be discussed here. The developmental aspect of his theory, i.e. the specific developmental stages of an individual's self-identity, will be elaborated on below in the section on career stages.

The basis of Super's emphasis of the self-concept is that he believes that the choice of an occupation demands that an individual is able to "state rather explicitly" what kind of person he thinks he is (Super, 1957, p. 191). "In choosing an occupation one is, in effect, choosing a means of implementing a self-concept" (Super, 1957 p. 196). As the individual's career progresses, he is continually called upon to test his self-concept against reality and to find out whether he can live up to the picture he has of himself (Super, 1957). The process of vocational choice and development is therefore one of developing and implementing a realistic concept of oneself (Super, 1957). Super (1957) views the process of developing a realistic concept of oneself as very similar to the process of personal development, and therefore the concept can only be viewed in the context of a developmental process.

A summary of Super's updated (1992) propositions regarding the career is set out below. (Propositions iv, v, vi, ix, x, xi, xii and xiii deal specifically with the self-concept, but it is useful to read all 14 of the propositions for the sake of completeness).

(I) People differ in their abilities and personalities, needs, values, interests, traits, and self-concepts.
(ii) People are qualified for a number of occupations, by virtue of these characteristics.
(iii) Each occupation requires a characteristic pattern of abilities and personality traits.
(iv) People's self-concepts change with time and experience, although they do become increasingly stable from late adolescence until late maturity.
(v) The process of change takes place over the life cycle.
(vi) The career pattern is influenced by the individual's parental socioeconomic level, mental ability, education, skills, personality characteristics (needs, values, interests, traits, and self-concepts) and career maturity, and by the opportunities to which he or she is exposed.
(vii) Success in coping with the career depends on the individual's career maturity. Career maturity is based on the individual's success in coping with the demands of each stage of his career
on a physical, psychological and social level.

(viii) Career maturity is a hypothetical construct and does not increase monotonically.

(ix) Development through life stages can be facilitated by the maturation of abilities and interests, reality testing and the development of self-concepts.

(x) The process of career development is one of developing and implementing an occupational self-concept.

(xi) The process of adjustment of the individual to social factors and of synthesis between self-concept and reality is one of learning from feedback.

(xii) Work and life satisfaction depend on the extent to which the individual finds an opportunity to express abilities, needs, values, interests, personality traits and self-concepts.

(xiii) The degree of satisfaction people attain from work is proportional to the degree to which they have been able to implement their self-concept.

(xiv) Work provides a focus for personality organisation for most people, although for some this focus is peripheral and foci such as homemaking or leisure activities may be central.

Evaluation of Super's self-concept theory

Brown, et al (1990) believes that although Super's theory is the most comprehensive of the theories presented to date, the fourteen propositions fail to account for differences in career patterns observed in people from lower socioeconomic groups and special population groups, such as women. He suggests that the best way to address this problem would be to look at those forces that shape the vocational self-concept. Osipow (1990) observes that although the theory plays a prominent role in understanding self-identity, it does not provide a practical approach to measure the self-concept.

2.2.3 Personality

This construct will be discussed in three sections - personality types, needs and values.

2.2.3.1 Personality types

A personality type may be defined as "a product of a characteristic interaction among a variety of cultural and personal forces including peers, biological heredity, parents, social class, culture, and the physical environment" (Holland, 1985, p.2). Each personality type has a repertoire of
attitudes and skills for coping with environmental problems and tasks. An individual's personality is determined by which type he or she most resembles. The resemblance to each of the six basic types of personality form the individual's personality pattern. (Holland, 1985).

Holland's theory of personality types (1985) will be discussed in detail, as representative of the field of research on the construct personality, for the following reasons:


* The theory is related to the concept of career anchors. Both theories are based on the assumption that people search for environments/careers that will allow them to exercise their abilities, express their values and take on agreeable roles. (Holland, 1985, p.4; Schein, 1990).

Holland's theory of vocational personalities (1985) predicts occupational choice on the basis of personality type. He believes that career choice is dependent on the interaction between personality and the environment. People gravitate to environments that are congruent with their personal orientations.

The theory is based on four main assumptions:

(i) People can be categorised into six main types. Each personality type is based on a combination of personal and cultural forces. Depending on the person's background, he learns to prefer certain activities, which in turn lead to interests and specific dispositions. Each personality type has a specific set of attitudes and skills for coping with issues. A person's attitudes can be compared with the profiles of the six personality types, in order to determine which type he or she most resembles. Most people can not be categorised according to a single personality type. In most cases, a hierarchy of personality types from the one the individual most resembles to the one he least resembles can be formulated. The individual's personality pattern consists of his or her degree of resemblance to all of the six types.

(ii) There are six corresponding environments. Each environment offers specific
opportunities and poses specific problems.

(iii) People search for environments that are compatible with their personality types. They search for environments that will allow them to exercise skills and abilities, express their attitudes and values and take on agreeable roles and problems (Holland, 1985 p. 4).

(iv) Behaviour is determined by an interaction between personality and environment. If we know an individual's personality pattern and the pattern of his environment, we can predict certain outcomes such as choice of vocation, job changes, vocational achievement and personal competencies.

The personality types and their corresponding environments can be described as follows;

* **Realistic**: This type of individual has a preference for activities that are practical and concrete, and is likely to develop mechanical and technical abilities. The corresponding environment is characterised by activities that involve the ordered and systematic manipulation of objects, tools, machines and animals.

* **Investigative**: This type of individual is concerned with understanding physical, biological and cultural phenomena, and is likely to develop mathematical and scientific ability. The investigative environment is one that stimulates people to achieve scientific competence such as performing enquiring activities.

* **Artistic**: This type of individual has a preference for aesthetic qualities, and is likely to develop artistic ability. The corresponding environment is characterised by ambiguous, free and unsystematised activities. It fosters artistic competencies and achievements.

* **Social**: This type of individual has a preference for social interaction and is likely to develop leadership and speaking ability. The social environment provides an opportunity for the individual to engage in social activities, such as informing, training and developing.

* **Enterprising**: This type of individual is predisposed to manipulating others to attain organisational goals or economic gain and is likely to develop leadership, interpersonal and persuasive abilities. This type of environment requires people to engage in activities such as selling or leading others.

* **Conventional**: This type of individual is systematic and predictable and is likely to develop clerical and arithmetic ability. This type of environment provides an opportunity
for the individual to engage in specific and ordered organisation of data, such as keeping records, filing materials, reproducing materials and operating data processing machines.

Holland's theory rests on the following principles (Holland, 1985):
* The choice of a vocation is an expression of personality.
* Interest inventories are personality inventories.
* These vocational stereotypes have important psychological and sociological meanings.
* Members of a vocation have similar personalities and similar histories of personality development.
* People in a vocational group have similar personalities, and tend to respond to problems and situations in similar ways.
* Vocational satisfaction, stability and achievement depend on the congruency between one's personality and the environment in which one works.

Evaluation of Holland's theory of personality types

The theory has been criticised for several reasons. Firstly, the theory is regarded as static as it fails to provide any insight into the process of personality development, i.e. the individual's changing needs, values and self-concept during the different stages of his life are not accounted for in the theory (Brown et al, 1990; Hackett et al, 1991 Osipow, 1973; Spokane, 1985).

Secondly, the theory is regarded as static as it fails to provide insight into the process of career development. The theory states that when there is an inappropriate match between environment and personality, career change is likely to occur but has not examined the impact of environmental and economic constraints on this process (Brown, 1990; Hackett et al, 1991; Osipow, 1973; Spokane, 1985).

These criticisms are of concern because there is much research to indicate that the individual's perception of his life and career change during the life cycle, particularly during the midcareer stage (Levinson, 1978; Schein, 1990a; Super, 1980, 1992). The critics of this theory, however all acknowledge that Holland's work is exemplary in its continual revision made in response to substantive criticisms and disconfirmatory research findings. The theory is also simple and

2.2.3.2 Needs

A consistent definition of needs is difficult to establish as the concepts of needs, values and interests often overlap (Macnab & Fitzsimmons, 1987; Super, 1973). When examining tests to measure the different constructs, measures of needs resemble those found in tests of values and measures of interest often include items like those found in need and value inventories (Super, 1973). These contradictions can be illustrated by the opposite emphasis that Super (1973) and Locke (1976) place on needs and values in their definitions of the two constructs. Super (1973) defines need as "global aspects of behaviour that can be satisfied in many ways by the attainment of different values" (Super, 1973). Implicit in this definition is the assumption that needs rather than values are the direct determinants of career choice. Locke (1976) also links the concept of needs and values, but in the reverse way to Super. He classifies a need as "objective" and innate - it exists regardless of what the person wants (as opposed to a value which is "subjective" and acquired - what a person develops). Locke (1976) therefore believes that all men have the same basic needs, but differ in what they value. It is the individual's values that will determine actual choices (Locke, 1976).

Roe's theory of personality development and career choice is representative of the theorists who emphasise the construct needs as the more direct determinant of career choice. It will be discussed in detail for the following reasons:

* The theory has stimulated research and is widely acknowledged for its contribution to knowledge of how need satisfaction influences career choice (Brown et al, 1990; Minor, 1992; Osipow, 1973; Roe & Lunneborg, 1990).

* The theory is related to the career anchor theory. Both theories are based on the assumption that there is a tendency for people to choose careers that will enable them to satisfy their most important needs through their work (Hall, 1976; Roe, 1957, 1990; Schein, 1990a).

Roe's original theory on the early determinants of vocational choice is based on eight hypotheses (Roe, 1957). They are:
(i) Intelligence, abilities, interests, attitudes and other personality variables cannot be conclusively linked to heredity factors.

(ii) The development of special abilities, interests, attitudes and other personality variables are primarily determined by the direction of involuntary energy.

(iii) The direction of involuntary energy is determined by the pattern of early satisfaction and frustration. The order in Maslow's hierarchy of needs is based on the assumption that higher order needs cannot appear until lower order needs are satisfied. Maslow's hierarchy of needs are arranged from lower order needs to higher order needs as follows: physiological needs, safety needs, need for belongingness and love, need for importance, respect, self-esteem, independence, need for information, need for understanding, need for beauty and need for self-actualization.

(iv) The pattern of attention directedness that a person develops will ultimately determine the field or fields in which he applies himself.

(v) The intensity of the needs will determine the degree of motivation that an individual has to accomplish these needs.

(vi) Needs that are satisfied do not develop into unconscious motivators.

(vii) Needs that are not satisfied will, if lower order, prevent the appearance of higher order needs, and will become dominant motivators.

(viii) Needs that are satisfied after a delay, but eventually accomplished, will become motivators, depending on the degree of satisfaction felt.

Roe (1957, 1990) believes that, depending on the situation the child experiences while growing up, specific attitudes, capacities and interests will develop. The choice of an occupation will therefore reflect very strongly a combination of genetic and experiential variables. The patterns of early experience with parents can be classified according to the child's position in the family's emotional structure; emotional concentration on the child (overprotection or overdemanding); avoidance of the child (rejection or neglect); and acceptance of the child (casual acceptance or loving acceptance). To a large extent, homes in which children are the centre of attention provide full satisfaction of needs. Children who are subjected to avoidance by parents experience major lacks in need gratification. Accepting parents offer reasonable gratification of all needs. As a result of their experiences in childhood, children may develop an orientation towards persons or an orientation not towards persons. This orientation later develops into patterns of interests and
Roe (1957, 1990) divides occupational choice into eight general categories: service, business contact, organisations, technology, outdoor, science, general cultural and arts/entertainment. The level at which the activities can be pursued can be divided into six general categories; professional and managerial (two levels), semi-professional, small business, skilled, semi-skilled and unskilled.

**Evaluation of Roe's theory of personality development and career choice**

The theory has been criticised on the following grounds. Firstly, there is little empirical support for the propositions (Brown et al, 1990; Hall, 1976; Minor, 1992; Osipow, 1990; Sonnenfeld & Kotter, 1982). This may be due to the difficulties in testing the theory, i.e. obtaining retrospective measures of childhood experiences (Hall, 1976) or because of the operational inadequacy of the constructs (Osipow, 1990). Secondly, there is little practical value for counsellors or personnel specialists (Hall, 1976; Osipow, 1973). Roe's theory assumes that childhood experience influences personal orientation, which in turn influences career choice. As personal orientation is already well-established by the time the person is being studied, it would be more practical and effective to measure personal orientation, rather than childhood influences, as a predictor of career choice (Hall, 1976). Roe and Lunneborg (1990) however believe that Roe's two-way occupational classification system (Roe, 1957) has been supported and successfully applied in career counselling (Brown et al, 1990; Hackett et al, 1991; Minor, 1992).

### 2.2.3.3 Values

As outlined in the previous section, Super (1973, p. 190) defines values as "objectives that one seeks to attain to satisfy a need . . . these are the objectives sought in behaviour" (Super, 1973, p. 190). This definition implies that values are an indirect determinant of career choice, whilst needs are more direct. Locke (1976) on the other hand regards values as "subjective" - what a person consciously or subconsciously desires, wants, or seeks to attain - and acquired (learned). He therefore believes that whereas everyone has the same basic needs, people differ in what they value. Needs therefore lead a person to take action, but it is his values that will determine actual choices. Locke (1976) quotes Rand's analysis of a value as having two attributes: content - what is wanted or valued - and intensity - how much it is wanted. An individual's values, ranked as to
importance, represent his value hierarchy.

England (1967) defined a value system as "a relatively permanent perceptual framework which shapes and influences the general nature of an individual's behaviour. Values are similar to attitudes but are more ingrained, permanent and stable in nature."

Brown (1995) quotes Rokeach's (1973) definition of values as "core beliefs that are standards against which individuals can judge their daily performance and that of others". For work to be satisfying an individual must believe that his activities are worthwhile; for example, if he favours wealth and performs in a job that is financially rewarding the job is likely to satisfy him. Values are therefore the basis for establishing short and long term goals because they provide individuals with idealised end states for their lives (Brown, 1995).

Pine and Innes (1987) define values as "an individual's belief about modes of conduct and end states of existence". This is also based on Rokeach's definition.

Simonsen (1986) suggests that an easy way to identify an individual's work values is just to ask "What is important to you in your work?" She believes that job dissatisfaction arises when top work values are missing from a job. She distinguishes between values and needs on the basis that needs can change with circumstances. Work values are however formed at a young age and continue to matter, evolving slowly if at all. Work values are therefore likely to be the motivators of underlying career development needs. Simonsen (1986) believes that some of the most difficult career counselling is required when needs and values conflict. She believes that interests may be useful for initial career planning, but may not influence long-range career management as significantly as work values.

The construct of values will be discussed for the following reasons:

* Values are regarded as important determinants of career choice because they play a major role in an individual's life and manifest themselves in almost all behaviour. Values have been correlated with organisational level, personal success, decision-making and job satisfaction. Some authors believe values occupy a central position in the social
sciences and have attained a status at least equalling abilities and interests (England, 1978; Krau, 1987; Locke, 1976; Pine & Innes, 1987; Rokeach 1973; Super, 1973; Zytowski, 1994).

The construct values is one of the components of the career anchor construct (along with needs and talents) (Schein, 1990a).

Pine and Innes (1987) emphasise the impact of economic conditions on individual work values. They believe that when society is prosperous and the economy is booming, higher order values centering on social concerns and self-actualisation will dominate. In an unstable economy where there is financial uncertainty, survival values will dominate. They believe that studies on career choice and development do not pay enough attention to economic and societal forces that shape individual work values and career choices. This is consistent with Rokeach's conclusion on the impact of the environment on the individual's value system. His findings suggest that lower order needs are more important to the poor and uneducated, whilst the affluent and educated take values such as safety and security for granted (Rokeach, 1973).

England (1967) found that the personal value system of individual managers influences the organisation in both an indirect and a direct manner. Ravlin and Meglino (1987) quote England's (1967) research findings of two processes that link values to choice behaviour. The first is that values are thought to influence the selection and interpretation of external stimuli, thereby affecting the organisation of behavioral choices and the formulation of alternative courses of action. The second is that values guide action in a direct way, influencing decision making.

Ravlin and Meglino (1987) confirm in their study that values do act as a guide for decision making, but that there is a weaker relationship between values and career choice in a more complex environment, as people choose alternatives for reasons other than their system of values when faced with a complex set of choices.

In a survey of the personal value systems of managers in five countries, England (1978) found that:

* There were large differences in values within each group studied. In each country, some
managers had a pragmatic orientation, others an ethical-moral orientation, while a few had a feeling orientation.

* Personal value systems of managers were relatively stable and did not change rapidly, even during periods of environmental and social flux.

* Personal value systems of managers were related to the way managers behaved and their career success.

One of the main conclusions from the study was that the personal values of managers are both measurable and important to measure, as they are related to decision making, managerial success, and satisfaction (England, 1978).

2.2.4 Social Background

Specific theories on social background will not be discussed in great detail, as the construct is not directly related to the career anchor model. It is however clear that social structure and family background are one of the variables that affect career choice and development (Hotchkiss & Borrow, 1990; Mathabe & Temane, 1993; Minor, 1992; Osipow, 1990).

Miller and Form's (1951) use of longitudinal data on career changes emphasised the importance of environmental influences on occupations. The model established that parents in upper class families pressure their offspring to establish social contacts that facilitate career choice that maintain the family's high status, whereas blue collar families anticipate low social mobility and focus on instilling values of security, respectability, and provision for one's family.

The Blau model of occupational choice (1956) combined career orientation with economic and social forces. Career choice was seen as being influenced by the social structure in two ways: firstly, the social experiences of the person influenced his personality (needs, self-concept, orientation, interest, values), which in turn oriented him towards particular fields; and secondly, the social and economic conditions of occupational opportunity influenced the attainment of these choices.

Blau and Duncan (1967) subsequently emphasised the effects of the social structure as the main predictors of occupational entry and career choice. They concluded that the level at which the
individual started determined his chances of upward mobility. Socio-economic status, family structure, education and occupation all influenced the individual's social background. They suggested that the most influential forces in one's social class background on career attainment were father's occupation and father's education. These two factors tended to influence a person's education and first job, which in turn influenced subsequent jobs.

Sonnenfeld and Kotter (1982) concluded that research on social background has demonstrated a clear relation between parental occupation, education and wealth and the occupational status and income attained by children. They acknowledged, however, that the strength of the relation and how the relation works is still unclear. Osipow (1990) believes that people generally follow the career most open to them, other things being equal, i.e. they follow easy options. He believes that social background is just one of the variables that influence career choice, the others being social, biological and personal.

Hotchkiss and Borow (1990) stress that a sociological perspective of career choice views occupational choice as being rooted in a broad system of social stratification. From this perspective market forces have more of an influence on career decisions than individual choices.

Minor (1992) concluded, from research conducted on status attainment, that women and individuals who belong to a prejudiced racial group, achieve a lower educational level and occupational status than men or individuals who belongs to racial groups that are not discriminated against. This view has been confirmed in South Africa. The impact of the individual's culture on career choice and development is stronger than that of the individual's internal culture (Mathabe & Temane, 1993). Mathabe and Temane (1993) believe that the concept of career choice is a farce for indigenous South Africans, because even if they aspire to attainment of a particular career, based on personal internal factors, the attainment of this would be very unlikely in the light of external socio-political factors.
2.3 LIFE / CAREER STAGES

The aim of this section of the literature survey is to demonstrate that career choice is based on a broader range of influences than merely vocational considerations. The issues of life/career stage, family life stage, lifestyle, leisure and other issues must also be considered (Hall & Mirvis, 1995a; Minor, 1992; Schein, 1995; Sonnenfeld & Kotter, 1982). The present study investigates midcareer individuals and a background of life/career cycles is provided to establish a context for a discussion of the midlife/midcareer stage.

Whilst career choice theories are regarded as important, developmental theories treat them as an insufficient basis for career management. Studies of the life span have provided clear evidence that occupational choice is not something that happens once in a lifetime, on leaving school or university. Career development is in fact a process - a series of stages (Super, 1980). An individual's life cycle can be understood in terms of a series of stages characterised by changing patterns, tasks, career concerns, values and needs, which emerge as he passes through various age ranges (Super, 1980). Each life/career stage is associated with specific psychological or social development tasks (Burack, 1984). Although there is mixed support on what the stages are and when they occur, there is general agreement that important career outcomes are not set until approximately the age of thirty or forty (Schein, 1990a; Sonnenfeld & Kotter, 1982). A resolution between the changing goals of the individual and the changing realities of the workplace must be continually negotiated. With a changing self and a changing situation the matching process is never really completed. The general conclusion that can be made from the selection of developmental theories is that individuals need a longitudinal framework within which to form career decisions (Minor, 1992; Sonnenfeld & Kotter, 1982; Super, 1992).

2.3.1 Traditional theories of life/career stages

The adult life/career can be divided into three main stages, namely early adulthood/establishment; middle adulthood/maintenance; and late adulthood/decline.

2.3.1.1 Early adulthood/Establishment

This period extends from approximately mid-twenties to forty. At this stage a man builds up all the important aspects of life's structure - work, family, friendships, leisure, community and whatever is central to him (Levinson's 1978 research was conducted exclusively with men).
Levinson et al (1978) divides this stage into three sections: entering the adult world - in this stage the individual tests a variety of initial choices regarding occupation, relationships, peers, values and life style; age thirty transition - in this stage there is an opportunity to modify and improve the structure; and settling down - in this stage the individual tries to achieve two main tasks: firstly to establish a niche in society (work, family, friendships, leisure, community and whatever is important to him) and secondly to strive for advancement and to build a better life.

Super (1992) terms this period the establishment phase. During this stage the individual is likely to establish a career. Not all individuals are able to achieve this goal. Some people live lives of changing jobs and occupations, field and level of employment. There may however be some consistency in this random movement when it is evaluated in terms of socio-economic status and opportunities for those employed at higher levels. If attempts to stabilise are successful, a period of consolidation and advancement could follow. If not, frustration could lead to either stagnation or change. Economic circumstances, such as technological change, recessions and political change, have a real effect on the opportunity of the individual to establish himself. Those who can cope with change may thrive and achieve stability.

2.3.1.2 Middle adulthood/ Maintenance

This period extends from approximately age forty to sixty. The stage is characterised by stabilising the choices that have been made in the preceding periods. Each individual has a different set of circumstances and will consequently experience a frustrating or fulfilling middle adulthood, depending on the preceding circumstances. Super (1992) terms this period the maintenance period. For those who stabilise in early adulthood, the focus is on preserving the place they have made in their occupations. Some mark time and avoid learning situations. Many keep up to date and try to break new ground. They behave as if they were still in the establishment phase. These are innovators as opposed to stagnators.

2.3.1.3 Late adulthood / Decline

This period extends from age sixty. During this period the main tasks are to conclude the efforts of middle adulthood and to prepare for the era to come. Super (1992) terms this period the decline period. Older people begin to decelerate and selectively disengage. How and when
depends on their occupation and circumstances. Some individuals only retire in their nineties. Death may come before retirement. For some individuals retirement may be sad, for others it may lead to a feeling of accomplishment and the opportunity to get established again in another field.

2.3.2 New trends in life/career stage theory and their implication for career choice and development practices

Super (1973, 1980) elaborated on his original theory of career development and stages by developing a life-career rainbow. The life-career rainbow describes more adequately the many aspects of a career throughout the life span. It describes the various roles an individual plays as he matures from early in life to late in life. At some stages the individual plays a number of roles and at other stages only one (Super, 1980). The career pattern is affected by the simultaneous combination of life roles, i.e. the life-style, the sequential combination of these roles, i.e. the life space, and the life stage that he finds himself in (Super, 1980). Super (1973, 1980) defines nine major roles that people play and four principal theatres that people occupy during their lifetime. The roles are (1) child, (2) student, (3) 'leisurite' (one engaged in the pursuit of leisure-time activities), (4) citizen, (5) worker, (6) spouse, (7) homemaker, (8) parent, and (9) pensioner. Other roles can be identified and not everyone plays every role. The sequence of initiating and abandoning roles differs with each person. The principal theatres in which the roles are played are (1) the home, (2) the community, (3) the school (including college and university), and (4) the workplace. There are other theatres and not everyone enters every theatre. Each role is typically played in one theatre, but may also be played in other theatres. The worker role changes when the individual changes jobs, or occupations, as may occur more than once in the course of a lifetime (Super, 1980). Super's latest work (1992) refers to the maxicycle over the lifespan, but draws attention to the fact that there can be minicycles during which the individual recycles through the stages.

Minor (1992) believes that this cyclical approach seems to be the most applicable to present-day career stages. This opinion is supported by Hall and Mirvis (1995a), who believe that careers in the 1990s will become more and more cyclical, involving periodic cycles of skill apprenticeship, mastery and reskilling. The expectation of reaching a 'plateau' and contributing on a diminishing scale thereafter is no longer automatic. In addition, lateral, rather than upward movement will
constitute career development. The old model of career development that was built on the expectation that employees would "plateau" or pass their prime in their career at a certain point and that their contribution would diminish from that point until retirement is no longer regarded as the only alternative (Hall & Mirvis, 1995a). The contemporary model of career development predicts that workers will periodically plateau in their careers depending on their career age, rather than their chronological age. Hall and Mirvis (1995a) believe that the career cycle of employees is shortening and individuals may go through a number of career cycles of exploration - establishment - maintenance - disengagement, rather than trying to prolong the maintenance stage of their careers.

2.4 MIDLIFE / MIDCAREER

The common denominator of traditional studies on midlife / midcareer (such as those of Levinson, Vaillant, Gould, and Sheehy) is that they have a longitudinal perspective, i.e. they make use of life/career stages as the framework for understanding adult lives and the midlife / midcareer stage in particular (Lawrence, 1980). These traditional theories that emphasise chronological definitions of midcareer may, however, no longer be relevant in the contemporary work environment - a world of turbulence and rapid technological change (Goffee & Scase, 1992; Greller & Stroh, 1995; Hall & Mirvis, 1995a & b). In this environment the 'traditional career contract' (the set of mutual expectations between employer and employee) has changed to a more protean or self-based career (Hall & Mirvis, 1995a & b). In order to understand this development and the effect on the midcareer employee, the longitudinal perspective, i.e. the midlife / midcareer perspective of traditional theories will be set out, followed by new trends in midcareer theory and the implications for midcareer employees.

2.4.1 Traditional approach to midlife / midcareer

The midlife/ midcareer transition extends roughly from age thirty-five to forty-five. Authors vary in the ages they use to mark the midlife / midcareer period but the ages most usually mentioned for males is the thirty-five to forty-five decade. It is difficult to generalise in the case of females as their career and lifecycles are influenced by a number of variables such as their roles as wives and mothers. As a result of these variables, most of the traditional literature on midcareer is orientated towards male careers (Strumpfer, 1985).
This stage is characterised by a period of evaluation, reappraisal, exploration, testing choices and creation of the basis for a new life. It is a period when a man evaluates whether his actual desires, values, talents and aspirations can be expressed. It becomes important to ask

"What have I done with my life? What do I really get from and give to my wife, children, friends, work, community - and self? What is it I truly want for myself and others?" (Levinson et al, 1978, p. 61).

This transitional period may go unnoticed by some, be noticed but manageable for some, whilst a crisis for others. Levinson quotes Jaques' assertion that the core of the mid-life crisis is the experience of one's own mortality. From the perspective of the sequence of generations, Levinson et al (1978) believes that the midlife transition coincides with Erikson's stage of generativity versus stagnation. In this phase a man assumes responsibility for the new generation of adults and will foster their growth toward independence. The capacity to experience and fight against stagnation is an intrinsic aspect of the struggle in this stage. From a career perspective the individual is likely to review his career during this stage. If he has failed to realise his dreams at this stage, he must come to terms with this and make new choices. If he has succeeded, he must appreciate the value of his success. In either event, he has reached a turning point. He is now able to consider the impact and judge the success of his initial aspirations in terms of work, family, politics, religion and leisure.

Although authors differ on precisely what characteristics differentiate midlife from other stages a typical description of this period could be as follows:

Midlife is a time when individuals simultaneously face changes in their family lives and in their careers. During this period, they may develop a more certain knowledge of the degree of career success attainable, a feeling of job entrapment, a change in family relationships as children leave the home, and an acute awareness of physical ageing and death. The usage of the term 'midlife crisis' in the academic world arises from the observation that these issues generate sufficient stress to induce upheaval in adult lives. (Lawrence, 1980, p. 37)
Most of the theories on life and career stages assume that life stages are tied to specific age spans (Lawrence, 1980). This view holds that all people experience a midlife crisis at a specific time of their lives. This view however fails to consider the notion that many experiences are dependant on one another and continuous throughout the life span. A midlife crisis must be understood within the cumulative experience of the individual (Bailyn, 1977; Lawrence, 1980; Strumpfer, 1985; Super, 1990). It is not an isolated experience, but is built on the individual's total experience. In other words, lives cannot be understood by merely photographing them at a specific point in time (Bailyn, 1977; Lawrence, 1980; Strumpfer, 1985; Super, 1990).

Bailyn (1977) illustrates this principle in her study of midcareer men with two distinctly different career paths, one in which individuals were promoted rapidly, and the other where there was a slower rate of progress up the corporate ladder. By age fifty, both sets of individuals will have reached the same point. The former group may have reached a specified level sooner, but could have been stuck on a career plateau for fifteen years, whilst the other group may have made slower, steadier progress up the corporate ladder, ultimately reaching the same point at age fifty. The former group would probably express frustration and a feeling of failure - having been stuck at the same point for so many years, whilst the other group may experience a feeling of success at having moved steadily up the ladder. By understanding each individual's career history, the different responses of the two groups can be understood.

Some individuals in midlife may for example have infant children, or be widowed, or never have married, or be in a dual-career marriage. All these individuals will experience different stresses at different times in their lives. If "midcareer crisis" is limited to a specific age category, individuals who are 'off-time' may be overlooked (Lawrence, 1980). Super (1992) therefore does not define midcareer specifically, but emphasises that coping with the demands of the environment at any given life/career stage depends on the individual's career maturity. This is a constellation of physical, psychological and social characteristics and includes the degree of success in coping with the demands of earlier stages of career development, especially the most recent. It is therefore important to understand the career of each individual in the context of his whole life, rather than at a specific point in time.
2.4.2 Traditional theories of midlife / midcareer

Some of the main traditional midlife / midcareer theories are now discussed.

2.4.2.1 Levinson (1978)

Levinson et al (1978) defines the midlife transition as the period occurring between early adulthood and middle adulthood from approximately forty to forty-five. It is the stage when "a man can make some judgment regarding his relative success or failure in meeting the goals he set himself in the enterprise of Becoming One's Own Man" (Levinson et al, 1978, p. 191). Becoming one's own man means success in terms of a flourishing enterprise, advancement on his chosen "ladder", affirmation, independence, seniority and/or success in any area defined by his current life structure (Levinson et al, 1978). The feelings of this stage are summed up as follows:

As the years pass, most people - regardless of their professions or skills - find their jobs or careers less interesting, stimulating, or rewarding. By midlife, many feel the need for new and greener occupational fields. They yearn for opportunities to reassert their independence and maturity and to express the needs and use the talents of a different stage of life" (Levinson et al, 1983, p. 123).

It is a stage where "a man yearns for a life in which his actual desires, values, talents and aspirations can be expressed" (Levinson et al, 1978 p. 60).

Levinson et al (1978) believes that during this stage, three major tasks must be resolved. The first task is reappraising the past. This need arises from the individual's heightened awareness of his mortality and a desire to use the remaining time more wisely. As this process takes place the individual may begin to shed illusions that he held about his career and life or experience "deillusionment". The process of shedding illusions involves discarding long held assumptions and beliefs about self and the world and provides the individual with a more realistic approach to his life.

The second task is modifying the life structure. The individual must begin to make choices that will provide the pattern for his existence in the remainder of his life. Some men make significant
changes in the external aspects of their lives such as divorce or major shifts in occupation, whilst others make less visible external changes. However in most cases important changes take place. The individual experiences significant changes in the internal aspects of his life structure. His values, what he wants to give to the world and what he wants to be for himself change. The final test of the developmental work accomplished in this period is the satisfactoriness of the life structure emerging from it.

The third task is the individuation process - the changes in a person's relationship with himself and with the external world. Levinson (1978), drawing on the work of Erikson, Jaques and Jung, distinguishes four tasks for the mid-life individual. The four polarities that must be resolved are (1) young/old, (2) destruction/creation, (3) masculine/feminine, (4) attachment/separateness. Although the paired tendencies are opposing conditions, they are not mutually exclusive and can coexist within the self. The developmental task throughout life (not just through the mid-life transition) is to integrate the opposing forces and make sense of them in a new way for the remainder of the individual's life.

2.4.2.2 Sheehy (1976)

Sheehy (1976) confirms the consensus of current research that the transition into middle life is as critical as adolescence and in some ways more traumatic. She refers to the ages between thirty-five and forty-five as the deadline decade and describes some of the predictable inner changes during this period as follows:

* seeing the dark end of the tunnel. At this stage there is a change in the proportion of safety and danger the individual feels in his life. The optimism of the early years often turns to a realisation of ageing;

* change in time sense. There is a feeling that time is running out and must be beaten. During this stage, the notion of time is based on time left to live;

* change in sense of aliveness versus stagnation. A feeling of stagnation often exists before the individual is able to spur himself on to make use of the time left;

* change in sense of self and others. During this stage the individual becomes aware of changes in the relationship between himself and his children, parents and friends. He becomes more aware of illness and death around him;
* de-illusioning the dream. At this stage the individual is forced to face the gap between the vision of himself in his twenties and the actuality of arrival at forty. If the ideal self is not attainable and the individual cannot adjust to it, chronic depression can result. If he can accept that he will not achieve his ideal, but can still make a contribution, and progress happily. If the ideal self has been achieved, the individual may need to invent another dream in order to maintain enthusiasm for the future. Other individuals may feel free to pursue old passions. These people are often more enthusiastic than those that stay with the old, achieved dream;

* groping toward authenticity. The loss of youth, the slowing down of physical powers, the realisation that most roles are stereotyped, and the spiritual dilemma of having no answers can send the individual into a crisis. At this stage some degree of personality change is probably inevitable. At this stage the individual is ready to look for a sense of purpose that is truly his own. He begins the process of examining what he thinks and feels and stands for, in the effort to forge an authentic identity. At this stage the individual may become ready to accept responsibility for the way he really feels;

* from disassembling to renewal. The narrow self of the past that was tailored to fit in with the culture and other people is disassembled and renewal occurs by accepting the suppressed and unwanted parts of oneself. There is freedom from slavishly following what the culture wants and wasting time conforming to rules;

* riding out the down side. The sooner the individual acknowledges the fear of the down side, the sooner he can be integrated into youthful optimism and true strength. The most important words during midlife are -"Let go. Let it happen to you. Let it happen to your partner. Let the feelings. Let the changes" (Sheehy, 1976, p. 364).

2.4.3 Career change

Research provides evidence of a change in orientation and increased job mobility at midcareer (Levinson, 1983; Sonnenfeld & Kotter, 1982; Williams & Fox, 1995). Levinson (1983) believes that the "ego ideal" - an idealised image of oneself in the future - is an important tool for career change. It can serve as a road map in the quest for the right direction. The closer a person gets to the ego ideal, the better he feels about himself. The greater the gap between his ego ideal and
his current self-image, the angrier he is at himself and the more inadequate, guilty, and depressed 
he feels (Levinson, 1983). He believes that when a career satisfies the ego ideal, life and work are 
rewarding. When a career does not meet these self demands, work is a curse.

Lawrence (1980) distinguishes between an internal crisis and an external crisis. The internal crisis 
results from changes within the individual where the individual feels that he has some control over 
the changes. This type of crisis fits in with life-stage approach which suggests that at a certain 
point of life/career the individual may experience certain conflicts which prompt him to change 
careers. An external crisis results from events outside the individual that often occur without 
warning. In this case the individual feels he has no control over the events. An event of this nature 
would be for example when a person is fired from a job.

In her 1980 study, Lawrence proposed that midlife / career change is the outcome of the 
resolution of a midlife crisis. In her research, two distinct patterns of career change emerged: 
change as a result of a crisis, and planned transition. Of the ten individuals in her sample, one had 
a crisis pattern which emerged as a result of an externally created situation, one had an internal 
crisis prompted by a need to reevaluate himself and his relationship with others, and a third had 
a crisis with both internal and external qualities. In each of the three cases a personal change 
preceded the career change. However the majority of the sample had no crisis but rather planned 
transitions to new careers. The proposition that midlife career change is the outcome of the 
resolution of a midlife crisis could not be supported.

Strumpfer (1985) notes that some authors view the midcareer/midlife stage as a crisis period, due 
to the upheaval and distress involved, whilst others view the stage as a transition, emphasising that 
it bridges the gap between two life stages. The more optimistic view on the midcareer/midlife 
stage is characterised by viewing the stage as a "dangerous opportunity", which is akin to the 
Chinese way of viewing a crisis. Strumpfer (1985) believes that people are not helpless victims 
of an unavoidable series of events over which they have no control. The midlife transition can be 
viewed as one of growth and problems can be viewed as "opportunities in work clothes".

2.4.4 New midlife / midcareer trends and the implication for midcareer employees

The traditional issues of midcareer discussed above must be understood in the context of the life and work atmosphere of the 1990s. In these times, the midcareer individual is subject to an increasingly complex working environment. Inevitably the issues facing midcareer individuals in today's times will be different to those faced by midcareer individuals that lived and worked in more tranquil times (Davis & Rodela, 1990; DeVries, 1994; Elliot, 1994; Goffee & Scase, 1992; Greller & Stroh, 1995; Hall & Mirvis, 1995a, 1995b; Schein, 1995).

Some of the issues that midcareer individual of the 1990s are exposed to are as follows:

* **a change in the nature of the career contract.** The "traditional career contract", i.e. the mutual set of expectations between employee and employer, has changed as a result of the complex environment. The contemporary career is based on self-management and less commitment to one organisation. There is a move from an organisationally based career to a protean career (De Vries, 1994; Elliot, 1994; Hall & Mirvis, 1995a & b);

* **a change in the nature of career.** In the past, vertical growth, or climbing the corporate ladder was the norm. In today's environment, horizontal growth is valued, where individuals expand their range of competencies and may change careers frequently, often experiencing a few 'career cycles' within a lifetime, rather than a single lifelong career stage cycle (Goffee & Scase, 1992; Greller & Stroh, 1995; Hall & Mirvis 1995 a & b);

* **a change in the nature of workplace skills required of the midcareer individual.** In the past decade, individuals focused on acquiring a set of skills that built on each other, in order to advance along a linear career path. In today's times the individual must develop multiple skills in order to take the opportunity to change careers when necessary (Greller & Stroh, 1995; Hall & Mirvis, 1995a & b);

* **a change in the nature of survival tactics that midcareer individuals need to employ.** In the past, steady advancement, success, power and esteem in the eyes of others were valued. In today's times, continuous learning, i.e. heightened adaptability, and identity development are required to forge a successful career (Greller & Stroh, 1995; Hall & Mirvis, 1995a & b).

Chronological definitions of individuals' careers are therefore no longer as relevant as they used
to be (Hall & Mirvis, 1995a & b). Individuals may undergo a few career cycles within a lifetime instead of one lifelong career cycle. The key issue determining a stage will not be chronological age, but career age. Instead of defining an individual as midcareer because he is between 35 and 45, one would define him by career age, where for example five years in a given speciality would be regarded as mid-life for that speciality (Hall & Mirvis, 1995a & b).

Hall and Mirvis (1995a & b) believe that the traditional career contract - the set of mutual expectations between employer and employee - has changed over the last decade. The new contract reflects a move from an organizationally based career to a protean career. The protean career is based on experience, flexibility and personal development rather than secure and stable career paths (Hall & Mirvis, 1995a). This has important implications for the midcareer worker.

The contemporary high-speed work environment demands two key competencies: identity development (more complexity, self-reflection and self-learning) and heightened adaptability. The development of these skills occurs through a process of midcareer "routine-busting". This suggests a new view of career stages, in which the focus is on many cycles of learning, rather than a single lifelong cycle. In a contemporary career, an individual may go through a number of cycles of exploration, establishment, maintenance and disengagement in his work life rather than trying to prolong the maintenance stage of his career. Instead of the individual reaching a plateau during the midcareer period (a point where he has become established in a line of work and chances of upward mobility slow down or stop), the individual may periodically plateau as he passes his prime over his career age, rather than his chronological age.

Greller and Stroh (1995) confirm that the increased complexity in the workplace such as technological change and restructuring is affecting traditional career cycles, particularly of midcareer workers and beyond. They emphasise that chronological definitions of midcareer are no longer appropriate. Experience, time in a job or organisation and unique family pressures all shape the unfolding of one's career. Research indicates that the working population is becoming older and the workplace is changing due to the complex working environment. These demographic and technological changes necessitate a rethinking of the traditional models of career stages. Despite the stereotypes to the contrary, research indicates that workers at midlife are capable of changing and adjusting to changes in their environments. With a rapid change in the
environment multiple careers and skills are replacing the model of climbing a career ladder. Changes in technology necessitate new skills just to perform one’s job. A career today means a commitment to constant learning and reshaping one’s skills.

DeVries (1994) also believes that the protean career is here to stay and since people in general live much longer, it is not essential to stick to only one occupation. He too believes that the midcareer and the process of ageing may not necessarily be negative. There are constructive ways of dealing with the process. Many people find renewed fulfilment in the family. Others are able to look for new horizons and find more challenging jobs. Others are at last free to do what they have always wanted to do, but were never allowed to or did not dare to do in the past.

Elliot (1994) points out that the protean career concept gives the individual the greatest amount of responsibility in the management of his own career. The individual’s task would be to take personal responsibility for his career rather than expecting the organisation to do it. This concept gives the individual the right and the responsibility to manage his own specific midcareer needs himself without being dependant on the organisation in which he is employed.

Goffee and Scase (1992) also believe that as a result of a variety of technological, organizational and broader social change, the nature of corporate careers has changed. This restructuring process has limited the opportunities for hierarchical advancement and reduced job security. This in turn affects the attitudes and behaviour of employees in organisations. The results of their study on the private and professional lives of manager in large scale organisations indicated that as a result of the changing environment, managers have psychologically re-adjusted their work orientations by limiting their dependency on one organisation. This may mean frequent moves between organisations while for others self-employment is an option. For male managers across the range it appears that personal and family life emerged as an increasingly important source of satisfaction and personal identity.

Schein (1990a) defines the midcareer stage as a period of reassessment (although it is not clear whether it is a crisis or even a stage). He believes that the impact of changing times on midcareer is complicated by two factors. Firstly, people vary greatly as to how much they are involved in
career versus personal and family issues, and how much negative impact career problems will have. Secondly, the midcareer person is likely to be more vulnerable to organisational change. To be made redundant in midcareer permits neither the option of starting all over again in another company nor early retirement. In order to alleviate this type of problem, the individual must anticipate the possibility of being made redundant at some point and make contingency plans for this possibility. For some people, midcareer shifts will involve expensive periods of reeducation or retraining, particularly if they have found early in their career that their talents and interests are mismatched with the occupations they entered. Providing the means for reeducation and entry into new careers that are a better match is in everyone’s interest in order to maximise the productivity of society as a whole.

Davis (1990) believes that in today’s constantly changing world, the midcareer individual is not only concerned with adapting to environmental demands, but also with maintaining competency. He believes that in order to manage his midcareer transition he must learn the skills of learning, understanding, predicting, acting and controlling. He refers to workers in the midcareer age bracket that feel confused in mid-career, resulting in inaction, indecision or uncertainty. He believes that careerists, especially at the near halfway mark of life, will face serious transitions and must react or adapt to them in order to achieve a positive career continuance and avoid negative stresses. Davis refers to Schein’s midcareer stage, where the individual tends to develop a distinct occupational self-concept (a crucial part of himself that he would not give up if forced to make a choice) which enables him to answer several crucial career questions.

Williams and Fox (1995) refer to a growing concern about the future of midcareer personnel in the next century due to the probable significant restructuring of the workforce. They believe that as individuals reach the mid-career stage of their life, several factors alter their needs, values and performance. Obsolescence and career plateauing is a major concern as technology and knowledge accelerate. The social attitude to older workers, as reflected in a lack of anti-discriminatory laws for individuals aged between 40 and 70, is also a reason for concern. As a result of these factors it is not unusual to see performance evaluations dropping after age 40 (Williams & Fox, 1995). They attempt to define the characteristics of mid-career workers in an attempt to provide a basis for organisational actions toward mid-career workers. During this stage
the importance of work, family and personal issues changes. These individuals have matured psychologically and biologically and have typically reached the peak performance of their career having overall job satisfaction (Williams & Fox, 1995). Although they have a strong work orientation, they tend to start placing greater value on non-work variables, such as family and lifestyle. During this stage, midcareer workers may become aware of unachieved goals, previous mistakes and limitations of future development. This may lead to stress and frustration. For midcareer workers, both extrinsic and intrinsic rewards are important, but not necessarily in the traditional ways. Because their perspective of work, family and personal issues evolves with time, the importance of these factors may shift. Job structure and recognition may become more important to midcareer workers than pay. Pay may still be important, but secondary to organisational recognition: both work and non-work satisfaction, monetary and non-monetary rewards becomes important. Therefore organisational response to enhance intrinsic rewards would be particularly effective with midcareer workers. It is also logical that the midcareer workers pursue qualities that reflect professionalism, i.e. an identity based on skills and technical knowledge, formal education, demonstration of competency, ethical standards and a mission of serving society.

The implications of the aforementioned trends in midcareer theory for the midcareer employee can be summed up as follows. The traditional midcareer period may not be as clear cut as it was in the traditional career cycle. The individual's career age will become a more important factor for consideration than his chronological age. This may in fact solve the problem of the traditional "midcareer crisis" as individuals will develop and maintain career adaptability by adopting an approach of lifelong learning and exploring new areas of work, even while they are thriving in the present one (Hall & Mirvis, 1995b).

2.5 CHAPTER SUMMARY
This chapter presents theories of career choice and career stages, with particular reference to midlife/midcareer. The various constructs that can be matched with compatible occupations are discussed, namely, interests, self-concept, personality (personality types, values and needs) and social background. The most widely used and researched theories based on these constructs are explained. Holland's theory of personality types (1985) is discussed in detail as representative of
the field of research on the construct personality. Super's self-concept theory (1957, 1980, 1992) is discussed in detail as representative of the field of research on the construct self-concept. Roe's theory of personality development and career choice (1957, 1990) is discussed in detail as representative of the field of research on the construct needs.

Traditional theories of life/career stages are then discussed in order to provide the background for a discussion of midlife / midcareer. The models of Levinson's life stages and Supers career stages demonstrate that the adult life/career span can be divided into approximately three main stages, namely, early adulthood/establishment, middle adulthood/maintenance and late adulthood/decline. Contemporary views of life/career stages however demonstrated that the chronological age of the individual is becoming less important as individuals tend to experience a few career cycles within a life span.

The midlife / midcareer stage is then discussed in greater detail, as the study investigates midcareer employees. Traditional models of midlife / midcareer are discussed as well as current views of the midlife / midcareer and their implications for career choice and development practices.

Herewith the first aim of the literature survey, namely to discuss career choice theories and career stages with particular reference to the midlife / midcareer stages, has been achieved.

Chapter 3 discusses the career anchor concept as well as current trends in career anchor research and the implications thereof for current career choice and development practices.
Chapter 3 represents the second step in the literature survey, namely to define the career anchor concept; to describe how career anchors develop; to describe the eight categories of career anchors as well as current trends in career anchor research and the implications thereof for current career choice and development practices.

3.1 INTRODUCTION

In Chapter 2 the extensive body of research on career choice, based on the compatibility between the person and his environment, was reviewed. Constructs such as interests, personality and self-concepts were discussed. The equally voluminous body of research on career development and the influence of life/career stages on the individual's career was also reviewed. The discussion of life/career stages provided the necessary context for a discussion of the research on the midlife/midcareer stage - a stage that is particularly significant in the career cycle. Although career choice is usually related to the beginning stages of a career, research shows that career choices are also commonly made at midcareer, particularly in today's changing times, and are just as important to the individual as post-education career choices.

Although this research has provided a great deal of information on the process of career choice and development, no one theory can be considered sufficiently comprehensive to be considered a complete guide in the process of choosing and developing a career in contemporary times. As the work environment becomes increasingly complex and individuals become increasingly responsible for the management of their own careers, they need an approach that clarifies their career preferences. The career anchor concept therefore becomes especially applicable today, as more and more people are forced to make not only one career choice, but often a few career choices within a lifetime (Schein, 1996). As the lives and careers of individuals evolve, they tend to discover that one of the eight career anchor categories has certain characteristics that they would not give up if forced to make a choice. By becoming aware of their career anchor, the individual becomes able to do a better job of analysing his or her career preferences. Through this process, the individual can become more self-reliant and gain the personal control so necessary for reshaping his or her own career (Schein, 1996).
Schein's career anchor model provides a framework to supplement and integrate traditional information of career choice and development with additional factors and thereby provides a more comprehensive measurement of the compatibility of the subjective career preferences of the individual with the requirements of the occupation.

3.2 DEFINITION AND ORIGIN OF THE CONCEPT OF CAREER ANCHOR

The career anchor concept originated from several decades of research conducted by Professor Edgar H. Schein and others on how individuals define themselves in relation to their work. The concept developed from a longitudinal study of 44 alumni of a masters programme at the MIT Sloan school of management in 1961. Initial interviews were conducted in 1961, 1962 and 1963 while the respondents were still students. Follow-up interviews were conducted five and approximately ten years into their careers. The career histories of the individuals were varied, but the pattern of feelings underlying career decisions was fairly consistent. The metaphor of an anchor developed from the respondent's description of feeling pulled back to choices that felt more comfortable than alternative options. As a career evolves, a person develops a clearer self-concept. This self-insight is acquired gradually through experience in the workplace, where the individual can discover specific talents depending on opportunities that are available. The individual also becomes aware of the things he values and may be more motivated to pursue activities in those areas. He also gradually establishes his fundamental needs and motives and begins to explore how they can best be fulfilled through his career. The combination of talents, values and motives forms a self-concept or what Schein refers to as a career anchor (Schein, 1990a).

The career anchor construct differs from the traditional constructs discussed in Chapter 2 as it takes into account career preferences, the individual's own experiences, and the individual's self-perception of his talents, values and needs. Each of these factors will be discussed separately.

* Career preferences. Schein's career anchor approach can be regarded as a new approach when compared to the existing theories of career choice and development because the main focus of the theory is on career preferences as opposed to tasks, jobs and occupations (Ledvinka, 1988; Nordvink, 1991). Hall and Mirvis (1995a & b) believe that the career preference approach will
become more and more important as organisations offer less secure lifelong careers to individuals and in turn have increasingly to accommodate the diverse career needs of employees.

* **Actual experience of the individual.** As the individual acquires actual work experience, he begins to understand more precisely what he wants from his career (Schein, 1993a). It is a process based on evolution, development and discovery through actual experience (Schein, 1978).

* **The individual's self-perception of his talents, values and needs.** The individual's perception of his occupation may not coincide with organisational or external definitions of what his career is (Schein, 1978). The individual's perception may also not coincide with his actual needs, drives and talents (DeLong, 1982a & b). DeLong (1982a & b) believes that this is the reason why the career anchor concept is so powerful - self-perceptions will guide and constrain a person's future career decisions no matter how accurate or inaccurate they are. Researchers on contemporary careers believe that viewing careers from a subjective perspective will increase the predictive accuracy of career assessments (Savickas, 1992).

A career anchor may defined as "that one element in a person's self-concept that he or she will not give up, even in the face of difficult choices" (Schein, 1990a p. 18). It is a subjective self concept that consists of an integrated combination of:

* **self-perceived talents and abilities;** based on actual successes in a variety of work settings;

* **self-perceived motives and needs;** based on opportunities for self-tests and self-diagnosis in real situations and on feedback from others;

* **self-perceived attitudes and values;** based on actual encounters between self and the norms and values of the employing organisation and work setting. (Schein, 1978).

Implicit in the definition of a career anchor is the belief that each individual has a single unique factor at the top of his hierarchy that acts as an anchor - the one thing he would not give up if
forced to make a choice. Some individuals are unable to distinguish one unique career anchor, as their work may fulfill a variety of needs, values and talents. Schein (1990a), however, believes that in most cases the individual would be able to determine his dominant anchor by inventing hypothetical career options and deciding what he would not be able to give up if forced to make a choice.

The value of the career anchor construct lies in it's description of the individual's internal career. It is possible that an individual may appear to have a disjointed external career, yet may have a very clear idea of what he is achieving in terms of his internal career. The standards by which an individual measures his or her own success may also be quite different from those used by another person or by society. It is therefore likely that the subjective definition of success would reflect the individual's career anchor or internal career rather than his external career. Schein (1980a) points out that one of the major causes of career dissatisfaction is a lack of realism in the internal career and the absence of any corrective mechanisms or feedback from the employer.

The career anchor can, therefore, at least theoretically be regarded as a reliable criterion to guide career choice and development once the individual has developed sufficient working experience to develop a mature career anchor.

3.3 THE DEVELOPMENT OF CAREER ANCHORS

The career anchor is based on experience in a work setting. It is improbable that it would be established before the individual has developed sufficient work experience to provide an integrated subjective assessment of his values, needs and talents. Schein (1990a) believes that such a learning process may require up to ten years or more of actual work experience. The time period required to form a mature self-concept will vary according to the intensity, diversity and quality of the working experience and the feedback acquired while working.

The development of the vocational self-concept takes place over a series of career stages and must therefore be understood in the context of these stages. Schein's (1990a) description of career stages is based on the research of Super (1957) and is expanded on the basis of the work of Dalton et al (1977), Derr (1980), Levinson et al(1978) and on his own research (Schein, 1990a).
Schein emphasises that the development of a career anchor and the time unit of each stage varies according to the individual and the particular circumstances of his career.

During the stage of growth, fantasy and exploration, which usually takes place during childhood and early adolescence, a career has little meaning except in terms of occupational stereotypes. The individual then undergoes a period of education and training which may be very brief or very extensive (20 years or more) depending on the occupation. As the individual enters the world of work, he is required to make a major adjustment to the realities of work. Personal learning and a testing of talents, motives and values in a work context sow the seeds of an occupational self-concept or career anchor. The stage of basic training and socialisation varies in length and intensity depending on the occupation. The more responsible the occupations, the longer the period of socialisation. This period is also a major source of personal learning, as the organisation starts to make personal demands on the individual. At this stage an individual starts to determine whether he should remain in the organisation or leave. Once the employees gives membership to the organisation and is recognised as a full contributor, the career anchor clarifies further. As the individual responds to the challenges, he gains greater insight into his motives, values and talents, thus developing a clearer vocational self-concept. By the time he has gained tenure or permanent membership, he is able to determine within five or ten years whether he will have a long term future in the organisation. Once the individual has the reached the stage of midcareer crisis and reassessment, he may begin to question himself about his initial career choices and how well he has achieved his goals. As the answers to these questions become clearer, he may make a major career change, but often this change is just an external manifestation of what he has always wanted to do (Schein, 1990a). As a result of the reassessment period, the individual can often make decisions about the course of action for the rest of his life. Some choose to pursue their careers further, others choose to remain in their positions without making changes. For some, levelling off may have connotations of stagnation, whilst for others it may indicate a level of satisfaction with things the way they are. As the stage of retirement approaches, the individual begins to disengage and slow down. At the stage of retirement, the organisation no longer provides a meaningful role for the individual. The effect of this event on the individual again depends on his career anchor and his way of viewing retirement. For some it is an opportunity to start second careers and develop new interests and hobbies. For others it is a crisis resulting in
loss of psychological or physical health.

The components of the career anchor - talents, motives and values - become intertwined in the process of establishing a mature self-concept. People learn to be better at those things they value and are motivated to do and learn to value and be motivated by those things they happen to do well (Schein, 1990a). There is a difference amongst individuals as to which of the three areas of the career anchor initially dominate their self-concepts. People differ as to whether talents, motives or values initially provide the central theme to their careers. As the individual progresses through the stages of his career, the need for congruence leads people to seek consistency among the different elements of the self-concept.

Initially when individuals enter the world of work, they have ambitions, hopes and fears, but very little knowledge of their abilities. As they progress, they develop an idea of their interests, motives, values and intellectual and motor skills. They still, however, do not know how good they will be at certain kinds of work and the emotional effect it will have on them. The early years in an occupation are therefore a crucial time of learning about the occupation and about oneself in relation to the demands of the job. This process may be painful for those that realise that their ambitions are inconsistent with their work experiences. This phenomenon is known as reality shock. As the individual progresses through the career stages he has the opportunity to exercise choice and from this process learn to identify what is really important to him. Gradually dominant themes emerge - skills that an individual wants to exercise and needs or values that seek expression in the work environment. It is only when the individual is confronted with difficult choices in a working environment, that he or she begins to realise what is really important to him or her (Schein, 1990a). With further work experience and feedback, the individual acquires a more rational sense of who he or she really is. It is at this stage that the career anchor begins to function as a guidance system to the individual in career decisions and the metaphor of a feeling of "being pulled back to things they have strayed from" begins to serve as a constraint in career decisions (Schein, 1990a, p. 18).

The career anchor is therefore the self-image and remains stable once it is mature. It may change if the person obtains systematic experience and feedback to ensure that he cannot maintain an
illusion, but it will not change if constraints preventing the individual from expressing his career anchor are perceived as temporary.

Career anchors, therefore, cannot be predicted ahead of time because they are "evolutionary, and a product of a process of discovery" (Dessler, 1981, p.525). During the midcareer reassessment stage the individual is often in desperate need of a tool to assist him in assessing his progress relative to original ambitions and goals. He may come to the realisation that he is not going to realise his dreams, or having accomplished his dreams he realises that he does not want to be doing what he is doing. During this stage, he may also begin to assess how important work is in his total life. So it is at midcareer that the individual is often, for the first time, faced with difficult choices about what he wants and what he can accomplish. An awareness of his career anchors would assist such an individual in making the right choices (Dessler, 1981).

In an effort to judge the utility of the career anchor concept for individuals that are beyond the midcareer stage, Schein (1978) posed the question of whether you would find similar anchors in midlife managers as you would in senior managers? He believed (although there was only limited evidence from the original MIT panel study and two less formal studies on the older executives) that they would remain stable (Schein, 1978). Schein (1990a) maintains that although there is still insufficient evidence to prove that anchors remain stable after midcareer, there is evidence, based on fifteen of the original panellists that are now in their mid-forties, that anchors do remain stable once they are clarified. The expectation is therefore that once individuals have clarified their self images, they hold onto these insights (Schein, 1978).

Slabbert (1987) however provided evidence of a relation between career anchors and age groups amongst managers. In her sample of managers, certain career anchors were related to specific age groups. For example, the entrepreneurial career anchor was strongly related to managers aged 30 to 34 years and the security (geographical location) anchor was related to managers aged 45 to 49 years.

Schreuder (1989) also came to the general conclusion, based on previous research, that although an individual has a dominant anchor that will probably not change once it is discovered, different
career anchors may be associated with different life stages.

Many researchers have recommended that future research be aimed at establishing the relation between career anchors and career stages. Obviously, this type of research study is difficult to operationalise as it is longitudinal by design and takes decades to complete. The only longitudinal research data available is that of Schein's original study.

3.4 TYPES OF CAREER ANCHORS

Based on the original longitudinal study and subsequent career history interviews, eight career anchor categories have been identified (Schein, 1990a). Schein (1990a) states that most people associate with one of these eight career anchors. If it appears that a new or different anchor emerges, it can usually be established that this anchor is a dimension of one of the eight established anchors (Schein, 1990a). Needs such as power, creativity and variety arise in research on career anchors; however, these needs can be expressed in different ways in a variety of anchors. For example, power can be expressed by a technical person through knowledge and skill. It can be expressed by an entrepreneurial person through building an organisation. Power could also be expressed by a general manager through achieving high rank. Research to date has not established any new anchors (Schein, 1990b). The eight basic categories of career anchors (Schein, 1990a), as well as the more contemporary trends in each of these anchors (Schein, 1996) are now described.

3.4.1 Technical / Functional Competence

For some people the satisfaction of being an expert in a particular field is more important than anything else. If they moved into other fields of work they would probably experience less satisfaction. They feel pulled back to their specific area of competence. Their identity is built around the content of their work. They are therefore committed to being a specialist rather than climbing the organisational ladder. They could be motivated to seek promotional opportunities if they could be guaranteed of remaining in their field of expertise. Their career anchor is built around their area of specialisation. The type of work they need is work that will be challenging, work that will test their abilities and skills. Their primary concern is the content of the work and the ability to exercise their talents in this area of specialisation. They will engage in administrative
or managerial work if it is required, but regard this as necessary rather than intrinsically enjoyable. A challenging career path is difficult for the individual who has this career anchor, as promotion into supervisory or managerial posts might entail a movement away from the area of specialisation. Becoming a teacher, mentor or consultant are some ways of expanding the individual's career options. Technical / functional people require their salary levels to be commensurate with their level of education and work experience, regardless of actual accomplishments. They may also be more oriented to absolute pay levels rather than special incentives - this allows them to remain mobile and avoid getting caught in a trap of unchallenging work. This type of individual would prefer a parallel type of professional career path similar to the typical managerial career path. They would resent moving out of their technical area into managerial ranks for the purposes of furthering their career. They do not necessarily have to be acknowledged in terms of rank (Schein, 1990a).

Schein (1996) has recently discussed new trends in the technical/functional competence anchor and the implication for career choice and development. This group is becoming aware of the increasing importance of knowledge and skill, although in the past this anchor has been less valued. Climbing the corporate ladder and advancing in terms of managerial responsibility has been considered more important. Individuals with this anchor also have to live with the continual threat of becoming technologically obsolete due to the rapidly changing environment. In order to prevent obsolescence, continual updating and relearning is required. There may be an increase in the process of replacing obsolete people with younger talent. The burden of relearning will then fall increasingly on the individual and this may make a technical competence career anchor not feasible from a financial point of view. Schein (1996) believes that plans to support the knowledge-based organisation may develop, but the world of work is still a long way from providing technical individuals with a way to survive in a rapidly changing technological environment.

3.4.2 General managerial competence
The managerially anchored individual has an interest in general management. He/she differs from the technically competent anchored individual in that he/she places value on the skill of general management as an end in itself, as opposed to a technical individual who would regard it as a
necessary, but unfulfilling part of the job. He is interested in making or coordinating major policy decisions, rather than focusing on specialist information. An individual with this career anchor values increased responsibility through advancement within the organisation. He enjoys practising his leadership skills and would be searching for a sufficiently senior level in the organisation to be in a position to exercise these skills. High income is a priority for managerially anchored individual, as recognition for his contribution to the organisation and as an indication of his seniority. The skills required of a managerially anchored individual can be divided into three main areas. The first is analytical competence, which involves the ability to solve problems in the context of uncertainty and incomplete information. An individual with this career anchor would be able to reframe problems into a format where decisions can be made.

The second essential skill is one of interpersonal competence, which involves the ability to influence and control people at all levels. The basic skill of communication is fundamental to achieving this goal. Hand in hand with communication is the ability to motivate people to achieve goals. The managerially competent individual is able to formulate clear goals, communicate them clearly and motivate people to implement them. Once this task has been achieved, the manager would monitor progress and institute corrective action if necessary. In general, an individual with this anchor has the ability to bring the right people together to work on a problem, and create a climate conducive to information exchange, which in turn will lead to sound decision making.

The third essential skill for the managerially competent individual is emotional competence. An individual with this anchor is able to make decisions without guilt, even if these decisions have devastating consequences for others. He must be able to accept the ultimate responsibility for the outcome of a plan of action, even if he had no control over its implementation. He must also be able to absorb the emotional strain of responsibility, interpersonal conflict and uncertainty. In general an emotionally competent person will find the challenges of managing others exciting and motivating, rather than exhausting and stress provoking. The type of work that an individual with this anchor will seek is one with high levels of responsibility and varied integrated content. He will value a highly paid position as he judges himself by his income levels. He will place emphasis on short term rewards such as bonuses for reaching goals. He will value good retirement benefits as this type of individual is often not very mobile due to commitment to a specific organisation.
Schein (1996) believes that as work becomes more technically complex, there is a need for greater managerial competence at lower and lower levels. In today’s organisations, layers of management are being cut out to provide flatter organisations that are based on project teams. These teams are often self-managed, leading to less centralised control. The skills of general management are therefore required at lower levels. Managers of teams and projects will have to have general management skills, as well as their technical understanding of the tasks. The status of general management is therefore likely to become much more variable. The skill of general management may therefore cease to be a position, and will become more a process skill that will be needed in all kinds of positions. Everyone will be expected to become competent at management to a greater or lesser extent. The implications of this for the individual is that the individual with a general management anchor will be forced to examine once again what he or she is really after - power, responsibility, accomplishment of a task, ability to build and manage a team or a combination of all of these.

3.4.3 Autonomy / Independence
An individual with this anchor avoids being subjected to other people’s norms. He values freedom to do things his own way above all. Self-reliance and independent judgement are hallmarks of his character. He finds organisational life intrusive and restricting and seeks out employment situations where he can be master of his own fate. This type of individual would prefer work that has clearly defined goals, but where the method of accomplishment is left up to him. Work within his own area of expertise is preferred over organisational team work or climbing the corporate ladder. The autonomy anchored person prefers pay being based on merit. This includes compensation for performance by means of bonuses and other benefits that have no strings attached. An individual with this anchor would prefer recognition in the form of awards, letters of commendation and other portable forms of recognition to promotion and pay increases (Schein, 1990a).

In today's increasingly complex working environment, individuals that associate with autonomy will find the changing environment an easier place to negotiate than individuals with other anchors.
(Schein, 1996). The self-reliance that is needed to survive in today's environment is already part of the psychological make-up of the autonomy anchored individual. This group of people may in fact become role models for future careerists. Schein (1996) also believes that, inevitably, as people get older their need for autonomy increases, leading to a natural desire to become less dependent on any particular organisation or job. One factor that has not yet been established is whether the need or ability to be autonomous is based on a position of established security. For example an employee in midcareer may associate with the anchor of autonomy, but will continue to seek secure positions until retirement as he may not have sufficient funds to risk other career choices.

3.4.4 Security / Stability

The overriding need of an individual with a security anchor is the need to feel safe and secure within an organisation. It is for this reason that individuals with this anchor choose well established and reliable organisations that offer long-term security. The government and civil service, schools and universities are examples of this type of organisation. These individuals are prepared to relinquish the planning of their careers to the management hierarchy in exchange for the prospect of a secure future. Individuals with this career anchor are often perceived as lacking in ambition. This may not necessarily be true. Individuals that are talented may work their way into high ranking positions within such an organisation. Less talented individuals may achieve middle management positions where they make full use of their abilities and talents. Most individuals who have an overriding need for stability are more concerned with the context they work in than the content of the work itself. They focus more on the extrinsic sources of job satisfaction such as pay, benefits and working conditions than the intrinsic sources of job satisfaction such as the challenge of the work itself. This type of individual prefers their pay to be based on salary scales of steadily increasing increments, awarded on the basis of duration of service. Obtaining formal tenure in an organisation would be a major source of security for an individual with this anchor. The stability anchored individual offers loyal and steady performance, as he believes this contributes to the organisation's performance (Schein, 1990a).

Schein (1996) believes that individuals that associate with this anchor may experience the most severe problems in today's complex working environment. As organisations tend to offer the
opportunity to learn and gain experience rather than a secure lifelong career in one organisation, the individual is forced to rely on himself as opposed to depending on the organisation. The group of individuals who associate with security tend to rely on the organisation to offer them a secure livelihood. As organisations are no longer offering this kind of guarantee, the security anchored individual may not be able to find a suitable person-environment fit in the existing environment. In order to survive, individuals who associate with the security anchor may have to find new ways of thinking about themselves.

3.4.5 Entrepreneurial creativity

This career anchor is characterised by an overriding need to create or exercise creativity. The individual with an entrepreneurial anchor will continually seek to establish new businesses, new organisations and/or develop new products and services. It is important to the entrepreneur that his new creations must be identified as his own personal efforts. The entrepreneurial tendency often emerges early on in the individual's life, where he may have established a pattern of initiating projects that earn money and recognition. This tendency is evident in families, where some or all of the members of the family have been successful in entrepreneurial activities. In order to succeed in entrepreneurial pursuits, the individual must possess a high level of motivation and talent. An individual with this type of orientation has a high need to prove that he can create businesses, and is ready to sacrifice autonomy and stability in the early stages of a business venture in order to achieve this goal. Ownership of an enterprise is more important to this type of person than drawing large sums of money from the business. He would always prefer to retain the controlling portion of a business in order to retain the opportunity of making the decisions that count. The entrepreneurially anchored individual will always strive for the power and autonomy to move into key positions where creativity can be exercised. Acknowledgement for building a noteworthy enterprise or large fortune are the main forms of recognition that this type of individual seeks (Schein, 1990a).

As the working environment becomes more complex, the opportunities for individuals with this anchor increase (Schein, 1996). Individuals who associate with this type of anchor have a desire to create and develop their own business, and as the need for new products and services increases, so does the opportunities for the entrepreneurially anchored individual. The core of this anchor
is creativity and this is a trait that is needed and valued in the increasingly complex working environment of the 1990s.

3.4.6 Sense of service, dedication to a cause

The service anchored individual has an overriding need to express his values in the context of his work. The expression of values in the work context is of greater importance than utilising his talents. This type of individual has a great need to improve the world and assist people through the framework of his belief systems. Individuals with this anchor often enter the ministry or helping professions such as medicine, psychology and social work. Work of this nature gives the individual the opportunity to express his values by helping the people around him. It should be noted, however, that not all individuals that work in helping professions have service as an anchor, and conversely individuals with a service anchor are not limited to the helping professions.

Remuneration for work is not a key issue for the service anchored individual who will be satisfied with a fair salary commensurate with the work. He will appreciate promotion to more senior levels only if the promotion provides him with more scope to express his values. The most appreciated form of recognition that this type of individual would enjoy is a feeling that his values are shared by his superiors and his peers (Schein, 1990a).

Schein (1996) believes that the number of people with this anchor is growing, as people increasingly feel the need to do something meaningful with their lives. As the world becomes more and more aware of social problems, the feeling of social responsibility increases. For example, a combination of the service and the entrepreneurial anchor is creating new organisations that manage environmental problems more efficiently. These type of organisations may provide employment for those that have become victims of technological advancement as well as some of the most talented of the new generations.

3.4.7 Pure challenge

An individual with this type of anchor values the challenge of his work above all else. He consistently searches for opportunities for self tests in order to prove to himself that he can overcome impossible obstacles. His goal is to solve unsolvable problems and win against all odds. To him life and work is a competition in which winning means everything. This type of motivation
may lead him to seek increasingly difficult assignments to challenge both himself and the people around him. He is highly motivated to develop himself even at the expense of those around him. As most other people do not have the same level of motivation and aspirations, the presence of an individual with this anchor may make those around him feel uncomfortable. If a challenge anchored individual believes that his career holds no competitive opportunities, he may become demotivated (Schein, 1990a).

Schein (1996) believes that the group of individuals who associate with this anchor is growing. It is not clear, however, whether the size of this group is growing due to the increasing challenges that individuals have to face in today's changing environment or whether they are entering the workforce with this predisposition. Either way, the group of individuals who have a desire to overcome impossible odds and solve unsolved problems will be very necessary in the challenging working environment of the 1990s.

3.4.8 Lifestyle

This anchor may appear as a contradiction in terms. If an individual values lifestyle above all else, it is logical to assume that his career may not be of value to him. This is not necessarily true - more and more people are searching for meaningful careers that can accommodate other lifestyle factors. The overriding need of an individual with this type of anchor is flexibility. This type of individual will be most comfortable in an organisation that respects personal and family concerns. An organisation that will be attractive to this individual will offer conditions that allow for family and other commitments, such as sabbatical and day-care options. This anchor was originally observed in women graduates of MIT, but has recently become increasingly present in male graduates (particularly in management and consulting). This may be due to changing trends in society and the increase of dual career families (Schein, 1992). Unwillingness to move geographically is also a new trend that has emerged recently (Schein, 1992). This tendency indicates an unwillingness of individuals to substitute career advancement for a balance between personal, family and career aspects of life.

An emerging trend in career anchor research is an increasing incidence of lifestyle integration anchored people (Schein, 1992, 1996). This anchor often arises in dual career families where
factors other than pure career concerns are taken into consideration. Individuals with this anchor seek situations that provide integration of work life, family situations and personal growth. They tend to value job sharing opportunities, part-time work and other such modifications over a nine to five job (Schein, 1996). As the occupational structure changes to a different concept of the employment contract, i.e. one where the organisation owes less and less to the individual; the skills one possesses are regarded as more important than seniority and loyalty. This gives individuals greater mobility and autonomy. As a result of changes in the economy, both the organisation and the individuals are looking after themselves. Organisations are becoming less paternalistic and individuals are becoming more self-reliant. This trend was predicted by Bailyn as far back as 1977 when she addressed the specific problem of midcareer tensions in a study of male graduates from MIT that were in technical careers. She examined the strength of each respondent's work orientation and the relation between their work involvement and the accommodation of their families' needs. The findings produced a dilemma. In order to function effectively as a professional, a high degree of involvement in work seemed to be required. However an individual's general well being cannot be based only on work, particularly in the middle years. Relations with the family must also be taken into account. Bailyn suggested that in certain cases individuals could accommodate their family life without their professional performance being adversely affected. The lifestyle integration anchor had not been included as a career anchor at that stage, but she did predict quite accurately that the changing environment would result in the anchor becoming more prevalent in the years ahead.

3.5 GENERAL TRENDS IN CAREER ANCHOR RESEARCH AND THE IMPLICATIONS FOR CURRENT CAREER CHOICE AND DEVELOPMENT PRACTICE

In general, most people tend to develop a dominant career anchor on one of the two ends of two sets of continua (Schein, 1992). The first is security versus autonomy and the second is technical competence versus managerial competence.

The balance between security and autonomy is regarded as one of the most fundamental issues in career anchor research (Schein, 1992). For most people one or other end of the continuum develops into a career anchor. Those individuals that have security as an anchor are less
concerned with the content of their work and place more value on "golden handcuffs" - the benefits that the job offers. Conversely, individuals with autonomy as an anchor are more concerned with maintaining control over their worklife and place less emphasis on rank and benefits (Schein, 1992).

Schein (1996) confirms that these two categories (security and autonomy) have shown a visible shift in structure and content. Individuals with the security / stability anchor are experiencing the most severe problems in the increasingly complex environment. They can no longer expect the security and stability of a guaranteed job. All that they are likely to derive from the organisation is the opportunity to learn and gain experience. These individuals, who have always placed emphasis on finding a good employer and staying with that employer for their entire careers, have to change. Schein (1996) believes that the future of the security anchored employee becomes more uncertain as the organisation offers less and less security. On the other hand, autonomy anchored individuals will find the complex occupational world easier to manage. The individual with this anchor is self-reliant, which is one of the most important psychological traits that organisations require. They are in general, naturally motivated to reduce their dependence on any one organisation or job and are therefore well equipped to survive in the unpredictable occupational environment. Schein (1996) questions whether the ability to be autonomous depends on a basic level of security, i.e. Does the individual develop an autonomy anchor only once he can afford to, or will it emerge in the individual under any circumstance? Schein believes that in some circumstances, e.g. midcareer, an employee who does not have a secure financial position may seek security even if his anchor is autonomy. Those individuals who have already built autonomous careers by midcareer will be in a position to continue for the balance of their careers whilst those who have reached midcareer in a secure job may be far more vulnerable to changes in the work force.

The second continuum is technical competence/managerial competence. This relates to the tendency to limit a speciality to a specific field as opposed to broadening skills with the ultimate goal of moving into general management and concurrently exercising fewer technical skills. Technical skills will lead to an individual taking on challenges within his skill area (managerial and administrative responsibilities are acceptable if they are in that skill area). In general management
the main goal is to rise to a level in the organisation where the individual will personally identify with the success of the organisation. Most individuals tend towards one or other of these opposing anchors. These two categories of career anchors have also shown a shift in structure (Schein, 1996). Employees with the technical competence anchor are becoming aware of their increasing value of their knowledge and skill. This is a change from previous decades where technical competence was not valued to the same extent. In the past, most employees felt pressured to take on managerial roles in order to get ahead and gain bigger rewards. Now the world values experts in specific functions, particularly as technological complexity increases. Although this change in attitude is very advantageous to the technically anchored employee, he is still under continual threat of technological obsolescence. As it is not clear whether organisations will guarantee continued education and retraining, technical experts may become obsolete more rapidly. This means that the technically anchored employee is under constant pressure to update and relearn his skills in an environment that may not support this process. Schein (1996) questions whether these employees will have to budget for their own learning or will organisations share the responsibility with them. A failure to remain up to date may lead to replacing obsolete employees with younger talent. As the organisation of the future is likely to be knowledge based, it is becoming important to work out how the bearers of this knowledge will be accommodated.

On the other end of the continuum, a managerially anchored employee has a very different psychological makeup to a technically anchored employee. The managerially anchored employee has the emotional makeup to make decisions based on incomplete information which are likely to have far reaching consequences. He must also have the interpersonal skills to cope with a competitive and political environment, as well as analytical and financial skills required to make sound decisions (Schein, 1996). The need for individuals with this anchor is increasing, as the work environment becomes more complex. As organisations flatten and teams of employees rather than hierarchical levels of management develop, more managers are required to manage these teams, at lower levels of the organisation. As managerial skills are required at lower levels of the organisational hierarchy, the status of general management may vary from position to position. General management may therefore cease to be a position and may be regarded as a process such as leadership. In fact this skill may be required from every member of the group.
rather than a single individual. Therefore the individual with this anchor may be forced to review his needs, talents and values and to evaluate what he gets from the job (Schein, 1996).

In general the changes in the working environment should lead to the emergence of new career anchors that reflect a higher level of emphasis on technical competence and less emphasis on managerial competence, as well as an increase in the occurrence of the autonomy anchor and less emphasis on the security anchor.

Another category that has shown an obvious change in the 1990's is the lifestyle career anchor. Once again, as the commitment of the organisation to the employee lessons, individuals become more self-reliant. They have begun to demand more than a nine to five job and demand support systems such as child care, job sharing and part-time work (Schein, 1996).

Schein (1996) emphasises that although it is difficult to accurately assess future trends in career anchors, he can predict with certainty that careers in the future will most certainly be based on self reliance and learning and that career anchors will reflect this trend.

3.6 CHAPTER SUMMARY
This chapter presented Schein's career anchor model (1990a) by defining a career anchor, describing how career anchors develop, describing the different types of career anchors as well as current trends in career anchor research and their implications for career choice and career development practices. Herewith the second aim of the literature survey, has been achieved.

Chapter 4 discusses aspects of career anchor theory such as career anchors at midcareer, the relation between career anchors and occupational types, different hierarchical levels and other constructs such as needs, values and self-concepts. Job satisfaction is defined and the relation between career anchors and job satisfaction, person-environment fit and level in the organisational hierarchy will be discussed.
Chapter 4 addresses the third aim of the literature survey, namely: to clarify the relation between career anchors and midcareer; career anchors and related constructs such as occupational types, different hierarchical levels, needs, values and self-concept; to define job satisfaction and to describe the relation between career anchors and job satisfaction, person-environment fit and level in the organisational hierarchy; and to discuss the implications of the relation between career anchors and these related aspects for current career choice and development practices.

4.1 INTRODUCTION

Since the inception of Schein's longitudinal study, research on career anchors has been conducted in various ways by Schein, his colleagues and students, and other researchers internationally and in South Africa. Theoretical research on career anchors that is relevant to this study can be divided into two approaches:

(i) research that demonstrates the relation between career anchor theory and other career choice and development theory (Nordvik, 1991; Super, 1992).

(ii) current trends in career anchor research (Schein, 1992, 1993b).

In addition to theoretical research, many empirical studies have been conducted. Relevant empirical research into career anchors can be divided into three main areas:

(i) research aimed at identifying the dominant career anchor in specific occupational groups in order to provide evidence of a significant relation between career anchors and specific occupational groups (Bailyn, 1982; Burke, 1983; De Long, 1982b, 1984; Derr, 1980; Erwee, 1990; Hall & Thomas, 1979; Kaplan, 1990; Schein 1980a; Schreuder, 1989; Slabbert, 1987; Van Vuuren, 1989);

(ii) research aimed at furnishing evidence of the relation between career anchors and different levels of the organisational hierarchy (different management levels) (Slabbert, 1987; Schreuder, 1989);

(iii) research aimed at establishing the relation between career anchors and specific outcomes such as quality of worklife or job satisfaction. Research of this nature can be further subdivided
into two different approaches. The first is research aimed at establishing whether individuals with a person-environment fit defined according to career anchor theory, experience a higher level of a specific outcome such as job satisfaction or quality of work life, than individuals with no such fit (Laher, 1982; Schreuder, 1989). The second is research aimed at determining a direct relationship between career anchors and specific outcomes, such as job satisfaction (Eastwood 1980, Kaplan, 1990).

In this chapter, career anchors and midcareer will be discussed as well as the relation between career anchors and other related aspects. Job satisfaction will be defined and the relation between career anchors and job satisfaction will be discussed.

4.2 CAREER ANCHORS AND THE MIDLATER STAGE
The midcareer stage is a realistic opportunity that the individual has to assess his career anchor more accurately. In fact, Schein (1978) lists the first specific task of the midcareer crisis stage (age 35 - 45) as "become aware of one's career anchor - one's talents, motives, and values" (Schein, 1978, p. 43). De Long (1982a & b) reinforces the importance of discovering one's own career anchor at this stage by emphasising that the problems of mid and late career are much more likely to be severe if the individual does not have this knowledge.

From the internal career perspective, by midcareer the individual has accumulated sufficient working experience and has developed sufficient insight based on this experience to have integrated his needs, values and talents into an identifiable career anchor (Schein, 1990a). From the external career perspective, this stage can often precipitate difficult career choices that have lasting consequences for the balance of the individual's career. These changes may be voluntary, as a result of greater insight and self-understanding, clearer conceptualisation of values or changing needs and new opportunities (Isaacson, 1985), or involuntary, a result of technological development or of the change in the traditional concept of one career in one lifetime to the more flexible contemporary career based on self-management of many careers in a lifetime (Hall & Mirvis, 1995a; Isaacson, 1985). In both cases, self-knowledge, in the form of understanding one's needs, values and talents, will assist as a guide and constraint in making the right choices (Schein, 1990a). In terms of Schein's career anchor theory, the midcareer stage is theoretically the pivotal
point in an individual's life and career cycle, the point at which he has the tools to create a balance between his internal and external career. The demands of the external career, such as promotion, transfers, etc, and the development of the internal career, consolidation of needs, values and attitudes, coincide at this stage to provide the individual with the wherewithal to make the right career choice at the right time.

Some research on career anchors during midcareer indicates that the process of making a midcareer change can be difficult. In his study of naval officers, Derr (1980) raised the concept of career patterning - a process of the career anchor becoming more definite over time. He suggested that the more definite the anchor, the more difficult the midlife crisis is likely to be. He believes that there may be an optimal level of pattern formation that allows for wholeness and identity but permits flexibility. This line of reasoning is confirmed by Hall and Mirvis (1995b) who believe that established career patterns are difficult to break, especially at midcareer.

Schein (1992) believes that a change of direction at midcareer is often a natural event. He believes that everyone has a career anchor, but in many occupations there is not enough flexibility to express it. People who make dramatic midlife changes in external careers are often trying to actualise what their anchors were all along. They often express the sentiment "Finally I am doing more of what I really want to do with my life". Bailyn (1980) concluded, as a result of her research, that a career path that is slower and less demanding in the early years is more likely to be followed by crisis-free midcareer years. Individuals who have followed a traditional career path may be in higher organisational positions than those individuals with a more gradually rising career path, but despite this advantage they may be more prone to the crisis characteristics of the midcareer stage. Hansson (1993) proposed that individuals can have significantly different competencies, values and attitudes, but only after spending time in the workplace does a person coalesce these experiences into career anchors. He hypothesised that these orientations are altered by forces beyond the workplace - work, family conflict, number of dependants and education. With familial responsibilities diminishing, women in the middle years may be given the opportunity to express their true occupational self. Contrary to expectations, no significant differences were found in career orientations of women under or over forty. This research indicates that by midcareer, most individuals have established their vocational self-concepts and are aware of their
career anchors. For some individuals who have had slower earlier careers due to family commitments or who have been stuck in careers that they have not really enjoyed, the midcareer years are the first real opportunity for them to achieve true expression of their vocational self-concept.

Although research on how career anchors influence career choice at midcareer is somewhat contradictory, there is a clear indication that by the midcareer stage, the individual will have developed a career anchor that will probably remain stable for the balance of the lifecycle. There are however no theoretical or empirical research studies that provide a more precise definition of the point at which a career anchor becomes a reliable guide for career decisions (although most studies on career anchors are based on individuals with at least five to ten years working experience). Derr (1980) recommends further research on the gradual patterning and ultimate definition of the career anchor. This would shed light on the point at which the individual's needs, values, attitudes and abilities become stable and begin to act as a guide for life and career decisions. In general, more longitudinal research on career anchors throughout the life cycle would have to be conducted to establish more precisely the relation between the career anchor and the midcareer stage of the career.

4.3 CAREER ANCHORS AND OTHER RELATED CONSTRUCTS

The relation between career anchors and other related constructs will be discussed under the following headings: occupational type, different hierarchical level and other constructs such as personality, needs, values and self-concept.

4.3.1 Relation between career anchors and occupational types

Schein (1992) reports that whilst general trends are developing in careers and career anchors, such as a general increase in the prevalence of technical competence and lifestyle integration anchors, research has also indicated that there is a more direct relation between the eight career anchors and a variety of occupational groups, i.e. there is a tendency for certain career anchors to be the dominant career anchors of individuals in specific occupational groups (Schein, 1990a).

De Long (1984) compared the career anchors of rural and urban educators. He assumed that there
would be a significant difference between the career anchors of rural and urban educators. The results did not however demonstrate this. In fact both groups had very strong similarities in career anchors. Two distinct groups with different anchors did however emerge. One group was managerially and autonomy oriented and the second group was security and technically oriented.

The study of career anchors of selected occupational groups (managers, functional, alumni, alumnae and consultants) showed a great deal of variability, although there were also biases that reflected the career path. For example, in the group that had reached general management positions, managerial anchors dominated (Schein, 1987). There were however also quite large groups that had a technical anchor (Schein, 1987). Schein (1987) hypothesised that these people were probably unhappy in their jobs or would not be performing their jobs properly. The results also indicated that the functional group had a higher percentage of people anchored in technical and relatively few in managerial. The autonomy anchor was also relatively prominent among the management consultants.

Burke (1983) investigated the career anchors of type A managers in the early stages of their careers. He found a positive correlation between type A behaviour and the anchors managerial, identity/status, variety and creativity. The type A scale was negatively related to the technical career anchor.

Derr (1980) conducted a study of US naval officers in five different communities. He found that the officers had mainly managerial and technical anchors with the distribution varying by community. In general, most naval officers fell into the technical category. The study also uncovered an additional category of career anchor type. Derr named this career anchor the warrior, and described an individual of this type as attracted to high adventure, lots of action and risk.

The results obtained by Webb (1992), who compared the career anchors of managers and consultants, confirmed previous research findings of a significant relation between career anchors and different occupational groups. She found that consultants are more likely to have technical competence, service and autonomy as career anchors, whilst managers are more likely to have
managerial competence and security as anchors.

All these results provide evidence of a significant relation between career anchor and occupational type. In most cases research in a South African context also reflects this relation.

Slabbert (1987) studied the career anchors of MBA/MBL graduates and found that various occupational groups differed in the strength of association with particular career anchors. Most respondents associated with managerial competence as their dominant anchor. The career anchor with the lowest mean was technical competence, indicating that the individuals in the sample are less interested in maintaining their involvement with their area of technical expertise than they are in management. Significant differences did exist between the career anchors of different occupational groups, e.g. human scientists tended to have service and autonomy as career anchors, whereas educationalists associated with security.

Erwee (1990) examined the career anchors of business and professional women in three occupational groups: personnel specialists, executive secretaries/administrative assistants, and managers. Service was the most common dominant career anchor among the total sample. Personnel specialists had service, variety and security as dominant career anchors. Executive secretaries had even higher scores on security than personnel specialists. Managers tended to have relatively lower scores on technical competence, security and service.

Schreuder (1989) examined the relation between career anchors, job perception and quality of worklife on a sample of individuals at different hierarchical levels (top, middle and non managerial) at various organisations. He too found a significant relation between career anchors and occupational types. In this study, occupational types were distinguished on the basis of the individual's perception of his job, rather than his actual job.

Van Vuuren et al, (1989) measured the career anchors of a group of accountants and found the most prominent career anchor to be managerial competence.

Kaplan (1990) conducted a study on professionals divided into fourteen categories - accountants,
architects, attorneys, dentists, dieticians, medical doctors, engineers, nurses, pharmacists, physiotherapists, psychologists, radiographers, social workers and veterinarians. He did not employ the same methodology as previous studies - identifying a single dominant career anchor as the highest scoring anchor out of the nine measured by the Career Orientations Inventory, for each occupational category. He expressed reservations about this approach based on the rationale that if the questionnaire consists of nine independent scales, Schein's technique cannot be used accurately in the absence of normative data. In his study, he suggested a partial solution by comparing the anchors between each group and then sketching a relative profile of the importance of each value for each profession. This resulted in a hierarchy of orientations, similar to the technique used by Holland (1985) to identify vocational personalities. The professional groups then provide their own normative data, with the other professions providing points of reference for each individual professional group. Kaplan (1990) believes that whilst this method does not provide the clear-cut answers that Schein's does, it can be treated with more confidence. By making use of this technique, he confirmed previous research trends - different professional groups have different career anchor profiles and therefore associate with different career anchors. Examples of these associations are as follows. Accountants score highly on challenge, entrepreneurship and managerial competence, and tend to place a low value on lifestyle, service and technical competence. Architects score highly on entrepreneurship, autonomy and managerial competence and low on security. Only dentists emerged as possessing one dominant career anchor, that of autonomy/independence, as opposed to a hierarchy of orientations.

Webb (1992), in a study of managers and consultants, confirmed Kaplan's reservations about the feasibility of establishing a single dominant career anchor for each occupational category. The results of her study indicated that it is difficult to determine one dominant career anchor for an individual. She found that multiple anchors exist for twice as many consultants as managers.

4.3.2 Relation between career anchors and different hierarchical levels
Bailyn (1982) conducted a study on MIT graduates of classes of 1951, 1955, and 1959. The graduates were from the schools of Engineering, Science, Management, Architecture, Humanities and Social Science. The occupations of the sample at the time of the study were either engineering based or scientific/professional. The results indicated that despite similar early career interests and
experiences, at midcareer the work orientations of individuals with technically-based careers take a number of different forms. The bulk of the group were performing technical jobs, but a sizable number had moved into more business-oriented careers - consultants, managers, or entrepreneurs. Some individuals had concentrated their lives outside work altogether, although they had been technically trained. Those individuals in higher organisational positions were more positive about their work than those in the lower positions. Bailyn concluded that differences in organisational position are associated with very different career and life orientations at midcareer. The modal orientation of those with low organisational positions was not toward work, but toward other aspects of their lives - family, community or avocational concerns.

In South Africa, Slabbert (1987) found that respondents in top management were closely associated with autonomy. The respondents in senior management associated closely with security and service anchors. The middle managers associated more closely with technical competence and occupational identity. Schreuder (1989) found that respondents in top/middle management as well as those in non-managerial positions associated with security.

4.3.3 Relation between career anchor and personality, needs, values and self-concept

In Chapter 2, constructs used in career choice and development theory were discussed. The relation between these constructs and the career anchor construct will now be discussed in order to demonstrate the origin of the career anchor construct and indicate how and where the career anchor theory fits into the general body of research on career choice and development.

The theories of Holland (1985) and Schein (1990a) can be compared as they are based on similar psychological principles - that people search for environments/careers that will allow them to exercise their abilities, express their values and take on agreeable roles (Holland, 1985; Nordvik, 1991; Schein, 1990a). Holland's theory is based on the personality construct, whilst Schein's theory is based on the career anchor construct. Schein (1980b) believes that the strength of Holland's theory lies in identifying specific measurable traits and occupational environments, which will allow vocational counsellors to improve the occupational choice process.

Schreuder (1989) refers to a study conducted by Hendriksz (1985) which provides a basis of
comparison between Schein's career anchors and Holland's personality types and the type of occupations that correspond to these types. The comparisons are presented in Table 4.1.

Table 4.1: The relation between career anchor, personality type and occupational type

<table>
<thead>
<tr>
<th>Career anchor</th>
<th>Personality type</th>
<th>Occupational type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managerial competence</td>
<td>Social</td>
<td>theatre manager, community worker, sociologist, teacher</td>
</tr>
<tr>
<td>Creativity</td>
<td>Artistic</td>
<td>designer, language teacher, dramatist, musician etc</td>
</tr>
<tr>
<td>Technical competence</td>
<td>Realistic</td>
<td>tradesman, tailor, farmer, builder, etc</td>
</tr>
<tr>
<td>Security</td>
<td>Conventional</td>
<td>typist, telephonist, timekeeper, filing clerk, etc</td>
</tr>
<tr>
<td>Autonomy</td>
<td>Investigative</td>
<td>estate agent, advocate, banker, market analyst, etc</td>
</tr>
</tbody>
</table>

Nordvik (1991) compares the theories of Holland and Schein as they are based on similar psychological variables. Both theories confirm the role of experience in the development of the self-concept. Nordvik however distinguishes between them on the basis of the differing research procedures and assessment methods used. Holland's theory focuses on activity content (the person is required to list a number of tasks, jobs and occupations and asked what he would like to do or can do) whilst Schein's method focuses on career goals (what the person wants to obtain or retain). Nordvik (1991) reasoned that vocational personalities and career anchors must therefore be regarded as distinct concepts because the one deals with preferred tasks, whereas the other deals with career goals. Nordvik (1991) conducted a study to investigate if the two concepts led to different conclusions. The main result that was obtained was that the two concepts are not highly related. A person's career anchor cannot be derived from an assessment of their vocational personality and vice versa. The conclusion was that it is difficult to find a common taxonomic system for constructs such as those used by Holland and Schein (Nordvik, 1991).

Research on needs and values is of direct relevance to career anchors as the career anchor
construct consists of needs and values. The needs theories have provided a useful set of categories for analysing human motivation and have drawn attention to the fact that needs may be hierarchically arranged (Schein, 1980a). The limitations of the theory are that most of them are too general to implement in practice and have not been sufficiently linked to models of adult development - what may have been a paramount need at one stage in a person's life may change completely at another stage (Schein, 1980a). Research on values has indicated that this construct is both measurable and important to measure as values are related to decision making and satisfaction (England, 1978). There is however some confusion about the origin of values, the quantity of values and the relationship of values and needs - different authors use the terms to convey different ideas (Krau, 1987; Macnab & Fitzsimmons, 1987; Super, 1973; Zytowski, 1994).

The career anchor model incorporates both needs and values as integral aspects of the occupational self-concept. However according to the results of Schein's original study in the early 60s, needs and values alone are not sufficiently reliable predictors of subsequent career choice (Schein, 1980a). It was only once the subjects of Schein's original study had gained actual experience that they discovered matches and mismatches between their needs, values and talents and the working environment. Many of the alumni in the study were unaware of their needs, values and talents until they had experienced several different jobs, organisations and occupations (Schein, 1980a). Talents particularly could not be assessed until the individuals had actual jobs and had formed perceptions of their talents. The career anchor model therefore differs from individual theories of needs and talents as it is based on a developmental framework - the individual gradually integrates his needs, values and talents as a result of his experience (Schein, 1980a).

Super's developmental theory is of particular relevance to Schein's career anchor model as it incorporates the notion of human development - that motives, needs, abilities, attitudes and values change and develop throughout the adult life cycle (Schein, 1980a). Schein's career stages are in fact based on Super's (1957) formulation of life stages (as well as on more recent research by Dalton et al, 1977; Derr, 1980; Levinson et al, 1978; and his own research). Most of the other theories on career choice ignore the issues that arise before, during and after career choice (Schein, 1980a). Schein (1980a) highlights one of the great problems in human behaviour research; namely, that it is difficult to distinguish between factors that remain stable and those
amenable to change and growth. One of the main tenents of Schein's theory is that the pattern of needs, motives and values that an individual develops in childhood and adolescence serves as an initial set of goals and constraints in the process of choice. Thereafter, the individual is always in a dynamic process of integrating inner forces and impulses with outer opportunities in order to establish a self-concept, which is in itself always changing and developing as a result of new experiences (Schein, 1980a). The career anchor is therefore explicitly developmental and reflects the search of the individual for a clear and workable self-concept, a process which may continue throughout life (Schein, 1980a). Super (1992) proposes that work satisfaction depends on the extent to which the individual finds an outlet for his abilities, needs, values and self-concepts and that the degree of satisfaction that people attain from work is proportional to the degree to which they have been able to implement their self-concept. This proposition is (as is Holland's theory of personality) similar to Schein's assertion that an individual will find satisfaction in his work if he is in a career that enables him to express his needs and values and utilise his talents.

Schein's career anchor theory (1990a) can therefore be regarded as a developmental perspective based on a combination of constructs such as personality, needs, values and self-concepts. The theory has a longitudinal approach which regards career choice as an ongoing dynamic process, thus incorporating the concept of a developmental approach to career choice and development. The career anchor is broader than any of the theories based on its component constructs as it includes a self-perception of needs, talents and values and is based on actual occupational experience (Schein, 1990a).

4.4 JOB SATISFACTION
This section represents part of the third step of the literature survey, namely to define job satisfaction (general, intrinsic and extrinsic job satisfaction); to describe the relation between career anchors and job satisfaction; and to explore the implications thereof for current career choice and development.

4.4.1 Introduction
Job satisfaction can be described in terms of the theory of work adjustment as the individual worker's appraisal of the extent to which the work environment fulfils his requirements (Dawis
Lofquist, 1984). Locke (1976) regards job satisfaction as a positive emotional state derived from one's job. One of the major issues pertaining to research on job satisfaction is the causes of job satisfaction (needs, values, expectancies, perceptions), as well as how these variables combine to form job satisfaction (Locke, 1976). Locke (1976) believes that job satisfaction is dependent upon an interaction between the person and his environment.

He categorises four main causes of job satisfaction. The first is expectancies. Some theorists believe that an individual's affective reaction depends upon the discrepancy between what his environment offers and what he expects (Locke, 1976). Locke believes however that most of these studies have not taken into account the effect of values, which he defines as goals, desires and aspirations). He believes that the response one experiences to an event is hard to predict, and may be positive or negative depending on one's values. He therefore names the second and third causes of job satisfaction as needs and values. The two constructs are discussed together because it is often difficult to distinguish between them; their definitions often overlap and the terms are used to mean different things in different theories. Some theorists believe that it is the degree to which the job fulfils or allows the fulfilment of the individual's needs that determines his degree of job satisfaction (Hall, 1976; Locke, 1976; Roe, 1957, 1990; Super, 1973 ). Others believe that it is the individual's values which will determine his level of job satisfaction (Locke, 1976).

Locke (1976) believes that job satisfaction is determined primarily by values. He quotes Rand's analysis of a value as having two attributes: content (what is wanted or valued) and intensity (how much it is wanted). An individual's values, ranked as to importance, represents his value hierarchy. The emotional response (in this case job satisfaction) depends on the discrepancy or relation between what the individual wants and what he perceives he is getting, and the importance of what is wanted (Locke, 1969). The degree of job satisfaction therefore reflects the value discrepancy and value importance (Locke, 1976). Overall job satisfaction would then be the sum of affect ratings pertaining to the individual job elements.

The fourth factor determining job satisfaction that must be taken into account is need-value conflict. In general, job satisfaction is a function of value attainment (Locke, 1976). However an individual's values influence his choices and actions in order to satisfy his needs (Locke, 1976).
An individual may not necessarily value that which he needs. When a need is incompatible with a value, less satisfaction will be attained from achieving the value than when a need and value are compatible (Locke, 1976). In general, job satisfaction results from the perception that one's job fulfils one's job values, providing and to the degree that those values are congruent with one's needs (Locke, 1976).

4.4.2 Definitions of job satisfaction

Locke (1976, p. 1300) defines job satisfaction as "a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences". Dawis and Lofquist (1984, p. 55) define job satisfaction in terms of the theory of work adjustment as "the individual worker's appraisal of the extent to which the work environment fulfils his or her requirements".

These definitions of job satisfaction are general and relate to the job as a whole. Research conducted by the Work Adjustment Project at the University of Minnesota Industrial Relations Centre led to the conclusion that it is more useful to measure satisfaction with specific aspects of work and work environments. The goal is to obtain an individualised picture of worker satisfaction rather than a general measure based on the job as a whole (Weiss, Dawis, England & Lofquist, 1967). The individualised measurement is important because two individuals may express the same amount of satisfaction with their work but for entirely different reasons. Research has shown that individuals have differences in their needs and that different jobs provide an opportunity to satisfy different needs. As a result people find different satisfactions in work (Weiss et al, 1967). They distinguish between general, intrinsic and extrinsic job satisfaction.

Extrinsic job satisfaction refers to satisfaction derived from contextual dimensions of the job such as remuneration and working conditions (Kaplan, 1990). Schein (1980a) quotes the Herzberg model, which distinguishes between job factors which are intrinsic and extrinsic and defines extrinsic factors as pay, benefits, working conditions and other aspects of the job situation. The short-form Minnesota Satisfaction Questionnaire refers more specifically to the following factors: attitude to supervisor, pay, company policies, opportunities for advancement and recognition for doing the job.
Intrinsic job satisfaction refers to satisfaction derived from the content of the job itself, such as the chance to do varied work and the opportunity to one's own ideas into practice (Kaplan, 1990). Schein (1980a) quotes the Herzberg model, which defines intrinsic factors as those factors that relate to the immediate interaction between the worker and the job. The short-form Minnesota Satisfaction Questionnaire refers more specifically to the following factors: variation in the job, opportunity to work alone, being able to keep busy, status of the job, opportunity to do things for other people, chance to tell people what to do, chance to utilise abilities, freedom to use own judgement, chance to try own methods of doing the job, feeling of accomplishment from the job.

Katz and Van Maanen (1977) identified three clusters of factors which they called "loci of work satisfaction". The first, which corresponds to intrinsic factors, is the job itself. The second is the interaction context - corresponding to those contextual factors which have to do with co-workers, supervisors, and other people in the job environment. The third is organisational policies - corresponding to those contextual factors which have to do with pay, promotional policies, working conditions and other issues less immediately under the control of the employee or supervisor. Each of these areas was related to job satisfaction to some degree.

Hackman and his colleagues (Hackman & Lawler, 1971; Hackman & Oldham, 1975, 1979) developed more refined sets of factors by analysing a large number of jobs and identifying basic dimensions which could apply to any job. The core job dimensions are skill variety, task identity, task significance, autonomy and feedback. The degree to which the relation between job dimensions and job outcomes will hold true will be moderated by three additional factors - the degree to which the worker has the necessary skills to do the job, the degree to which the coworker is motivated by the need to grow and sees work as growth producing, and the degree to which the worker is satisfied with the contextual factors of the organisation. Schein (1980a) believes that one of the advantages of this type of design is that it facilitates a more direct diagnosis of what is bothering workers.

4.4.3 The relation between person-environment fit and job satisfaction

There is an extensive body of research providing consistent evidence of increased job satisfaction when person-environment congruence exists (Spokane, 1985). The traditional approaches of
career choice and development are based on finding a compatible match between the individual and his chosen occupation according to some or other criterion (Blau & Duncan, 1967; England, 1978; Hall, 1976; Holland, 1985; Roe 1957, 1990, Strong, 1943; Schein, 1990a; Super 1957, 1980, 1992). Various researchers have however expressed a number of important reservations about the predictive validity of a person-environment fit model (Downey, Hellriegel & Slocum, 1975; Gati, 1989, Hesketh & Gardner, 1993; Pervin, 1987). The reservations can be grouped into reservations about the comprehensiveness of the approach to the study of congruence, the possibility that some types of work are more satisfying in their own right, and that some types of people are more satisfied, and issues around the type of job satisfaction.

The comprehensiveness of the approach to the study of congruence (Gati, 1989; Pervin, 1985). Gati (1989) quotes Osipow's reservation about research on congruence. Osipow asks "How do we assess people? How do we measure their environment? How do we compare the two, regarding the degree and quality of fit?" Gati (1989) believes that the fact that some studies based on constructs such as interests and personality, obtain nonsignificant results can be attributed to independent variables which affect the individual's occupational satisfaction. These aspects include, among others, abilities and aptitudes, skills and occupational values (Gati, 1989). A more comprehensive approach to the study of congruence includes variables such as age and sex will increase the predictive value of congruence tests (Gati, 1989). Pervin (1987) confirms this finding by outlining the ongoing controversy that the topic of person-environment congruence still causes. He believes that models of person-environment interaction that are dynamic and focus on the flow of behaviour are preferable to static descriptive models.

The possibility that some types of work are more satisfying in their own right, and that some types of people are more satisfied (Hesketh & Gardner, 1993). Most studies derive an index of fit (between the person's profile or type and the environmental profile or type), and relate it to an outcome such as job satisfaction. This type of design, however, fails to control for the independent contribution of the person or the environment. The studies do not take into account that certain interest types are more stable and satisfied than others, nor for the possibility that certain environments produce higher levels of satisfaction or stability. Therefore the person-environment fit fails to control for the independent relation of satisfaction to either the person
(people with certain needs and values may be more satisfied than others) or the environment component (some environments are more satisfying than others, irrespective of individuals' needs). Hesketh and Gardner's (1993) study aimed to test the person-environment fit hypothesis relevant to Holland's theory by controlling for the independent direct contribution of the person and environment to satisfaction. Fit improved the prediction of satisfaction for 13 of 21 attributes even after controlling for the direct relations of preferences and perceptions which provided some support for person-environment fit notions. Despite this the results of the study indicated that in almost all cases satisfaction was most strongly predicted by the job perception.

*The type of job satisfaction - intrinsic, extrinsic, general* (Spokane, 1987). Research conducted by the Work Adjustment Project at the University of Minnesota led to the conclusion that it is more useful to obtain an individualised picture of worker satisfaction rather than a general measure. This is important because two individuals may express the same amount of satisfaction with their work but for entirely different reasons. Spokane (1987) used Holland's construct of congruence to determine the relationship between extrinsic job satisfaction and person-environment congruence. He found that those individuals with a high level of congruence were more satisfied than those with a low level of congruence. He also found that more men than women were dissatisfied with extrinsic benefits (income, fringe benefits and opportunities for promotion). Kaplan, in his 1990 study of fourteen categories of professionals, measured the relation between the individual's career anchors and general, intrinsic and extrinsic job satisfaction. He found that the results indicated a stronger level of prediction for intrinsic satisfaction than for overall job satisfaction.

Hesketh and Gardner (1993) quote the guidelines recommended by Edwards (1991) for person-environment fit research in general, namely:

(i) the involvement of multiple organisations to increase the spread of scores
(ii) the partially independent measurement of all three components in the model (work preferences, job perceptions, and satisfaction)
(iii) the use of commensurate attributes underlying the measurement of these three components
(iv) the inclusion of attributes that are not necessarily normatively desirable (e.g. interest
scales) completion of analyses at the item level.

4.4.4 Relation between career anchors and job satisfaction

Research on this topic can be divided into two areas. The first deals with a fit between the individual and the environment in terms of career anchors and its effect on a specific outcome, such as job satisfaction (Hall & Thomas, 1979; Laher, 1982; Schein, 1990a; Schreuder, 1989). The second area deals with a direct relation between career anchors and a specific outcome such as job satisfaction (Eastwood, 1980; Kaplan, 1990).

Research on the relation between a fit between career anchor and occupational type and its effect on job satisfaction will be discussed first. Schein (1990a) believes that a fit between the person and environment based on the individual’s career anchor will enable the individual to express his real self in his job and as a result he will experience greater job satisfaction. The matching process however can be a difficult one. There is a large variation in the anchors of individuals, as well as in the nature and types of organisations (Schein, 1990a).

Hall and Thomas (1979) conducted a study on a group of programme managers in several large aerospace companies which demonstrates the relation between career anchors, occupational groups and job satisfaction. The authors hypothesised that the satisfaction of a programme manager would vary according to how well his career anchor matched the requirements of the programme phase. During the creation phase, the more entrepreneurially oriented individuals should be more effective and satisfied. During the design phase, the technically/functionally oriented individuals should be more effective and satisfied, and during the production phase, the security anchored individuals should be more effective and satisfied (this phase requires long periods of repetitive work). The author’s hypothesis was partially confirmed in the study, providing evidence that a mismatch between career anchors and job requirements can lead to individual dissatisfaction and poor performance.

As a result of her research on MIT graduates that had reached midcareer, Bailyn (1980)
recommended that future research on career anchors should focus more on the fit between identified orientations and organisational positions as a predictor of job satisfaction. This recommendation is based on the fact that, in her study, she did not manage to establish a direct relation between career anchors and job satisfaction.

Eastwood (1980) conducted a study of 113 managers and technical people from a computer systems manufacturer. He found that job satisfaction was significantly greater for a group where there was a match between their career anchors and job categories than for the group where there was no such match. He found, however that this relation was moderated by the respondents' level of self-esteem. Where self-esteem was low, no significant differences between the groups were found.

Schreuder (1989) based his study on the same rationale as most person-environment fit models, i.e. if the individual achieves a fit between himself and his environment, he will experience greater job satisfaction. He hypothesised that if there is a fit between an individual's career anchor and his job perception, he will experience a higher quality of worklife than if no such fit exists. The results of his study confirmed his hypothesis.

There has, however, also been research to demonstrate that the relation between person-environment fit and an outcome such as job satisfaction is not free of confounding variables. The reasons for this may be (1) that some types of people are more satisfied and some types of work are more satisfying in their own right (Hesketh & Gardner, 1993), and (2) certain values have a strong correlation with job satisfaction. These values may produce a higher level of job satisfaction, irrespective of the fit between the individual and the environment (Kaplan, 1990). This type of reservation about the predictive value of person-fit designs being associated with specific outcomes has led to research on the direct relation between career anchors and job satisfaction.

Kaplan (1990) quotes a study by Laber (1982) which was conducted on public school teachers in New York state. In this study, Laber established a direct relation between different career anchors and job satisfaction. In his own study (1990), Kaplan examined the direct relationship
between individual career anchors and job satisfaction. The focus of the study was to test whether job satisfaction is dependent upon an individual's career anchor. His reasoning was based on the evidence that values have a very strong correlation with job satisfaction, and values are an integral component of career anchors. Kaplan analysed job satisfaction in terms of the categories provided in the Minnesota Satisfaction Questionnaire. The results of the study indicated a stronger level of prediction for intrinsic job satisfaction than for overall job satisfaction. On the basis of his results he concluded that only the career orientation of service influences the experience of intrinsic job satisfaction. Job satisfaction could therefore not be predicted on the basis of a dominant career orientation, but rather by a combination of orientations.

In general, research on career anchors and job satisfaction seems to provide stronger support for a person-environment fit design rather than a design that investigates a direct relation between job satisfaction and career anchors. Research does however indicate that, firstly, it is important to obtain a more individualised picture of job satisfaction than a general one, and, secondly, that the independent effects of individuals and environments should not be ignored. A major dilemma for future research on career anchors and job satisfaction is to determine the contribution of person-environment fit, whilst still controlling for the independent contribution of the person and the environment (Hesketh & Gardner, 1993).

4.4.5 Relation between career anchors, job satisfaction and managerial level
In her study, Bailyn (1980) found that in general, those in the sample who were technically oriented, and in high organisational positions, were most satisfied with their jobs. She reasoned that this might have been due to the fact that those respondents tended to be the most highly rewarded and their job satisfaction was as a result of their above average incomes. Another possible reason given was that high organisational positions are satisfactory to the technically oriented because they give them the power to be autonomous in their technical functioning. It was the autonomy of the high organisational positions that seemed to be important for this group. She commented that it is therefore unfortunate that individuals that are technically oriented are usually not granted this autonomy, without the accompanying high organisational/managerial position. She found that the individuals with technical orientations in low organisational positions generally experienced a lower level of job satisfaction.
Schreuder (1989) found in his study of the relation between career anchor, occupational type, organisational type and quality of work life that the quality of work life of managerial employees that had a fit between career anchor and occupational type was significantly higher than that of managerial employees with no such fit. No similar results were found for the non-managerial group.

4.5 CHAPTER SUMMARY

This chapter discussed various bodies of research related to career anchor theory.

Herewith the third aim of the literature survey, namely, to clarify the relation between career anchors and midcareer; to define job satisfaction and to clarify the relation between career anchors and general, intrinsic and extrinsic job satisfaction; and to outline the implications for career choice and development practices, has been achieved.

Chapter 5 discusses the first six steps of the empirical study, namely determination and description of the sample population, choosing the psychometric battery, administration of the psychometric battery, scoring of the psychometric battery, research design and statistical processing of data and formulation of the research hypotheses.
INTEGRATION OF LITERATURE SURVEY

THEORETICAL RELATION BETWEEN CAREER ANCHORS, OCCUPATIONAL TYPE AND GENERAL JOB SATISFACTION, INTRINSIC JOB SATISFACTION AND EXTRINSIC JOB SATISFACTION

Integration

Research on career anchors and related aspects indicates that there is a link between career anchors and occupational types and that a person-environment fit based on a match between career anchor and occupation leads to a higher level of job satisfaction (Bailyn, 1980; Burke, 1983; Eastwood, 1980; Erwee, 1990; Hall & Thomas, 1979; Kaplan, 1990; Schreuder 1989, Schein, 1978, 1980a, 1990a, 1996; Slabbert, 1987; Webb, 1992).

The concept of a career has changed so much over the last few decades that traditional models of career choice and development no longer provide an adequate explanation for career decisions in the 90's. In order to understand why broader models of career choice and development are required, existing theories of career choice and stages are reviewed. Career anchor theory is then proposed as a broader model of career choice and development. The concept is defined and the different categories of career anchors are described. The research is based on individuals in the midcareer stage, as it is to a large extent the stage that the individual has gathered sufficient experience to be able to identify a stable career anchor. Lastly, research on career anchor and related aspects such as job satisfaction are discussed. Current trends in career anchor research and their implication for career choice and development practices are discussed.

Theories of career choice and its implications for career choice and development practices

Career choice theorists divide the criteria for career choice into a number of basic approaches. These include interests, self-concept, personality and social background. Theories that are based on these constructs and are well recognised and relevant to the career anchor model are discussed in greater detail to provide a background for a literature survey of career anchors.

The following constructs are discussed separately; Interests / Self-concepts / Personality / Social
background. All of these constructs are regarded as important determinants of career choice because they play a major role in the individual's life and they manifest in almost all behavior.

Interests are regarded as important determinants of career choice, as "a response of liking" would attract an individual to a specific occupational career choice (Strong, 1943). Self-concept is regarded as a determinant of career choice as the self-concept is a person's image of himself - his abilities, interests, needs, past history and aspirations and could be expressed in terms of an occupation (Hall, 1976). Personality types are regarded as determinants of career choice and development as each personality type has a repertoire of attitudes and skills for coping with environmental problems and tasks and specific personality types are attracted to specific environments (Holland, 1985). Needs are regarded as direct determinants of career choice, as the individual chooses an occupation that will fulfill his needs (Locke, 1976; Roe, 1957; Super, 1973). Values are regarded as an important determinant of career choice as research has indicated a correlation between values and organizational level, personal success, decision-making and job satisfaction (England, 1978; Krau, 1987; Locke, 1976; Super, 1973; Rokeach, 1973, Zytowski, 1994). Social background is regarded as a determinant of career choice and development as occupational choice is often a function of social stratification. Generally people choose a career most open to them, other things being equal and social background is one of the variables that influence career choice (Osipow, 1990).

The following theories are discussed in greater detail because they are related to the career anchor theory and are prominent theoretical influences in career choice and development practices:

Hollands theory of vocational personalities and work environments (1985). This theory views career choice as dependent on the interaction between personality and the environment. People gravitate to environments that are congruent with their personalities (Holland, 1985).

Super's self-concept theory (1957, 1980, 1992). This theory views career choice as the implementation of a self-concept. The process of career choice and development is therefore one of developing and implementing a realistic concept of oneself (Super, 1957).
Roe's theory of personality development and career choice (1957, 1990). This theory views career choice as a function of early experience of fulfilment of needs from parents. The process of career choice and development is therefore one of gravitating to an environment consistent with one's personal orientation (based on fulfilment of needs in childhood).

Theories of life/career stages and its implications for career choice and development practices

Developmental theorists believe that career choice cannot only be based on vocational considerations. The issues of stage in life/career cycle, family life cycle, life style, leisure and other issues must also be considered (Minor, 1992; Sonnenfeld & Kotter, 1982; Hall & Mirvis, 1995a & b; Schein, 1996). Studies of the lifespan have provided evidence that occupational choice is not something that happens once in a lifetime, but it is in fact a process - a series of stages (Hall, 1976). Each life/career stage is associated with specific psychological or social development tasks (Burack, 1984). It is therefore important to view career choice and development from a longitudinal perspective.

More recently, as a result of an increasingly complex working environment, developmental theorists believe the career cycle is shortening and individual may go through a number of career cycles rather than prolonging the maintenance stage of their careers (Hall & Mirvis, 1995a & b; Schein, 1996). Contemporary models of career development predict that employees will periodically plateau in their careers depending on their career age, rather than their chronological age (Hall & Mirvis, 1995a & b; Schein, 1996).

Midlife/midcareer stages and its implications for career choice and development practices

The midlife/midcareer period has traditionally been regarded as a significant stage in the life/career cycle. It is at this stage that the individual is able to evaluate whether his actual desires, values and talents have been expressed in his occupation (Levinson et al, 1978). Individuals often review their careers during this stage.

Inevitably, as a result of an increasingly complex working environment, the traditional issues of the midcareer individual have changed. The traditional midcareer period may not be as clear cut
as it was in the traditional career cycle. The individual's career age will become more important than his chronological age. This may in fact solve the problem of the traditional "midcareer crisis" as individuals develop and maintain career adaptability by adopting an approach of lifelong learning (Hall & Mirvis, 1995b).

**Schein's career anchor concept and its implications for career choice and development practices.**

Schein's (1990) career anchor model provides a framework to supplement and integrate traditional information of career choice and development with additional factors and thereby provides a more comprehensive measurement of the compatibility of the subjective career preferences of the individual with the requirements of the occupation. These additional factors are career preferences, actual experience of the individual and the individual's self perception of his talents, values and needs. The development of a career anchor takes place over a series of career stages.

In the increasingly turbulent economy, the individual will have to play an increasingly important role in his or her career planning. As a result of changes in the nature of organisations, a different emphasis in the balance of career anchors is emerging. The career anchors of technical competence, lifestyle integration, autonomy, entrepreneurial creativity, service and pure challenge are becoming more prevalent amongst individuals. Reasons for these changes are probably due to an increase in dual career families, a greater necessity for self managed careers as well as a larger amount of technical posts available (Schein, 1996). The career anchors of general managerial competence and security are becoming less prevalent amongst individuals. This is probably due to a reduction in the amount of managerial posts available as well as less guarantees of lifelong careers by organisations to individuals (Schein, 1996).

**Career anchors and related aspects such as career anchors and midcareer, occupational types, different hierarchical levels and job satisfaction**

Research on career anchors gives a clear indication that by midcareer the individual will have developed a career anchor that probably will remain stable for the balance of the individual's career. It is at this stage that the demands of the external career (promotion, transfer, etc) coincide with the demands of the internal career (attitudes, needs, values, etc). In fact, this stage is the first
realistic opportunity that the individual has to assess his career anchor accurately.

Research indicates that there is a direct relation between career anchor and occupational types as well as different hierarchical levels (De Long, 1984; Derr, 1980; Erwee, 1988; Schein, 1992; Schreuder, 1989; Slabbert, 1987; Webb, 1992).

There is also a relation between career anchors and job satisfaction. A fit between the individual and his occupation will result in the individual experiencing greater job satisfaction (Bailyn, 1980; Eastwood, 1980; Hall & Thomas, 1979; Schein, 1990a; Schreuder, 1989). In order to obtain a more individualised picture of job satisfaction, the construct is divided into intrinsic and extrinsic job satisfaction. Research indicates that there may be a stronger level of prediction for intrinsic job satisfaction than for extrinsic job satisfaction, i.e. the career anchor construct influences the experience of intrinsic job satisfaction to a greater extent than extrinsic job satisfaction (Kaplan, 1990).

**Hypothetical relation between career anchors, occupational type and general, intrinsic and extrinsic job satisfaction.**

As a result of the aforementioned background, this research project attempts to determine whether there is a relation between career anchors and occupational types. Occupational types are determined in terms of the individual's subjective perception of the needs, values and talents that his occupation fulfils, i.e. in terms of the eight categories of career anchors. If a link is established between the two constructs, i.e. individuals with a specific career anchor are likely to choose a matching occupational type, the research project attempts to determine if a person-environment fit based on a match between career anchor and occupational type, results in a higher level of general, intrinsic and extrinsic job satisfaction. Research suggests that an individual with a P-E fit will experience greater job satisfaction (Eastwood, 1980; Schein, 1990a; Schreuder, 1989). As the career anchor concept is a subjective measurement of the individual's self concept and is based on his own perception of his needs and values, there is reason to believe that the P-E fit will influence intrinsic job satisfaction more than extrinsic job satisfaction. This was confirmed by Kaplan (1990) who demonstrated in his study that the career anchor construct is a stronger predictor for intrinsic job satisfaction than for overall job satisfaction, i.e. that career anchors
influence intrinsic job satisfaction more than extrinsic job satisfaction (Kaplan, 1990).

The research project therefore attempts to determine if midcareer individuals with a fit between career anchor and occupational type will experience a higher level of job satisfaction than midcareer individuals with no such fit. A greater difference between levels of intrinsic job satisfaction, rather than extrinsic job satisfaction between the fit and non-fit groups, is anticipated.

The research project also aims to establish if, on a micro level, i.e. on the level of the individual career anchors, there is a greater difference in job satisfaction between the fit and non-fit group for some career anchors rather than others. If this is established, then certain career anchors could be regarded as leading to a greater level of job satisfaction between the fit and non-fit group than others.

**Implications for career choice and development practices**

The study is based on the career anchor model. This construct is based on the individuals subjective interpretation of his needs, values and talents. As the concept of a career is changing, constructs that provide an accurate and reliable criterion for predicting career choice in today unpredictable work environment, particularly for individuals in the midcareer stage are needed. The career anchor concept is broader than other typical constructs used in traditional models of career choice and development. It not only reflects the needs and values of the individual, but also his talents. It is also a subjective concept, based on self-insight, which researchers on contemporary careers believe is the key to constructive career management in today increasingly complex world.

A probable relation between career anchors and occupational types will add to the existing evidence of research that individuals with a specific career anchor choose occupations that match their career anchors. In this study, occupational type is measured in terms of the individuals perception of the main aspect that dominates his occupation - in terms of the eight categories of career anchors. If a link between career anchors and occupational types can be established, the career anchor construct can be regarded as a valuable tool for career decisions in today times.
It can also be postulated that a person-environment fit based on a match between career anchor and occupational type will result in a higher level of general, intrinsic and extrinsic job satisfaction. If the empirical investigation provides evidence of this, there is further evidence of the value of the career anchor construct as a reliable and valid diagnostic tool.

Herewith the fourth aim of the literature survey, namely to postulate a theoretical relation between career anchors and occupational types and how a fit between the two would result in higher levels of job satisfaction and to define the implications for career choice and development practices, has been achieved.

Following this, the relation between career anchors, occupational types and general, intrinsic and extrinsic job satisfaction will be tested empirically.
Chapters 5, 6 and 7 contain the empirical investigation. The aims of the empirical investigation are:

* to ascertain the relation between career anchors and occupational types of midcareer managerial and non-managerial employees.
* to ascertain whether there is a difference in general, intrinsic and extrinsic job satisfaction between midcareer managerial and non-managerial employees with a fit between career anchor and occupational type and those with no such fit.

This chapter describes the first six steps of the empirical investigation, namely:

Step 1: Determination and description of the sample
Step 2: Description of the psychometric battery
Step 3: Administration of the psychometric battery
Step 4: Scoring of the psychometric battery
Step 5: Statistical processing of data
Step 6: Formulation of hypotheses

Steps 7 to 11 will be discussed in chapters 6 and 7, namely, reporting and interpretation of results, integration of research, limitations, conclusions and recommendations for further research.

5.1 THE SAMPLE

The population for this study was midcareer managers, \( n = 164 \) (top and middle management), and midcareer non-managers, \( n = 131 \) (clerical and secretarial). The sample was obtained from a population of 10 organisations. The rationale for approaching 10 organisations to participate in the study was to obtain as diverse a response from as many different organisations as possible, to obtain a sufficiently large sample to provide meaningful statistics. The rationale for studying midcareer individuals, i.e. individuals in the age group of 35 years to 45 years, was based on Schein's (1987) specific research findings on the stability of career anchors. According to Schein's career anchor theory, individuals in the early career stages are still forming their career anchors, which are likely to change as a result of their actual experience. Once individuals reach the
midcareer age group they will theoretically have matured sufficiently and gained adequate insight to have clarified their career anchors to a point where they are probably stable and will not change during the remainder of their career.

Employees were categorised as managerial or non-managerial on the basis of salary and job grade. In certain cases where it was unclear, self-assessment of hierarchical level in the organisation and the number of staff supervised were also taken into consideration. Top managers and middle managers were categorised as managerial employees, whilst secretarial and administrative employees were categorised as non-managerial employees.

In order to obtain meaningful statistical data, a sample of approximately 300 individuals was required. A response rate of approximately 30% was anticipated and it was therefore decided to send out approximately 1000 questionnaires in order to obtain the required sample. 1 046 questionnaires were issued and 340 were returned in time to included in the analysis. Of these, 45 were discarded as they were judged unreliable. The final total of questionnaires that could be used was therefore 295. The response rate was therefore 32,5% and the rate of useable questionnaires was 28,3%. The managerial groups consisted of 164 respondents (55,6%) and the non-managerial group consisted of 131 respondents (44,4%).

The sample obtained could be termed a sample of convenience as it was not drawn on a random basis. A member of the Human Resources Department of each organisation concerned was requested to use his or her discretion to distribute equal numbers of questionnaires to managerial and non-managerial employees.

The demographic characteristics of the sample are described in Table 5.1.
Table 5.1: Description of sample on categorical variables (N = 295)

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<th>Total</th>
<th>%</th>
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<tr>
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</tr>
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<td>55,6%</td>
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<tr>
<td>Non-managerial</td>
<td>131</td>
<td>44,4%</td>
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<tr>
<td><strong>Years of service</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>less than 1 year</td>
<td>28</td>
<td>9,5%</td>
</tr>
<tr>
<td>1 to 5 years</td>
<td>58</td>
<td>19,7%</td>
</tr>
<tr>
<td>5 to 10 years</td>
<td>81</td>
<td>27,5%</td>
</tr>
<tr>
<td>10 to 15 years</td>
<td>73</td>
<td>24,7%</td>
</tr>
<tr>
<td>more than 15 years</td>
<td>55</td>
<td>18,6%</td>
</tr>
<tr>
<td><strong>Job changes in last 10 years</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>none</td>
<td>107</td>
<td>36,5%</td>
</tr>
<tr>
<td>one</td>
<td>82</td>
<td>28,0%</td>
</tr>
<tr>
<td>two</td>
<td>47</td>
<td>16,0%</td>
</tr>
<tr>
<td>three</td>
<td>34</td>
<td>11,6%</td>
</tr>
<tr>
<td>four</td>
<td>11</td>
<td>3,1%</td>
</tr>
<tr>
<td>five or more</td>
<td>14</td>
<td>4,8%</td>
</tr>
<tr>
<td><strong>Years wished to continue in career</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>less than 1 year</td>
<td>29</td>
<td>9,8%</td>
</tr>
<tr>
<td>1 to 5 years</td>
<td>109</td>
<td>36,9%</td>
</tr>
<tr>
<td>5 to 10 years</td>
<td>44</td>
<td>14,9%</td>
</tr>
<tr>
<td>10 to 15 years</td>
<td>39</td>
<td>13,2%</td>
</tr>
<tr>
<td>more than 15 years</td>
<td>74</td>
<td>25,2%</td>
</tr>
</tbody>
</table>
In summary, the sample comprised 164 managerial and 131 non-managerial midcareer employees, of whom approximately 40% were female and 60% male.

A significant characteristic of the sample is that the respondents had a fairly stable work record. At least 70% of the sample had served in their present organisation for at least five years and at least 80% of the sample had made none, or only one or two job changes in the last ten years. Approximately 90% wanted to continue in their current career for more than a year. Only 10% wanted to continue for only a short period (up to a year) in their present careers.

5.2 THE PSYCHOMETRIC BATTERY

The psychometric instruments were selected according to their applicability to the relevant models and theories of the research. Emphasis was placed on construct validity and reliability.

Mouton and Marais (1990) define construct validity as "the extent that a scale, index, or a list of items measures the relevant construct and not something else" (p.68), and reliability as "the requirement that the application of a valid measuring instrument to different groups under different sets of circumstances should lead to the same observations" (p.79).

The following measuring instruments were used in this study:

* A biographical questionnaire
* The Career Orientations Inventory (COI)
* A Job Perception Questionnaire (JPQ)
* The Minnesota Job Satisfaction Questionnaire (MSQ)

5.2.1 Biographical Questionnaire

The questionnaire was designed to obtain information that was necessary for the statistical analysis. The questionnaire includes items on sex, age, years of service, job changes and years that the individual would like to continue in career. Items on salary, grading system, grade, job category, number of staff supervised and self-assessment of level in the organisational hierarchy were included in order to determine whether the individual was of a managerial or non-managerial level.
5.2.2 Career Orientations Inventory (COI) - 1990 version
This questionnaire is discussed under the following headings: rationale, description, scale, administration, interpretation, validity and reliability.

5.2.2.1 Rationale of the COI
The COI was used to measure each respondent's dominant career anchor. It should be noted that Schein (1990a) emphasises that the questionnaire in fact provides a career orientation as opposed to the more accurate reflection of the individual's self-concept - the career anchor. He believes that the more important part of the process of establishing a career anchor is a structured interview with a partner and unless the individual discusses his career history with someone else, he will not be able to establish the true pattern of his talents, values and needs (Schein, 1990a). For the purposes of this study, however, the career orientation is referred to as a career anchor. This approach was taken as it would have been too time consuming and costly to conduct a lengthy interview with each of the 300 participants in the study. From other research conducted on career anchors (Kaplan, 1990; Schreuder, 1989) it was felt that the Career Orientations Inventory would serve as an adequate measurement of career anchors for the purposes of this study.

5.2.2.2 Description of the COI
The instrument used in this study is the updated 1990 version of the questionnaire. It consists of a set of 40 items, all of which are considered of equal value, and to which subjects respond to in terms of how true the statement is (Schein, 1990a).

5.2.2.3 Scale of the COI
The scale used in this questionnaire is a summated rating scale in the form of a six point Likert-type scale. Respondents respond to one of the following categories: never true (1), occasionally true (2, 3), often true (4, 5), and always true (6). The respondents are then requested to identify the items that they rate highest, and to pick out and place a cross next to the three items that seem most true for them. The three items that have a cross next to them are awarded an extra four points in the computation of scores. The scores of each questionnaire are entered on a computer. The result, i.e. the total scores obtained for each of the eight categories of career anchor, are
summed and averaged to yield an individual score for each career anchor. The category that yields the highest score is regarded as the individual's dominant career anchor.

5.2.2.4 Administration of the COI
The questionnaire is self-administering. Directions for the respondent appear on the first page of the questionnaire. Item rating instructions are repeated at the top of each page. There is no time limit. The questionnaire may be completed in group sessions or individually.

5.2.2.5 Interpretation of the COI
The eight career anchor scores measured by the COI can be interpreted as follows:

**Technical/functional competence:** The higher the score on this factor, the more the individual would like the opportunity to apply his skills in a specific technical area and to develop those skills in the same area of expertise.

**General managerial competence:** The higher the score on this factor, the more the individual would like the opportunity to reach a sufficiently high position in the corporate hierarchy in order to manage others and be responsible and accountable for the total results.

**Autonomy/independence:** The higher the score on this factor, the more the individual places a high value on freedom to define his work in his own context. The individual would be less able to forfeit flexibility as to how and when to work.

**Security:** The higher the score on this factor, the more the individual values secure employment. In some cases the individual will do whatever the organisation requires in exchange for tenure.

**Entrepreneurship/creativity:** The higher the score on this factor, the more the individual would like the opportunity to create an enterprise that is the result of his own efforts.

**Service:** The higher the score on this factor, the more the individual would like the opportunity to pursue work that has value, such as helping others, improving people's safety or increasing
harmony among people.

**Pure challenge:** The higher the score on this factor, the more the individual places high value on the challenge of solving unsolvable problems and overcoming difficult obstacles. The individual would not give up the opportunity of winning out over the impossible.

**Lifestyle integration:** The higher the score on this factor, the more the individual places a high value on the opportunity of retaining balance between his personal needs, family needs, and the requirements of a career. This type of individual would not be willing to forfeit a career that does not provide sufficient flexibility to be able integrate all the major aspects of life into a unified whole.

### 5.2.2.6 Validity of the COI

Mouton and Marais (1990) emphasise that the problem of construct validity is one of the most difficult problems in social science research; in other words, how does the researcher know that the items included in the questionnaire actually measure the construct that the items are supposed to measure?

Kaplan (1990) reports that in a personal communication with Schein, Schein expressed reservations about the construct validity of the questionnaire. By definition the career anchor is "the element in our self-concept that we would not give up if forced to make a choice (Schein, 1987). Given this characteristic of the construct, Schein suggested that a forced choice format would have been more appropriate for the inventory. Schein subsequently addressed this problem in the 1990 version of the instrument by requesting the respondents to identify the items that were rated highest, and to pick out of these the three items that seemed most true for them. Those items are awarded an extra four points in the computation of scores. In this way Schein has in some way made the inventory more consistent with the definition of a career anchor, thereby improving its construct validity (Kaplan, 1990).

Another threat to the construct validity of a Likert-type questionnaire is response-set variance. The scale used in the COI is a Likert-type scale. The purpose of the scale is to ascertain where
the individual is placed on the continuum of the attitude being measured (Kerlinger, 1973). Kerlinger (1973) emphasised that summated rating scales often seem to contain response-set variance. Individuals have differential tendencies to use certain types of responses: extreme responses, neutral responses, agree responses, disagree responses, which may confound the attitude variance. The individual differences yielded by summated attitude scales had been shown to be due in part to response-set and other similar extraneous sources of variance (Kerlinger, 1973).

A third threat to the construct validity of this type of questionnaire is social desirability. Huysamen (1983) emphasises that social desirability is the most important problem affecting the validity in self-report inventories. He believes, however, that this problem is not that prominent in attitude scales. This is due to the fact that there is considerable agreement on what is socially acceptable as far as personality attributes are concerned, whereas the same does not apply to attitude scales. Social desirability should therefore not play a detrimental role in attitude scales, especially if subjects are assured of the anonymity of their responses (Huysamen, 1983). The scale used in this study is one of personality attributes and could therefore be affected by social desirability. However, as subjects were assured of the anonymity of their responses in this study, the detrimental role that social desirability might have played in their responses may have been lessened.

Schreuder (1989) believed that although the psychometric properties of the questionnaire could be improved, the level of reliability and validity of the questionnaire was adequate for his study, as it was being used to predict broad trends rather than individual differences. It is felt that the same could be said of the present study.

5.2.2.7 Reliability of the COI

The questionnaire was originally developed in 1982 and was subsequently revised in 1985 and 1990. The questionnaire used in this study, i.e. the 1990 version of the COI, measures eight career anchors. Each anchor is measured by five items on a six-point Likert scale. It is reasonable to assume that the revised version has at least the same reliability as previous versions of the questionnaire, as it is based on the same (and in some cases an improved) approach to the
As no previous reliability studies were available for the 1990 version of the COI, the reliability of this questionnaire was tested. Table 5.2 reflects the reliability scores obtained for the 1990 version of the COI.

Table 5.2: Reliability of COI according to Cronbach's Alpha Coefficient

<table>
<thead>
<tr>
<th>Factor</th>
<th>Total items</th>
<th>Alpha coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical competence</td>
<td>5</td>
<td>0.59</td>
</tr>
<tr>
<td>Managerial competence</td>
<td>5</td>
<td>0.71</td>
</tr>
<tr>
<td>Autonomy</td>
<td>5</td>
<td>0.75</td>
</tr>
<tr>
<td>Security</td>
<td>5</td>
<td>0.78</td>
</tr>
<tr>
<td>Entrepreneurship</td>
<td>5</td>
<td>0.75</td>
</tr>
<tr>
<td>Service</td>
<td>5</td>
<td>0.73</td>
</tr>
<tr>
<td>Challenge</td>
<td>5</td>
<td>0.70</td>
</tr>
<tr>
<td>Lifestyle</td>
<td>5</td>
<td>0.64</td>
</tr>
</tbody>
</table>

These internal consistency reliabilities as measured by Cronbach's Alpha Coefficient scale are moderately high with the exception of somewhat lower reliabilities for technical competence and lifestyle integration. A desirable reliability coefficient would usually fall in the range of 0.8 to 0.9 (Anastasi, 1976) in the case of individual testing, but reliabilities as low as 0.3 are quite acceptable when instruments are used to gather group data (personal communication, Watkins, 1997).

5.2.3 JOB PERCEPTION QUESTIONNAIRE (JPQ)

This questionnaire is discussed under the following headings: rationale, description, scale, administration, interpretation, validity and reliability.

5.2.3.1 Rationale of the JPQ

The present author adapted the items of the COI to reflect the individual's perception of his occupational type. The resultant scale is referred to as the JPQ. The adaptation was designed to test the primary hypothesis of the study, i.e. that there is a relation between career anchor and
occupational type. The questionnaire measures the individual's subjective perception of his occupational type in terms of the eight categories of career anchors. By measuring the sample group's perception of occupational type, it is expected that respondents give a description of their occupation that reflects the real characteristics of the occupation and relates to the characteristics of career anchors. It is therefore viewed that perception of occupation or occupational perception is a measurement of occupational type. Consequently, for the purpose of this study no distinction is made between perception of occupational type / occupational perception and occupational type. The JPQ is presented in the appendix.

5.2.3.2 Description of the JPQ

The JPQ consists of the same questions as that of the COI, except that the questions are rephrased to ascertain the individual's perception of his occupational type. The questionnaire consists of a set of forty items to which subjects respond to in terms of how true the statement is. Each item in the JPQ was matched to a corresponding item in the COI and refers to the same category of career anchor. For example, question 1 of the COI, which reads as follows, refers to the technical competence anchor: "I dream of being so good at what I do that my expert advice will be sought continually". The corresponding question in the JPQ reads "I am regarded as an expert in my field, and am continually called upon to give advice".

5.2.3.3 Scale of the JPQ

The scale used in this questionnaire is also a summated rating scale in the form of a six-point Likert-type scale. Subjects respond, as in the case of the COI, to one of the following categories: never true (1), occasionally true (2,3), often true (4,5) and always true (6). The respondents are then requested to identify the items that they rated highest, and to pick out and place a cross next to the three items that seem most true for them. The three items that have a cross next to them are awarded an extra four points in the computation of scores. The scores of each questionnaire are entered on computer. The result, i.e. the total scores obtained for each of the eight categories of occupational types are summed and averaged to yield an individual score for each job perception. The category that yields the highest score is regarded as the individual's dominant perception of occupational type.
5.2.3.4 Administration of the JPQ

The questionnaire is self-administering. Directions for the respondent appear on the first page of the questionnaire. Item rating instructions are repeated at the top of each page. There is no time limit involved.

5.2.3.5 Interpretation of the JPQ

The eight job perception scores measured by the JPQ can be interpreted as follows:

*Technical/functional competence:* The higher the score on this factor, the more the individual perceives his job as consisting of the opportunity to work in his area of technical expertise and to advance his skills in that area of expertise.

*Managerial competence:* The higher the score on this factor, the more the individual perceives his work to be centred around managing others and being responsible and accountable for their work.

*Autonomy/Independence:* The higher the score on this factor, the more the individual perceives his work to be flexible and providing of a great deal of freedom to plan his own work schedule.

*Security:* The higher the score on this factor, the more the individual perceives his job as secure.

*Entrepreneurship / creativity:* The higher the score on this factor, the more the individuals perception that his job enables him to create his own enterprise that is the result of his own efforts.

*Service:* The higher the score on this factor, the more the individual perceives his job as enabling him to make a contribution to society, i.e. that his job has value.

*Pure challenge:* The higher the score on this factor, the more the individuals perceives that his job provides him with the challenge to win out against the impossible. His work provides the opportunity to solve very difficult problems and overcome obstacles.
Lifestyle integration: The higher the score on this factor, the more the individual perceives that his work is sufficiently flexible to allow him to integrate his personal needs, family needs and the requirements of a career.

5.2.3.6 Construct validity of the JPQ
The same reservations about the construct validity of the COI could be applied to the JPQ. An individual's occupational type must be understood in terms of the main aspect that dominates his occupation, in terms of the eight categories of career anchors. Respondents were therefore requested to identify the three items that seemed most true. Each of these items was then awarded an extra four points in the computation of scores. In this way the definition of a job perception was applied and its construct validity improved.

Kerlinger's (1973) reservations regarding the interpretation of Likert-type scales and Huysamen's (1983) warnings regarding the problem of social desirability in self-report inventories apply in much the same way as they apply to the COI.

5.2.3.7 Reliability of the JPQ
A Cronbach alpha coefficient analysis was conducted to test the reliability of each of the factors of this questionnaire. The results are reflected in Table 5.3.

Table 5.3: Reliability of JPQ according to Cronbach's Alpha Coefficient

<table>
<thead>
<tr>
<th>Factor</th>
<th>Total items</th>
<th>Alpha coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical competence</td>
<td>5</td>
<td>0,55</td>
</tr>
<tr>
<td>Managerial competence</td>
<td>5</td>
<td>0,77</td>
</tr>
<tr>
<td>Autonomy</td>
<td>5</td>
<td>0,83</td>
</tr>
<tr>
<td>Security</td>
<td>5</td>
<td>0,85</td>
</tr>
<tr>
<td>Entrepreneurship</td>
<td>5</td>
<td>0,79</td>
</tr>
<tr>
<td>Service</td>
<td>5</td>
<td>0,84</td>
</tr>
<tr>
<td>Challenge</td>
<td>5</td>
<td>0,81</td>
</tr>
<tr>
<td>Lifestyle</td>
<td>5</td>
<td>0,81</td>
</tr>
</tbody>
</table>
A desirable reliability coefficient would usually fall in the range of 0.8 to 0.9 (Anastasi, 1976). The alpha coefficients for each factor in the JPQ are acceptable, with the reliability of the technical competence subscale (Cronbach's alpha = 0.55) sufficiently reliable for group data. The item-total correlations of this subscale are in general lower than those of other subscales.

It was decided however that the questionnaire could be regarded as sufficiently reliable for use in this study, bearing in mind that the questionnaire is being used to predict broad general trends as opposed to individual differences. The results on the technical competence factor should, however, be interpreted conservatively.

Table 5.4 reflects the item-total correlations per factor of the JPQ.
<table>
<thead>
<tr>
<th>Factor</th>
<th>Items</th>
<th>Item-total correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical competence</td>
<td>1</td>
<td>0.28</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>0.33</td>
</tr>
<tr>
<td></td>
<td>17</td>
<td>0.32</td>
</tr>
<tr>
<td></td>
<td>25</td>
<td>0.27</td>
</tr>
<tr>
<td></td>
<td>33</td>
<td>0.38</td>
</tr>
<tr>
<td>Managerial competence</td>
<td>2</td>
<td>0.48</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>0.54</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>0.63</td>
</tr>
<tr>
<td></td>
<td>26</td>
<td>0.58</td>
</tr>
<tr>
<td></td>
<td>34</td>
<td>0.53</td>
</tr>
<tr>
<td>Autonomy</td>
<td>3</td>
<td>0.57</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>0.63</td>
</tr>
<tr>
<td></td>
<td>19</td>
<td>0.66</td>
</tr>
<tr>
<td></td>
<td>27</td>
<td>0.64</td>
</tr>
<tr>
<td></td>
<td>35</td>
<td>0.66</td>
</tr>
<tr>
<td>Security</td>
<td>4</td>
<td>0.58</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>0.69</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>0.66</td>
</tr>
<tr>
<td></td>
<td>28</td>
<td>0.55</td>
</tr>
<tr>
<td></td>
<td>36</td>
<td>0.25</td>
</tr>
<tr>
<td>Entrepreneurship</td>
<td>5</td>
<td>0.53</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>0.65</td>
</tr>
<tr>
<td></td>
<td>21</td>
<td>0.47</td>
</tr>
<tr>
<td></td>
<td>29</td>
<td>0.53</td>
</tr>
<tr>
<td></td>
<td>37</td>
<td>0.65</td>
</tr>
<tr>
<td>Service</td>
<td>6</td>
<td>0.64</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>0.56</td>
</tr>
</tbody>
</table>
According to this table, the item total correlations are relatively high, except for the items in the subscale of technical competence. Items with low item-total correlations (for example, item 36) should be omitted in future use of the scale.

### 5.2.4 MINNESOTA SATISFACTION QUESTIONNAIRE (MSQ)

The MSQ is discussed under the following headings: rationale, description, scale, administration, interpretation, validity and reliability.

#### 5.2.4.1 Rationale of the MSQ

The MSQ was used in this study as it provides an individualised picture of worker satisfaction. A measurement of general, intrinsic and extrinsic job satisfaction can be obtained from the questionnaire. The value of measuring these differences is that it enables one to distinguish the components of an individual's general job satisfaction or the lack thereof. Two individuals may express the same amount of job satisfaction but for entirely different reasons. People find different satisfactions in work, and to understand these differences, it is useful to measure satisfaction with specific aspects of work (Weiss et al, 1967). By obtaining a measurement of the different elements
of job satisfaction one can understand the components of job satisfaction more clearly than from a general or gross measure of satisfaction with the job as a whole. This understanding can contribute to the effectiveness of career choice.

5.2.4.2 Description and background

The Minnesota Satisfaction Questionnaire (MSQ) is based on a continuing series of research studies conducted on adjustment to work by the Work Adjustment Project at the University of Minnesota. The questionnaire is published in two forms (long and short) and measures specific aspects of work and work environments. The long form of the questionnaire consists of 100 items. The short form of the questionnaire consists of 20 items scored on a Likert-type scale. The short form of the questionnaire was used in this study.

5.2.4.3 Scale of the MSQ

The questionnaire contains responses which are weighted in the following manner: very dissatisfied (1), dissatisfied (2), neither (3), satisfied (4) and very satisfied (5). The long form questionnaire consists of twenty subscales of five items each. The short form consists of one question from each of those subscales. The short form MSQ yields a general satisfaction score (the summation of all twenty items), and two subscales yield an intrinsic satisfaction score - the content of the job itself (the summation of items 1, 2, 3, 4, 7, 8, 9, 10, 11, 15, 16, 20) and an extrinsic satisfaction score - the context of the job (the summation of items 5, 6, 12, 13, 14, 19).

5.2.4.4 Administration of the MSQ

The questionnaire is self-administering. Directions for the respondent appear on the first page of the questionnaire. Item rating instructions are repeated at the top of each page. There is no time limit.

5.2.4.5 Interpretation of the MSQ

The three job satisfaction scores measured by the Minnesota Satisfaction Questionnaire can be interpreted as follows:

*General satisfaction:* The higher the score, the more the individual is satisfied with all aspects
of the job, i.e. the content and the context of the job.

**Intrinsic satisfaction:** The higher the score, the more the individual is satisfied with the content of the job itself such as feeling of accomplishment from the job and the chance to utilise abilities.

**Extrinsic satisfaction:** The higher the score, the more the individual is satisfied with the context of the job such as remuneration and working conditions.

5.2.2.6 Validity of the MSQ

The short-form MSQ is based on a subset of the long-form items. Validity for the short form may in part be inferred from validity for the long form which has been confirmed in numerous studies (Weiss et al, 1967). The construct validity is derived from the questionnaire performing according to theoretical expectations. The results of the research of the Minnesota studies indicated that the MSQ measured satisfaction in accordance with expectations from the theory of work adjustment (Weiss et al, 1967). Other evidence for validity of the short-form MSQ is available from studies of occupational group differences and studies of the relation between satisfaction and satisfactoriness, as specified in the theory of work adjustment (Weiss et al, 1967).

5.2.2.7 Reliability of the MSQ

The questionnaire meets the accepted standards for reliability. Holt reliability coefficients for each norm group and each short-form scale indicate a high level of internal consistency. The reliability coefficients range from 0,87 to 0,92 for the general satisfaction scale; 0,84 to 0,91 for the intrinsic satisfaction scale; and from 0,77 to 0,82 for the extrinsic satisfaction scale. In general the reliability coefficients are high (Weiss et al, 1967).

The questionnaire was designed for and tested on American samples. Kaplan (1990) assessed the short-form MSQ in a South African context. The reliability coefficients that he obtained were high (general job satisfaction was 0,90; intrinsic satisfaction was 0,82 and extrinsic satisfaction was 0,84). He concluded that the short-form MSQ questionnaire could be used on a South African sample with confidence in terms of its reliability and validity.
The reliability of the MSQ was tested using Cronbach's alpha coefficient and the results are presented in Table 5.5

Table 5.5: Reliability of the MSQ

<table>
<thead>
<tr>
<th>Scale</th>
<th>Reliability coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>General job satisfaction</td>
<td>0.90</td>
</tr>
<tr>
<td>Intrinsic job satisfaction</td>
<td>0.87</td>
</tr>
<tr>
<td>Extrinsic job satisfaction</td>
<td>0.80</td>
</tr>
</tbody>
</table>

These reliability coefficients can be regarded as sufficiently high to regard the questionnaire as reliable for this South African sample.

5.3 ADMINISTRATION OF THE PSYCHOMETRIC BATTERY

The questionnaires were distributed and collected by a member of the Human Resources Department in each of the ten organisations selected. The number of questionnaires given to each organisation was determined by how many the organisation was prepared to distribute. Approximately 100 questionnaires were given to each organisation. An additional 175 questionnaires were distributed on an ad hoc basis, to sundry individuals who are employed by organisations. The questionnaires were accompanied by a covering letter explaining the aim of the study. The covering letter guaranteed anonymity to all participants in the study. On average, the response rate was approximately 30%. The contact person in the Human Resources Department was requested to distribute equal numbers of questionnaires to employees at managerial level and at non-managerial level. Employees below a certain level (below grade 3 in the Peromnes system, Band A in the Patterson scale, etc.) were excluded from the sample. A full breakdown of the demographic characteristics of the sample appears in Table 5.1.

5.4 SCORING OF THE PSYCHOMETRIC BATTERY

Each item on the scales of the COI and JPQ has an equal value ranging from one to six points (never true - 1; occasionally true - 2,3; often true - 4,5; and always true - 6). An additional 4 points is added to items that have a cross next to them. The scores for each of the 40 items in both questionnaires are then summed and averaged to yield eight scores for each individual for career
anchors and perceptions of occupational type respectively. The highest score obtained in the COI and the JPQ identifies the individual's dominant career anchor and dominant perception of occupational type.

Each item on the scale of the MSQ has an equal value ranging from one to five points (very dissatisfied - 1; dissatisfied - 2; neutral - 3; satisfied - 4 and very satisfied - 5). The scores for each of the 20 items in the questionnaire were entered on computer and summed and averaged to yield three scores for each individual, for general job satisfaction, intrinsic job satisfaction and extrinsic job satisfaction.

5.5 STATISTICAL PROCESSING OF DATA

This section describes the statistical procedures that were carried out once the data had been collected and the scores had been computed.

(a) The categorical or frequency data of dominant career anchors and dominant occupational types as measured by the COI and JPQ were determined for the total group as well as for the managerial and non-managerial groups.

(b) The means and standard deviations as measured by the MSQ, for general, intrinsic and extrinsic job satisfaction, were determined for the total group as well as for the managerial and non-managerial group.

(c) In order to determine the relation between career anchors and perception of occupational types, i.e. to determine whether membership of a specific category on one dimension tended to be associated with membership of the same category on the other dimension, the following steps were taken. The dominant career anchor and dominant perception of occupational type were compared for each individual, and the number of respondents who fell into the same category on each dimension was thus established. These were referred to as the 'fit' group, as there was a fit between their career anchor and their perceived occupational type. A chi square test then was used to evaluate whether the percentage of fits for each category of career anchor, was significantly higher than chance. A chance fit was calculated as one eighth (0.125) as respondents
had a one in eight chance of falling into any given occupational type. The chi square scores were evaluated at the 0.05, 0.01 and 0.001 levels of significance. The 0.05 level of significance is regarded by most researchers as a reasonable indication of statistical significance, i.e. if there is a difference between two means, after a statistical test, at the 0.05 level of significance, then it is reasonable to believe that the difference is not merely a chance difference (Kerlinger, 1973).

(d) In order to determine whether there was a difference in the level of general, intrinsic and extrinsic job satisfaction for midcareer employees with a fit between their career anchor and perception of occupational type and those with no such fit, the following steps were taken. A t-test was selected to determine whether there were significant differences of the dependent variable between the two groups. The t-test is designed to determine whether the difference between two groups differs beyond the bounds of chance fluctuation. If the numerator and the denominator of the t-ratio are the same, the difference could have occurred by chance. A "real" difference would be reflected in a t-ratio with a considerably larger numerator than denominator (Kerlinger, 1973).

(e) In order to determine whether specific career anchor / occupational type fits are associated with job satisfaction to a greater or lesser extent, a micro analysis was conducted. As in (d) above the aim was to determine if there was a difference in the level of general, intrinsic and extrinsic job satisfaction for midcareer employees with a fit between career anchor and occupational type and those with no such fit, but for each career anchor / occupational type separately. The mean level of general, intrinsic and extrinsic job satisfaction was therefore determined for the fit group and the non-fit group for each career anchor. As, on a micro level, the sample sizes were too small to make the assumptions of normal population distributions and homogeneity of variance, parametric statistics could not be used. Non-parametric statistics were required to test the differences in the means of the dependent variable, namely job satisfaction. The Mann Whitney test was selected to test whether the difference between the two groups differs for each of the eight categories beyond the bounds of chance fluctuation.

5.6 FORMULATION OF THE RESEARCH HYPOTHESES

The following hypotheses were formulated:
Null Hypothesis 1  There is no relation between career anchors and occupational types of midcareer employees.
H1.1 There is a relation between career anchors and occupational types of midcareer employees.

Null Hypothesis 2  Midcareer employees with a fit between career anchor and occupational type do not experience a higher level of general job satisfaction, than midcareer employees with no such fit.
H2.1 Midcareer employees with a fit between career anchor and occupational type experience a higher level of general job satisfaction, than midcareer employees with no such fit.

Null Hypothesis 3  Midcareer employees with a fit between career anchor and occupational type do not experience a higher level of intrinsic job satisfaction, than those midcareer employees with no such fit.
H3.1 Midcareer employees with a fit between career anchor and occupational type experience a higher level of intrinsic job satisfaction, than those midcareer employees with no such fit.

Null Hypothesis 4  Midcareer employees with a fit between career anchor and occupational type do not experience a higher level of extrinsic job satisfaction, than midcareer employees with no such fit.
H4.1 Midcareer employees with a fit between career anchor and occupational type experience a higher level of extrinsic job satisfaction, than midcareer employees with no such fit.

All the hypotheses were be tested for the total, managerial and non-managerial groups separately.

5.7  CHAPTER SUMMARY
This chapter discussed the first six steps of the empirical investigation: the determination and description of the sample population, the psychometric battery, the administration of the
psychometric battery, the scoring of the psychometric battery, the statistical processing of data and the formulation of the research hypotheses.

Chapter 6 discusses the seventh and eighth steps of the empirical investigation, namely the reporting and interpretation of results and the integration of the research findings.
Chapter 6 focuses on the results of the empirical study with the aim of reporting, interpreting and integrating the results with the literature survey.

6.1 FREQUENCY DISTRIBUTION OF THE CAREER ANCHORS AND OCCUPATIONAL PERCEPTIONS (PERCEPTIONS OF OCCUPATIONAL TYPE)

For each individual a dominant career anchor and perception of dominant occupational type was established. As illustrated occupational perception is viewed, for the purposes of this research, as a measurement of occupational type. The sum of these dominant career anchors and perceptions of dominant occupational type was then computed for the total sample, the managerial group (Man) and the non-managerial group (N-M). Frequencies (n) and percentages (%) of dominant anchors and dominant occupational perceptions are presented in order to establish how they are distributed in the three groups. The results are presented in Table 6.1 and Table 6.2 respectively.
Table 6.1: Frequency distribution of dominant career anchors for the total sample, managerial group and non-managerial groups

<table>
<thead>
<tr>
<th>Anchor</th>
<th>Total sample</th>
<th>Managerial</th>
<th>Non-managerial</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>Technical</td>
<td>66</td>
<td>22,4</td>
<td>42</td>
</tr>
<tr>
<td>Managerial</td>
<td>15</td>
<td>5,10</td>
<td>12</td>
</tr>
<tr>
<td>Autonomy</td>
<td>25</td>
<td>8,5</td>
<td>14</td>
</tr>
<tr>
<td>Security</td>
<td>39</td>
<td>13,3</td>
<td>6</td>
</tr>
<tr>
<td>Entrepreneur</td>
<td>30</td>
<td>10,2</td>
<td>20</td>
</tr>
<tr>
<td>Service</td>
<td>26</td>
<td>8,8</td>
<td>11</td>
</tr>
<tr>
<td>Challenge</td>
<td>40</td>
<td>13,6</td>
<td>26</td>
</tr>
<tr>
<td>Lifestyle</td>
<td>53</td>
<td>18,0</td>
<td>32</td>
</tr>
<tr>
<td>Total</td>
<td>295</td>
<td>100</td>
<td>164</td>
</tr>
</tbody>
</table>

TABLE 6.2: Frequency distribution of dominant occupational perceptions for the total sample, managerial group and non-managerial groups

<table>
<thead>
<tr>
<th>Anchor</th>
<th>Total sample</th>
<th>Managerial</th>
<th>Non-managerial</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>Technical</td>
<td>79</td>
<td>26,8</td>
<td>58</td>
</tr>
<tr>
<td>Managerial</td>
<td>19</td>
<td>6,4</td>
<td>18</td>
</tr>
<tr>
<td>Autonomy</td>
<td>24</td>
<td>8,1</td>
<td>13</td>
</tr>
<tr>
<td>Security</td>
<td>50</td>
<td>16,9</td>
<td>22</td>
</tr>
<tr>
<td>Entrepreneur</td>
<td>12</td>
<td>4,1</td>
<td>7</td>
</tr>
<tr>
<td>Service</td>
<td>32</td>
<td>10,8</td>
<td>10</td>
</tr>
<tr>
<td>Challenge</td>
<td>24</td>
<td>8,1</td>
<td>17</td>
</tr>
<tr>
<td>Lifestyle</td>
<td>55</td>
<td>18,6</td>
<td>19</td>
</tr>
<tr>
<td>Total</td>
<td>295</td>
<td>100</td>
<td>164</td>
</tr>
</tbody>
</table>
6.1.1 Career anchors

The frequency of dominant career anchors will be discussed separately for the total sample, managerial group and non-managerial groups.

(a) Total sample

Table 6.1 shows that 22.4% of the respondents (the largest single group) had technical competence as a dominant career anchor. The next largest group (18.0%) had lifestyle integration as a dominant anchor. The rest of the sample was fairly evenly distributed amongst the remaining career anchors with managerial as the least common career anchor. These results support current research findings (Schein, 1996), namely, that technical competence and lifestyle integration are becoming increasingly prevalent as career anchors in the 1990s.

Schein (1992) refers to the emergence of new career anchors that reflect a higher level of emphasis on technical competence. As organisations become flatter, fewer managerial posts are available and the opportunities for technically anchored people increase. People with a technical career anchor are becoming more important to organisations (Schein, 1992, 1996). In South Africa, the reason for a high proportion of individuals with a dominant anchor of technical competence may also be attributed to changing values in the workplace in general and affirmative action in particular. The majority of the sample (80%) consisted of white employees and these employees may be motivated to secure their positions in the organisation by maintaining and developing their technical competence.

Schein (1992) also draws attention to the lifestyle career anchor as an important emerging career anchor in the 1990s. The reasons for this could be the increasing number of dual career families and changing sociocultural values, leading people to expect more from life with less willingness to settle for less (Schein, 1992). These reasons become even more feasible in the midlife/midcareer stage of an individual's life. Bailyn (1977) found that as people approach midcareer, family relationships become more important than involvement in work. She also predicted that the lifestyle integration anchor would become increasingly prevalent as time went on. Bearing in mind that the individuals in the sample were aged between 35 and 45 years and were thus in the traditionally defined midcareer stage, it is logical that they will begin to seek a
balanced lifestyle where they can participate in the lives of their families and society in general as well as in a career.

The sample had a fairly high record of stability in their work records. Approximately 70% of the respondents had served in their present organisation for at least 5 years and at least 80% of the sample had made less than two job changes in the last 10 years. Despite this, only 13% of the sample had security as their dominant anchor. This figure could be seen as surprisingly low as the sample consisted of midcareer individuals, who traditionally value security in the "second half" of their career. This low proportion of individuals with security as a dominant anchor (13%) combined with the high proportion of individuals with technical competence as a dominant anchor (22%) could once again reflect the current trend of the 1990s. Individuals, even at midcareer, are becoming less concerned with maintaining the security of a lifelong career within one organisation and are rather developing skills (technical competence) that will ensure mobility and the opportunity to move from one organisation to another if necessary. Hall and Mirvis (1995a & b) emphasise that it is no longer possible to ensure a lifelong career in one organisation, and a few career cycles in different organisations (even after the midcareer stage), rather than a lifelong career in one organisation, will become inevitable. The figures obtained in this study support this theory.

(b) Managerial group

In the managerial group, the largest number of respondents (26%) associated with technical competence as their dominant anchor. Individuals with lifestyle integration and challenge also comprised large proportions of the managerial sample (20% and 16% respectively). Surprisingly, very few of the individuals in the managerial group had managerial competence as their dominant career anchor (7%). These figures again verify trends identified in research (Schein, 1992, 1996). Earlier (1987), Schein referred to the managerial competence / technical competence polarity. According to this theory, individuals tend to associate themselves either with managerial competence, which enables them to supervise and coordinate the efforts of others, or with technical competence, in that they wish to remain in their area of expertise and will only be interested in advancement if they can maintain their involvement in their area of expertise. With the changing structure of organisations in the 1990s, namely a reduction in the number of
managerial posts and an increasing availability of more senior technical posts, it appears that individuals can remain in their area of expertise and still progress in their careers. In fact, the technically anchored individual appears to have more opportunities for self-management of his career by maintaining his specialist skills. This may account for the high proportion of the managerial group in this sample that are technically anchored. A second reason for the high frequency of technical competence as a dominant anchor in the managerial sample is that although both top and middle management were combined into one group, the majority were middle management employees. Slabbert (1987) found in her research that middle managers tended to associate more closely with technical competence than with other anchors. A third reason for the high incidence of technical competence as a dominant career anchor could be due to the structure of the South African workforce. The sample used in this study consisted of predominantly white employees, and one way of middle managers protecting themselves from becoming victims of affirmative action policies could be to maintain and increase their level of technical competence.

The proportion of the managerial sample that had lifestyle integration as their dominant anchor (20%) can be understood in the same context as the total group. As managers reach midcareer, the importance that they attach to the relationship with the family increases and they feel motivated to seek a balanced lifestyle that incorporates work, family relationships and recreation.

The proportion of managers that had challenge as a dominant career anchor (16%) can be understood in terms of the definition of the anchor. An individual with this anchor has a desire to overcome difficult obstacles and solve unsolvable problems. Jobs at this level would demand those skills from the individual and conversely an individual with this anchor would be comfortable in a managerial role.

(c) Non-managerial group

In the non-managerial group, 25% of the respondents (the largest single group) associated with security as their dominant anchor. The next largest groups had technical competence (18%) and lifestyle integration (16%) as their dominant anchor. These figures once again confirm current research findings. Schreuder (1989) found a strong association between security and individuals in non-managerial positions.
The reason for such a large proportion of the sample having security as their dominant anchor could also be interpreted in the context of the current South African situation. Most of the employees in the sample are white (80%), and could become the victims of affirmative action in a corporate environment. Whilst the managerial sample protect themselves by developing technical skills, the non-managerial employee may not have technical expertise and relies on the security of a lifelong career in one organisation above all else. The others that can maintain and develop technical skills do so, in order to obtain security either in one or other organisation.

Traditionally, individuals in non-managerial roles (or lower levels of the organisation) are associated with a high level of lifestyle integration (Bailyn, 1978). This may be due to their main orientation not being toward work but more to other aspects of their lives, family, community or avocational needs, particularly at the midcareer phase of their lives. The fairly high proportion of non-managerial employees in this study who had lifestyle integration as their dominant career anchor (16%) reflect this trend.

6.1.2 Occupational perceptions

The frequency of occupational perceptions will be discussed separately for the total sample, managerial group and non-managerial groups.

(a) Total sample

Table 6.2 shows that 26.8% of the respondents (the largest single group) perceived their occupational type as technical competence, namely, that their occupations provide them with the opportunity to work in their area of technical expertise. The next largest group (18.6%) perceived their occupational type as lifestyle integration, namely, that their occupations provide them with the opportunity to have sufficient flexibility to integrate their personal and family needs and the requirements of a career. The rest of the sample has a fairly even distribution of how they perceive their occupational type.

(b) Managerial group

In the managerial group (35%), the largest number of respondents perceived their occupational type as technical competence, namely, that their occupations provide them with the opportunity
to work in their area of technical expertise. A much smaller group (11%) perceived their occupations to be centred around managing others. The balance of the sample was fairly distributed among the remaining perceptions of occupational types.

(c) Non-managerial group
In the non-managerial group (21%), the largest number of respondents perceived their occupational type as lifestyle integration, that is they perceived that their occupation provides them with sufficient flexibility to be able to integrate all the major aspects of life into a unified whole. Another large group (21%) perceived their occupational type as security, namely, that their occupations provide secure employment. The next most frequently cited perceived occupational types in this group were service (16,8%) and technical competence (16%).

6.2 JOB SATISFACTION
In Table 6.3 the mean job satisfaction and standard deviation (SD) scores are presented.

<table>
<thead>
<tr>
<th></th>
<th>Total sample (n = 295)</th>
<th>Man (n = 164)</th>
<th>N-M (n = 131)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>General</td>
<td>3,55</td>
<td>0,6</td>
<td>3,62</td>
</tr>
<tr>
<td>Intrinsic</td>
<td>3,75</td>
<td>0,6</td>
<td>3,82</td>
</tr>
<tr>
<td>Extrinsic</td>
<td>3,11</td>
<td>0,8</td>
<td>3,11</td>
</tr>
</tbody>
</table>

Managerial = Man  Non-managerial = N-M

From Table 6.3, it can be seen that the level of job satisfaction of both managerial and non-managerial employees in this sample was in the positive direction, with the mean job satisfaction score significantly higher than neutral (completely satisfied scored a 5). General job satisfaction was 3,55 (p <0,001), intrinsic job satisfaction was 3,75 (p <0,001 ) and extrinsic job satisfaction was 3,11 (p < 0,01).
In order to gain more insight into the components of job satisfaction, the scores for general, intrinsic and extrinsic job satisfaction are presented and discussed separately.

6.2.1 General job satisfaction
The high scores obtained for general job satisfaction were consistent with the record of employment stability of the group as described in Chapter 5. At least 70% of the respondents had served in their present organisation for at least 5 years and at least 80% of the sample had made at most two job changes in the last 10 years. Approximately 90% of the sample wanted to continue in their current careers for more than one year, whilst only 10% of the sample wanted to continue for less than one year in their present careers.

According to Table 6.3 the general level of job satisfaction was significantly higher than neutral (3.55 p < 0.001). This high level of job satisfaction for midcareer employees seems contradictory, as one would have expected employees to be going through a "crisis" at this stage (Lawrence, 1980; Levinson et al, 1978; Sheehy, 1976; Super, 1992). An explanation for this finding could be current trends in the career cycles of individuals. It is possible that individuals today may avoid a "crisis" in the traditional sense (Hall & Mirvis, 1995a & b). As people are likely to undergo a series of career cycles in a lifetime, their level of job satisfaction may relate to the extent of compatibility between themselves and their work environment, rather than to their career stage. Research on job satisfaction supports the contention that there is a relation between job satisfaction and person-environment fit (Spokane, 1985). It is therefore possible that the general high level of job satisfaction of midcareer employees could be related to a high level of person-environment fit in this study.

6.2.2 Intrinsic job satisfaction
Inspection of Table 6.3 reveals that the level of intrinsic job satisfaction (3.75) was higher than that of general job satisfaction (3.55). As defined in Chapter 4, intrinsic job satisfaction referred to the content of the job itself or the immediate interaction between the worker and the job (Schein, 1980a). It is therefore clear that although the general level of job satisfaction was high, more of the job satisfaction was derived from intrinsic sources than extrinsic sources.
6.2.3 Extrinsic job satisfaction

Inspection of Table 6.3 reveals that the level of extrinsic job satisfaction (3,11) is lower than the level of general job satisfaction (3,55). As defined in Chapter 4, extrinsic job satisfaction refers to the context of the job or the working conditions, pay, benefits and other aspects of the work situation (Schein, 1980a). It can therefore be seen that less of the fairly high level of job satisfaction of the group can be related to extrinsic sources rather than intrinsic sources.

6.3 THE RELATION BETWEEN CAREER ANCHOR AND OCCUPATIONAL PERCEPTION

In order to test hypothesis 1, namely, that there is a relation between career anchors and occupational types of midcareer employees, the career anchor and the occupational perception for each individual were related.

For each career anchor, the respondents occupational perception was recorded as 'fitting' or 'not fitting'. For example, in the analysis of the relation of the technical competence anchor, 35 of the 62 respondents who were technically anchored perceived their occupational type as technical. There was thus a percentage 'fit' of 56% for this anchor. The chi squared analysis was used to assess whether the percentage fit for each anchor was significantly higher than chance. A chance fit was calculated as $1/8 = 0.125$ as respondents have an equal chance of working in 1 of 8 occupational types by chance. A significant fit would indicate significant predictability of occupational perception from career anchors.

In the case of small sample sizes (expected frequencies lower than 5), the Fisher Exact test was computed. The Chi square or Fishers Exact test was computed for the total sample, managerial and non-managerial groups.

The results are presented in Table 6.4.
From Table 6.4, there is some evidence that for the group as a whole, there is a significant relation between career anchor and occupational perception, i.e. for seven of the eight anchors (the exception being entrepreneurship), there is a highly significant relation between career anchor and occupational perception. For the managerial group, there is a significant relation between career anchor and occupational perception for only two of the eight career anchors (technical competence and managerial competence). For the non-managerial group there is a significant relation between career anchor and occupational perception for four of the eight career anchors (technical competence, security, service and lifestyle integration).

Overall, therefore, there is a significant relation between career anchor and occupational perception for the total group. There is however only some evidence of a significant relation between career anchor and occupational perception for the managerial and non-managerial
groups when considered separately. Hypothesis 1 was therefore not rejected for the total sample, but was rejected for the managerial and non-managerial groups considered separately.

6.4 GENERAL JOB SATISFACTION OF RESPONDENTS WITH A FIT BETWEEN CAREER ANCHOR AND OCCUPATIONAL PERCEPTION AND THOSE WITH NO SUCH FIT

In Chapter 3, research on the relation between person-environment fit and job satisfaction was outlined (Downey et al, 1975; Gati, 1989; Hesketh & Gardner, 1993; Pervin, 1987; Spokane, 1985). In this study, the fit group and the non-fit group were first compared in terms of their general job satisfaction. This was in order to test hypothesis 2 which posited that respondents with a fit between career anchor and occupational type have a higher level of general job satisfaction than those that have no such fit. The hypothesis was investigated separately for the total sample as well as the managerial and non-managerial groups. The results are presented in Table 6.5.

Table 6.5: The mean general job satisfaction scores of fit and non-fit groups

<table>
<thead>
<tr>
<th></th>
<th>Fit n</th>
<th>N-F n</th>
<th>Fit mean</th>
<th>N-F mean</th>
<th>Fit s</th>
<th>N-F s</th>
<th>T test DF</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>137</td>
<td>158</td>
<td>3.65</td>
<td>3.46</td>
<td>0.56</td>
<td>0.62</td>
<td>293</td>
<td>2.88 **</td>
</tr>
<tr>
<td>Man</td>
<td>76</td>
<td>88</td>
<td>3.70</td>
<td>3.56</td>
<td>0.48</td>
<td>0.57</td>
<td>162</td>
<td>1.80 *</td>
</tr>
<tr>
<td>N-M</td>
<td>61</td>
<td>70</td>
<td>3.60</td>
<td>3.34</td>
<td>0.64</td>
<td>0.66</td>
<td>129</td>
<td>2.28 *</td>
</tr>
</tbody>
</table>

Fit = Fit group  N-F = Non-fit group

* p < 0.05  
** p < 0.01  
*** p < 0.001

The mean general job satisfaction scores of the fit versus the non-fit groups are also graphically illustrated in the form of bar diagrams for the group as a whole as well as the managerial and non-managerial groups separately (Figure 6.1).
Figure 6.1: Mean general job satisfaction scores of total, managerial and non-managerial groups

For the sample as a whole, the general job satisfaction of the fit group was significantly higher than the general job satisfaction of the non-fit group (p < 0.01). For the managerial group and non-managerial group, the general job satisfaction of the fit group was also significantly higher than the general job satisfaction of the non-fit group (p < 0.05).

It is clear from these results that hypothesis 2 was supported.

In order to investigate whether fits in terms of specific anchors are associated with general job satisfaction to a greater or lesser extent, an analysis at a micro level was conducted. The analysis was computed for each of the eight career anchors separately. The results are presented in Tables 6.6, 6.7 and 6.8.
GENERAL JOB SATISFACTION: SCORES OF FIT VERSUS NON-FIT GROUPS FOR EACH CAREER ANCHOR (TABLES 6.6 - 6.8; t test and Mann-Whitney U test statistics)

Table 6.6: Total sample

<table>
<thead>
<tr>
<th>Anchor</th>
<th>Fit n</th>
<th>N-F n</th>
<th>Fit mean</th>
<th>N-F mean</th>
<th>Fit s</th>
<th>N-F s</th>
<th>T test DF</th>
<th>T test t</th>
<th>MWU</th>
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<tbody>
<tr>
<td>Tech</td>
<td>40</td>
<td>22</td>
<td>3.68</td>
<td>3.40</td>
<td>0.55</td>
<td>0.73</td>
<td>60</td>
<td>1.73</td>
<td>357.5</td>
</tr>
<tr>
<td>Man</td>
<td>8</td>
<td>7</td>
<td>3.94</td>
<td>3.72</td>
<td>0.39</td>
<td>0.71</td>
<td>13</td>
<td>0.75</td>
<td>21.0</td>
</tr>
<tr>
<td>Aut</td>
<td>11</td>
<td>14</td>
<td>3.50</td>
<td>3.32</td>
<td>0.59</td>
<td>0.64</td>
<td>23</td>
<td>0.70</td>
<td>66.5</td>
</tr>
<tr>
<td>Sec</td>
<td>18</td>
<td>22</td>
<td>3.62</td>
<td>3.44</td>
<td>0.67</td>
<td>0.64</td>
<td>38</td>
<td>0.85</td>
<td>175.0</td>
</tr>
<tr>
<td>Entre</td>
<td>7</td>
<td>23</td>
<td>3.11</td>
<td>3.21</td>
<td>0.55</td>
<td>0.61</td>
<td>28</td>
<td>-0.37</td>
<td>77.0</td>
</tr>
<tr>
<td>Serv</td>
<td>15</td>
<td>12</td>
<td>3.89</td>
<td>3.47</td>
<td>0.54</td>
<td>0.65</td>
<td>25</td>
<td>1.82</td>
<td>54.0</td>
</tr>
<tr>
<td>Chall</td>
<td>15</td>
<td>25</td>
<td>3.83</td>
<td>3.63</td>
<td>0.34</td>
<td>0.48</td>
<td>38</td>
<td>1.38</td>
<td>160.5</td>
</tr>
<tr>
<td>Lifest</td>
<td>22</td>
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<td>3.55</td>
<td>0.53</td>
<td>0.56</td>
<td>53</td>
<td>-0.10</td>
<td>348.5</td>
</tr>
</tbody>
</table>

(no significant differences between groups were found)

Table 6.7: Managerial group

<table>
<thead>
<tr>
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<th>Fit N</th>
<th>N-F n</th>
<th>Fit mean</th>
<th>N-F mean</th>
<th>Fit s</th>
<th>N-F s</th>
<th>T test DF</th>
<th>T test t</th>
<th>MWU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tech</td>
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<td>162.0</td>
</tr>
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<td>0.39</td>
<td>0.90</td>
<td>10</td>
<td>0.17</td>
<td>15.5</td>
</tr>
<tr>
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<td>7</td>
<td>7</td>
<td>3.54</td>
<td>3.34</td>
<td>0.17</td>
<td>0.53</td>
<td>12</td>
<td>0.58</td>
<td>19.0</td>
</tr>
<tr>
<td>Sec</td>
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<td>4</td>
<td>3.75</td>
<td>3.54</td>
<td>0.14</td>
<td>0.53</td>
<td>4</td>
<td>0.53</td>
<td>4.0</td>
</tr>
<tr>
<td>Entre</td>
<td>3</td>
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<td>3.18</td>
<td>3.24</td>
<td>0.63</td>
<td>0.62</td>
<td>8</td>
<td>-0.15</td>
<td>25.0</td>
</tr>
<tr>
<td>Serv</td>
<td>6</td>
<td>5</td>
<td>3.84</td>
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<td>0.31</td>
<td>0.47</td>
<td>24</td>
<td>0.67</td>
<td>78.5</td>
</tr>
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<td>10</td>
<td>16</td>
<td>3.76</td>
<td>3.65</td>
<td>0.31</td>
<td>0.47</td>
<td>24</td>
<td>0.67</td>
<td>78.5</td>
</tr>
<tr>
<td>Lifest</td>
<td>8</td>
<td>24</td>
<td>3.56</td>
<td>3.66</td>
<td>0.31</td>
<td>0.52</td>
<td>30</td>
<td>-0.55</td>
<td>75.5</td>
</tr>
</tbody>
</table>

(no significant differences between groups were found)
Table 6.8: Non-managerial group

<table>
<thead>
<tr>
<th>Anchor</th>
<th>Fit N</th>
<th>N-F N</th>
<th>Fit mean</th>
<th>N-F mean</th>
<th>Fit s</th>
<th>N-F s</th>
<th>T test DF</th>
<th>T test t</th>
<th>MWU p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tech</td>
<td>9</td>
<td>11</td>
<td>3,53</td>
<td>3,05</td>
<td>0,63</td>
<td>0,79</td>
<td>11</td>
<td>1,46 *</td>
<td>29,5</td>
</tr>
<tr>
<td>Man</td>
<td>-</td>
<td>3</td>
<td>-</td>
<td>3,52</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Aut</td>
<td>4</td>
<td>7</td>
<td>3,41</td>
<td>3,3</td>
<td>0,70</td>
<td>0,61</td>
<td>9</td>
<td>0,28</td>
<td>13,0</td>
</tr>
<tr>
<td>Sec</td>
<td>16</td>
<td>18</td>
<td>3,60</td>
<td>3,42</td>
<td>0,71</td>
<td>0,67</td>
<td>32</td>
<td>0,77</td>
<td>127,0</td>
</tr>
<tr>
<td>Entre</td>
<td>4</td>
<td>6</td>
<td>3,06</td>
<td>3,12</td>
<td>0,57</td>
<td>0,62</td>
<td>8</td>
<td>-0,14</td>
<td>10,0</td>
</tr>
<tr>
<td>Serv</td>
<td>9</td>
<td>7</td>
<td>3,92</td>
<td>3,54</td>
<td>0,56</td>
<td>0,86</td>
<td>14</td>
<td>1,07</td>
<td>24,0</td>
</tr>
<tr>
<td>Chall</td>
<td>5</td>
<td>9</td>
<td>3,96</td>
<td>3,61</td>
<td>0,41</td>
<td>0,51</td>
<td>12</td>
<td>1,32</td>
<td>13,0</td>
</tr>
<tr>
<td>Lifest</td>
<td>14</td>
<td>9</td>
<td>3,52</td>
<td>3,24</td>
<td>0,63</td>
<td>0,57</td>
<td>21</td>
<td>1,09</td>
<td>46,0</td>
</tr>
</tbody>
</table>

(only one significant difference between groups was found)

From these tables, it can be seen that although the general job satisfaction of the fit group was higher than that of the non-fit group for almost all of the separate anchors (the exceptions being entrepreneurship and lifestyle integration), the differences were not significant. It can therefore be concluded that these small differences observed at the micro level together contributed to an overall significant difference at the macro level. These conclusions pertain for the group as a whole and for the managerial and non-managerial groups separately.

6.5 INTRINSIC JOB SATISFACTION OF RESPONDENTS WITH A FIT BETWEEN CAREER ANCHOR AND OCCUPATIONAL PERCEPTION AND THOSE WITH NO SUCH FIT

The hypothesis that respondents with a fit between career anchor and occupational perception have a significantly higher level of general job satisfaction than those with no such fit was supported for the group as a whole as well as the managerial and non-managerial groups separately. Intrinsic and extrinsic job satisfaction were then analysed separately to test hypotheses 3 and 4. Once again this investigation was carried out for the total sample as well as for the managerial and non-managerial groups. The results with regard to intrinsic job satisfaction are presented in Table 6.9.
Table 6.9: The mean intrinsic job satisfaction scores of fit and non-fit groups

<table>
<thead>
<tr>
<th></th>
<th>Fit N</th>
<th>N-F N</th>
<th>Fit mean</th>
<th>N-F mean</th>
<th>Fit s</th>
<th>N-F s</th>
<th>T test DF</th>
<th>T test t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>137</td>
<td>158</td>
<td>3,86</td>
<td>3,65</td>
<td>0,55</td>
<td>0,65</td>
<td>292,9</td>
<td>3,03</td>
</tr>
<tr>
<td>Man</td>
<td>76</td>
<td>88</td>
<td>3,89</td>
<td>3,75</td>
<td>0,46</td>
<td>0,58</td>
<td>160,8</td>
<td>1,69</td>
</tr>
<tr>
<td>N-M</td>
<td>61</td>
<td>70</td>
<td>3,82</td>
<td>3,52</td>
<td>0,65</td>
<td>0,71</td>
<td>129</td>
<td>2,55</td>
</tr>
</tbody>
</table>

Fit = Fit group   N-F = Non-fit group

*   p < 0,05
**  p < 0,01
*** p < 0,001

The mean intrinsic job satisfaction scores of the fit versus the non-fit groups are graphically illustrated in the form of bar diagrams for the group as a whole as well as for the managerial and non-managerial groups separately (Figure 6.2).

![Bar Diagrams](image)

Figure 6.2: Mean intrinsic job satisfaction scores of total, managerial and non-managerial groups

For the sample as a whole, the intrinsic job satisfaction of the fit group was significantly higher than that of non-fit group (p < 0,01). For the managerial group, the intrinsic job satisfaction of the fit group was higher than that of the non-fit group, however the difference was not significant (p = 0,09). For the non-managerial group, the intrinsic job satisfaction of the fit group
was significantly higher than that of the non-fit group (p < 0.05).

Hypothesis 3 was therefore supported for the group as a whole as well as for the non-managerial group. Hypothesis 3 could not however be supported in the case of the managerial group.

In order to investigate whether fits in terms of specific anchors are associated with intrinsic job satisfaction to a greater or lesser extent, a micro analysis was conducted. The analysis was computed for each of the eight career anchors, separately. The results are presented in Tables 6.10, 6.11 and 6.12.

**INTRINSIC JOB SATISFACTION: SCORES OF FIT VERSUS NON-FIT GROUPS FOR EACH CAREER ANCHOR (TABLES 6.10 - 6.12; t test and Mann Whitney U test statistics)**

Table 6.10: Total sample

<table>
<thead>
<tr>
<th>Anchor</th>
<th>Fit N</th>
<th>N-F n</th>
<th>Fit mean</th>
<th>N-F mean</th>
<th>Fit s</th>
<th>N-F s</th>
<th>T test</th>
<th>T test</th>
<th>MWU stat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tech</td>
<td>40</td>
<td>22</td>
<td>3.89</td>
<td>3.53</td>
<td>0.52</td>
<td>0.76</td>
<td>32</td>
<td>1.94</td>
<td>330.5</td>
</tr>
<tr>
<td>Man</td>
<td>8</td>
<td>7</td>
<td>4.09</td>
<td>3.94</td>
<td>0.32</td>
<td>0.58</td>
<td>13</td>
<td>0.64</td>
<td>22.5</td>
</tr>
<tr>
<td>Aut</td>
<td>11</td>
<td>14</td>
<td>3.73</td>
<td>3.59</td>
<td>0.53</td>
<td>0.73</td>
<td>23</td>
<td>0.53</td>
<td>71.5</td>
</tr>
<tr>
<td>Sec</td>
<td>18</td>
<td>22</td>
<td>3.78</td>
<td>3.50</td>
<td>0.71</td>
<td>0.65</td>
<td>38</td>
<td>1.28</td>
<td>152.0</td>
</tr>
<tr>
<td>Entre</td>
<td>7</td>
<td>23</td>
<td>3.41</td>
<td>3.45</td>
<td>0.69</td>
<td>0.67</td>
<td>28</td>
<td>-0.16</td>
<td>79.5</td>
</tr>
<tr>
<td>Serv</td>
<td>15</td>
<td>12</td>
<td>4.18</td>
<td>3.58</td>
<td>0.56</td>
<td>0.73</td>
<td>25</td>
<td>2.42 *</td>
<td>41.5</td>
</tr>
<tr>
<td>Chall</td>
<td>15</td>
<td>25</td>
<td>4.0</td>
<td>3.84</td>
<td>0.31</td>
<td>0.55</td>
<td>37.9</td>
<td>1.12</td>
<td>159.0</td>
</tr>
<tr>
<td>Lifest</td>
<td>22</td>
<td>33</td>
<td>3.68</td>
<td>3.81</td>
<td>0.49</td>
<td>0.53</td>
<td>53</td>
<td>0.88</td>
<td>159.0</td>
</tr>
</tbody>
</table>

(no significant differences between groups were found)
From these tables, it can be seen that although the intrinsic job satisfaction of the fit group was higher than the non-fit group for almost all of the anchors (the exceptions being entrepreneurship), the differences were not significant. It can therefore be concluded that these
small differences observed at the micro level together contributed to an overall significant
difference at the macro level. These conclusions pertain for the group as a whole as well as for
the non-managerial group. For the managerial group, the differences in intrinsic job satisfaction
between the fit and non-fit groups observed at the micro level, were so small that they were not
sufficient to contribute to a significant overall difference at the macro level.

6.6 EXTRINSIC JOB SATISFACTION OF RESPONDENTS WITH A FIT
BETWEEN CAREER ANCHOR AND OCCUPATIONAL PERCEPTION AND
THOSE WITH NO SUCH FIT

Hypothesis 2 and 3, i.e. that midcareer employees with a fit between career anchor and
occupational type have a significantly higher level of general and intrinsic job satisfaction than
those with no such fit were supported. Given support for these hypotheses, the differences in the
level of extrinsic job satisfaction between the fit and non-fit group was also investigated. As in
the previous cases, the investigation was carried out for the total sample as well as the
managerial and non-managerial groups. The results are presented in Table 6.13.

Table 6.13: The mean extrinsic job satisfaction scores of fit and non-fit groups

<table>
<thead>
<tr>
<th></th>
<th>Fit N</th>
<th>N-F N</th>
<th>Fit mean</th>
<th>N-F mean</th>
<th>Fit s</th>
<th>N-F s</th>
<th>T test DF</th>
<th>T test t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>137</td>
<td>158</td>
<td>3,21</td>
<td>3,10</td>
<td>0,81</td>
<td>0,79</td>
<td>293</td>
<td>1,90</td>
</tr>
<tr>
<td>Man</td>
<td>76</td>
<td>88</td>
<td>3,25</td>
<td>3,10</td>
<td>0,76</td>
<td>0,77</td>
<td>162</td>
<td>1,30</td>
</tr>
<tr>
<td>N-M</td>
<td>61</td>
<td>70</td>
<td>3,15</td>
<td>2,94</td>
<td>0,88</td>
<td>0,81</td>
<td>129</td>
<td>1,40</td>
</tr>
</tbody>
</table>

Fit = Fit group     N-F = Non-fit group

*     p < 0,05
**    p < 0,01
***   p < 0,001

The mean extrinsic job satisfaction scores of the fit versus the non-fit groups are graphically
illustrated in the form of bar diagrams for the total, managerial and non-managerial groups
(Figure 6.3).
For the sample as a whole, the extrinsic job satisfaction of the fit group was higher than that of the non-fit group; however, this difference was not significant. For the managerial group and non-managerial group, the extrinsic job satisfaction of the fit group was also higher than that of the non-fit group, but not significantly so.

From these results it can be seen that a fit between career anchor and occupational type does not lead to a significantly higher level of extrinsic job satisfaction for either managerial or non-managerial employees. Hypothesis 4 could therefore not be supported.

In order to investigate whether fits in terms of specific anchors were associated with extrinsic job satisfaction to a greater or lesser extent, a micro analysis was conducted. The analysis was computed for each of the eight career anchors considered separately. The results are presented in Tables 6.14, 6.15 and 6.16.
EXTRINSIC JOB SATISFACTION: SCORES OF FIT VERSUS NON-FIT GROUPS
FOR EACH CAREER ANCHOR (TABLES 6.14 - 6.16; t test and Mann-Whitney U test statistics)

Table 6.14: Total sample

<table>
<thead>
<tr>
<th>Anchor</th>
<th>Fit N</th>
<th>N-F N</th>
<th>Fit mean</th>
<th>N-F mean</th>
<th>Fit s</th>
<th>N-F s</th>
<th>T test DF</th>
<th>T test t</th>
<th>MWU stat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tech</td>
<td>40</td>
<td>22</td>
<td>3.21</td>
<td>3.08</td>
<td>0.84</td>
<td>0.84</td>
<td>293</td>
<td>1.90</td>
<td>404.0</td>
</tr>
<tr>
<td>Man</td>
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<td>0.72</td>
<td>1.12</td>
<td>13</td>
<td>1.01</td>
<td>19.0</td>
</tr>
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<td>14</td>
<td>2.99</td>
<td>2.76</td>
<td>0.94</td>
<td>0.78</td>
<td>23</td>
<td>0.65</td>
<td>66.5</td>
</tr>
<tr>
<td>Sec</td>
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<td>22</td>
<td>3.31</td>
<td>3.24</td>
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<td>0.83</td>
<td>38</td>
<td>0.27</td>
<td>187.0</td>
</tr>
<tr>
<td>Entre</td>
<td>7</td>
<td>23</td>
<td>2.52</td>
<td>2.62</td>
<td>0.58</td>
<td>0.78</td>
<td>28</td>
<td>-0.31</td>
<td>68.5</td>
</tr>
<tr>
<td>Serv</td>
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<td>3.31</td>
<td>2.15</td>
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<td>0.68</td>
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</tr>
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</tr>
<tr>
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<td>33</td>
<td>3.12</td>
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<td>0.76</td>
<td>53</td>
<td>0.36</td>
<td>339.5</td>
</tr>
</tbody>
</table>

(no significant differences between groups were found)

Table 6.15: Managerial group

<table>
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<th>Anchor</th>
<th>Fit N</th>
<th>N-F N</th>
<th>Fit mean</th>
<th>N-F mean</th>
<th>Fit s</th>
<th>N-F s</th>
<th>T test DF</th>
<th>T test t</th>
<th>MWU stat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tech</td>
<td>31</td>
<td>9</td>
<td>3.25</td>
<td>3.50</td>
<td>0.85</td>
<td>0.63</td>
<td>40</td>
<td>0.88</td>
<td>142.5</td>
</tr>
<tr>
<td>Man</td>
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<td>4</td>
<td>3.61</td>
<td>3.42</td>
<td>0.72</td>
<td>1.32</td>
<td>10</td>
<td>0.32</td>
<td>15.5</td>
</tr>
<tr>
<td>Aut</td>
<td>7</td>
<td>7</td>
<td>3.19</td>
<td>2.88</td>
<td>0.81</td>
<td>0.71</td>
<td>12</td>
<td>0.76</td>
<td>18.0</td>
</tr>
<tr>
<td>Sec</td>
<td>2</td>
<td>4</td>
<td>3.42</td>
<td>3.21</td>
<td>0.35</td>
<td>0.60</td>
<td>4</td>
<td>0.44</td>
<td>3.5</td>
</tr>
<tr>
<td>Entre</td>
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<td>2.58</td>
<td>0.95</td>
<td>0.80</td>
<td>18</td>
<td>0.06</td>
<td>24.5</td>
</tr>
<tr>
<td>Serv</td>
<td>6</td>
<td>5</td>
<td>3.33</td>
<td>2.90</td>
<td>0.69</td>
<td>0.40</td>
<td>9</td>
<td>1.23</td>
<td>8.0</td>
</tr>
<tr>
<td>Chall</td>
<td>10</td>
<td>16</td>
<td>3.32</td>
<td>3.28</td>
<td>0.65</td>
<td>0.75</td>
<td>24</td>
<td>0.13</td>
<td>76.0</td>
</tr>
<tr>
<td>Lifest</td>
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<td>24</td>
<td>3.23</td>
<td>3.19</td>
<td>0.45</td>
<td>0.70</td>
<td>30</td>
<td>0.16</td>
<td>93.0</td>
</tr>
</tbody>
</table>

(no significant differences between groups were found)
Table 6.16: Non-managerial group.

<table>
<thead>
<tr>
<th>Anchor</th>
<th>Fit N</th>
<th>N-F n</th>
<th>Fit mean</th>
<th>N-F mean</th>
<th>Fit s</th>
<th>N-F s</th>
<th>T test DF</th>
<th>T test t</th>
<th>MWU stat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tech</td>
<td>9</td>
<td>11</td>
<td>3,06</td>
<td>2,67</td>
<td>0,81</td>
<td>0,83</td>
<td>18</td>
<td>1,05*</td>
<td>37,0</td>
</tr>
<tr>
<td>Man</td>
<td>-</td>
<td>3</td>
<td>-</td>
<td>2,72</td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Aut</td>
<td>4</td>
<td>7</td>
<td>2,63</td>
<td>2,64</td>
<td>1,12</td>
<td>0,90</td>
<td>9</td>
<td>-0,03</td>
<td>13,5</td>
</tr>
<tr>
<td>Sec</td>
<td>16</td>
<td>18</td>
<td>3,29</td>
<td>3,24</td>
<td>0,90</td>
<td>0,88</td>
<td>32</td>
<td>0,17</td>
<td>138,0</td>
</tr>
<tr>
<td>Entre</td>
<td>4</td>
<td>6</td>
<td>2,46</td>
<td>2,75</td>
<td>0,25</td>
<td>0,81</td>
<td>8</td>
<td>-0,69</td>
<td>9,5</td>
</tr>
<tr>
<td>Serv</td>
<td>9</td>
<td>7</td>
<td>3,30</td>
<td>3,33</td>
<td>0,96</td>
<td>0,81</td>
<td>14</td>
<td>-0,08</td>
<td>30,0</td>
</tr>
<tr>
<td>Chall</td>
<td>5</td>
<td>9</td>
<td>3,8</td>
<td>3,07</td>
<td></td>
<td></td>
<td></td>
<td>12</td>
<td>2,75*</td>
</tr>
<tr>
<td>Lifest</td>
<td>14</td>
<td>9</td>
<td>3,06</td>
<td>2,67</td>
<td>0,91</td>
<td>0,81</td>
<td>21</td>
<td>1,05</td>
<td>45,0</td>
</tr>
</tbody>
</table>

(no significant differences between groups were found)

From these tables, it can be seen that although the extrinsic job satisfaction of the fit group was higher than the non-fit group for almost all of the separate anchors (the exceptions being entrepreneurship, autonomy and service), the differences were not significant. It can therefore be concluded that these differences were so small at the micro level that their contribution even at the macro level was not sufficient to yield a significant overall difference in extrinsic job satisfaction between the fit and the non-fit group.

6.7 INTEGRATION OF RESEARCH FINDINGS

The general aim of this research was to examine the relation between career anchors and occupational types and to determine if midcareer employees with a fit between career anchor and occupational type experience a higher level of general, intrinsic and extrinsic job satisfaction than those with no such fit.

The Chi Square and Fisher Exact test indicated that the percentage of fits as opposed to non-fits was significantly higher than chance, leading to the conclusion that there was a highly significant relation between career anchor and occupational perception for the sample as a whole. As no distinction is made between occupational type and occupational perception in this study, this finding leads to the conclusion that an individual with a certain career anchor is likely to view
his occupation in a similar way.

This finding is supported by research trends that indicate that there is a direct relation between the eight career anchors and a variety of occupations, i.e. there is a tendency for certain career anchors to be the dominant career anchors of individuals in specific occupational groups (Schein, 1990, 1992). The difference between general research of this nature and the research in this study is the way in which occupational type was measured. In most studies of this nature, occupational type is measured in terms of the objective categories of occupational type. In this study individuals were categorised according to their subjective perception of their occupational type. This method was selected as it is in line with current research that indicates that an individual's subjective interpretation of his occupational type or "internal career" provides a more accurate measurement of occupational type than an objective categorisation of his occupation or "external career" (Schein, 1990a; Savickas, 1992; Schreuder, 1989).

Three separate hypotheses were then postulated, namely, midcareer employees with a fit between career anchor and occupational type will experience a higher level of general job satisfaction, intrinsic job satisfaction and extrinsic job satisfaction, than those with no such fit. Three separate t-tests were conducted to determine if the differences in the mean level of job satisfaction scores differed for the fit and non-fit groups in the case of general, intrinsic and extrinsic job satisfaction.

The results obtained from the empirical study offer significant support for the trends indicated in the literature survey. The findings suggest that midcareer employees that have a fit between career anchor and occupational perception are likely to experience a higher level of general and intrinsic job satisfaction than those with no such fit. The literature survey supports these findings, in that there is an extensive body of research providing consistent evidence of increased job satisfaction when person-environment congruence exists, in general (Gati, 1989; Pervin, 1988; Spokane, 1985; Holland, 1973, 1985; Roe, 1957, 1990; Super, 1957, 1980, 1990) and more specifically in terms of a person-environment fit between career anchor and occupational type (Eastwood, 1980; Hall & Thomas, 1979; Kaplan, 1990; Schein, 1990; Schreuder, 1989).

However, the empirical study did not provide support for the hypothesis that midcareer
employees with a fit between career anchor and occupational type experience a higher level of extrinsic job satisfaction than those with no such fit. Once again, this finding is supported by trends in the literature survey which indicate that intrinsic job satisfaction can be predicted more accurately than extrinsic job satisfaction on the basis of career anchors (Kaplan, 1990).

In the empirical study, the analysis was expanded from the macro level to the micro level, namely, whether fits in terms of specific anchors are associated with job satisfaction to a greater or lesser extent. Although there are no references to studies of this nature in the literature survey, it was felt that research at this level would make a useful contribution, particularly as there is a continual shift in the dominance of various career anchors due to an increasingly complex work environment. As the research was conducted on an exploratory level, no specific hypotheses were postulated. The results of the empirical study did not indicate any significant differences in the level of job satisfaction for any fits based on specific career anchors. It was therefore concluded that the small differences observed at the micro level together contributed to an overall significant difference at the macro level, in the case of general and intrinsic job satisfaction. In the case of extrinsic job satisfaction, it was concluded that the differences at the micro level were so small at the micro level that their contribution even at the macro level, were not sufficient to yield a significant overall difference in extrinsic job satisfaction between the fit and the non-fit group.

The empirical investigation was conducted for the group as a whole as well as for the managerial and non-managerial groups. The investigation was conducted in this way because of trends in the literature survey that provide evidence of a difference in value systems and career anchors of managers and non-managers. In this study, no significant differences were found between the results obtained for the managerial and non-managerial groups in terms of their levels of job satisfaction, leading to the conclusion that in future studies the distinction between managers and non-managers may not be necessary.

In general the results obtained form the empirical study offered support for the findings identified in the literature survey. These findings suggest that there is a relation between career anchors and occupation types for midcareer employees and that those individuals with a fit between
career anchor and occupational type are likely to experience a higher level of general and intrinsic job satisfaction than those with no such fit. The fit between career anchor and occupational type is likely to have less correlation with the individual’s level of extrinsic job satisfaction.

6.8 CHAPTER SUMMARY
This chapter contained steps 7 and 8 of the empirical investigation, that is to say, the results of the empirical study were reported and interpreted.

Chapter 7 comprises steps 9 to 11 of the empirical investigation - the limitations, conclusions and recommendations for further research.
Chapter 7: LIMITATIONS, CONCLUSIONS AND RECOMMENDATIONS

Chapter 7 contains steps 9 to 11 of the empirical investigation. The limitations of the research are discussed, followed by the conclusions and recommendations for further research.

7.1 LIMITATIONS OF THE RESEARCH

Certain limitations of the study were described in the methodology section and are summarised here.

The internal validity of the study must be regarded with caution. The study was a field study in the form of a survey, therefore accuracy of experimental conditions could not be achieved. However the data obtained can be regarded as accurate as possible; for example, standardised instructions were issued to all participants.

The external validity / generalisability of the study must also be regarded with caution. The sample was not drawn randomly, i.e. not every individual in the population had an equal chance of being selected - only organisations that were willing to participate in the study, and only employees in those organisations who were willing to participate in the study were used. It is therefore not possible to accept that the sample attained in the study is representative of the defined population. There must necessarily be some doubt concerning the generalisability of the findings of the study.

The Career Orientations Questionnaire (1990 version) had a lower level of reliability for two subscales (technical competence - 0.59 and lifestyle integration - 0.64) than the other subscales (ranging from 0.70 - 0.78). Although reliabilities as low as 0.3 are acceptable when instruments are used to gather group data, the lower reliability of these subscales must be taken into account in the interpretation of the results.

The Job Perception Questionnaire is based on the Career Orientations Questionnaire (1990 version). This questionnaire had a lower level of reliability for one subscale (technical competence - 0.55) than the other subscales (ranging from 0.77 - 0.85). As the questionnaire is used to predict broad trends rather than individual differences, reliability as low as 0.3 are
acceptable. Despite this, the low reliability of this subscale must be taken into account in the interpretation of the results.

The construct validity of both questionnaires must also be interpreted with some caution. By definition, a career anchor is "the element in our self concept that we would not give up if forced to make a choice" (Schein, 1978). Given this characteristic, a forced choice format might have been more appropriate for the inventory. In the 1990 version of the instrument, however, Schein addressed this problem by requesting respondents to identify the items that were rated highest, and to pick out the three items that seemed most true for the individual. Those items are awarded extra points in the computation of scores. In this way, Schein has in some way made the inventory more consistent with the definition of a career anchor, thereby improving its construct validity.

The same procedure was applied to the scoring of the JPQ in order to weight the dominant perceived occupational type. Respondents were requested to identify the three items on the questionnaire that seemed most true. Each item was awarded extra points in the computation of scores. In this way the definition of the occupational type was applied and the construct validity of the questionnaire improved.

7.2 CONCLUSIONS

On the basis of the literature review the following conclusions were arrived at.

The traditional career contract - the set of mutual expectations between the employer and employee - has changed over the last decade. The concept of a contemporary career has broadened from the possibility of one job in one organisation to three or more careers in different organisations or occupations. In today's times the individual is becoming more responsible for the planning of his own career. This has important implications for the midcareer worker. Instead of a midcareer individual reaching a plateau during the midcareer period, he may periodically plateau as he passes his prime career age, rather than his chronological age. Therefore the traditional midcareer period may not be as clearcut as it was in the traditional career cycle. This may, in fact,
solve the problem of the midcareer crisis, as midcareer employees may be able to develop and maintain adaptability by continually exploring new areas of work, even while thriving in the present one.

Traditional career paradigms such as career choice and career development no longer meet the requirements of the increasingly complex work environment. As individuals become more responsible for managing their own careers, new career models that provide the individual with sufficient self-insight to make these choices are emerging. The career preference paradigm which clarifies employee career preferences and their match with the organisation's staffing requirements is emerging as an important third perspective in career theory. The career anchor model, which is based on providing the midcareer individual with a vocational self-concept or career preference based on a combination of his needs, values and talents, is an example of such a model.

The following specific conclusions emerged from the empirical investigation conducted in this study.

* There is a significant relation between career anchor and occupational type for midcareer employees (both managers and non-managers). The career anchor construct can therefore be regarded as a valid and reliable diagnostic tool for career choice once the employee has reached midcareer, i.e. once he has had sufficient working experience to have established his true talents, needs and values.

* Midcareer employees (managers and non-managers) with a fit between their career anchor and occupational type are likely to experience a higher level of general and intrinsic job satisfaction than midcareer employees with no such fit.

* Midcareer employees (managers and non-managers) with a fit between their career anchor and occupational type are not likely to experience a significantly higher level of extrinsic job satisfaction than midcareer employees with no such fit.

* On a micro level, there are no specific career anchor / occupational type fits associated
with a higher level of job satisfaction than other 'fits'. The individual differences do however contribute to the overall difference in job satisfaction between fit and non-fit groups.

A notable feature of this thesis is that the empirical results confirm the trends identified in current career research, namely that employees with a fit between their career anchor and occupational type experience greater intrinsic job satisfaction than those with no such fit. In addition, lifestyle integration and technical competence emerged as frequent career anchors.

7.3 RECOMMENDATIONS FOR FURTHER RESEARCH

As is evident in the literature review the concept of a career has broadened considerably over the last few decades. Research on contemporary careers is therefore vital to provide individuals with new ways of understanding their careers and making correct career choices at various points in their lives.

The midcareer stage has always been highlighted as a significant stage in the individual's career. As careers have evolved the problems associated with midcareer individuals have changed. In traditional careers when individuals had one job in one organisation for a lifetime, the concept of midcareer plateaus and midcareer obsolescence were common. In the contemporary career, less emphasis is placed on the individual's age and more on how long he has worked in a career. Further research on midcareer individuals and the changes in their career preferences throughout their career/lifecycle would contribute to the understanding of contemporary career choice.

This research highlighted the differences between job satisfaction derived from intrinsic sources and that derived from external sources. Within the career anchor model, the importance of viewing careers from a subjective perspective is emphasised. It is this emphasis that clarifies that intrinsic job satisfaction may be a more valued outcome of a compatibility between the individual and his occupation. Further research on the differences in intrinsic and extrinsic job satisfaction between employees in contemporary careers would contribute to an understanding of individual differences and more specifically the components of job satisfaction.
In this study, a distinction between managers and non-managers was made. Although there were no major differences in the results of the two groups, the results were clearer in the case of managers than non-managers. This trend has been shown in other research studies where results for managers have been confirmed whereas varying results for non-managers have been obtained. A more detailed look at the differences between the career preferences of managers versus non-managers and how a compatibility between the individual and his occupation would affect his job satisfaction would add to an understanding of contemporary career preferences.

Although longitudinal and biographical research is time consuming and costly, a longitudinal and biographical study of employees' career preferences over a span of time would prove extremely valuable to the field of research on career preferences. As the individual is likely to change career a few times in a lifetime, due to environmental conditions, a study of the pattern of these career changes would provide greater insight into the development of career preferences and more specifically career anchors. Most studies within the career preference paradigm are correlational and therefore the direction of causality cannot be inferred. Studies of a longitudinal nature would provide further insight into the causes and effects of career choice.

Lastly, the career anchor model has been supported in this study and in many preceding research studies as a valuable tool for career choice. It has shown to be suitable for the current nature of careers, as well as very helpful for midcareer individuals. Comparative studies on the value of the model and other models within the career preference paradigm would provide a broader context for the career anchor model and highlight its value in relation to other career preference models.


1. **BIOGRAPHICAL INFORMATION**

Please answer the following questions by **circling** the applicable number and filling in the information on the dotted line.

**TITLE (PROF/DR/MRS/MR/MS) ............ Surname ........................................ FIRST NAME(S) ............................................................................................................................**

**NAME OF ORGANISATION ................................................................. POSITION IN ORGANISATION .................................**

<table>
<thead>
<tr>
<th>1. Gender</th>
<th>5 to 10 years</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>1 10 to 15 years</td>
<td>4</td>
</tr>
<tr>
<td>Female</td>
<td>2 More than 15 years</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Age</th>
<th>7. What is your current salary - excluding package benefits?</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 to 34 years</td>
<td>1 Less than R8000.00 per month (excluding benefits)</td>
</tr>
<tr>
<td>35 to 40 years</td>
<td>2 R8000.00 to R11000.00 per month (excluding benefits)</td>
</tr>
<tr>
<td>41 to 45 years</td>
<td>3 More than R11000.00 per month (excluding benefits)</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>3. Race</th>
<th>4 8. Which grading system is used in your organisation?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>Peromnes</td>
</tr>
<tr>
<td>White</td>
<td>1 Paterson</td>
</tr>
<tr>
<td>Asian</td>
<td>2 Task</td>
</tr>
<tr>
<td>Coloured</td>
<td>3 Other</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. Years of service in current organisation.</th>
<th>10. What is your current grade? e.g. Peromnes Grade 8 or Paterson Grade D1.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 year</td>
<td>1</td>
</tr>
<tr>
<td>1 to 5 years</td>
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<tr>
<td>5 to 10 years</td>
<td>3</td>
</tr>
<tr>
<td>10 to 15 years</td>
<td>4</td>
</tr>
<tr>
<td>More than 15 years</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5. How many job changes have you made in last 10 years?</th>
<th>11. Which of the following categories do you fit into?</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>Top Management</td>
</tr>
<tr>
<td>One</td>
<td>2 Other</td>
</tr>
<tr>
<td>Two</td>
<td>3 Middle Management</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6. How many more years would you like to continue in your current career?</th>
<th>12. If you have circled 5 in question 11 - specify which category you fit into.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 5 people</td>
<td>1</td>
</tr>
<tr>
<td>6 to 10 people</td>
<td>2</td>
</tr>
<tr>
<td>More than 10 people</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>7. Age</th>
<th>13. How many staff do you supervise?</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 to 15 years</td>
<td>1</td>
</tr>
<tr>
<td>More than 15 years</td>
<td>2</td>
</tr>
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<table>
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<th>8. Race</th>
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<td>Coloured</td>
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</table>

<table>
<thead>
<tr>
<th>9. If you have circled 4 in question 8 - specify name of grading system.</th>
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</thead>
<tbody>
<tr>
<td>Coloured</td>
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</tbody>
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<tr>
<th>10. Gender</th>
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</thead>
<tbody>
<tr>
<td>Male</td>
<td>1</td>
</tr>
<tr>
<td>Female</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>11. Age</th>
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</tr>
</thead>
<tbody>
<tr>
<td>35 to 40 years</td>
<td>1</td>
</tr>
<tr>
<td>41 to 45 years</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>12. How many job changes have you made in last 10 years?</th>
<th>13. How many staff do you supervise?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 5 years</td>
<td>1</td>
</tr>
<tr>
<td>6 to 10 people</td>
<td>2</td>
</tr>
<tr>
<td>More than 10 people</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>13. Gender</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>1</td>
</tr>
<tr>
<td>Female</td>
<td>2</td>
</tr>
</tbody>
</table>
2. **CAREER ORIENTATIONS QUESTIONNAIRE**

This questionnaire is designed to obtain information on your career orientations i.e. what motives, values and talents have shaped your career and influenced the direction of your career choice.

**Instructions**

For each of the following forty items, rate how true that item is for you in general by circling a number from 1 to 6. The higher the number, the more that item is true for you. For example, if the item says "I dream of starting up and building my own business," you would rate that as follows:
- "1" if the statement is never true for you,
- "2" or "3" if the statement is occasionally true for you,
- "4" or "5" if the statement is often true for you,
- "6" if the statement is always true for you.

<table>
<thead>
<tr>
<th></th>
<th>Never true</th>
<th>Occasionally true</th>
<th>Often true</th>
<th>Always true</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I dream of being so good at what I do that my expert advice will be sought continually</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2. I am most fulfilled in my work when I have been able to integrate and manage the efforts of others.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3. I dream of having a career that will allow me the freedom to do a job my own way and on my own schedule.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4. Security and stability are more important to me than freedom and autonomy.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5. I am always on the lookout for ideas that would permit me to start my own enterprise.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6. I will feel successful in my career only if I have a feeling of having made a real contribution to the welfare of society.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7. I dream of a career in which I can solve problems or win out in situations that are extremely challenging.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8. I would rather leave my organisation than to be put into a job that would compromise my ability to pursue personal and family concerns.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9. I will feel successful in my career only if I can develop my technical or functional skills to a very high level of competence.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10. I dream of being in charge of a complex organisation and making decisions that affect many people.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>11. I am most fulfilled in my work when I am completely free to define my own tasks, schedules and procedures.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>12. I would rather leave my organisation altogether than accept an assignment that would jeopardise my security in that organisation.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Never true</td>
<td>Occasionally true</td>
<td>Often true</td>
<td>Always true</td>
<td></td>
</tr>
<tr>
<td>13. Building my own business is more important to me than achieving a high-level managerial position in someone else's organisation.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>14. I am most fulfilled in my career when I have been able to use my talents in the service of others.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>15. I will feel successful in my career only if I face and overcome very difficult challenges.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>16. I dream of a career that will permit me to integrate my personal, family and work needs.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>17. Becoming a senior functional manager in my area of expertise is more attractive to me than becoming a general manager.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>18. I will feel successful in my career only if I become a general manager in some organisation.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>19. I will feel successful in my career only if I achieve complete autonomy and freedom.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>20. I seek jobs in organisations that will give me a sense of security and stability.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>21. I am most fulfilled in my career when I have been able to build something that is entirely the result of my own ideas and efforts.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>22. Using my skills to make the world a better place to live and work is more important to me than achieving a high-level managerial position.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>23. I have been most fulfilled in my career when I have solved seemingly unsolvable problems or won out over seemingly impossible odds.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>24. I feel successful in my life only if I have been able to balance my personal, family and career requirements.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>25. I would rather leave my organisation than accept a rotational assignment that would take me out of my area of expertise.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>26. Becoming a general manager is more attractive to me than becoming a senior functional manager in my current area of expertise.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>27. The chance to do a job my own way, free of rules and constraints, is more important to me than security.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>28. I am most fulfilled in my work when I feel that I have complete financial and employment security.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>29. I will feel successful in my career only if I have succeeded in creating or building something that is entirely my own product or idea.</td>
<td>1</td>
<td>2</td>
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</tr>
<tr>
<td>30. I dream of having a career that makes a real contribution to humanity and society.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>31. I seek out work opportunities that strongly challenge my problem-solving and / or competitive skills.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>32. Balancing the demands of personal and professional life is more important to me than achieving a high-level managerial position.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>33. I am most fulfilled in my work when I have been able to use my special skills and talents.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>34. I would rather leave my organisation than accept a job that would take me away from the general managerial track.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>35. I would rather leave my organisation than accept a job that would reduce my autonomy and freedom.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>36. I dream of having a career that will allow me to feel a sense of security and stability.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>37. I dream of starting up and building my own business.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>38. I would rather leave my organisation than accept an assignment that would undermine my ability to be of service to others.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>39. Working on problems that are almost unsolvable is more important to me than achieving a high-level managerial position.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>40. I have always sought out work opportunities that would minimise interference with personal or family concerns.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

At this point, look over your answers and locate all of the items that you rated highest. Pick out the three items that seem most true for you and place a cross (X) next to each.
3. **JOB PERCEPTION QUESTIONNAIRE**

This questionnaire is designed to obtain a description of your perception of your present job.

**Instructions**

For each of the following forty items, rate to what extent each of the following statements is true of your present job by circling a number from 1 to 6. The higher the number, the more the item is true of your present job. For example, if the item says “In my present job I experience a strong sense of security” you would rate that as follows:

- “1” if the statement is never true,
- “2” or “3” if the statement is occasionally true,
- “4” or “5” if the statement is often true,
- “6” if the statement is always true.

**In my present job**

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Occasionally</th>
<th>Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I am regarded as an expert in my field, and am continually called upon to give advice.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2. I have the opportunity to integrate and manage the efforts of others.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3. I am able to do a job my own way and on my own schedule.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4. I experience a sense of security and stability.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5. I have the opportunity to explore ideas that would permit me to start my own enterprise.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6. I am able to make a real contribution to the welfare of society.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7. I have the opportunity to solve problems and win out in extremely challenging situations.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8. I am able to pursue personal and family concerns.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9. I have the opportunity to develop my technical or functional skills to a very high level of competence.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10. I am in charge of a complex organisation and make decisions that effect many people.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>11. I am able to define my own tasks, schedules and procedures.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>12. I experience a strong sense of security.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>13. I have the opportunity to build my own business.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>14. I am able to use my talents in the service of others.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<td></td>
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</tr>
<tr>
<td>15.</td>
<td>I face and overcome very difficult challenges.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>16.</td>
<td>I am able to integrate my personal, family and work needs.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>17.</td>
<td>I am a senior functional manager in my area of expertise.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>18.</td>
<td>I am a general manager in my organisation.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>19.</td>
<td>I have achieved complete autonomy and freedom.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>20.</td>
<td>I have a sense of security and stability.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>21.</td>
<td>I am able to build something that is entirely the result of my own ideas and efforts.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>22.</td>
<td>I am able to use my skills to make the world a better place to live and work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>23.</td>
<td>I have the opportunity to solve seemingly unsolvable problems or win out over seemingly impossible odds.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>24.</td>
<td>I am able to balance my personal, family and career requirements.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>25.</td>
<td>I work in my area of expertise as opposed to rotational assignments.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>26.</td>
<td>I am a general manager, as opposed to a senior functional manager in my area of expertise.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>27.</td>
<td>I am able to do a job my own way, free of rules and constraints.</td>
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<td>3</td>
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<tr>
<td>28.</td>
<td>I have complete financial and employment security.</td>
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<tr>
<td>29.</td>
<td>I am able to create or build something that is entirely my own product or idea.</td>
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<td>3</td>
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<tr>
<td>30.</td>
<td>I am able to make a real contribution to humanity and society.</td>
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<td>31.</td>
<td>I have the opportunity to strongly challenge my problem solving and / or competitive skills.</td>
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<td>3</td>
</tr>
<tr>
<td>32.</td>
<td>I am able to balance the demands of personal and professional life.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
In my present job

<table>
<thead>
<tr>
<th>Item</th>
<th>Never true</th>
<th>Occasionally true</th>
<th>Often true</th>
<th>Always true</th>
</tr>
</thead>
<tbody>
<tr>
<td>33. I have the opportunity to use my special skills and talents.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>34. I have the opportunity to be on the general managerial track.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>35. I experience autonomy and freedom.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>36. I enjoy a feeling of security and stability.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>37. I am able to build my own business.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>38. I have the opportunity to be of service to others.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>39. I am able to work on problems that are almost unsolvable.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>40. I experience minimal interference with personal or family concerns.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

At this point look over your answers and locate all the items that you rated highest. Pick out the three items that seem most true for you and place a cross (X) next to each.
MINNESOTA SATISFACTION QUESTIONNAIRE

Instructions

This questionnaire is designed to obtain information on how you feel about your present job i.e. what aspects you are satisfied or dissatisfied with. Illustrate the extent of your satisfaction by placing a X in the applicable box.

On the next page you will find statements on your present job.

• Read each statement carefully

• Decide how satisfied you feel about the aspects of your job described by the statement

Keeping the statement in mind:

- if you feel that your job gives you more than you expected, check the box under "Very Sat." (Very Satisfied);

- if you feel that your job gives you what you expected, check the box under "Sat." (Satisfied);

- if you cannot make up your mind whether or not the job gives you what you expected, check the box under "N." (Neither Satisfied nor Dissatisfied);

- if you feel that your job gives you less than you expected, check the box under "Dissat." (Dissatisfied);

- if you feel that your job gives you much less than you expected, check the box under "Very Dissat." (Very Dissatisfied);

• Remember: Keep the statement in mind when deciding how satisfied you feel about that aspect of your job.

• Do this for all statements. Please answer every item.

Be frank and honest. Give a true picture of your feelings about your present job.

Ask yourself: How satisfied am I with this aspect of my job?

Very Sat. means I am very satisfied with this aspect of my job

Sat. means I am satisfied with this aspect of my job.

N. means I can't decide whether I am satisfied or not with this aspect of my job.

Dissat. means I am dissatisfied with this aspect of my job.

Very Dissat. means I am very dissatisfied with this aspect of my job.
On my present job this is how I feel about...

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>Being able to keep busy all the time.</td>
<td></td>
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<tr>
<td>2.</td>
<td>The chance to work alone on the job.</td>
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<tr>
<td>3.</td>
<td>The chance to do different things from time to time.</td>
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<td>4.</td>
<td>The chance to be &quot;somebody&quot; in the community.</td>
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<tr>
<td>5.</td>
<td>The way my boss handles his/her workers.</td>
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<tr>
<td>6.</td>
<td>The competence of my supervisor in making decisions.</td>
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<tr>
<td>7.</td>
<td>Being able to do things that don't go against my conscience.</td>
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<tr>
<td>8.</td>
<td>The way my job provides for steady employment.</td>
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<tr>
<td>9.</td>
<td>The chance to do things for other people.</td>
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<tr>
<td>10.</td>
<td>The chance to tell people what to do.</td>
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<tr>
<td>11.</td>
<td>The chance to do something that makes use of my abilities.</td>
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<tr>
<td>12.</td>
<td>The way company policies are put into practice.</td>
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<tr>
<td>13.</td>
<td>My pay and the amount of work I do.</td>
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<tr>
<td>14.</td>
<td>The chances for advancement on this job.</td>
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</tr>
<tr>
<td>15.</td>
<td>The freedom to use my own judgement.</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>16.</td>
<td>The chance to try my own methods of doing the job.</td>
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</tr>
<tr>
<td>17.</td>
<td>The working conditions.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>18.</td>
<td>The way my co-workers get along with each other.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>19.</td>
<td>The praise I get for doing a good job.</td>
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</tr>
<tr>
<td>20.</td>
<td>The feeling of accomplishment I get from the job.</td>
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</tr>
</tbody>
</table>

Thank you for your co-operation.