

**PSYCHOLOGICAL STRENGTHS AND JOB
SATISFACTION OF REPRESENTATIVES IN THE
FERTILISER INDUSTRY**

Johannes Lodewikus Pretorius Naudé

**Mini-dissertation submitted for the Magister Artium in the Department of
Industrial Psychology at the Potchefstroom University for Christian
Higher Education**

Supervisor: Prof. S. Rothmann

Potchefstroom

1999

ACKNOWLEDGEMENTS

In compiling this mini-dissertation, I came to realise to what extent I am dependent on the resources of others around you. The intricate network of relationships resulting from this focussed effort leaves one with a deep sense of gratitude. To all of those who formed a part of this network, a very special word of thanks for their kind consideration, love and support throughout the compilation of this mini-dissertation. Specifically, the following people need to be singled out:

- In the first instance to my **Heavenly Father** for giving me, and everybody involved, the opportunity to serve Him through this piece of work.
- **Prof. Ian Rothmann**, my mentor, for the exceptional motivation and insight throughout the compilation of this mini-dissertation. The very long hours you have put in and the countless untimely visits to your house is highly appreciated.
- **Lydia van der Linde**, my mother, for all the support, understanding and quick solutions to the last-minute problems.
- **Kerry Corlett**, my best friend for the continuous support and understanding throughout the difficult times this past year.
- **Dr. Linkie Viljoen** of the Statistical Consultation Services for the processing and interpretation of the empirical results.
- **Prof. W.H. Willies** and **Lande Schäfer** for the professional manner in which the language editing was conducted.
- **My colleagues** for providing the basis to grow both professionally and personally.
- **My friends and family** for their interest, love and support.
- **The Corlett-family** for their interest, love and support. In many ways an example of self-efficaciousness.
- Last, but not the least, the **respondents** for their participation in the study.

ABSTRACT

SUBJECT: PSYCHOLOGICAL STRENGTHS AND JOB SATISFACTION OF AGRICULTURAL REPRESENTATIVES IN THE FERTILISER INDUSTRY

KEY TERMS: Sense of coherence; self-efficacy; locus of control; fortigenic strengths; salutogenesis; job satisfaction.

Modern organisations everywhere are faced with many challenges in terms of economic viability and the way in which they manage their workforce. Amidst many societal and economic pressures, South African organisations are forced to restructure and reform in order to survive. In this context, uncertainties prevail which influence the South African workforce to a great extent. Organisations, therefore, would benefit from methods that ensure that favourable work-related outcomes can be created despite the environmental pressures. One such a work-related outcome is job satisfaction.

In recent years, renewed interest in the role of dispositional characteristics (psychological strengths) in predicting work-related outcomes, resulted in many studies focusing on the predictive value of psychological strengths on job satisfaction. In the present study, the psychological strengths of sense of coherence, self-efficacy and locus of control are investigated in terms of their ability to predict the job satisfaction of agricultural representatives in the fertiliser industry.

A correlational design was used to determine the relationship between the constructs of sense of coherence, self-efficacy, locus of control and job satisfaction. Data from the total population of agricultural representatives (55) was gathered and explained in terms of descriptive statistics (means, standard deviations, skewness and curtosis). Cronbach alpha coefficients were determined for the measuring instruments and Pearson's correlation, canonical correlations and multiple correlations were computed. T-tests were used to compare the job satisfaction of the contrast groups. Finally, a regression analysis was carried out to determine the extent to which the psychological strengths of sense of coherence, self-efficacy and locus of control predict job satisfaction.

The findings suggested that a relationship exist between the consecutive psychological strengths of sense of coherence, self-efficacy and locus of control, suggesting that the psychological strengths form part of the same construct (dispositional characteristics). Concerning the relationship between the psychological strengths and job satisfaction, the results indicated that individuals with a high sense of coherence experience significantly more job satisfaction than those with a low sense of coherence. Pertaining to the relationship between locus of control and job satisfaction, it was found that individuals with a high internal locus of control experience significantly more job satisfaction in terms of ability, achievement, authority, co-workers, independence, responsibility and supervision in terms of the technical side of the job. The findings also indicated that individuals with a low external locus of control and high autonomy experience significantly more job satisfaction than those with high external locus of control and low autonomy. Although significant relationships between self-efficacy and job satisfaction were expected, no such differences were found between the contrast groups in terms of their job satisfaction, which implies that self-efficacy was not related to job satisfaction in the present study.

Concerning the predictive value of the psychological strengths in relation to job satisfaction, the findings indicated that the psychological strengths predicted 20,7% of the variance of total job satisfaction, which is practically significant. Especially external locus of control and autonomy were found to be good predictors of job satisfaction.

OPSOMMING

ONDERWERP: PSIGOLOGIESE KRAGTE EN WERKSTEVREDENHEID VAN LANDBOUKUNDIGE VERTEENWOORDIGERS IN DIE KUNSMISBEDRYF

Sleuteltermes: Koherensiesin; selfdoeltreffendheid; lokus van beheer; fortigene kragte; salutogenese; werkstevredenheid.

Moderne organisasies word gekonfronteer met talle uitdagings in terme van ekonomiese lewensvatbaarheid en die manier waarmee daar met hul werksmag omgegaan word. Te midde van sosiale en ekonomiese druk, word Suid-Afrikaanse organisasies geforseer om te herstrukureer en te hervorm in 'n poging om te oorleef. Teen hierdie agtergrond vier onsekerheid hoogty, wat op sy beurt weer die Suid-Afrikaanse werksmag in 'n groot mate beïnvloed. Vervolgens kan organisasies by metodes baat wat gunstige werkgebaseerde uitkomst kan verseker, die omgewingstressors ten spyte. Een so 'n werkgebaseerde uitkomst is werkstevredenheid.

Onlangse hernude belangstelling in die rol wat disposisionele eienskappe (psigologiese kragte) speel in die voorspelling van werkgebaseerde uitkomst, het gelei tot talle studies wat op die voorspellingsrol van psigologiese kragte op werkstevredenheid fokus. In die huidige studie word op drie psigologiese kragte gefokus, naamlik koherensiesin, selfdoeltreffendheid en lokus van beheer, asook die mate wat dit die werkstevredenheid van landboukundige verteenwoordigers in die kunsmisbedryf voorspel.

'n Korrelasionele ontwerp gebruik om die verband tussen die konstrakte koherensiesin, selfdoeltreffendheid, lokus van beheer en werkstevredenheid te bepaal. Die data is verkry van die totale populasie van landboukundige verteenwoordigers (55) en aan die hand van beskrywende statistiek verduidelik (rekenkundige gemiddeldes, standaardafwykings, skeefheid en kurtose). Cronbach alfa-koeffisiënte is vir die meetinstrumente bereken asook Pearson se korrelasie, kanoniese korrelasies en meervoudige korrelasies. T-toetse is ook bereken om sodoende die werkstevredenheid van die kontrasgroepe te vergelyk. 'n

Regressie analise is uitgevoer om die mate waarin die psigologiese kragte, naamlik koherensiesin, selfdoeltreffendheid en lokus van beheer werkstevredenheid voorspel. Die praktiese betekenisvolheid van die resultate is ook bepaal.

Die resultate toon 'n verband tussen die verskillende psigologiese kragte wat daarop dui dat koherensiesin, selfdoeltreffendheid en lokus van beheer deel vorm van dieselfde konstruk. In terme van die verband tussen die verskillende psigologiese kragte en werkstevredenheid het die resultate aangedui dat persone met 'n hoë koherensiesin betekenisvol meer werkstevredenheid ervaar in vergelyking met persone met 'n laer koherensiesin. In terme van die verhouding tussen lokus van beheer en werkstevredenheid, het die resultate aangedui dat hoë interne lokus van beheer persone beduidend meer werkstevredenheid ervaar ten opsigte van vermoë, prestasie, outoriteit, medewerkers, onafhanklikheid, verantwoordelikheid en toesighouding in verband met die tegniese sy van die werk. Resultate het ook aangedui dat persone met 'n lae eksterne lokus van beheer en hoë outonomie beduidend meer werkstevredenheid ervaar in vergelyking met persone met 'n hoë eksterne lokus van beheer en lae outonomie. Ten spyte van die verwagte beduidende verhoudings tussen selfdoeltreffendheid en werkstevredenheid, is geen beduidende verhoudings tussen die kontrasgroepe gevind in terme van hulle werkstevredenheid nie. Hierdie bevinding impliseer dat selfdoeltreffendheid nie verband hou met werkstevredenheid in die huidige studie is nie.

In terme van die voorspellingswaarde van die psigologiese kragte in verhouding met werkstevredenheid, is gevind dat die psigologiese kragte 20,7% van die variansie van totale werkstevredenheid voorspel wat prakties betekenisvol is. Die resultate toon verder dat eksterne lokus van beheer en outonomie, in die besonder, beter voorspellers van werkstevredenheid is.

CONTENTS

| | |
|---|-----------|
| ACKNOWLEDGEMENTS | ii |
| ABSTRACT | iii |
| OPSOMMING | v |
| CONTENTS | viii |
| LIST OF TABLES | xiv |
| LIST OF FIGURES AND DIAGRAMS | xvi |
| | |
| CHAPTER 1: INTRODUCTION | 1 |
| | |
| 1.1 PROBLEM STATEMENT | 1 |
| 1.2 OBJECTIVES OF THE RESEARCH | 6 |
| 1.2.1 General objective | 6 |
| 1.2.2 Specific objectives | 7 |
| 1.3 THE PARADIGM PERSPECTIVE | 7 |
| 1.3.1 Intellectual climate | 8 |
| 1.3.2 The market of intellectual resources | 9 |
| 1.3.2.1 Research hypothesis | 10 |
| 1.3.2.2 Theoretical statements of the research | 10 |
| a. Theoretical definitions | 10 |
| b. Theoretical models and theories | 11 |
| 1.3.3 Methodological beliefs | 14 |
| 1.4 RESEARCH METHOD | 14 |
| 1.4.1 Phase 1: Literature study | 15 |
| 1.4.2 Phase 2: Empirical study | 15 |
| 1.4.2.1 Step 1: Deciding on a research design | 15 |
| 1.4.2.2 Step 2: Selecting the study population | 15 |
| 1.4.2.3 Step 3: Deciding on the measuring instruments | 16 |
| 1.4.2.4 Step 4: Statistical data-analysis | 17 |

| | | |
|-------------------|--|-----------|
| 1.5 | CHAPTER DIVISION | 18 |
| 1.6 | CHAPTER SUMMARY | 18 |
| | | |
| CHAPTER 2: | JOB SATISFACTION | 19 |
| | | |
| 2.1 | DEFINITION OF JOB SATISFACTION | 19 |
| 2.2 | COMPONENTS OF SATISFACTION WITH THE JOB | 24 |
| 2.2.1 | Components related to the work environment | 25 |
| 2.2.1.1 | Working conditions | 25 |
| 2.2.1.2 | Social status | 26 |
| 2.2.1.3 | Interpersonal relationships | 27 |
| a. | Relationships with supervisors | 27 |
| b. | Relationships with co-workers | 29 |
| 2.2.1.4 | Participation in decision-making | 30 |
| 2.2.1.5 | Job security | 30 |
| 2.2.1.6 | Moral values and social service | 32 |
| 2.2.2 | Components related to the job itself | 32 |
| 2.2.2.1 | Opportunity for advancement | 33 |
| 2.2.2.2 | Compensation | 34 |
| 2.2.2.3 | Utilisation of ability | 36 |
| 2.2.2.4 | Creativity | 36 |
| 2.2.2.5 | Autonomy | 37 |
| 2.2.2.6 | Task variety | 38 |
| 2.2.2.7 | Activity | 38 |
| 2.2.2.8 | Recognition and feedback | 38 |
| 2.2.2.9 | Authority | 39 |
| 2.2.2.10 | Responsibility | 40 |
| 2.2.2.11 | Achievement | 41 |
| 2.2.2.12 | Professional growth | 41 |
| 2.2.3 | Components related to organisation policies | 42 |

| | | |
|------------|--|-----------|
| 2.3 | CAUSES OF JOB SATISFACTION | 44 |
| 2.3.1 | Dispositional causes of job satisfaction | 45 |
| 2.3.2 | Situational causes of job satisfaction | 49 |
| 2.3.3 | Interaction causes of job satisfaction | 50 |
| 2.4 | CHAPTER SUMMARY | 51 |

CHAPTER 3: PSYCHOLOGICAL STRENGTHS AND JOB SATISFACTION 53

| | | |
|------------|---|-----------|
| 3.1 | SENSE OF COHERENCE | 53 |
| 3.1.1 | Definition of sense of coherence | 55 |
| 3.1.2 | Development of a sense of coherence | 56 |
| 3.1.3 | Research about sense of coherence | 57 |
| 3.1.4 | Implications of a strong sense of coherence | 60 |
| 3.2 | SELF-EFFICACY | 62 |
| 3.2.1 | Definition of self-efficacy | 63 |
| 3.2.2 | Determinants of self-efficacy | 65 |
| 3.2.3 | Research on self-efficacy | 69 |
| 3.2.4 | Implications of a strong self-efficacy | 70 |
| 3.3 | LOCUS OF CONTROL | 73 |
| 3.3.1 | Definition of locus of control | 74 |
| 3.3.2 | Development of locus of control | 78 |
| 3.3.3 | Research regarding locus of control | 80 |
| 3.3.4 | Implications of an internal locus of control | 83 |
| 3.4 | THEORETICAL INTEGRATION: THE RELATIONSHIP BETWEEN SENSE OF COHERENCE, SELF-EFFICACY, LOCUS OF CONTROL AND JOB SATISFACTION | 84 |
| 3.5 | CHAPTER SUMMARY | 89 |

| | | |
|-------------------|--|-----------|
| CHAPTER 4: | EMPIRICAL STUDY | 91 |
| 4.1 | STUDY POPULATION | 91 |
| 4.1.1 | Population | 91 |
| 4.1.2 | Sampling | 92 |
| 4.2 | THE MEASURING BATTERY | 94 |
| 4.2.1 | Measurement of job satisfaction | 94 |
| 4.2.1.1 | The Minnesota Satisfaction Questionnaire (MSQ) | 94 |
| a. | Development and rationale | 94 |
| b. | Description | 95 |
| c. | Administration and scoring | 100 |
| d. | Interpretation | 100 |
| e. | Reliability and validity | 101 |
| f. | Motivation for choice | 101 |
| 4.2.2 | Measurement of psychological strengths | 102 |
| 4.2.2.1 | Orientation to Life Questionnaire (OLQ) | 102 |
| a. | Development and rationale | 102 |
| b. | Description | 103 |
| c. | Administration and scoring | 104 |
| d. | Interpretation | 104 |
| e. | Reliability and validity | 104 |
| f. | Motivation for choice | 106 |
| 4.2.2.2 | Self-Efficacy Questionnaire (SEQ) | 106 |
| a. | Development and rationale | 106 |
| b. | Description | 107 |
| c. | Administration and scoring | 108 |
| d. | Interpretation | 108 |
| e. | Reliability and validity | 109 |
| f. | Motivation for choice | 109 |
| 4.2.2.3 | Locus of Control Inventory (LCI) | 110 |
| a. | Development and rationale | 110 |

| | | |
|--|--|----------------|
| b. | Description | 112 |
| c. | Administration and scoring | 113 |
| d. | Interpretation | 114 |
| e. | Reliability and validity | 115 |
| f. | Motivation for choice | 118 |
| 4.3 | PROCEDURE | 118 |
| 4.3.1 | Presenting and motivating the study for approval at managerial level | 119 |
| 4.3.2 | Negotiations with management | 119 |
| 4.3.3 | Administration of the measuring instruments | 119 |
| 4.4 | STATISTICAL DATA-ANALYSIS | 120 |
| 4.5 | FORMULATION OF HYPOTHESES | 122 |
| 4.6 | CHAPTER SUMMARY | 124 |
| CHAPTER 5: RESULTS AND DISCUSSION | | 125 |
| 5.1 | DESCRIPTIVE STATISTICS AND RELIABILITY OF THE MEASURING INSTRUMENTS | 125 |
| 5.2 | THE RELATIONSHIP BETWEEN SENSE OF COHERENCE, SELF-EFFICACY AND LOCUS OF CONTROL | 131 |
| 5.3 | THE RELATIONSHIP BETWEEN SENSE OF COHERENCE, SELF-EFFICACY, LOCUS OF CONTROL AND JOB SATISFACTION | 134 |
| 5.4 | DIFFERENCES BETWEEN THE JOB SATISFACTION OF CONTRAST GROUPS IN TERMS OF PSYCHOLOGICAL STRENGTHS | 139 |
| 5.5 | REGRESSION ANALYSIS REGARDING PSYCHOLOGICAL STRENGTHS AND JOB SATISFACTION | 149 |
| 5.6 | DISCUSSION | 151 |
| 5.7 | CHAPTER SUMMARY | 153 |

| | | |
|--|---|------------|
| CHAPTER 6: | CONCLUSIONS AND RECOMMENDATIONS | 155 |
| 6.1 | CONCLUSIONS | 155 |
| 6.1.1 | Conclusions in terms of the specific literature objectives of the study | 155 |
| 6.1.2 | Conclusions in terms of the specific empirical objectives of the study | 157 |
| 6.2 | LIMITATIONS OF THE PRESENT STUDY | 158 |
| 6.3 | RECOMMENDATIONS | 159 |
| 6.3.1 | Recommendations for the organisation | 159 |
| 6.3.2 | Recommendations for future research | 161 |
| REFERENCES | | 163 |
| APPENDIX 1: THE MEASURING BATTERY | | 187 |

LIST OF TABLES

| | | |
|-----------|--|-----|
| Table 1: | Characteristics of the Sample | 93 |
| Table 2: | Descriptive Statistics and Reliability in terms of the Psychological Strengths for the Total Population | 126 |
| Table 3: | Descriptive Statistics and Reliability in terms of the Minnesota Satisfaction Questionnaire for the Total Population | 129 |
| Table 4: | The Relationship between Sense of Coherence, Self-Efficacy and Locus of Control | 132 |
| Table 5: | The Relationship between Psychological Strengths and Job Satisfaction | 135 |
| Table 6: | Canonical Correlations between Locus of Control, Sense of Coherence, Self-Efficacy and Job Satisfaction | 139 |
| Table 7: | Differences between Contrast Groups in terms of Sense of Coherence's Job Satisfaction | 140 |
| Table 8: | Differences between Contrast Groups in terms of Internal Control's Job Satisfaction | 142 |
| Table 9: | Differences between Contrast Groups in terms of External Control's Job Satisfaction | 144 |
| Table 10: | Differences between Contrast Groups in terms of Autonomy's Job Satisfaction | 146 |

| | |
|--|------------|
| Table 11: Differences between Contrast Groups in terms of Self-Efficacy's Job Satisfaction | 148 |
| Table 12: Regression-Analysis of Sense of Coherence, Self-Efficacy, Locus of Control and Job Satisfaction | 150 |

LIST OF FIGURES AND DIAGRAMS

| | | |
|-----------|---|-----|
| Figure 1: | River of satisfaction | 23 |
| Figure 2: | Definition of a Generalised Resistance Resource (GRR) | 54 |
| Figure 3: | Determinants in the formation of self-efficacy | 66 |
| Figure 4: | Proposed expected relationships between sense of coherence, self-efficacy, locus of control and job satisfaction based on the literature findings | 89 |
| Figure 5: | Distinction between people with an internal and external locus of control | 115 |
| Figure 6: | Summary of the relationship between the psychological strengths and job satisfaction | 152 |

CHAPTER 1

INTRODUCTION

This mini-dissertation takes a look at the relationship between sense of coherence, self-efficacy, locus of control and job satisfaction, as well as the extent to which sense of coherence, self-efficacy and locus of control can predict job satisfaction.

In this chapter the problem statement, the research objectives, the paradigm perspective and the research method are being discussed. Thereafter, a chapter division will be given.

1.1 PROBLEM STATEMENT

According to Luthans (1989) it is essential for organisations, in order to function effectively, to explain and predict the productivity, employee turnover, absence and job satisfaction of employees. According to Cranny, Smith and Stone (1992) job satisfaction is an affective (emotional) reaction to a job which stems from the incumbent's comparison of actual outcomes with the required outcomes. It is therefore a general attitude which stems from the comparison by the employee of actual outcomes with expected outcomes. Luthans (1989) is of the opinion that information about the job satisfaction of employees is of utmost importance to managers. It has been proven on the basis of empirical data that job satisfaction affects job attendance, general behaviour syndromes that are indicative of a positive orientation towards the organisation, attempts to influence working situations through trade union activities, and psychological withdrawal.

Job satisfaction is influenced by extrinsic and intrinsic factors. According to Lofquist and Davis (1969) intrinsic factors such as the utilisation of individual abilities, performance, the level of independence, moral values and creativity influence job satisfaction, as well as extrinsic factors such as supervision, company policy and practice, remuneration, promotion

and recognition affect job satisfaction. In a study where the job satisfaction of social workers was investigated, it was found that the most important organisational determinant of job satisfaction was the degree of challenge and stimulation (King & Botha, 1997). In a cross-cultural study of Mexican managers it was found that intrinsic and extrinsic factors did not contribute to job satisfaction as much as participation (Frucot & Shearon, 1991).

It is a well-known fact that employees spend a great deal of their active life at work (Gruneberg, 1979). In this context, employees develop individual dispositions concerning work, supervision, co-workers and compensation which can generally be referred to as job satisfaction (Baron, 1983). According to Schouwstra (1992) the mere presence of factors influencing job satisfaction contributes to the success of the organisation.

In recent years, more attention has been given to the hypothesis that factors inherent to the individual (dispositional factors) rather than just the characteristics of a particular job, influence the job satisfaction of individuals (Judge, Locke, Durham & Kluger, 1998; Kirkcaldy, Cooper & Furnham, 1999). According to Judge, Locke and Durham (1997) dispositional causes of job satisfaction can be explained in terms of "core evaluations". Judge et al. (1998) defined core evaluations as fundamental, unconscious conclusions that individuals make about themselves, other people and the world. Accordingly, individuals judge situations not just in terms of the characteristics of the situation and their needs associated with it, but also in terms of the assumptions they hold about themselves, other people and the world (reality).

This study deals with the relationship between dispositional factors (including sense of coherence, self-efficacy and locus of control) and job satisfaction. Sense of coherence, self-efficacy and locus of control are constructs from the salutogenic (Antonovsky, 1987) or fortigenic paradigm (Strümpfer, 1995). Where the pathogenic paradigm was initially used to determine why people got ill, the emphasis is currently on the salutogenic paradigm (which focuses on the origins of health) or fortigenic paradigm (which focuses on the origins of strengths).

Sense of coherence is a construct developed by Antonovsky (1987) and can be defined as an orientation which indicates the extent to which a person has a long-lasting and dynamic trust that both his/her internal and external environments are predictable and that a high probability exists that things will work out as well as could be expected. According to this definition, a high sense of coherence is associated with an understanding of situations on a cognitive level and an experience of stimuli as manageable and meaningful. It could be made applicable to the job situation in the sense that a person who has a high sense of coherence will be able to understand the challenges of his work, will regard them as within his/her control and perceive them as significant enough for energy to be expended on them. Research on sense of coherence revealed that neuroticism is negatively related to sense of coherence (Carmel & Bernstein, 1989; Flannery & Flannery, 1990). Neuroticism can be viewed as the frequent experience of a wide variety of negative and upsetting emotions, even in the absence of obvious stressors (Clark & Watson, 1991). Consequently, sense of coherence focuses on characteristics opposite to that of neuroticism. Strümpfer (1998) found consistent statistical and practical significant correlations of sense of coherence with job satisfaction in three different samples, representing from just over 5% to 22% common variance.

Coetzee and Rothmann (1999) found a positive relationship between the sense of coherence and the measure of job satisfaction experienced by employees in the South African dairy industry. However, they found that sense of coherence alone predicted only 29,7% of the variance in job satisfaction. Coetzee and Rothmann (1999) also found that low and high coherence groups also did not differ significantly in respect of their satisfaction with remuneration and promotion.

The concept of *self-efficacy* was developed by Bandura (1977) and can be described as the judgements of persons regarding their skills in organising and carrying out the required behaviour performing particular types of actions. Self-efficacious persons will believe in their ability to exercise control over things which happen in their lives. It is this process that causes individuals to evaluate, test and integrate information regarding their own skills, and

in so doing, to regulate their choices and efforts. It may be expected that self-efficacious employees will be able to deal with a challenge effectively with the skills at their disposal, even if they do not have all the skills required for the task. Consequently, self-efficacy focuses on the individual's control over behaviour.

It appears as if self-efficacy is a relatively good predictor of performance (Ballantine & Nunns, 1998; Niedinger, 1997). Although job satisfaction does not necessarily cause job performance, it is clear, according to Bogazzi (1980) and Wanous (1974), that job performance, to a minor extent, gives rise to job satisfaction. In the study of Judge et al. (1998) it was found that core evaluations, i.e. self-efficacy, indirectly influence job satisfaction in the sense that perceptions of work attributes, which influence job satisfaction, are affected.

The construct of *locus of control* was developed by Rotter (1966) and is described as the extent to which individuals feel that they play a causative role in events in their lives (Hendriks, 1985). Individuals may show an internal or an external locus of control. The former means that positive and/or negative events are attributed by own actions and are consequently regarded as being under personal control. An external locus of control means that positive and/or negative events are regarded as unrelated to own behaviour and therefore are beyond personal control. Locus of control, therefore, refers to the expectancy of individuals to control the outcome of their behaviour. In a job context, employees with an internal locus of control will probably feel that he/she can deal with a situation because it is regarded as being under personal control. This is then also the reason why such individuals experience more job satisfaction (Judge et al., 1998). It has been found that employees with an internal locus of control experience more job satisfaction than persons with an external locus of control when the budgeting process is more participative (Brownell, 1981). In their study, Rothmann and Agathagelou (in press) determined the relationship between locus of control and job satisfaction of senior police personnel in the North West Province of South Africa. The study confirmed a correlation of large effect between the construct of

locus of control and job satisfaction. Also, a moderate negative correlation was found between an external locus of control and the job satisfaction of senior police personnel.

The company in the fertiliser industry where the researcher intends to undertake the research is confronted with intense national and international competition. The technology used during the manufacturing process is obsolete, and due to high costs it is currently virtually impossible to implement new technology. Furthermore, the staff in the company was subjected to great uncertainty for almost a year as a consequence of a possible take-over, which eventually realised in 1999. Great demands are placed on agricultural representatives with regard to the marketing of fertiliser.

Agricultural representatives are trained in agricultural science. However, they are placed in positions which require technical (agricultural) as well as marketing competencies. Agricultural representatives also know that, as a consequence of obsolete technology used in the manufacturing of fertiliser (and the higher costs of fertiliser caused by this), they are at a disadvantage when it comes to the marketing of their product. The company where the research is being undertaken is characterised by an assumption that the agricultural representatives will see to it that the product that is manufactured will be sold. Consequently, a sales orientation, rather than a marketing orientation prevails. This culture has caused much pressure for agricultural representatives to achieve the sales budget. The company had to terminate the services of a few employees, while six marketers in one business unit resigned within two months. More research information regarding agricultural representatives' level of psychological strengths (sense of coherence, self-efficacy and locus of control) and the relationship of these with job satisfaction may indicate whether the dispositional view of job satisfaction proves to be true. In this case, various organisational socialisation programmes (such as recruitment, selection, induction and development) could be implemented to increase the satisfaction of agricultural representatives and eventually the effectiveness of the organisation.

The following research questions could consequently be identified for this investigation:

- How is job satisfaction conceptualised in the literature?
- What is the relationship between job satisfaction on the one hand and sense of coherence, self-efficacy and locus of control on the other hand, according to the literature?
- What are the levels of sense of coherence, self-efficacy, locus of control and job satisfaction of agricultural representatives in the fertiliser industry?
- What is the relationship between sense of coherence, self-efficacy and locus of control on the one hand and job satisfaction on the other hand among agricultural representatives in the fertiliser industry?
- To what extent are sense of coherence, self-efficacy and locus of control predictors of job satisfaction among agricultural representatives in the fertiliser industry?

1.2 OBJECTIVES OF THE RESEARCH

The aim of this research involves a general objective, as well as specific objectives.

1.2.1 General objective

The general research objective is to determine whether there is a relationship between sense of coherence, self-efficacy and locus of control on the one hand and job satisfaction on the other hand among agricultural representatives in the fertiliser industry, and to determine whether sense of coherence, self-efficacy and locus of control can predict the extent of their job satisfaction.

1.2.2 Specific objectives

- To conceptualise job satisfaction from the literature.
- To determine the relationship between job satisfaction on the one hand and sense of coherence, self-efficacy and locus of control on the other hand, according to the literature.
- To determine the levels of sense of coherence, self-efficacy, locus of control and job satisfaction of agricultural representatives in the fertiliser industry.
- To determine the relationship between job satisfaction on the one hand and sense of coherence, self-efficacy and locus of control on the other hand among agricultural representatives in the fertiliser industry.
- To determine whether sense of coherence, self-efficacy and locus of control can predict the job satisfaction of agricultural representatives in the fertiliser industry.

1.3 THE PARADIGM PERSPECTIVE

According to Mouton and Marais (1992), any research is directed by a specific paradigm perspective, which includes theoretical and methodological convictions. Because individual researchers are brought up in a certain research tradition or paradigm, it has direct influence on the choices of the researcher in terms of theory and methodology. The researcher is therefore bound by specific theories, methodology and research techniques as prescribed by the paradigm, and to certain meta-theoretical assumptions and presuppositions on which the paradigm is based (Mouton & Marais, 1992).

According to the integrated model of Mouton and Marais (1992) the research process in the social sciences consists of three subsystems which are in interaction with each other and with the research domain as defined in a specific discipline. These are the intellectual climate of a specific discipline, the market of intellectual resources in the discipline (theoretical statements and methodological beliefs), and the research process itself.

Consequently, the intellectual climate and the market of intellectual resources are presented in terms of the present study. The research process follows in the next section.

1.3.1 Intellectual climate

According to Mouton and Marais (1992) the intellectual climate refers to the variety of convictions in a specific discipline in a certain time. In the social sciences, the intellectual climate includes beliefs about human beings in general, as well as more discipline-specific beliefs about society, culture and history. The intellectual climate also differs from a discipline in the sense that beliefs in the intellectual climate take on the form of presuppositions.

In the present study, the disciplinary relationship focus is primarily on industrial psychology, which can be defined as the scientific study of human behaviour and psychological conditions in the work-related context and the application of this knowledge to minimise problems that might arise (McCormick & Ilgen, 1981). It includes organisational variables such as recruitment and placement of personnel, training, task-analysis, job evaluation, motivation of personnel, performance appraisal, the management of morale and weariness, ergonomics, organisational psychology, market and consumer psychology and industrial safety (Plug, Louw, Gouws & Meyer, 1997).

The subdisciplines in the present study are Organisation Psychology and Psychometrics. Organisation Psychology can be defined as the study of organisations, the elements and systems of which they consist, as well as factors that influence the effective functioning of organisations. More specifically, Organisation Psychology studies the individual's interaction with organisations (Plug et al., 1997). Psychometrics is defined as the branch of psychology that focuses on the development and application of mathematical and statistical procedures in psychology, in other words the study of all aspects of psychological measurement, including also the development and standardisation of psychometric tests (Plug et al., 1997).

The paradigm in the present research is the fortigenic paradigm, which studies the origin of psychological strengths (Strümpfer, 1990). The fortigenic strengths used in the present study, include sense of coherence, self-efficacy and locus of control. The construct of sense of coherence assumes that individuals who understand what happens to them, who believe that situations can be controlled by themselves or significant others, and who believe that situations and tasks within their own personal boundaries are worthwhile expending energy upon, will be able to handle stressful situations in their lives effectively. Self-efficacy refers to the assumption that individuals can handle any demand or situation, provided that they believe in their ability to come up with the necessary resources and motivation to assist them in coping with the task at hand. Finally, locus of control assumes that individuals' perception of control over behavioural outcomes determine their behavioural outcomes. Consequently, if individuals believe that they control their behavioural outcomes, they have an internal locus of control. Individuals with an external locus of control believe that they are controlled by their environment and that they have no responsibility for their behavioural outcomes, because they perceive that they cannot control it. Individuals are also assumed to be able to believe in their own ability, to act independently, to make decisions on their own and to implement action steps to solve problems.

The empirical study is presented from the positivistic and functionalistic framework. Basic assumptions of the positivistic framework are that knowledge can only be obtained through the study of observable phenomena. Knowledge can furthermore be obtained via objective, empirical and operational methods (Plug et al., 1997). The basic assumption of the functionalistic framework is that comprehensive, meaningful units of psychological phenomena (thoughts, vision and beliefs) can be classified in relationships with the purpose to explain the relevance thereof for human adaptation and survival (Plug et al., 1997).

1.3.2 The market of intellectual resources

According to Mouton and Marais (1992) the market of intellectual resources consists of the collection of beliefs which gives to scientific hypotheses their status of knowledge

suppositions. This means that the market of intellectual resources consists of both theoretical statements and methodological beliefs.

1.3.2.1 Research hypothesis

A significant relationship exists between sense of coherence, self-efficacy and locus of control of agricultural representatives in the fertiliser industry on the one hand and job satisfaction on the other hand. Sense of coherence, self-efficacy and locus of control can be used to predict their job satisfaction.

1.3.2.2 Theoretical statements of the research

Mouton and Marais (1992) defines theoretical statements as all the testable beliefs of social phenomena, in other words the what (descriptive) and the why (explanatory/interpretative) of human actions. This includes all statements that form part of hypotheses, typologies, models and theories.

The following theoretical statements serve as the point of departure for discussion in this research, and will be divided into conceptual descriptions (theoretical definitions) and theoretical models and theories.

a) Theoretical definitions

The following theoretical definitions are used in the present research:

- *Job satisfaction* can be viewed as a positive or negative emotional response to work resulting from individual needs that must be fulfilled by the job. Employees compare their expected outcomes with the perceived real outcomes offered by the job and when the perceived outcomes are less than expected, a negative emotional response toward the job, which leads to job dissatisfaction, is experienced. When the perceived outcomes are equal to or exceed the expected

outcomes, a positive emotional response towards the job is experienced. This response is indicative of job satisfaction (Cook, Hepworth, Wall & Warr, 1981; Weiss, Davis, England & Lofquist, 1967).

- *Sense of coherence* can be defined as a dispositional characteristic that helps employees to make sense of stressful experiences, to select the appropriate resources at their own or significant other's disposal, and to allocate energy towards stressors which are viewed as challenges. A strong sense of coherence helps individuals to face stressful situations and to handle complex tasks (Antonovsky, 1979, 1986, 1987a)

- *Self-efficacy* is defined as the belief of individuals in their ability to come up with the necessary resources and the motivation to handle challenges and tasks effectively. Self-efficacy, therefore, refers to the belief of individuals that they can come up with and use the relevant behavioural, cognitive and motivational resources to deal with the task at hand (Bandura, 1988; Stajkovic & Luthans, 1998; Wood & Bandura, 1989).

- *Locus of control* can be defined as a relatively stable, fundamental dispositional variable that refers to the extent to which individuals feel that they exert control over (internal locus of control) or are controlled by (external locus of control) their environment. The ability of individuals to believe in their own ability, to act independently, to make decisions on their own and to implement action steps to solve problems also plays a crucial role in locus of control (Heider, 1958; Maram & Miller, 1998; Rotter, 1966, 1975; Schepers, 1995).

b) Theoretical models and theories

According to Mouton and Marais (1992) models are not only functional because they serve to classify, but they also suggest relationships between variables. Theories go a step

further in the sense that they also explain and interpret. Because of the nature and aim of the present research, the following models and theories are relevant:

- The *cognitive model* (Weiss and Cropanzano, 1996) describes how job reactions are a product of the correspondence between internalised standards and perceptions of the job. In the present research, the model offers an explanation to the psychological processes underlying dispositional sources of job satisfaction.
- The *social information processing model* (Salancik & Pfeffer, 1978) states that task perceptions and attitudes in the workplace are a response to both the informational cues in the work environment and the objective task characteristics of the job. The social information processing model represents a general view towards the situational causes of job satisfaction in the present research.
- According to the *dispositional model* (Gerhart, 1987; Steel & Rentsch, 1997) individual (internal) characteristics or traits are used to determine work outcomes. In the present study dispositional characteristics (i.e. sense of coherence, self-efficacy and locus of control) are investigated as causes of job satisfaction.
- In the *salutogenic model* (Antonovsky, 1986) the origins of psychological health are investigated; in other words, how people stay healthy amidst stressful situations. In the present study, the salutogenic model is expanded to include the fortigenic approach, or the study of strengths (Strümpfer, 1990).
- The *main effect model of sense of coherence* (Feldt, 1997) states that sense of coherence has a direct and positive effect on well-being at work irrespective of the level of stressors. The model has been widely used in previous studies about sense of coherence. The present study, however, focuses on sense of coherence as a health resource in a work-related context.

- The *person-environment-integration theory* (Dawis, 1992) states that employees with high levels of self-management prefer more autonomy and a less structured environment, whereas employees with low levels of self-management prefer less autonomy and a more structured environment. The theory explains autonomy as a component of job satisfaction in the present study.

- The *theory of work adjustment* (Weiss et al., 1967) postulates the correspondence (or lack of it) between the work personality and the work environment as the principal reason or explanation for observed work adjustment outcomes, i.e. job satisfaction. The theory of work adjustment is one of the basic assumptions underlying the present study, because job satisfaction in this study is conceptually based on the findings of the Minnesota-studies. According to this view, job satisfaction is the result of the extent to which individuals feel that their individual capacities, experience and values can be utilised in their work environment.

- According to *social cognitive theory* (Bandura, 1977a) individual differences in the workplace can be viewed as resulting from the triadic relationship between the individual (unique personality characteristics such as need for achievement), the environment (perceived consequences from the organisational environment, such as pay for performance) and the behaviour itself (previous successful or unsuccessful performances). In the present study, social cognitive theory is the basic theory on which self-efficacy is based. Accordingly, self-efficacy is concerned with individuals' belief to affect the environment and the way in which they control their actions to achieve desired outcomes.

- *Social learning theory* (Rotter, 1954) refers to the study of the nature of reinforcements in the social environment and the way in which it influences the future behaviour of the learner. It is concerned with the the role of reinforcement, regard, and gratification in determining behaviour. The dispositional characteristic of locus of control, which is used in this study, has its roots in social learning theory.

- According to *attribution theory* (Heider, 1958) individuals are concerned with the causation of behaviour in order to make sense of the world around them. Although both internal and external forces combine to cause behaviour, it is not the cause, but the perception of these causes, that is important in the attributions of individuals. Consequently, individuals classify behaviour as resulting from the perception that it is related to either internal or external attributes. In the present study, locus of control is also linked to attribution theory in the sense that individuals' perception of control over outcomes can be either internal or external.

1.3.3 Methodological beliefs

According to Mouton and Marais (1992) methodological beliefs are statements about the nature and structure of science and scientific research. It includes philosophical research traditions (i.e. positivism) and the most important methodological models (e.g. quantitative). In most of the cases, however, it is methodological preferences, assumptions and presuppositions on what good research should be.

For this research, the point of departure is positivistic and quantitative, because the study of the phenomena in this study is based on objective, empirical and operational methods. Relevant terms used in this study are means, standard deviations, internal consistency, reliability, validity, practical significance, product-moment correlation coefficient and regression analysis.

1.4 RESEARCH METHOD

The research method consists of two phases, namely a literature study and an empirical investigation.

1.4.1 Phase 1: Literature study

In the literature study the focus is on the conceptualisation of job satisfaction and the three dispositional factors (sense of coherence, self-efficacy and locus of control).

1.4.2 Phase 2: Empirical study

The empirical study entails that the specifically stated objectives can be achieved as follows:

1.4.2.1 Step 1: Deciding on a research design

It has been decided to make use of a quantitative survey design, namely a correlational design (Huysamen, 1993). Every individual in the study population is measured against four variables at the same point in time, and the relationship between the measurements are determined.

The correlational design has been decided upon because the relationship between the constructs of sense of coherence, self-efficacy, locus of control and job satisfaction will be investigated at the same point in time without any planned intervention. The research is therefore descriptive and explanatory (Mouton & Marais, 1993).

1.4.2.2 Step 2: Selecting the study population

The study population consists of all the agricultural representatives (55) at the relevant company in the fertiliser industry. The representatives are distributed across five regions and consist of agricultural advisors, field technicians, agents, fertilising advisors, operational managers and marketers.

1.4.2.3 Step 3: Deciding on the measuring instruments

The following instruments are employed in the present study:

- The **Minnesota Job Satisfaction Questionnaire** is used to measure employees' satisfaction with their jobs. The questionnaire consists of 100 items. The Afrikaans-version of the questionnaire was used in previous studies and seems suitable for South African conditions. Research showed high internal reliability coefficients for all the subscales. Test-retest reliability over the span of one week has been reported to be 0,89 and 0,70 for one year (Cook et al., 1981).

Rothmann and Agathagelou (in press) found in their study on the job satisfaction of police personnel in the North West Province a Cronbach alpha coefficient of 0,96 for the total job satisfaction score. The alpha coefficients of the twenty factors of the questionnaire ranged between 0,49 (Activity) and 0,88 (Recognition). In general, the coefficients are accepted (Rothman & Agathagelou, in press). Coetzee and Rothmann (1999) found similar Cronbach alpha coefficients in their study on the relationship between sense of coherence and job satisfaction in the dairy industry.

- The **Sense of Coherence Scale (SOC)** (Antonovsky, 1987) consists of 29 items. Antonovsky (1993) revised the psychometric validity data of the scale. The Cronbach alpha score of the internal consistency varies between 0,82 to 0,95. The test-retest reliability of the SOC is 0,54 (after two years). The scale has a high content validity as well as construct validity. Antonovsky (1993) draws the conclusion that the SOC is a reliable instrument for measuring sense of coherence.
- The **Self-Efficacy Questionnaire (SEQ)** (Sherer & Maddux, 1982) is used to determine how the individual judges his or her own abilities and regulates the experience of personal efficacy with regard to incidents in his or her life. The reliability of the SEQ

varies between 0,71 and 0,86. The SEQ has both content and construct validity (Marais, 1997).

- The **Locus of Control Inventory (LCI)** (Scheppers, 1995) is used to measure locus of control. The three scales of the LCI were subjected to an item analysis and the reliability was found to be higher than 0,80. In the study of Rothmann and Agathagelou (in press) Cronbach's coefficient alphas of 0,81 (External Control), 0,77 (Internal Control) and 0,72 (Autonomy) were found, which are all more than the acceptable level of 0,70 (Nunnally, 1978).

Significant correlations with the following measuring instruments confirm the construct validity of the questionnaire: The General Scholastic Aptitude Test, the Senior Aptitude Tests and matric marks, The Sixteen Personality Factors Questionnaire, The Jung Personality Questionnaire, The Personal, Domestic, Social and Formal Relationships Questionnaire, the Study Habits and Attitudes Survey, the Career Development Questionnaire and the 19 Field Interests Questionnaire. As far as criterion-related validity is concerned, it has been found that the questionnaire correlates with a composite criterion of job success ($r = 0,62$).

1.4.2.4 Step 4: Statistical data-analysis

The statistical analysis is carried out with the help of the SAS-program (SAS Institute, 1996). Because the total population of agricultural representatives is used in the present study, descriptive statistics (arithmetic means, standard deviations, skewness and curtosis values) are used. Furthermore, the Cronbach alpha coefficient is determined to indicate the internal consistency of the measuring instruments. Pearson's correlation, canonical correlations and multiple correlations are computed. T-tests are used to compare the job satisfaction of contrast groups. Lastly, a regression analysis is carried out to determine the extent to which the dispositional variables of sense of coherence, self-efficacy, and locus of control predict job satisfaction. The practical significance of the results is also determined.

1.5 CHAPTER DIVISION

The chapters are presented as follows in this mini-dissertation:

Chapter 2: Job satisfaction

Chapter 3: Psychological strengths and job satisfaction

Chapter 4: Empirical study

Chapter 5: Results and discussion

Chapter 6: Conclusions and recommendations.

1.6 CHAPTER SUMMARY

In this chapter, the motivation for the present study and the steps in the research process were stated. The problem statement, aims of the study, the paradigm perspective and the research method have been discussed. Also, a prospective chapter division were indicated.

In Chapter 2 job satisfaction is discussed.

CHAPTER 2

JOB SATISFACTION

In this chapter job satisfaction and the factors influencing it are discussed. Firstly, after defining job satisfaction, a discussion of overall job satisfaction and components of satisfaction will be presented. Thereafter the causes of job satisfaction and the implications thereof for the present study are discussed.

2.1 DEFINITION OF JOB SATISFACTION

According to Visser, Breed and Van Breda (1997) it is generally accepted that there is no simple, commonly agreed upon theoretical generalisation which explains job satisfaction. Locke and Latham (1990b) and Wanous and Lawler (1972) contribute the conflicting results in various studies of job satisfaction to the fact that researchers tend to define the construct differently.

Although there are some variations in the definition of job satisfaction, there seems to be general consensus that job satisfaction can be described as an affective or emotional reaction to a job resulting from a comparison of actual outcomes with those that are desired, expected or felt to be deserved (Cranny, Smith & Stone, 1992).

Various researchers defined job satisfaction in terms of the aspects that Cranny et al. (1992) include in their definition. Lofquist and Dawis (1969) described job satisfaction as a function of the correspondence between the work environment and the needs of the individual. According to Locke (1976) job satisfaction is a pleasurable or positive emotional state resulting from the appraisal of the person's job or job experiences. Locke and Henne (1986) defined job satisfaction as a pleasurable emotional state resulting from the achievement of job values in the work environment. Porter, Lawler and Hackman (1975) viewed job satisfaction as a feeling about a job that is established by the difference between the

amount of a valued outcome that employees receive and the amount of the outcome that they feel they should receive.

In keeping with these findings, Noe et al. (1994) states that job satisfaction is the perception that a person's work fulfills his or her important job values. Job values are defined in terms of the conscious or unconscious desire of individuals to obtain something. Furthermore, people have different perceptions of which values they regard as important. This means that one employee may value salary above all else, while another employee may value co-workers. Also, the perception of individuals of their present situation relative to the values that matter to them, are important for job satisfaction. The perception of individuals concerning their situation can, however, differ completely (Noe et al., 1994).

Visser, Breed and Van Breda (1997) report the following common elements in the definition of job satisfaction:

- Employee satisfaction is an attitude or feeling which is based on the evaluation of conditions of employment (Hayeslip, 1982; Robbins, 1993; Steers & Porter, 1975);
- These reactions and perceptions are individualistic in nature (Dubin & Champoux, 1977; Heron, 1952; Herzberg et al., 1957; Lasswell, 1948; Roethlisberger & Dickenson, 1939); and
- Because attitudes and situations can change and due to the fact that they pertain to a particular context and content, the attitudes of individuals concerning satisfaction are time bound (Gurin, Veroff & Feld, 1960; Stoner & Freeman, 1992; Vroom, 1964).

Job satisfaction can therefore be seen as a positive or negative emotional response to work resulting from individual needs that must be fulfilled by the job. Employees compare the expected outcomes with the perceived real outcomes offered by the job and when the perceived outcomes are less than what is expected, the employee experiences a negative emotional response toward the job which leads to job dissatisfaction. If the perceived outcomes are equal or even higher than what is expected, the employee would experience a

positive emotional response to the job which indicates job satisfaction (Cook et al., 1981; Weiss et al., 1967).

According to Weiss et al. (1967) employees seek to achieve and maintain correspondence with their environment. The correspondence with the environment can be described in terms of the individual fulfilling the requirements of the environment, and the environment fulfilling the requirements of the individual (Cook et al., 1981). This means that employees would experience job satisfaction if they feel that their individual capacities, experience and values can be utilised in their work environment and that the work environment offers them opportunities and rewards (Dawis, 1992; Roberts & Roseanne, 1998). Cooper and Kelly (1993) underline the correspondence with the environment when they state that in order for people to be happy in their work, they must be fit for it, they must not do too much of it, and they must have a sense of success in it.

In defining job satisfaction, it is also important to distinguish between an overall job satisfaction and satisfaction with components of a job. According to Van Vuuren and Schepers (1993) the concept of job satisfaction is not one-dimensional but multidimensional and complex in nature. There seems to be general consensus among researchers that job satisfaction can be viewed as a multidimensional concept encompassing individuals' general attitude towards work, or to specific facets of the work (Greenberg & Baron, 1993; Longenecker & Pringle, 1984; Reyes & Shin, 1995; Tosi, Rizzo & Carrol, 1990).

In her research concerning the importance of the use of general job satisfaction, Smith (1992) described job satisfaction as "...an important part of a system of interrelated satisfactions..." (p. 5). Shore and Tetrick (1991) describes overall job satisfaction as representing a summary tabulation of the favourableness of various aspects of the job. Smith (1992) describes general satisfaction as not comprising of elements caused by the immediate job situation, but of two general elements she calls (a) temperament and (b) trust in management (Smith, 1992).

Smith (1992) used the analogy of rivulets flowing into a lake or the sea to describe the different satisfactions which, together with trust in management, lead to overall job satisfaction and which, combined with other forms of satisfaction, lead to life satisfaction. Figure 1 describes the process whereby the events experienced by the employee lead to satisfaction with various aspects of the job. This, together with trust in management, leads to general job satisfaction. General job satisfaction, combined with other elements of satisfaction in the employee's life, consequently leads to life satisfaction.

Brayfield and Rothe (1951) supported the global view of job satisfaction, whereas Smith, Kendal and Hulin (1969) contended that job satisfaction should be viewed as a multifaceted composite of affect.

In her paper presented at the meeting of the American Psychological Association in Los Angeles, Smith (1985) stated that virtually any measure can be placed somewhere along a specific-to-global continuum and that measures can be constructed to fit identifiable segments of the continuum. Consequently, researchers have constructed overall and component measures of job satisfaction making use of factors in the working environment that lead to job satisfaction.

According to Coster (1992) the measurement of specific components to determine the sum of general job satisfaction in a specific job is a better indication when compared to the measurement of only a global, general job satisfaction. Wanous and Lawler (1972) supported this view on the basis of their research findings. Locke (1969, 1976, 1984) similarly stated that satisfaction with the whole job is determined by the sum of the facet satisfactions, in other words, the sum of the independent components of satisfaction in a particular job.

In terms of the present study, the measurement of specific components to determine the sum of general satisfaction in a job are preferred to the measurement of only a global, general measure of job satisfaction.

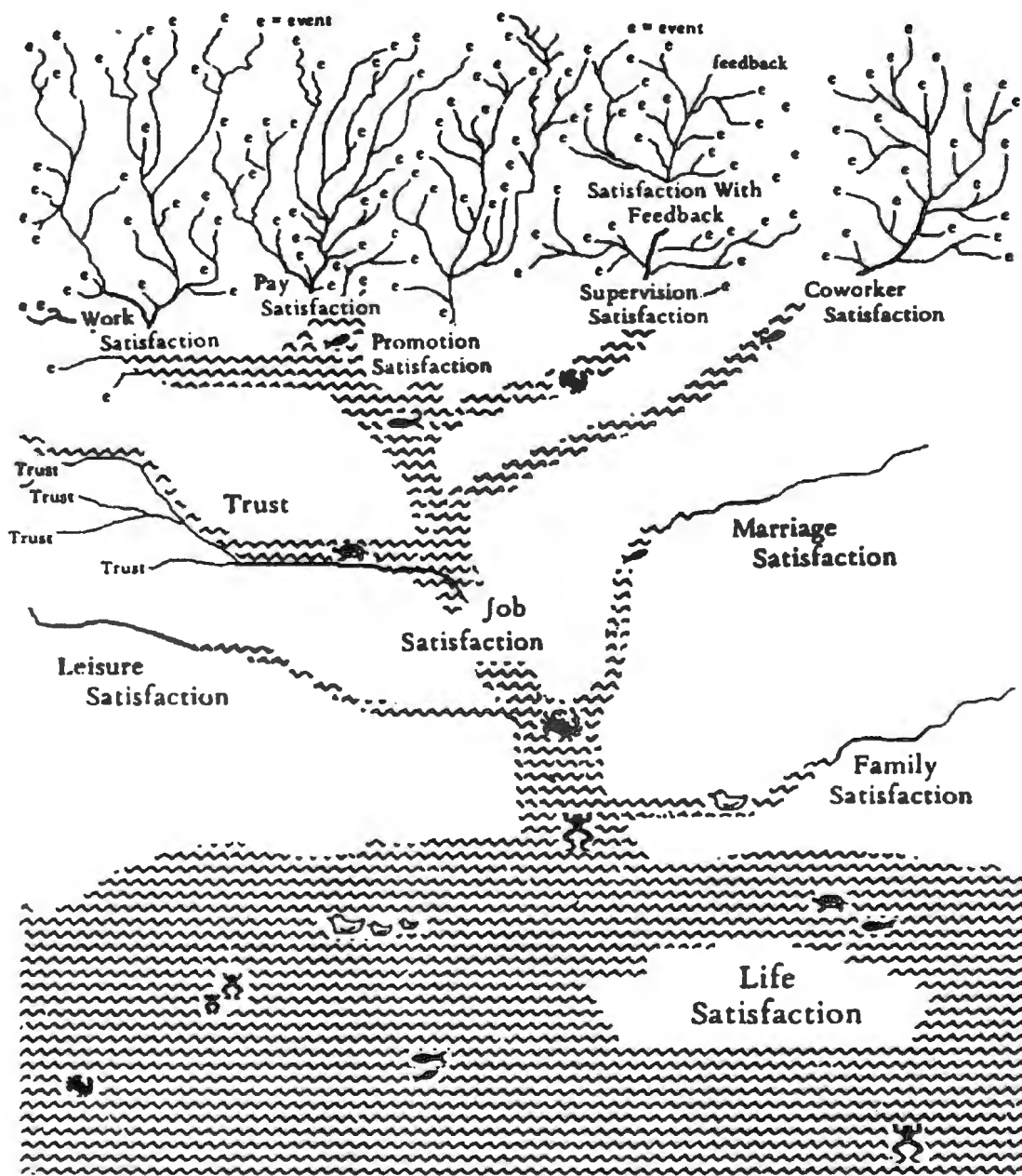


Figure 1: The process whereby events (e) in various aspects at work leads, in conjunction with trust in management, to general job satisfaction. Furthermore, general job satisfaction is combined with other areas of satisfaction in the employee's life and results in life satisfaction.¹

¹ From "In Pursuit of Happiness: Why study General Job Satisfaction?," by P.C. Smith, 1992, In C.J. Cranny, P.C. Smith, & E.F. Stone (Eds.), *Job Satisfaction: How People Feel About Their Jobs and How It Affects Their Performance*, p. 8. New York: Macmillan.

Consequently, the specific components of a job that employees may be satisfied with are discussed next.

2.2 COMPONENTS OF SATISFACTION WITH THE JOB

Various studies have been conducted in the voluminous research on job satisfaction to determine components with which employees can be satisfied or dissatisfied. These components are normally associated with specific features of paid employment in the working environment (Cook et al., 1981).

In a recent qualitative study which investigated the job satisfaction of principals and teachers in urban black schools in South Africa, nine components influencing job satisfaction emerged. The content analysis revealed the following components: physical working conditions, support by educational authorities, job security and teachers' salaries, interpersonal relations, appreciation by the community, school culture, environmental factors, nature of work and workload, and physical and emotional effects on teachers (Steyn & Van Wyk, 1999).

Katz and Van Maanen (1977) found in their study consisting of 3500 people in four different state departments that the following components correlated with job satisfaction (Note that they are given in order of the highest correlation to the lowest):

- Promotion fairness
- Feedback from supervisors and co-workers
- Autonomy
- Feedback from the job
- Colleague assistance
- Task variety
- Task identity
- Task significance
- Pay equity.

Various other studies in different contexts revealed different numbers of components of job satisfaction. Guion (1992) attributed these irregular findings to the different purposes of the studies and to the fact that some of the components are in fact not conceptually distinct.

Katz and Van Maanen (1977) found in their study conceptually different aspects of work (loci) with which job satisfaction are related. They are the following:

- *Job properties* include characteristics of the daily duties associated with a job, in other words characteristics of the job itself;
- *Interaction features* are characteristics of the daily interpersonal work-environment; and
- *Organisation policies* include characteristics of the general rules and standards that management enforce on employees.

Consequently, the relative influence of components, as they relate to job satisfaction according to the literature, are discussed. Components pertaining to the work environment (interaction features), the job itself (job properties) and the general rules and standards of the organisation (organisation policies) are presented in the following sections.

2.2.1 Components related to the work environment

According to Xaba (1996) components related to the work environment emanate outside and around the employee's task fulfilment. These components describe the environment where the employee works. They are the following:

2.2.1.1 Working conditions

Weiss et al. (1967) described working conditions as the physical environment in which employees work. The basic needs underlying employees' preference for pleasant working conditions are:

- the need for physical comfort, based on physical needs, and
- the need for facilities which would assist employees in accomplishing their aims.

Research indicates that employees prefer more average working conditions when compared to extreme working conditions concerning temperature, humidity, ventilation, lighting and noise, because these physical conditions influence their ability to work effectively (Robbins, 1996). In general, employees are satisfied with their working conditions unless there exists no direct comparison with another working environment which uses more or less the same techniques and methods, but offers better lighting for instance (Chadwick-Jones, 1969).

According to Locke (1976) employees take working conditions for granted, unless the conditions are very bad or very good. Also, working conditions become more visible when they change over a period of time, for example when moving to new premises or when employees change jobs.

Baron (1986) reported that if the work environment is comfortable and facilitative of the attainment of work goals, it usually produces higher levels of job satisfaction than an uncomfortable and chaotic environment.

2.2.1.2 Social status

According to Coetzee (1998) social status can be described as the social position, rank and prestige that somebody holds in society. Esterhuizen (1989) described status in terms of the status symbols attached to aspects like the job title, the size of an office, and the view that status is seen as a reward which depends heavily on the salary factor.

Social status affects employees' job satisfaction via its effects on their self-confidence, prestige, self-esteem and self-respect (Xaba, 1996). Steyn (1990) similarly found that the social status of employees can be improved by providing better salaries and service conditions, opportunities for advancement, recruitment, feedback and training.

According to Weiss et al. (1967) social status is the opportunity to be “someone” in society. When employees’ jobs provide social recognition, higher levels of job satisfaction would be experienced.

Mukesh (1990) added an interesting view to the social status experienced by employees by pointing to the social implications of the rise of “baby boomers”. Baby boomers are people born between 1946 and 1964, which is the period just after the Second World War. These people have been categorised as being spoilt, requiring constant attention, immediate gratification, and having endless desires for material goods. They also exhibit behaviour that reflects an attitude that the institution owes them a job and the benefits that go with it. The perceptions of these baby boomers can make management of professional staff very difficult and can influence their job satisfaction accordingly (McAllister, Mackowiak & Mackowiak, 1986).

2.2.1.3 Interpersonal relationships

Interpersonal relationships refer to the characteristics that arise when people interact in the performance of their jobs (Herzberg, 1968). According to Steyn (1990) these relationships are the interaction between an employee and other individuals in the organisation, which implies various social relationships in the both the formal and the informal contexts of the organisation. Consequently, the interpersonal relationships between employees and supervisors, as well as those between employees and co-workers are discussed in relation to job satisfaction.

a. Relationships with supervisors

The literature shows harmonious co-operation between employees and supervisors to be very important in creating employee job satisfaction and that employees prefer supervisors who are employee-centred (Likert, 1961; Locke, 1976; Shreeve et al., 1986; Steyn, 1990; Vroom, 1964).

The Michigan-studies (Locke, 1976) developed the term employee-centredness (also called consideration) to refer to the following behaviour of supervisors:

- friendliness;
- encouraging employees to perform;
- listening to the opinions of employees, and
- attending personally to employees (Locke, 1976).

Locke (1976) distinguishes between two types of attractions in the relationship between employees and supervisors, namely functional and functional-social attractions. In the first instance, the functional attraction is concerned with the obtainment of services, which means that employees would feel attracted to supervisors to the extent that supervisors help them carry out and maintain important tasks in their jobs (Visser, 1990). The employee's feelings are also influenced by the skills and the ability of supervisors to make decisions.

The functional-social attraction is based on the attraction between two or more people, which develops as a result of the extent to which supervisors share in the goals of employees, as well as their interest in employees as human beings.

Both the functional and the functional-social attractions are important in determining the level of attraction between employees and supervisors. Weiss et al. (1967) referred to these attractions as the technical and human relations nature of supervision.

Consequently, consideration by supervisors and their ability to create structure, serves to predict employees' job satisfaction. Also, the perceptions of employees in terms of the fairness of supervisors can also influence their job satisfaction (Wesolowski & Mossholder, 1997). Howard and Frink (1996) found that satisfaction with supervision affects the general job satisfaction of employees, which implies that when the organisation changes, satisfaction with supervision is still essential for maintaining general job satisfaction.

Based on the research findings, it can be concluded that supervision and the consequent relationships between supervisors and employees are important components of the job satisfaction of employees.

b. Relationships with co-workers

Massie (1971) stated that factors such as people's need to belong, their need to establish meaningful relationships with others and the influence of the group on the individual can have as much impact on employees' attitudes, behaviour and performance as incentives that management provide.

According to Lester (1987) the similarity of attitudes, the performance of jobs, the formation of personal relationships among fellow employees, and an increase in self-esteem can be considered crucial factors determining the formation of social relationships with co-workers.

Sergiovanni (1987) states that social interaction provides employees with opportunities to help and seek help from others, as well as to provide and to receive feedback from their co-workers. In their relationships with co-workers, help and feedback play an important role in employees, job satisfaction.

According to Torrington and Weightman (1989) collegiality is an important facet of interpersonal relationships with colleagues. The authors state that collaboration and teamwork are strengthened by collegiality which enables employees to contribute more to the group and therefore to the organisation as a whole. It was also found that job dissatisfaction resulted when teachers' need for affiliation (collegial relationships) were not met (Frase and Sorenson, 1992).

Steyn (1990) stated that enough opportunities for co-operation between colleagues, loyalty towards each other, intellectual fellowship and comradeship, and support for and from colleagues must be present for harmonious collegial relationships to exist. Evidently, these harmonious relationships between co-workers can lead to job satisfaction.

An interesting study on the gender composition of work groups revealed that both men and women in work groups with an equal gender composition, experience higher levels of job satisfaction when compared to groups of similar gender (Fields & Blum, 1997).

2.2.1.4 Participation in decision-making

Steyn (1990) reported a clear correlation between decision-making and teachers' job satisfaction. According to Heller, Clay and Perkins (1993) who based their research on situational leadership styles, the greatest number of respondents indicated the highest level of satisfaction under a participating style of leadership. Gruneberg (1979) stated that participation in decision-making and having employees' views considered and acted upon increase their self-esteem and allows more freedom to act in a way they think suitable to their abilities. Furthermore, participation in decision-making is strongly related to job satisfaction (Gruneberg, 1979).

2.2.1.5 Job security

Davy, Kinicki and Scheck (1997) defined job security as the expectations regarding the continuity in a job situation. The definition includes more than just the concern of keeping a job; it also includes the concern over the loss of certain job characteristics, pertaining to the limitation of advancement opportunities, the current working conditions and long-term career opportunities (Borg & Elizur, 1992).

According to Hoy and Miskel (1991) job security is an important factor influencing the job satisfaction of employees and relate to the desire for a peaceful, smoothly running and stable society, free from fear, anxiety and chaos. Esterhuizen (1989) postulates that if employees do not experience job security, they cannot give their full attention to their work, and uncertainty about their careers might ensue. As a result of a lack of job security, employees will then be demotivated and dissatisfied with their work.

In the past decade, there has been a growing interest in the relationship between job security and employee-attitudes concerning their work. One of the reasons for this is the fact that, in the last decade, following the international trend, nearly every major South African company has undertaken restructuring of its operations in an endeavour to reduce the major overhead expenditures, namely salaries and wages (Marais & Schepers, 1996). Another reason could be the trend that human resources are replaced by technology (Bennett, 1990).

These factors resulted in job losses and a change of emphasis in the expectations and responsibilities of both employees and employers (Tomasko, 1990). Similarly, Jacobson (1991) stated that a large number of people experience a fundamental and involuntary change in their set of beliefs about the employing organisation and their place in it.

Klarreich (1988), Tomasko (1990) and Tsjovold (1991) contend that, across the board, cuts in the staff of organisations lead to a decline in employee commitment, as well as resentment towards the organisation after reductions have been implemented where the main concern was financial savings for the organisation.

Understanding employees' need for job security, therefore, is crucial in understanding the reaction of employees towards organisational restructuring. According to Davy, Kinicki, Kilroy and Scheck (1988) the expectations of employees that are influenced the most during restructuring incentives, are their expectations about job security. Hunt (1986) reported that organisations do not fully comprehend the scope of restructuring incentives. Restructuring and the ensuing job insecurity leads to the development of an alienated workforce with low commitment to the organisation, as well as an unwillingness to offer more than their compulsory minimum contribution. According to O'Quinn and LoTempio (1998) feelings of pessimism about the future and the intention to quit the present job increased when job insecurity prevailed. Furthermore, the study indicated a meaningful relationship between job insecurity and job dissatisfaction.

According to the model of job security of Davy et al. (1997) it is postulated that job expectations (job security) are the direct cause of psychological responses (e.g. job satisfaction and organisational commitment). It was also postulated that the extent of job satisfaction and organisational commitment directly precede withdrawal intentions. Research indicated that job security correlated positively with job satisfaction (Arnold & Feldman; Oldham, Julik, Ambrose, Stepina & Brand, 1986), but negatively with the intention to quit (Arnold & Feldman, 1982; Ashford, Lee & Bobko, 1989).

In a study in a financial institution, the effects of organisational restructuring on job satisfaction, career aspirations and stress levels of employees were investigated by comparing a measure before and eight months after restructuring took place. Although it was expected that the effects of the restructuring process would diminish after a time lapse and that employees would experience a greater degree of job satisfaction, no increase or decrease in job satisfaction, career aspirations and stress levels were found (Marais & Schepers, 1996). Job security, therefore, plays an important role in the job satisfaction of employees.

2.2.1.6 Moral values and social service

According to Gordon (1983) employees would be more satisfied with their jobs when professional standards in the production and marketing of products are upheld. It is also believed that when employees can be of service to their fellow human beings and when the work is not perceived as incompatible with their moral values, their job satisfaction would improve. Dawis (1992) found that employees would experience job satisfaction if they do not feel that their work is morally wrong.

2.2.2 Components related to the job itself

According to Lester (1987) the components relating to the job itself involve the freedom to institute innovative materials, to utilise skills and abilities in designing work, to experiment, and to influence or control what goes on in the job. These dimensions include opportunity

for advancement, compensation, utilisation of ability, creativity, autonomy, task variety, activity, recognition and feedback, authority, responsibility, achievement, and professional growth.

2.2.2.1 Opportunity for advancement

According to Lester (1987) advancement relates to the opportunity for mobility and/or a change in status or position which may be equated with higher wages or power. Locke (1976) states that satisfaction in terms of advancement is a function of the frequency of advancement in relation to the needs of individuals and the importance thereof to them.

According to Locke (1976) the most important reasons for the need for advancement, are:

- the need for psychological growth (more responsibility can result);
- the need for validity (only if employees deserve it);
- the need for a higher income; and
- the need for social status (for those who base their self-concept on what others think of them).

Locke (1976) stated the importance of the principle of equity in this regard. Cultural differences in the meaning of equity can be detected. In the United States of America, for instance, merit and the ability to execute a task correctly, is important factors in the consideration for advancement. Furthermore, public and affiliated organisations are more willing to accept successful completion of exams and seniority as the basis for advancement (Locke, 1976). In South Africa, the promulgation of programs and laws, such as the Affirmative Action-program and the Employment Equity Act, are aimed at establishing equity and could influence employees' perception thereof (Christianson, 1998).

The perception of equity in terms of advancement is an important aspect in the job satisfaction of employees. According to Locke (1976) employees can view the advancement system as valid, but could still be dissatisfied because no chance of

advancement exists. These employees' standard values for promotion will be determined by their personal goals and career aspirations. Alternatively, employees can view the advancement system as invalid, but because they are not concerned about promotion, they can still be satisfied. A reason for this could be the fact that promotion leads to more responsibility and more complex tasks and that employees might consider themselves not ready for the challenge, e.g. in the case of low self-esteem. In the case where employees have to give up important aspects in their lives, such as social relations, promotion would not be attractive to them (Bray, Campbell & Grant ,1974).

According to Bozionelos (1996) the amount of advancements and the perception of the opportunity for advancement are related to career satisfaction, especially in the light of the fact that organisations in South Africa are restructuring and seems to be reverting to flatter organisational structures (Coetzee, 1998). Bozionelos (1996) suggests that other policies to compensate for the loss of opportunities of advancement be implemented.

2.2.2.2 Compensation

Gumbhir (1979) explained that there is a lot more to compensation than only salaries and paid benefits such as health insurance and pension plans. He called it the "intangibles" which include professional responsibilities and job satisfaction. According to Ivancevich and Glueck (1983) satisfaction with pay is important, because if pay satisfaction is low, job satisfaction is low and, consequently, absenteeism and turnover will be higher and costlier.

Research by Lawler (1971) viewed compensation from the discrepancy theory and the equity theory. The discrepancy theory states that satisfaction with compensation is based on the difference between the compensation employees receive and the value attached to the compensation. The equity theory is based on the principle that satisfaction with compensation is the result of compensation that is received for the input and output of employees, as well as the comparison of compensation with other employees in the same job.

The equity theory identifies the following three factors that determine the salary level of employees (Locke, 1976):

- individual characteristics, (i.e. age, seniority, training and experience);
- individual activities (i.e. the amount of effort, quality and quantity of outputs, and creative innovations); and
- job variables, (i.e. challenge, level of responsibility, and time-span of discretion).

According to the equity theory, the factors mentioned above, are evaluated on a comparative basis, which means that employees who work harder, possess certain competencies, or employees who do a more strenuous job, deserve to be paid better (Locke, 1976).

Consequently, employees who perceive their pay as inadequate, will be dissatisfied with their job. Also, the equity theory predicts that, similar to undercompensation, overcompensation will lead to job dissatisfaction. Although a laboratory study by Pritchard, Dunette and Jorgenson (1972) did not support this hypothesis, the study could not be generalised due to the criticism pertaining to the study. It was argued that employees are not informed of the fact that they are overcompensated, or that they are not competent to perform certain tasks. Locke (1976) stated that employees adapt to overcompensation by changing their perception about equitable compensation to fit their present pay in an effort to justify what they receive.

According to Ivancevich and Glueck (1983) the relationship between compensation and job satisfaction is not obvious, because perceptions differ in relation to what compensation entails and employees do not always know in which manner compensation is determined.

According to the need hierarchy theory of Maslow (1974), the need for money is based on the need to satisfy physical needs like food, shelter and clothes. McClelland (1961), however, pointed to the fact that money serves as a symbol of performance, as a source of recognition, and provides a way to get access to luxuries, such as relaxation and art. For

some it is a status symbol, for others it implies security, and for others compensation is viewed as a sign of appreciation for the individual employee. Visser (1990) stated that the reason for the need for equitable compensation is the need for justice, which refers to the reward for activities performed.

Although equity is the standard value that employees use in evaluating their compensation, Visser (1990) mentioned other aspects that play a role in the evaluation of compensation. These values are influenced by employees' personal financial positions, their personal economic aspirations, as well as the amount of compensation that they received previously.

In a recent study, Carr, McLoughlin, Hodgson and MacLachlan (1996) found that employees who were fairly compensated, in comparison with employees who perceived themselves to be over- or undercompensated, experienced lower levels of job satisfaction and demonstrated a tendency to change jobs.

2.2.2.3 Utilisation of ability

According to Visser (1990) employees' jobs give them the opportunity to utilise their abilities and skills. Because most employees have a need to be intellectually stimulated in the work-environment (Du Brin, 1984), employees are more satisfied in their jobs if their abilities, be it cognitive or physical, are used optimally. According to Feldman and Arnold (1983) the utilisation of employees' abilities and skills lead to pride and feelings of competency and self-confidence.

2.2.2.4 Creativity

Herzberg (1966) views creativity as a characteristic of psychological growth and describes it as the ability of the brain to generate new knowledge and information to be able to handle every new situation that arises. According to Lester (1987) creativity refers to the freedom to institute innovative materials and to utilise your skills in designing your own work.

The difference between ordinary work and creative work lies in the fact that in creative work employees are allowed to determine their own goals and tasks, whereas in ordinary work, the tasks and goals are determined by an external source (Jaques (1970). Similarly, their review of measuring instruments, Cook et al. (1981) stated that the Minnesota Satisfaction Questionnaire defines creativity as the opportunity of employees to use their own methods when doing their work.

Du Toit (1994) stated that opportunities for creativity, renewal, variety and autonomy are aspects of challenging work and satisfaction. In this regard Greenfield and Blase (1981) found that teachers tend to develop fixed responses to their work environment as a result of job repetition, working with fixed time schedules, and performing the same roles day after day. This leads to a loss of motivation and enthusiasm for teaching and job dissatisfaction.

2.2.2.5 Autonomy

According to Lester (1987) autonomy implies that employees have the freedom to experiment and to influence or control what goes on in their jobs. Lawrence (1985) supported this view by stating that work is an integral part of employees' self-concept and that they will seek to make their work more meaningful. This implies having control over their working environment.

Weiss et al. (1967) described autonomy as the opportunity to work independently. According to the person-environment-integration theory, employees with high levels of self-management, prefer more autonomy in a less structured environment, whereas employees with low levels of self-management prefer less autonomy and a more structured environment (Dawis, 1992). Roberts and Foti (1998) found that employees who demonstrated high (low) levels of self-management, experienced more job satisfaction in their working-environment with little (much) structure.

According to Lawler and Hall (1970) the relationship between job satisfaction and autonomy can be explained in the sense that autonomy leads to high levels of responsibility and

accountability, which has an influence on employees' self-concept, and ultimately leads to job satisfaction. Katz and Van Maanen (1977) also found a significantly positive relationship between autonomy and job satisfaction.

2.2.2.6 Task variety

Task variety refers to the amount of competencies that must be used in one job (Gerber, Nel & Van Dyk, 1995). Du Toit (1994) reported that the job must be challenging and that variety is needed to make the job challenging and satisfying. In the absence of acceptable cognitive challenges or when the task becomes too much of a routine, employees would become bored. It could also be attributed to a loss of interest (Du Toit, 1994; Reeves, 1994). In a study stretching over years, Wyatt, Langdan and Stock (as cited in Locke, 1976) found that boredom could be attributed to the fact that employees' jobs could not hold their attention, and that boredom results from the under-utilisation of cognitive abilities.

Studies by Rousseau (1977) and Katz and Van Maanen (1977) established a positive relationship between task variety and job satisfaction. Task variety is also linked to job satisfaction by Daley (1986).

2.2.2.7 Activity

According to Weiss et al. (1967) the opportunity to stay busy at work is an important component enhancing employees' experience of job satisfaction in their jobs. Also, the opportunity to stay busy is closely related to components like task variety, which helps combat boredom in the job. This aspect may also be referred to as job underload.

2.2.2.8 Recognition and feedback

Recognition is an important factor influencing the job satisfaction of employees since it denotes an act of notice, blame, praise or criticism and involves the attention, appreciation, prestige and esteem of supervisors and colleagues (Lester (1987). Cohen (1985) found that

recognition of achievement by senior management, specialists and outsiders as much as immediate superiors and colleagues has the added value of stimulating effort. In the research of McCormick and Solman (1992) it was found that employees who feel that they were given recognition, felt that it was not enough in that superiors other than their immediate supervisors did not give enough recognition for their work.

According to Barber (1986) recognition and feedback satisfy employees' need for regard and consequently affect their job satisfaction. Locke (1973) found that recognition was the most influential component causing job satisfaction or dissatisfaction, especially among blue collar workers. Feedback is very important to employees, whether it comes from co-workers or supervisors or the task itself. Furthermore, research reports a significant positive relationship between job satisfaction and feedback (Hackman & Lawler, 1971; Teas, 1983; Teas & Horrel, 1981).

Employees who are well-informed concerning their supervisor's evaluation of their performance, uphold realistic expectations regarding compensation and advancement opportunities (Boshof and Meis, 1994). Furthermore, performance feedback lowers role ambiguity, which often has a negative influence on the job satisfaction of employees.

2.2.2.9 Authority

Authority refers to the inherent rights that employees have as a result of the position they occupy in the organisation (McKenna and Beech, 1995). Weiss et al. (1967) explained authority as the opportunity to delegate tasks to subordinates. South African organisations seem to move in the direction of flatter organisational structures and components such as self-management teams are considered. However, there still seems to be much autocracy, which makes authority a reality in South African employees' experience of the working environment (Coetzee, 1998).

According to Reeves (1994) teachers in Khayelitsha felt that schools were run in an authoritarian, top-down manner with teachers at the bottom of the pile. Sergiovanni and

Starratt (1993) found that principals who allow for participatory decision-making, give support and show consideration for employees' interests, foster employees' development by means of the provision of feedback, and allow for autonomy in the boundaries of competence, contributed to feelings of job satisfaction experienced by their subordinates. The literature links the leadership characteristics mentioned above to job satisfaction, which allows employees to exercise their own authority and consequently leads to job satisfaction (Du Toit, 1994; Kleynhans, 1981).

2.2.2.10 Responsibility

According to Xaba (1996) responsibility is defined in terms of employees' acceptance of ownership of the results of their work, in the sense that they feel personally accountable and responsible for the results of their work.

Responsibility is very closely related to autonomy and can be described as the freedom of employees to use their own discretion, set their own deadlines, decide for themselves what tasks or what part of tasks they are going to perform, and the opportunity for independent behaviour. Tetrick and La Rocca (1987) reported a positive relationship between the opportunity to accept responsibility and job satisfaction.

According to Esterhuizen (1989) responsibility is an important factor influencing the job satisfaction of employees in that it presents employees with the opportunity to experience autonomy, to develop in their work with the view of advancement, to excel in their work, as well as the potential for the work to be interesting. The reason for this is the fact that responsibility might increase employees' self-esteem and self-confidence through its impact on their feelings of autonomy and importance, which should directly make the job more challenging, worthwhile and satisfying.

2.2.2.11 Achievement

Achievement is related to employees' desire to excel or to succeed in competitive situations (Stoner and Wankel, 1986). This desire to achieve in the working situation generally leads to greater efforts and even more achievement (Esterhuizen, 1989). Du Toit (1994) found that employees who were achievement-motivated usually need success and fear failure.

According to Shreeve et al. (1988) the desire for achievement is closely related to career expectations. The authors assert that a large gap exists between employees' ideal performance level and their real achievements and accomplishments, which causes distress and therefore dissatisfaction.

In the literature, reference to achievement is made in terms of performance, which basically encompasses the need of employees to successfully manage their working-environment in order to survive. According to White (1959) successful management of the working-environment calls for a sense of work and pride (Turner & Miclette, 1962). The sense of work, according to Herzberg (1966), satisfies the need for psychological growth. This view is supported by Van der Westhuizen (1991) who stated that the desire for achievement in the job is based on the need for self-actualisation.

For employees to experience higher levels of performance, they must be able to discern their contribution to the whole (Locke, 1976). Performance will also increase if definite feedback concerning the level of performance is given (Hackman & Lawler, 1971). In terms of job satisfaction, the literature states that performance leads to job satisfaction (Clement, 1993; Gruneberg, 1979; Porter & Lawler, 1975).

2.2.2.12 Professional growth

Job satisfaction studies indicated that employees want to be acknowledged and treated as professionals (Shreeve et al., 1988). A professional can be defined as someone having

predeveloped knowledge and skills that are further shaped in practice and is assumed to be holding a certain degree of autonomy in action.

Reeves (1994) identified the demand of teachers for retraining and ongoing development to build their confidence, creativity and imaginative approaches to make growth and improvement in their professions possible. Sergiovanni (1987) identified four critical areas for teacher professional competency development, namely knowledge, the ability to demonstrate the knowledge by means of actual teaching under observation, a willingness to sustain the ability continuously, and the demonstration of a commitment to continuous professional growth. In the light of the definition of professionals, it seems reasonable to assume that these critical areas would be applicable to all professionals who are committed to continuous development.

According to Xaba (1996) it seems reasonable to assume that job satisfaction would be experienced by employees when the opportunities for professional growth are available, whereas job dissatisfaction can result in situations where these opportunities are not available.

2.2.3 Components related to organisation policies

The following component of job satisfaction relate to the policies and practices that organisations engage in.

Company policies and practices include the organisation's policy regarding advancement, recruitment, training and industrial relations. The practices in the organisation include procedures such as the grievance procedure, the disciplinary procedure, the dispute resolution procedure, and the dismissal procedure. Weiss et al. (1967) focused on employees' experience of the execution of the company's policies and practices. They found that employees experienced high levels of job satisfaction when they perceive the compensation policy, the grievance procedure and advancement policy of their organisation as being just and fair in relation to what they expect. The study of Katz and Van Maanen

(1977) established a high correlation between the employees' opinion that organisational policies and practices are just and fair and their job satisfaction.

The importance of employees' perceptions of justice was mentioned by Organ (1995). He stated that justice in terms of the decision process and the way in which benefits were divided, influenced job satisfaction as much as the decisions and benefits themselves. The perception of justice was consequently divided into diffused justice and procedural justice. Diffused justice refers to the advantages and decisions themselves. Procedural justice refers to the process by which diffusion takes place and includes structural and interpersonal components. The structural component refers to the characteristics of the formal procedure, whereas the interpersonal component refers to the interpersonal treatment of the employees by the decision makers.

Research by Schappe (1998) established that the perception of diffused justice was the strongest predictor of employees' job satisfaction, whereas the perception of interpersonal procedural justice turned out to be a stronger predictor of employees' job satisfaction than the perception of structural procedural justice. The perception of benefits and decisions themselves are therefore stronger predictors of employee job satisfaction than the perception of interpersonal treatment by decision makers and the perception of the characteristics of the formal procedures in the organisation.

According to Organ (1995) the perception of justice in terms of organisational policies and practices, is influenced by the following factors:

- immediate and detailed feedback;
- the option of appeal;
- a fundamental respect for humanity; and
- the possibility of contributing to the process in some way.

According to Herzberg (1968) it is the company policy and administration that are the most frequent sources of job dissatisfaction, but if employees are allowed to contribute in some

way and if they feel that they are part of the process, they might perceive the policies and practices to be just and fair, which could ultimately lead to job satisfaction.

2.3 CAUSES OF JOB SATISFACTION

The conceptualisation of the causes of job satisfaction includes the following points of departure:

- Firstly, situational variables that relate to external influences on the job may cause job satisfaction or dissatisfaction.
- Secondly, dispositional variables that relate to the individual (inherent variables) may be responsible for the different behavioural sets and attitudes towards a job.
- Thirdly, interaction between the combination of situational (organisational factors and interpersonal interactions) and dispositional variables (individual characteristics) may cause job satisfaction or dissatisfaction.

In the literature an ongoing debate on the real cause of job satisfaction has been raging between advocates of the situational and dispositional approaches to job satisfaction. Whereas the situational approach views attitudes such as job satisfaction to be influenced by external influences such as job design, supervisor and peer characteristics and other organisational factors (Roberts & Foti, 1998), the dispositional approach contends that attitudes such as job satisfaction are determined by the unique disposition of the individual (Staw & Ross, 1985). The interactionist approach considers both the individual tendencies and the situation-based experience in combination as the cause of job satisfaction (Steel & Rentsch, 1997). The individual and situation variables are therefore brought into consideration in the interactionist perspective.

These three approaches will now be described.

2.3.1 Dispositional causes of job satisfaction

In recent years, researchers focused on dispositional variables in determining work outcomes, i.e. job satisfaction and performance (Judge & Locke, 1993; Judge et al., 1998). The dispositional view takes the individual (internal) variables of employees to determine work outcomes. Job satisfaction is therefore seen as resulting from individual characteristics or traits (Roberts & Foti, 1998).

Dispositional variables can be described as psychological dimensions, such as personality characteristics, needs, attitudes, preferences and motives which result in a tendency to react to situations in a predetermined (predisposed) manner (House, Shane & Herold, 1996). According to Davis-Blake and Pfeffer (1989), the essence of the dispositional approach lies in the fact that individuals possess stable traits that significantly influence their affective and behavioural reactions towards organisational settings.

In the literature, the possible effects of dispositions on satisfaction with the job have been recognised for many decades in the work of Fisher and Hanna (1931), Hoppock (1935), Locke (1976), Smith (1955) and Weitz (1952). It was, however, the study of Staw and Ross (1985) that brought about a total re-evaluation concerning the assumptions about the nature of job satisfaction. In their study in the American Army 166 respondents were measured on two occasions and even though the respondents changed jobs or were subjected to occupational changes, their job satisfaction scores remained stable over a time period of five years. The researchers attributed the findings to the role of dispositional mechanisms in determining the development of job attitudes. Support for these findings can be found in the research of Steel and Rentsch (1997) who reported a significantly stable job satisfaction measure over a 10-year period ($r = 0,37$, $p < 0,01$). Other studies by Gerhart (1987) and Newton and Keenan (1991) also found consistency in job satisfaction scores over periods of time.

According to Levin and Stokes (1989), the next logical step in formulating a dispositional approach (based on the stability and cross-situational consistency of the studies reported

above) is to begin to investigate the possible traits and individual differences that might contribute to the attitudinal stability. This led to studies on affective temperament (Staw, Bell & Clausen, 1986) which significantly correlated with measures of job satisfaction. Consequently, employees with more positive affect tend to be more satisfied with their jobs than those assessed as having more negative affect. Whereas negative affectivity (similar to neuroticism) includes a wide variety of negative emotional experiences which influences the way in which the world, the self and others are experienced, positive affectivity (similar to extraversion or extraversion/introversion) is characterised by positive feelings experienced across situations, facets of sociability and social dominance, as well as by energy, venturesomeness and ambition (Clark & Watson, 1991).

Although positive affectivity and negative affectivity aided researchers in understanding dispositional causes of job attitudes, some controversy exists in the distinction between the two dispositions. In this regard Judge (1993) introduced the construct of affective disposition, which can be described simply as a disposition to be satisfied in life or on the job. Satisfied employees are therefore predisposed to be happy or unhappy and as a result experience satisfaction/dissatisfaction with a variety of life domains, including their jobs.

In a study by Strümpfer (1998) determining the relationship between negative affectivity, positive affectivity, affective disposition and sense of coherence, and job satisfaction in three different samples, relatively small correlations were found, but support for the relationship between dispositions and job satisfaction was established: a relatively weak relationship for negative affectivity, somewhat stronger for positive affectivity, still stronger for affective disposition, and the strongest for sense of coherence. Although only small amounts of variance were explained, the findings warranted further investigation, especially for the relationship between sense of coherence and job satisfaction.

In an attempt to understand the psychological processes underlying the dispositional source of job satisfaction, other approaches have been formulated. Weiss and Cropanzano (1996) presented a cognitive model that describes how job reactions are a product of the correspondence between internalised standards and perceptions of the job. Cantor (1990)

offered cognitive mechanisms (i.e. schemas and cognitive structures) pertaining to midrange personality traits that determine how individuals process information about themselves and the world. Another dispositional approach is the concept of self-schemas which assist individuals in the way they view and interpret reality (Markus, 1977).

The genetic approach is another dispositional approach to job satisfaction and argue that dispositions are innate (Lykken & Tellegen, 1996). To this end, Staw, Bell and Clausen (1986) demonstrated that personality factors measured in childhood predicted job satisfaction in adulthood. Also, Arvey, Bouchard, Segal and Abraham (1989) reported that monozygotic twins reared apart, revealed some similarity in their satisfaction self-reports and that their job satisfaction was higher than that of less closely related individuals.

Although these approaches offer some explanation, the underlying psychological processes are not illuminated and, furthermore, the influences of experiences and the conclusions drawn from it influences the job and life satisfaction of individuals (Judge et al., 1998). Also, in relation to dispositional affectivity, House, Shane and Herold (1996) recommended in their review of dispositional literature that affective disposition is only one of many traits that can and should be studied.

In an effort to understand the psychological processes underlying the dispositional causes of job satisfaction, Judge et al. (1997) explained dispositional determinants of job satisfaction in terms of "core evaluations" which can be described as fundamentally unconscious evaluations that individuals make about themselves. Consequently, employees evaluate situations not just in terms of the attributes of the job and the needs of the employee, but also in terms of assumptions concerning the self, other people and situations (Judge et al., 1998).

Judge et al. (1998) distinguished between internal and external core evaluations. Internal core evaluations refer to evaluations concerning the self, whereas external core evaluations refer to evaluations concerning other people (e.g. trust vs. cynicism) and the world (belief in a benevolent and just world). To this end, it is essential to develop a sense of trust early in

life (Erikson, 1950), because it forms an essential part of the basic assumptions that individuals hold about other people. Ball, Trevino and Sims (1994) found that individuals who did not believe in a just world, had more negative perceptions of the punishment they received compared to those who had more positive perceptions of justice in life. Judge et al. (1998) distinguished between four different core evaluations concerning the self that could influence job satisfaction, namely self-esteem, self-efficacy, neuroticism and locus of control.

Judge et al. (1998) found that core evaluations of the self have consistent effects on job satisfaction, independent of the attributes of the job itself. The way in which employees view themselves, therefore, affect how they experience their jobs and even their lives. According to these findings, it can be concluded that dispositional variables are very important in the understanding of employee job attitudes and that employees with more positive self-esteem are more able to cope with their jobs due to the fact that they view their lives and jobs more positively. Core evaluations also influence job attitudes in a more indirect way. Employees' actual perceptions of job attributes (e.g. autonomy and task significance) are influenced by core evaluations, which affect the way in which they evaluate their jobs. Consequently, employees with more positive self-esteem are more satisfied, not only because they feel happier and more in control, but also because they see more variety, challenge, and intrinsic worth in their work (Judge et al., 1998).

Another way of looking at dispositional variables is from a salutogenic or fortigenic paradigm. In the salutogenic paradigm, the focus is on the origins of health, whereas the fortigenic paradigm is concerned with the origin of strengths (Strümpfer, 1995). Because fortigenesis is closely related to, but more embracing and more holistic than salutogenesis, fortigenesis serves as the paradigm used in the present study (Strümpfer, 1995).

According to Strümpfer (1990) there are various fortigenic constructs concerned with how people stay healthy amidst stressful situations. The constructs refer to certain characteristics or traits inherent to individuals, enabling them to deal with stressful situations in their life successfully. These dispositional characteristics (strengths) include the

constructs of a sense of coherence, personality hardiness, potency, stamina, learned resourcefulness, locus of control, personal causation, self-directedness, self-efficacy and human agency, social interest, and a sense of humour (Strümpfer, 1990).

In a study in the dairy industry Coetzee and Rothmann (1999) found that sense of coherence alone explained about 30% of the variance in job satisfaction. Another motivation for undertaking the present study is stated by Rothmann and Agathagelou (in press). In their study concerning the relationship between locus of control and job satisfaction of senior police personnel in the North West Province, it was recommended that future research should focus on the role that three dispositional variables (i.e. sense of coherence, self-efficacy and locus of control) play in determining job satisfaction.

Judge et al. (1998) classified a core evaluation to be both "core" (fundamental) and an evaluation. Also, the three most fundamental evaluations individuals can make are with respect to oneself, other people and reality (the world), which include by implication all lesser evaluations. In their study Judge et al. (1998) used the core evaluations of self-esteem, self-efficacy, neuroticism and locus of control. Since neuroticism is negatively related to sense of coherence (Carmel & Bernstein, 1989; Flannery & Flannery, 1990), it would make theoretical sense to include sense of coherence in a study investigating the role of dispositional factors in determining job satisfaction. Related studies by Rothmann and Agathagelou (in press) and Coetzee and Rothmann (1999) included some of the core evaluations of locus of control and sense of coherence in determining job satisfaction.

In the light of these previous studies on the dispositional causes of job satisfaction, the core evaluations for the present study have been selected, namely sense of coherence, self-efficacy and locus of control (see Chapter 3).

2.3.2 Situational causes of job satisfaction

After the initial interest in the dispositional causes of job satisfaction in the early 1930's, the situational approach dominated till the 1980's (Strümpfer, 1998). The situational approach

to job satisfaction involves the influence of external influences such as job design, supervisor and peer characteristics, and other organisational characteristics that influence the job attitudes of individuals (Roberts & Foti, 1998). In direct contrast to the dispositional view of the causes of job satisfaction, the situational approach argues that the world of work, job characteristics, organisational situations and economic conditions affect people much more strongly than individual differences to the point that they consider dispositional effects to be negligible (Strümpfer, 1998).

According to Strümpfer (1998) the situational approach to job satisfaction/dissatisfaction is assumed to result from the nature of the job or the working conditions, in other words, the situational forces on employees' job attitudes. It is also assumed that the organisation is acting in employees' interest, for instance, by creating physical work settings, recognising and rewarding desirable performance, or by providing reward equity.

Roberts and Foti (1998) reported two general views towards the situational causes of job satisfaction, namely the need-based studies and the social information processing model. The needs-based studies refer to the job characteristics model theory (Hackman & Oldham, 1975, 1976, 1980) which states that work outcomes are determined by specific external characteristics of the job and the motivating potential of the job itself. The social information processing model (Salancik & Pfeffer, 1978) contends that task perceptions and attitudes in the workplace are as much a response to informational cues in the work environment as they are to the objective task characteristics of the job. Other situational theorists also investigated the amount of structure and consideration offered by supervisors in their explanation of work outcomes, i.e. studies on the relationship between leader-initiating structure and employee attitudes and behaviours (House, 1971; Kerr, Schriesheim, Murphy & Stogdill, 1974).

2.3.3 Interaction causes of job satisfaction

The interactionist approach can be seen as the combination of the dispositional approach (personal characteristics, e.g., traits, individual differences) and the situational approach

(e.g., contexts, interpersonal interactions) in determining attitudes and actions of individual employees (Guion, 1992; Roberts & Foti, 1998; Smith, 1992). Hanges, Schneider and Niles (1990) describes the relationship between attitudes and performance as arising from and being maintained through a dynamic and reciprocal interchange relationship between individuals and their environments. The interactionist approach, consequently, views individual and situation as central issues concerning the outcomes of work, i.e. job satisfaction.

In the study of Roberts and Foti (1998) the interactional effects of a dispositional characteristic (self-leadership) and a situational characteristic (work structure) on job satisfaction were investigated. The results indicated that satisfaction was higher for employees with high (low) self-leadership who worked in low (high) structure environments.

In the study of Gerhart (1987) it was established that the dispositional model of job satisfaction does not entirely rule out situational factors, i.e. job design influences. The study of Steel and Rentsch (1997) also found support for both the situational and dispositional approach, in other words the interactionist approach to the causes of job satisfaction. The results of their study suggested that beyond the effects of attitudinal stability (dispositional characteristic), residual variance in the job satisfaction scores have been found that relate to the way in which the job is designed (situational characteristic). The present study is, however, done from a dispositional perspective.

2.4 CHAPTER SUMMARY

In this chapter, the components influencing job satisfaction have been discussed. Also, approaches to the causes of job satisfaction, with specific reference to the dispositional causes of job satisfaction, have been discussed. The decision to use the dispositional approach have also been motivated according to the literature.

Hereby, the first specific objective, namely to conceptualise job satisfaction from the literature has been reached, and the first research question answered.

In the Chapter 3, the dispositional constructs of sense of coherence, self-efficacy and locus of control are discussed according to the literature. Also, a theoretical integration of the research findings is made to set the stage for the present study.

CHAPTER 3

PSYCHOLOGICAL STRENGTHS AND JOB SATISFACTION

This chapter focuses on psychological strengths as dispositional causes of job satisfaction. Specifically, the dispositional factors of sense of coherence, self-efficacy and locus of control are discussed. A theoretical integration, which represents the relationship between the constructs of sense of coherence, self-efficacy, locus of control and job satisfaction, is given at the end of the chapter.

3.1 SENSE OF COHERENCE

In everyday life individuals are constantly bombarded with stressful situations that can induce tension in their lives. According to Antonovsky (1979) stressors are omnipresent in human existence and yet human beings survive. The concept of sense of coherence was developed by Aaron Antonovsky (1979) who did much of his research on human experiences in adverse conditions. He contended that the reason human beings survive is related to what he calls generalised resistance resources, which people use to cope with a diversity of pathogens and stressors (Strümpfer, 1990).

Generalised resistance resources (GRRs) can help individuals to manage tension in any situation of demand (Antonovsky, 1979). GRRs help individuals in making sense of the countless amount of stressors that they experience every day. It is through repeated experiencing of this sense-making that individuals develop a strong sense of coherence (Strümpfer, 1990) over time. Figure 2 explains how the individual defines GRRs to make sense of the countless amount of stressors they encounter every day (Antonovsky, 1979).

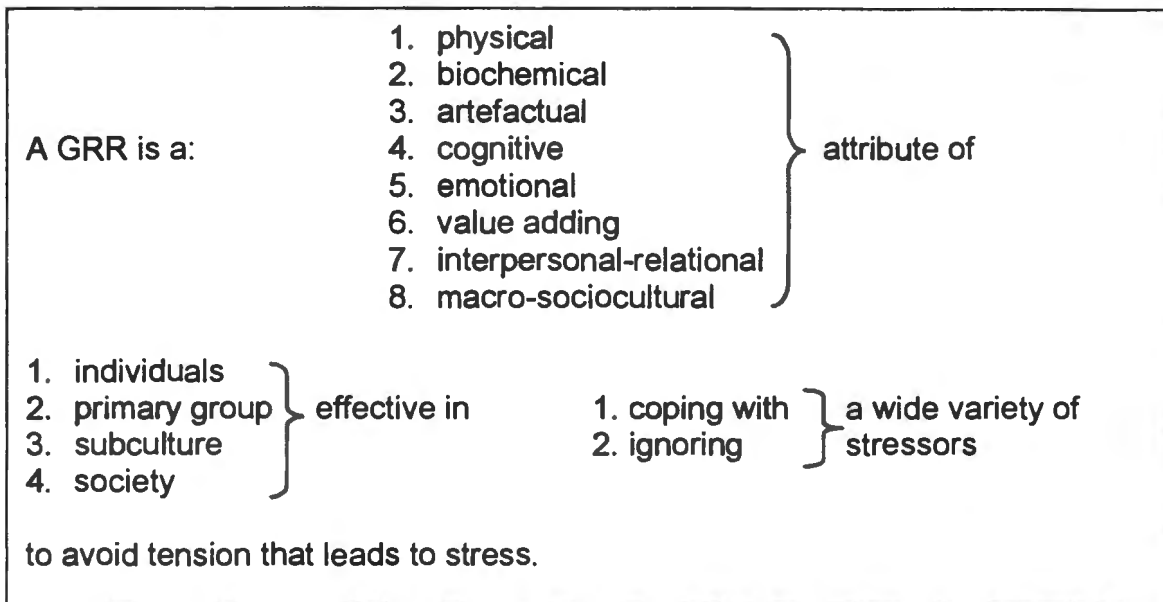


Figure 2: Definition of a Generalised Resistance Resource (GRR) which helps individuals make sense of experiences and which leads to a strong sense of coherence.²

Antonovsky (1987a) emphasised the fact that sense of coherence must be seen as a health resource and not as a particular coping style, because people with a strong sense of coherence are not limited to one particular coping style or resource. A person with a strong sense of coherence can confront a stressful life situation and choose the most appropriate strategy from the variety of potential resources available (Mankayi, 1996).

In the following sections, sense of coherence is defined and explained in terms of the development thereof. The relationship between sense of coherence and job satisfaction and the implications of a strong sense of coherence are discussed.

² From "Health, Stress and Coping," by A. Antonovsky, 1979, San Francisco, CA: Jossey-Bass, p. 103.

3.1.1 Definition of sense of coherence

Sense of coherence forms the central construct in Antonovsky's salutogenic model which investigates the origins of health, in other words which answers the question why people stay healthy despite stressful situations (Antonovsky, 1986).

Antonovsky (1987a) defined sense of coherence as follows: "The sense of coherence is a global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that (1) the stimuli deriving from one's internal and external environments in the course of living are structured, predictable and explicable; (2) the resources are available to one to meet the demands posed by these stimuli; and (3) these demands are challenges, worthy of investment and engagement" (p. 19).

The numbers in the definition represents the three core components of the sense of coherence construct, namely comprehensibility, manageability and meaningfulness (Antonovsky, 1987a).

Comprehensibility refers to the extent to which the individual perceives stimuli from inside and outside him/herself as clear, ordered, structured and consistent information, and to the expectation that these stimuli will in future be orderable, explicable and even predictable. This perception must make cognitive sense, in other words, the experience of structured environments makes it possible to anticipate and find structure in future events.

Manageability refers to the perception that the individual's life experiences are bearable, can be coped with, or better still, are challenges that can be met. The "available resources" in the definition can be under the individual's own control or under the control of legitimate others who have the power to resolve matters in the individual's interest, for example a spouse, relatives, friends, formal authorities, trade unions, God, a political party, a physician or leaders. The instrumental part of the definition therefore means that the individual bases manageability on experiences of control over the environment and trust that the challenges posed by living can be met.

Meaningfulness refers to the extent to which the individual feels that events make sense emotionally, rather than just cognitively. It refers to the sense of importance and value inherent in events and the feeling that it is worthwhile spending energy on. Meaning therefore refers to the motivational element of the sense of coherence construct.

In the light of the above-mentioned components, a person with a weak sense of coherence would experience internal and external stimuli as noise and therefore would not be able to structure or predict the future. The person would also feel victimised and would perceive events as burdensome (Strümpfer, 1990).

Antonovsky (1987a) stated that sense of coherence is not a state or trait, but a dispositional orientation. It includes components of memory, perception, information processing and affects and integrates these into behavioural appraisal patterns. The basis of these behaviours is the repeated experiences of sense-making, using the generalised resistance resources (GRRs). Sense of coherence, therefore, comprises of an individual's life experiences.

3.1.2 Development of a sense of coherence

The more individuals perceive their life experiences as constant, structured and balanced, the more they will view their world as coherent and predictable. Given the fact that a sense of coherence cannot be separated from an individual's life experiences, personal and developmental factors must influence the development of a sense of coherence. Antonovsky (1987a) believes that an individual's history, context, culture and socialising influence the development of a sense of coherence.

According to Antonovsky (1986) a sense of coherence develops tentatively during childhood and becomes more definite during adolescence. Sense of coherence is modified through the individual's life, with the first years of employment presenting a crucial transition period. It seems that individuals develop a generalised way of looking at the world at about the age

of thirty, after which the sense of coherence remains rather stable allowing minor or small changes to occur (Antonovsky, 1987a).

Sense of coherence can therefore be seen as a relatively stable dispositional orientation. This does not mean that a person with a strong sense of coherence views the entire world as meaningful, comprehensible and manageable. Individuals set boundaries outside which they will feel affected and still maintain a high sense of coherence, for example, the non-interest in developments in international politics. Despite the boundaries people set for themselves, Antonovsky (1987a) maintains that four areas must be included within the boundaries to still be able to maintain a high sense of coherence:

- the person's own feelings;
- the immediate interpersonal relations;
- the major sphere of activity (work); and
- existential issues of death, inevitable failures, shortcomings, conflict and isolation.

It is important for an individual to have flexibility about the life areas included in the boundaries and to be able to include new areas within the boundaries, in order to prepare for change resulting from the life cycles.

3.1.3 Research about sense of coherence

According to Feldt (1997) the main effect model of sense of coherence, as he calls it, (sense of coherence has a direct and positive effect on well-being at work irrespective of the level of stressors), has been widely used in overall health and disease studies. Only a few studies focusing on the role of sense of coherence as a health resource in a work-related context have been undertaken. Furthermore, the moderating or buffering role of sense of coherence in well-being at work is fairly unknown due to a lack of research in this area.

Feldt (1997) found strong support for the main effect model of sense of coherence and some support for the moderating effect of sense of coherence upon the relationship

between perceived work characteristics and well-being. Accordingly, strong sense of coherence subjects experienced greater well-being than weaker sense of coherence subjects. A strong sense of coherence further allowed individuals to cope more successfully with the adverse effects of work characteristics and reduced the pathogenic influences on well-being.

Other research on the sense of coherence construct include highly consistent findings linking a strong sense of coherence to well-being. In this regard a strong sense of coherence has been associated with competence, life satisfaction, functional status and psychological and physical health. A strong sense of coherence has been found to predict healthier behaviours and to be negatively associated with perceived work stress, depression, anxiety, psychological distress and psychological symptoms (Feldt, 1997; Kivimäki et al., 1997).

A series of studies has been undertaken at the university of Cape Town to investigate correlations between a short form of the Sense of Coherence Scale and both health-related and work-related variables (Strümpfer, 1990). According to Strümpfer (1998) findings in this regard constantly revealed strong relationships between the Sense of Coherence Scale and job satisfaction. The following four studies showed clear relationships with a short form of the Sense of Coherence Scale (SOC-13).

In a sample of coloured farm employees Strümpfer and Louw (1989) found that only among men with a low sense of coherence did a sense of participation in decisions at work correlate with measures of job satisfaction and reduced feelings of powerlessness. In a high sense of coherence group, job satisfaction and powerlessness were not related to participation in decision-making. No moderator effects of sense of coherence were found for health related outcomes. Sense of coherence correlated significantly with a general health rating and a survey measure of psychological health. Furthermore, sense of coherence correlated positively with social support from various sources and negatively with a feeling of powerlessness.

In a sample of black female nurses in Umtata, Danana (1989) found that sense of coherence correlated with the intensity of stressful job events and a survey measure of psychological health. It correlated positively with job satisfaction, the quality of the nurse's patient care as rated by the supervisor sister, and with general well-being. Concerning the moderating role of sense of coherence, moderated relationships were found between qualitative workload and the measure of psychological health, as well as between subjective job stress and job satisfaction. Relationships only occurred in the low sense of coherence group.

In a study undertaken by Fritz (1989) on data-processing personnel in a financial organisation, sense of coherence was found to correlate negatively with two stressors, namely, role ambiguity and role conflict. Although the health-related outcomes of somatic complaints and depression showed negative correlations, a general health rating correlated positively with sense of coherence. Work related outcomes of job satisfaction and life satisfaction also correlated positively with sense of coherence. In this example, the moderating effect manifested in 12 of the 54 possible combinations of stressor-outcome relationships, which has been equally distributed between health- and work-related outcomes.

Anstey (1989) undertook a study on industrial operatives in the chemical industry and found hardly any relationships between sense of coherence and stressors, or with health-related or with work-related outcomes. No real evidence of moderating effects was found.

The above-mentioned studies, together with other postgraduate research studies at the University of Cape Town, found significant correlations ($p < 0,001$) between the sense of coherence 13-scale and a particular job satisfaction scale (Danana, 1989; Schneier, 1990; Strümpfer, Fritz & Page, 1991). Using another scale of job satisfaction, Mavuya (1991) and Segaloe (1991) reported correlations significant at $p < 0,001$ and $p < 0,05$. In a sixth study a significant correlation of $p < 0,001$ was found by Strümpfer and Louw (1992) using yet another scale of job satisfaction (Strümpfer, 1995).

In a study in the dairy industry in South Africa, Coetzee and Rothmann (1999) found a positive relationship between sense of coherence and job satisfaction. They also found that low sense of coherence groups differed significantly regarding all components of job satisfaction, except compensation and advancement.

3.1.4 Implications of a strong sense of coherence

The concept of sense of coherence can be seen as a dispositional orientation that helps individuals to cope more effectively with stressors in their environment. Examples linking sense of coherence and stress-management is abundant in the literature. The reported relationship between sense of coherence, stress and job satisfaction, however, is that a strong sense of coherence gives employees the perception of control over the environment and that this perception ultimately leads to job satisfaction (Fisher, 1984).

In everyday worklife, the amount of stressors can influence individuals to a great extent and that is the reason why continuous reference to stress has been made in the discussion of sense of coherence.

A strong sense of coherence enables individuals to make sense of stressful life experiences and to define or redefine a stressor in order not to surrender to it. According to Coetzee (1998) individuals would get involved in activities that would promote health and neglect endangering situations. In making sense of stressors, individuals learn through their own life experiences to cope more effectively with stressors.

Strong sense of coherence people would also perceive stressors as manageable and would therefore select resources to their own disposal or those under the power of significant others to deal with a stressor. Individuals, therefore, does not revert to measures such as helplessness, but assumes responsibility for choosing their own destiny amidst stressful life experiences.

The motivation of a strong sense of coherence lies in allocating energy to stressors and seeing it as challenges on which it is worthwhile to spend energy on. Weak sense of coherence people would perceive stressors as negative and unwanted, thereby immobilising themselves which means that they do nothing to change the stressful situation at hand.

High sense of coherence people, consequently, have access to a wide variety of generalised resistance resources (GRRs) which enables them to understand situations, choose the resources or combinations thereof and to structure experiences in a meaningful way in order to predict future events. The stressor would then be perceived as manageable and worth getting involved in.

According to Antonovsky (1987a), the results of a strong sense of coherence are manifested in carrying out a specific task. The more complex and biased the task at hand, the more helpful a strong sense of coherence would be in helping individuals to be motivated to accept the challenge, create structure and to search for appropriate resources. A strong sense of coherence also helps individuals to trust the outcome to be relatively successful. The task, however, must fall within their personal boundaries for the sense of coherence to influence the outcome. Antonovsky (1987a) went further claiming that individuals with a strong sense of coherence would be more aware of their feelings, would have less difficulty describing it and would feel less threatened by it.

According to Strümpfer (1990) the largest portion of an adult's waking hours are spent at work and therefore represent the dominant source of internal and external stimuli to be comprehended, managed and made meaningful. He goes on to say that a strong sense of coherence would result in the following at work:

- making cognitive sense of the workplace in perceiving stimuli as clear, ordered, structured, consistent and predictable information;
- perceiving work as experiences that can be coped with, as bearable and as challenges that can be met with personal resources or sources under the control of legitimate others; and

- meeting work demands as welcome challenges, worthy of engaging in and investing energy in by making emotional and motivational sense of it.

Strümpfer (1990) pointed out that the sense of coherence is of no use if it is not accompanied by the appropriate ability, training and development, skills and conducive organisational environment. Accordingly, Strümpfer (1990) believed that the demeanour mentioned above must lead to productive performances, recognition, reward and promotion. In turn, sense of coherence will strengthen more if the experiences at work are incorporated as work-related GRR's. The work environment would then, theoretically speaking, become more comprehensible, manageable and meaningful to strong sense of coherence employees who would incorporate successful coping experiences in their demeanour.

3.2 SELF-EFFICACY

When traditional approaches to understanding and managing human performance failed to deliver the desired results, researchers turned to behaviour modification techniques which focused on principles of operant conditioning in a desperate attempt to make organisations more effective. Despite the staggering performance increases reported in research, the behaviour modification techniques were not implemented because it was considered to be too narrow and simplistic (Stajkovic & Luthans, 1998). According to Barling and Beattie (1983) a recent development in the general field of behaviour modification has been the addition of cognitive processes to behaviour modification, which resulted in a group of techniques referred to as cognitive behaviour modification.

The behaviourist and cognitive approach prevails in efforts to understand human resources in organisations and is expanded in the research of Albert Bandura in the last decade (Stajkovic & Luthans, 1998). Bandura (1977a) expanded the traditional views of social learning and behaviourism into what he called social cognitive theory (SCT). The scope of this approach went further than the traditional views of learning and/or modifying behaviour and included cognitive constructs such as self-regulatory mechanisms. In this view, learning

is seen as knowledge acquisition through cognitive processing of information (Stajkovic & Luthans, 1998).

The concept of self-efficacy was derived from social cognitive theory and encompasses a lot of basic research by Bandura and others (Bandura, 1977b). In the following sections, attention is given to the definition of self-efficacy, its determinants, research in terms of job satisfaction, implications of a strong self-efficacy and the consequences of self-efficacy in the working environment.

3.2.1 Definition of self-efficacy

According to Stajkovic and Luthans (1998) self-efficacy is central to social cognitive theory which views the individual differences in the work setting as resulting from the triadic relationship between the individual (unique personality characteristics such as the need for achievement), the environment (perceived consequences from the organisational environment, such as pay for performance), and the behaviour itself (previous successful or unsuccessful performances). These relationships are reciprocal and causative in nature, which results in individuals being both producers and products of their environments, personality and behaviours at the same time.

Wood and Bandura (1989) reported that "self-efficacy refers to beliefs in one's capabilities to mobilise the motivation, cognitive resources, and courses of action needed to meet given organisational demands" (p. 408). Stajkovic and Luthans (1998) described self-efficacy as beliefs of individuals in their capabilities to affect the environment and the way in which they control their actions to produce the desired outcomes. Individuals, therefore, have to believe that they can come up with the necessary behavioural, cognitive and motivational resources to deal with the task at hand successfully. If not, they will most likely dwell on the formidable aspects of the job, exert insufficient effort, and, as a result, fail.

In defining self-efficacy, three aspects are pointed out by Bandura (1988). Firstly, self-efficacy is a judgement or a comprehensive summary of the perceived capability to perform

a given task. Secondly, self-efficacy can be seen as a dynamic construct that changes over time. Thirdly, self-efficacy beliefs involve a mobilisation component which refers to a complex generative process whereby the individual develops and uses adaptive performance to fit changing circumstances.

According to Gist and Mitchell (1992) the assessment of capability is comprehensive in the sense that the individual employee in the organisational context derive information concerning capability from the self, the work task and others in the working environment. The dynamic nature of self-efficacy can be ascribed to the fact that new information and experiences are constantly added, e.g. during actual task performance. Concerning the mobilisation component, self-efficacy differentiates between people with the same skills in their utilisation, combination, and sequencing of these skills in changing circumstances.

Another important aspect in defining self-efficacy is the specificity-generativeness issue of the construct (Chen, Greene & Crick, 1998; Judge et al., 1998). Although Bandura (1982) maintained that self-efficacy is task-specific, it can also be generative in the sense that self-efficacy, with respect to one task, may be generalised to another task. The broader implication of the self-efficacy construct, however, is conditional in the sense that the tasks should be more or less interrelated (Gist, 1987).

Self-efficacy can consequently be seen as employees' belief in their ability to use and develop resources and the motivation to cope effectively with the tasks at hand. Because the individual's self-efficacy changes constantly, it becomes apparent that the individual uses informational cues from the environment, the self and the work task to form efficacy expectations, which differentiates employees with similar skills in the organisational context from each other. Also, in the case of interrelated tasks, self-efficacy in one task could be generalised to other tasks.

According to Gardner (1998) self-efficacy can be viewed from both a specific and a general angle. Specific self-efficacy is a state-based expectation or judgement about the likelihood of successful task performance measured immediately before any effort is expended on the

task. Consequently, specific self-efficacy is much more variable than other more stable personality characteristics, e.g. dispositional traits. Self-efficacy can also be viewed as a general, stable cognition (trait) that people hold and carry with them which reflects the expectation that they possess the ability to perform tasks successfully in a variety of achievement situations (Eden & Zuk, 1995; Riggs, Warka, Babasa, Betancourt & Hooker, 1994; Sherer, Maddux, Mercandante, Prentice-Dunn, Jacobs & Rogers, 1982). General self-efficacy can be reflected in statements such as "When I start something, I can usually complete it". Self-efficacy in the present research is viewed from a general self-efficacy perspective.

Because self-efficacy differs from employee to employee, researchers study the individual differences in the formation of self-efficacy and consequently the determinants thereof. In the next section the determinants of efficacy expectations (self-efficacy) will be discussed.

3.2.2 Determinants of self-efficacy

According to Bandura (1977b) there are four categories of experience that act as sources in the formation of self-efficacy, namely enactive mastery (personal attainments), vicarious learning (modelling), verbal persuasion and psychological arousal (e.g. anxiety). Figure 3 represents the formation process of self-efficacy.

Stajkovic and Luthans (1998) stressed the fact that the actual impact of any relevant information on the feeling of self-efficacy, is determined by the cognitive evaluation of personal and situational factors by the person and not the direct impact of "objective" reality. The key to understanding self-efficacy therefore lies in the individual, cognitive evaluation of personal and situational input and not so much in the experience itself.

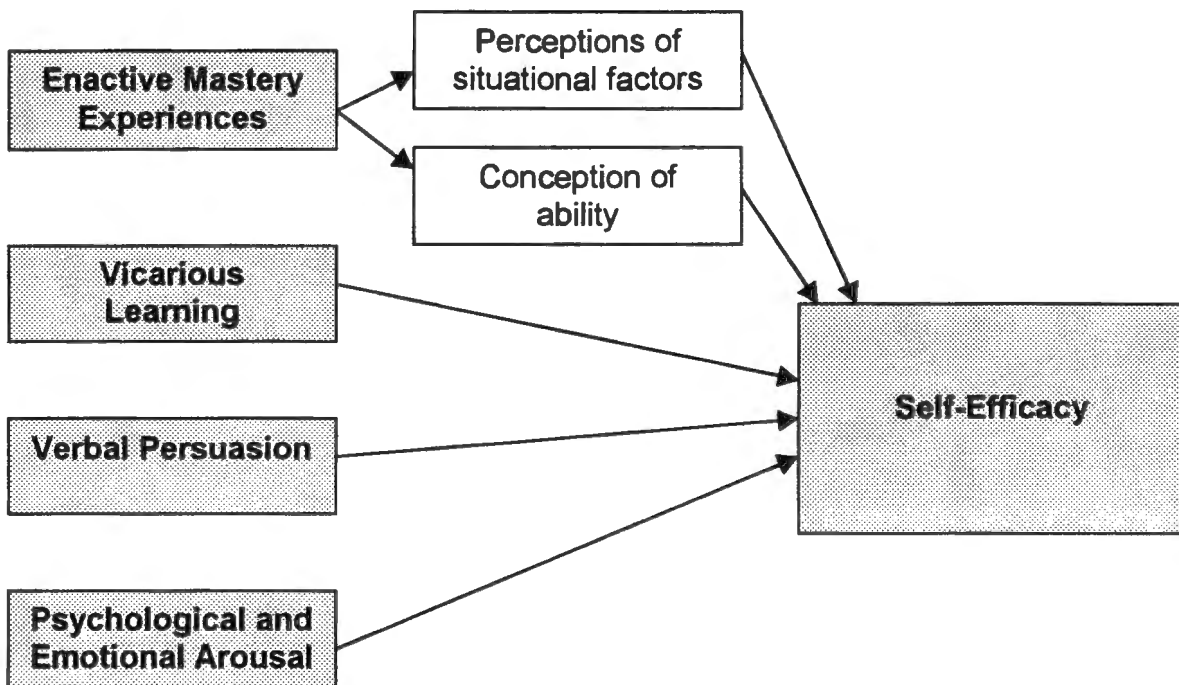


Figure 3: Determinants in the formation of self-efficacy.³

According to Gist and Mitchell (1992) environmental (situational) factors pertain to the task itself and indirectly influence self-efficacy through their evaluation by the individual. Task attributes refer to aspects like considerations of the degree of interdependence between tasks and the amount of resources (e.g. time, staff and material resources) available to complete the task successfully (Bandura, 1988a).

Complexity of the task is another environmental (situational) variable that influence self-efficacy and refers to the number of components involved, uncertainty and the sequential or coordinative steps required to perform the task successfully (Campbell, 1988). Physical distractions, in for example noise and interruptions can also influence self-efficacy (Gist & Mitchell, 1992).

³ From "Cognitive Theory and Self-Efficacy: Going Beyond Traditional Motivational and Behavioural Approaches," by A.D. Stajkovic and F. Luthans, 1998, *Organisational Dynamics*, 26(4), p. 69.

Lazarus and Folkman (1984) indicated that the amount of risk or danger and distractions may increase anxiety, which leads to lowering levels of self-efficacy through thoughts of failure, psychological manifestations of stress, and the reduction of coping mechanisms. Other environmental (situational) factors which can influence self-efficacy are physical conditions (e.g. weather) or the geographical setting (Gist & Mitchell, 1992). According to Stajkovic and Luthans (1998) the amount of external aid received and the type of supervision can also influence self-efficacy.

The second category of factors influencing perceptions of personal efficacy is personal perceptions of ability. According to Stajkovic and Luthans (1998) ability can be seen as either an incremental (acquirable) skill or as a given entity. Research has shown that employees who view ability as an incremental skill tend to spend more time diagnosing the task, are less prone to the negative impact of failures (e.g. stress, anxiety), and ultimately maintain higher levels of self-efficacy. Employees that view ability as a given entity, attribute mistakes to intellectual incapacities, which implies lack of personal control and ultimately diminishes learning and the estimate of personal efficacy (Stajkovic & Luthans, 1998).

Vicarious learning (modelling) is the second source in the formation of self-efficacy and occurs when people partly judge their capabilities in comparison with others (Bandura, 1988b). Given the amount of diagnostic information available in the organisation, self-efficacy appraisals are influenced by vicarious learning when employees are observing competent individuals performing a similar task and are reinforced by it (Stajkovic & Luthans, 1998). Models provide information regarding the nature of the task, the skills needed and the development of effective psychological strategies, such as persisting despite difficulty (Gist & Mitchell, 1992).

According to Mager (1992) and Stajkovic and Luthans (1998) the greater the perceived similarity between the employee and the model concerning personal characteristics, which are assumed relevant to accomplish a specific task, the greater the effect on the employee's behaviour. Modelling becomes especially important when employees have little prior

enactive experiences on which to base assessments of personal efficacy (Stajkovic & Luthans, 1998).

Stajkovic and Luthans (1998) described vicarious learning as a source that provides employees with an enacted mastery experience, because it gives employees the opportunity to witness a modelled performance in terms of skills and strategies which, if mastered, will enhance their self-efficacy.

The third source of self-efficacy, is *verbal persuasion*. According to Gist and Mitchell (1992) verbal persuasion include feedback or instruction about abilities. Stajkovic and Luthans (1998) state that verbal persuasion focuses on enhancing the individual's appraisal of self-efficacy and not on increasing the level of skill and ability. This form of efficacy information can be particularly relevant if employees question their efficaciousness, for example in the case of failure to produce the desired outcome.

For verbal persuasion to be effective, employees must have some reason to believe that they have the ability to accomplish the task at hand or that the ability can be developed (Stajkovic & Luthans, 1998). The credibility, expertise, trustworthiness and prestige of the persuading person is of further critical importance (Bandura, 1977a).

Psychological and emotional arousal is the fourth and last source in the formation of self-efficacy. It encompasses emotional or cognitive appeals aimed at convincing employees that they can perform a specific task at a specific level, e.g. exhortations (Stajkovic & Luthans, 1998). These appeals can result in more weakly held efficacy beliefs because less is learned about the requirements of task performance, but they can nevertheless influence efficacy judgements (Schunk, 1983).

According to Stajkovic and Luthans (1998) psychological and/or emotional arousal is sometimes viewed as a sign of vulnerability and dysfunction, but people differ in their proneness to become inhibited by emotional distractions. Self-directed attention focuses the attention on psychological agitation, while task-directed attention focuses on the task at

hand and not on the aversive stressful distractions. Consequently, self-efficacy tends to be higher for task-directed employees (Stajkovic & Luthans, 1998).

3.2.3 Research on self-efficacy

The concept of self-efficacy seems to have many diverse applications in research. Self-efficacy has been investigated on behaviours such as snake phobics (Bandura & Adams, 1977), agoraphobia (Bandura, Adams, Hardy & Howells, 1980), deficits in children's achievement behaviour (Schunk, 1981), and non-pathological behaviours such as tennis performance (Barling & Abel, in press).

A significant number of research reports have linked self-efficacy with performance making the concept very useful in the understanding and management of human resources in contemporary organisations (Stajkovic & Luthans, 1998). Sadri and Robertson (1993) confirmed the strong link between self-efficacy and performance by finding enhanced task performance as a major consequence of strong self-efficacy perceptions.

According to Gist and Mitchell (1992) empirical research on work-related performance have yielded several consistent findings. In this regard self-efficacy has been linked to life insurance sales (Barling & Beattie, 1983), faculty research productivity (Taylor, Locke, Lee & Gist, 1984), coping with difficult career related tasks (Stumpf, Brief & Hartman, 1987), career choice (Lent, Brown & Larkin, 1987), learning and achievement (Campbell & Hackett, 1986; Wood & Locke, 1987), and adaptability to new technology (Hill, Smith & Mann, 1987).

The literature is somewhat silent about the possible effects of self-efficacy on employee attitudes, such as satisfaction and commitment (Gardner & Pierce, 1998). However, some of the studies conducted on self-efficacy and employee attitudes are presented.

Various postulated links between self-efficacy and job satisfaction are presented in the literature. Locke and Latham (1990b), drawing from aspects of seven theories, hypothesised that a high level of self-efficacy will eventually lead to job satisfaction as well

as high performance. Wood and Bandura (1989) suggested that inefficacious thoughts could cause distress and depression, which could then lead to reduced levels of satisfaction.

In a study determining the role of chronological age in work outcomes, Schwoerer and May (1996) found that high levels of self-efficacy or well-designed tools led to higher job satisfaction, regardless of age. According to Lee and Bobko (1994) and Riggs et al. (1994) the higher one's level of self-efficacy towards a certain task, the higher one's positive affect associated with it.

In a cross-cultural study comprising of three independent samples, core evaluations of the self have been found to have consistent effects on job satisfaction, irrespective of the attributes of the job itself. Because generalised self-efficacy represents perceptions of one's fundamental ability to cope with life's exigencies, it represents a core self-evaluation (Judge et al., 1998). Findings in this study showed self-efficacy and self-esteem to contribute the most to the core self-evaluations concept. Furthermore, it was established that core evaluations, i.e. self-efficacy, indirectly influence job satisfaction in the sense that perceptions of work attributes, which influence job satisfaction, are effected.

Gardner and Pierce (1998) studied the relationship between generalised self-efficacy, organisation-based self-esteem, and job performance and satisfaction. They found that organisation-based self-esteem mediated the effect of generalised self-efficacy on employee attitudes and behaviours. The effect of generalised self-efficacy on job satisfaction, therefore, operates through the effect that generalised self-efficacy has on the employee's organisation-based self-esteem.

3.2.4 Implications of a strong self-efficacy

According to Mager (1992) self-efficacy has five main effects on behaviour, namely choice behaviour, motivation, perseverance, facilitative thought patterns and vulnerability to stress and depression.

Mager (1992) reported that choice behaviour is determined by how efficacious employees feel towards the options at hand, e.g. employees might feel inefficacious at talking in front of people and could refuse invitations to speak at events that might enhance their careers.

According to Bandura (1988b) employees with high self-efficacy will mobilise more effort than those with low self-efficacy, in other words high self-efficacious employees tend to be more motivated. Consequently, employees who believe in their ability to perform in a specific area will more than likely strive harder to succeed.

Perseverance is another result of self-efficacy on behaviour. An employee with high self-efficacy will persevere despite obstacles and negative outcomes and would view failures only as temporary setbacks, rather than as a final result (Mager, 1992).

Facilitative thought patterns influences behaviour at work in the sense that positive self-talk and success scenarios are used as a starting point in the case of the employee with a high level of self-efficacy (Mager, 1992). Thought patterns should also set the focus on realistic job units when looking at a complex task at hand. Cervone (1985) demonstrated that when people are asked to focus on formidable aspects of a task, their self-efficacy was lowered. Self-efficacy was increased by focusing on the practicable aspects of a task.

According to Mager (1992) employees with low self-efficacy are more likely to experience stress and depression, because they expect failure to be imminent in future performance. High self-efficacy employees approach stressful situations with the belief that they would be able to handle it and are consequently less vulnerable to stress and depression.

If employees are, for instance, very nervous before briefing top management, their level of self-efficacy can determine how they handle the situation. It has been found that employees with a high self-efficacy may view psychological arousal as an energising factor, whereas employees with low self-efficacy tend to view it as a performance debilitator (Stajkovic & Luthans, 1998).

According to Bandura (1977a) self-efficacy can be classified into three dimensions, namely magnitude, strength and generality. *Magnitude* refers to the level of task difficulty and complexity that employees believe they are capable of executing, whereas *strength* of efficacy expectations refers to whether the judgement about magnitude is strong or weak. Self-efficacy may also vary in *generality* in the sense that personal efficaciousness can refer to a particular task or it can be generalised across similar activity domains.

In determining the strength of self-efficacy, Stajkovic and Luthans (1998) argued that self-efficacy can be predictive in the sense that certain characteristics can be attributed to employees according to the level measured. Consequently, a strong self-efficacy employee can be expected to sustain efforts even in the light of adverse conditions and uncertain outcomes, e.g. deficient equipment or an unappealing product. According to Smith and Foti (1998) a high general self-efficacy would lead employees to increased self-confidence due to an accumulation of successful experiences, and a demonstration of more effort in a variety of tasks.

According to Stajkovic and Luthans (1998) it is important to take into account that an employee would not only act on strong self-efficacy alone, but would also consider the benefits associated with the action, e.g. recognition or extra pay.

According to Bandura (1988b) employees with a low level of self-efficacy doubt their capabilities, shy away from difficult tasks, and have low aspirations and weak commitment to the goals they choose to pursue. Employees with a low level of self-efficacy tend to give up quickly in the face of difficulties and are slow to recover their confidence after failure or setbacks.

Self-efficacy, therefore, is the belief that a specific task or experience can be effectively dealt with. Employees with high personal efficacy exert sufficient effort and continue to do so despite discouraging factors that they may be confronted with. Furthermore, the experience gained serves as a reinforcer for future similar or related situations or tasks.

Finally, according to the literature, the employee seems to be satisfied with the job as a result of high levels of self-efficacy (Gardner and Pierce, 1998; Lee and Bobko, 1994; Locke et al., 1998; Riggs et al., 1994).

3.3 LOCUS OF CONTROL

The construct locus of control is a well-known concept in psychology and was first introduced by Julian Rotter (1966) in the mid-sixties. According to Mukheibir (1994) locus of control is derived from a large body of empirical data on social learning theory which focuses on how choices are made by individuals from a variety of potential actions. The emphasis is on learned social behaviour (Rotter, 1954).

According to Bothma and Schepers (1997) social learning theory stresses the role of reinforcement, regard, and gratification in determining behaviour. Social learning theory studies the nature of reinforcements in the social environment and the way in which it influences the future behaviour of the learner (Schepers, 1995).

In the research of Bothma and Schepers (1997) evidence is provided that the concept of locus of control also stems from the attribution theory of Fritz Heider (1958). Attribution theory is concerned with the causation of behaviour. According to Schepers (1995) attributions result from the fact that individuals ascribe causation to specific behaviours on a constant basis in an attempt to make sense of the world around them. According to Heider (1958) the attribution process can be described as the process whereby individuals interprets behaviour as being due to aspects of the environment, whether rooted in the self or the situation.

Heider (1958) stated that although both internal and external forces combine to cause behaviour, it is not the actual causation that is important in behaviour, but the perception of these causes. Ultimately, behaviour will be determined by discrepancies in the perception of internal and of external attributes. Behaviour, therefore, results from the perception that it is related to internal or external attributes. The implication is that the real causation of

behaviour could be totally different from the perception of the individual. It is in this sense that the construct of locus of control is related to attribution theory, because locus of control is concerned with the perception of control being either internal or external (Rotter, 1966).

According to Maram and Miller (1998) locus of control is also referred to as perceived external versus internal control of reinforcement. It is a personality variable which describes the degree to which individuals perceive that they control or are controlled by their environment (Rotter, 1966). Perceived control, according to social learning theory, refers to a generalised expectancy of internal or external control of reinforcement (Mukheiber, 1994).

In social learning theory, Rotter (1954) argued that the behaviour of individuals in relationship to specific reinforcements in situation can be predicted according to two principles: (1) the value they attach to the reinforcement, and (2) the expectancies of individuals concerning their behaviour in the situation. There are two kinds of expectancies in social learning theory, namely situation-specific and generalised expectancies.

According to Rotter (1975) situation-specific expectancies are determined to a large extent by the experience of individuals in that specific situation. Generalised expectancies are relatively stable resulting from generalising lifetime experiences in specific behaviour-outcome sequences. Rotter (1966) states that locus of control is one such generalised expectancy of control of reinforcement, being either internal or external.

In the following sections attention is given to the definition of the locus of control and the development of an internal or external locus of control. Also, research findings in terms of locus of control and specifically job satisfaction are reported, as well as the consequences of an internal locus of control.

3.3.1 Definition of locus of control

The Latin word for *locus* is place. As mentioned above, Rotter (1966) defined locus of control as a generalised expectancy of perceived internal or external control of

reinforcement. The *locus of control* or place of perceived control of reinforcement is therefore either internal or external.

The generalised expectancy of internal control of reinforcement refers to the perception that events, being positive or negative, are the consequence of one's own behaviour and actions and thereby potentially under personal control (Lefcourt, 1982). The generalised expectancy of external control of reinforcement, on the other hand, refers to the perception that positive or negative events are unrelated to one's own behaviour and actions and therefore beyond personal control.

Perceived control or locus of control, therefore, is the belief that reinforcements (rewards) are either resulting from own actions (internal) and therefore under personal control, or that reinforcements (rewards) are controlled by forces outside the self and are therefore independent of own actions. The perception of control, consequently, results from the belief that rewards result from own behaviour (internal) or that rewards are independent of own behaviour (external).

Connor (1995) supported this view by stating that: "The construct of internal or external control relates to a generalised belief that social or tangible rewards are linked either to one's own actions (internal control), or are the result of circumstances, chance or the actions of other people (external control)" (p. 16).

Rotter (1966) clarified the construct of locus of control further by stating that it is a generalised expectancy that an individual utilises in a novel or ambiguous situation. According to Ommen (1995) the locus of control construct is not intended to be a precise indicator of behaviour in a specific situation, but rather a disposition that influences behaviour to varying degrees in different contexts.

Locus of control is not an expectancy concerning a particular type of reinforcement, but rather a generalised expectancy of 'problem-solving' in the sense that individuals assess whether behaviours are important or not to goal attachment, irrespective of the nature of the

goal or the reinforcer (De Wet, 1990). Furthermore, locus of control is not intended to be a precise indication of behaviour in a specific situation, but rather an expectancy about the outcome of actions as resulting from internal action or external forces (Hammerschlag, 1984; Spector, 1988).

Another important aspect of locus of control is the fact that internal or external expectancies may vary according to the specific situation, task demand, or the nature of the other individuals concerned (Connor, 1995). Typologies should therefore be avoided.

Until now, locus of control has been viewed as a generalised expectancy, which is assumed to be stable across different situations. This view is supported by criticism against the fact that the scale of Rotter (1966) assumed generality and stability of the construct of locus of control. Gradually, the need for domain specific measures (e.g. the work setting) became stronger (Maram & Miller, 1998). Consequently, both Rotter (1975) and Phares (1976) called for the development of domain specific measures of locus of control, rather than the numerous general measures available in the market. This led to the scale developed by Spector (1988) which is the only locus of control scale developed for the work setting. Consequently, the concept of "work locus of control" was developed. This concept focuses specifically on organisational rewards or outcomes such as promotion, salary increases and general career advancement.

The success of the work-locus-of-control-approach to organisational research is evident in the studies of Blau (1993), Maram and Miller (1998), and Orpen (1991) which all demonstrated stronger relationships with a variety of organisational variables, when compared to the more general locus of control scale of Rotter (1966). The implication of the stronger relationships is the fact that the Work Locus of Control Scale (Spector, 1988) may predict work behaviour more accurately than the general scales (Maram & Miller, 1998). These work-specific scales have, however, not been tested for South-African conditions.

According to Levenson (1972) it might not be valid to combine the expectancies of fate, chance or significant others all under the heading of external control. She proposed that the internal-external scale of Rotter (1966) be expanded to three dimensions, namely internal (I), powerful others (P) and chance (C). The P-scale and the C-scale represent two different types of external orientation.

According to Connor (1995) the P-scale refers to the belief that the world is basically ordered and predictable and the assumption that control is in the hands of certain powerful people. The C-scale refers to the belief that the world is largely unordered and, therefore, it is not realistic to imagine that desired outcomes can be brought about.

In this vein, research by Schepers (1995) revealed that the traditional measure of locus of control, i.e. the I-E scale of Rotter (1966), seems satisfactory from a content viewpoint, but is in fact weakly developed from a psychometric viewpoint. Schepers (1995) contended that the biggest problem with the scale is the fact that it is presented in a forced-decision format and the fact that this leads to ipsative measurement. The reason for this is situated in the fact that in the I-E scale of Rotter (1966) the constructs of internal and external control are viewed as bipolar dimensions, whereas Schepers (1995) found the three factors in his scale to be independent. The implication is that, in the case of the more normative scale of Schepers (1995), respondents are allowed more freedom in their options when completing the questionnaire.

Schepers's (1995) new, normative measuring instrument has the advantage that inter-individual differences between individuals can be pointed out. A factor-analysis of this new instrument, the Locus of Control Inventory (LCI), also revealed three factors, i.e. Internal Locus of Control, Autonomy and External Locus of Control. The three factors represent three different scales and are used in the present study, because of the advantage of inter-individual comparisons.

3.3.2 Development of locus of control

The development of locus of control has, according to Phares (1976), origins in the formative years where the parent-child relationship and parenting techniques play an important role in forming the child's expectations in terms of reinforcement. Warm, protective, positive and caring parenting techniques tend to lead to internal locus of control development, while cold, rejecting, negative or overprotective parenting will probably lead to an external locus of control (Lefcourt, 1982).

According to Levenson's distinction, research found that punishing or strict controlling parents combined with large family size tend to produce high powerful-others-scores. Inconsistent or depriving behaviours appeared to lead to high chance-scores (Connor, 1995).

Despite evidence that the formation of locus of control stems from the formative years, some research evidence has also shown that generalised control expectancies are inherited to a certain extent (Miller & Rose, 1982; Pedersen, Gatz, Plomin, Nesselroade & McClearn, 1989). According to Boone and De Brabander (1997) locus of control expectancies are partly constitutional and partly the product of accumulated life experiences.

Some research has also ascribed the differences in individual control to the differences in cerebral functioning among individuals (De Brabander, Boone & Gerits, 1992). Accordingly, internals rely more on the functions of the left hemisphere for sensory-motor control while performing laboratory tasks, whereas externals rely more on the functions of the right hemisphere. Consequently, due to the fact that locus of control formation is partly constitutional and partly the sum of life experiences, Boone and De Brabander (1997) argues that the locus of control is a fundamental personality trait.

Factors in the child's social milieu has also been related to the formation of an internal or external locus of control (Mukheibir, 1994). It has been found, for instance, that first-borns tend to have an internal locus of control, as opposed to children that are born later (Phares,

1976). Also, according to Hillman, Wood and Sawilowsky (1992) individuals belonging to a minority or stigmatised group tend to be more external in their style, perhaps using the externality as a self-protection mechanism.

Phares (1976) ascribed the typically obtained external scores of the disadvantaged to two possible factors. Firstly, direct teaching where the influence of parents, peers or older siblings serves to reinforce external locus of control beliefs and even the punishment of verbalised internal locus of control beliefs. Secondly, the reality they face could reinforce beliefs of external locus of control due to the fact that members of a minority ethnic or stigmatised group quickly realise that they are restricted in terms of jobs, promotions and housing.

According to Lao (1974) research have indicated that control becomes more internal from youth to adulthood and that it doesn't decrease significantly as one reaches middle or old age. Connor (1992) reported that internality is associated more with higher social class or socio-economic status. On a materialistic level, the distinction between classes has been minimal, but the differences in terms of attitudes are worth mentioning. As one moves up in the socio-economic scale, there is the tendency to assume that one's own efforts are crucial, as opposed to the belief that one cannot control events.

According to Connor (1992) locus of control is inextricably linked to personality and culture in the sense that different types of societies maintain different expectations or values about the expression of internality or externality, and different incentives to males and females concerning acting upon internality or externality. The example of feminism could serve as proof in this regard in the sense that it could be demands for equality in reaction to perceived negative reactions from one's immediate circle or the society as a whole.

Locus of control, therefore, seems to be a relatively stable, fundamental personality characteristic that cannot be separated from the cultural setting in which the individual grows up. Locus of control has its roots in the formative years and is shaped by factors like

parenting, societal restraints and socio-economic status. Locus of control is not just the sum of life experiences, but also to some extent hereditary.

3.3.3 Research regarding locus of control

The locus of control construct is very familiar in psychology and is well-researched in many different settings. According to Garson and Stanwyck (1997) locus of control is one personality trait that has proven to be useful in explaining worker behaviour. Because job satisfaction are the focus of work outcomes in this research, the relationship between locus of control and job satisfaction forms the primary focus of the research findings presented below.

In general, research found that internal locus of control individuals tend to be more satisfied with their jobs than externals (Lee, 1990; Mitchell, Smyser & Weed, 1975). In this line of research, Pryer and Distefano (1971) found that external locus of control nurses were less satisfied in their jobs than internal locus of control nurses. Organ and Greene (1974) reported a significant correlation between internal locus of control and the job satisfaction of scientists and engineers.

Runyan (1973) conducted a study on the relationship between subordinates' locus of control, satisfaction and different types of supervision. It was found that internals were significantly more satisfied with a participative supervisory style than externals, while externals were significantly more satisfied with direct supervision.

According to Garson and Stanwyck (1997) there is one factor common to all the reported results concerning the relationship between job satisfaction and locus of control, and that is the fact that employees with an internal locus of control tend to be more satisfied when they feel that they have some control over what happens to them at work.

Researchers have also focused on the relationship between locus of control and stress. According to Kobasa (1979) and Ganellen and Blaney (1984) locus of control moderates the

relationship between stress and illness which results from differences in coping behaviour. Internal locus of control individuals are less prone to illness after experiencing stressful situations than external locus of control people.

According to Grannis (1992) strong correlations between external locus of control, distress and stressor frequency has been found for students. In a study concerning the relationship between locus of control, perceived stress and performance for newly-hired accountants, it was found that the more internal the individual's locus of control, the more that individual perceived stress as leading to higher achievements (Bernardi, 1997). Also an internal locus of control has been found to be positively associated with lower perceived stress and correspondingly higher job satisfaction (Schafer & McKenna, 1991).

The relationship between perceived control and work-related well-being has been reported by many researchers (Daniels & Guppy, 1992; Spector, 1982). In a study aimed at identifying work-based stressors and examining their association with employee characteristics, job satisfaction and perceived control, it was found that perceived control and the stressors related to performance recognition were the most substantial predictors of job satisfaction (Guppy & Rick, 1996). Internal locus of control could consequently be seen as a prerequisite for job satisfaction.

In a related exploratory study, the effects of locus of control, occupational stress and psychological symptom distress on reported job satisfaction among 34 practising nurses were investigated (Jain et al., 1996). It was found that greater work-related stress and higher psychological symptom distress were significantly negatively correlated with job satisfaction, and that external locus of control were negatively associated with job satisfaction.

A proposed relationship according to the general work stress health model of Sutton and Kahn (1986) was postulated between the ability to understand, predict and control events at work and the reduction of potential adverse effects generally associated with certain work conditions. In a study by Tetrick and LaRocco (1987) the potential moderating or interactive

effects of the understanding of events, the predictability of events and control over events with perceived stress, satisfaction and psychological well-being were studied. Understanding and control were found to have moderating effects on the relationship between perceived stress and satisfaction. Understanding, prediction and control were found to have direct relationships with perceived stress, but only control had a significant direct relationship with satisfaction. No significant direct relationship was found for psychological well-being.

According to Garson and Stanwyck (1997) relatively few organisational studies have focused on individual behaviour in teams. However, positive relationships have been found between internal locus of control and a preference for responsibility, autonomy, role ambiguity, and the ability to perform complex tasks with job satisfaction (Abel-Halim, 1980; Organ & Greene, 1974; Spector, 1982, 1986).

In an interesting study concerning the composition of management teams, predominantly internal locus of control teams systematically performed better than predominantly external and mixed internal-external teams (Boone, Van Olffen & Van Witteloostuijn, 1998). A related study is reported by Garson and Stanwyck (1997) who studied the effects of locus of control and performance-contingent incentives on the productivity and job satisfaction of self-managed teams. It was found that predominantly internal locus of control self-managing teams who expected a performance-contingent incentive, were significantly more satisfied with their supervisors than groups of externals who also expected an incentive.

Research in terms of organisational commitment revealed that an internal locus of control is positively related to organisational commitment at job entry (Pierce & Dunham, 1987). Luthans, Baack and Taylor (1987) found that an internal locus of control is also related to post-entry organisational commitment. In a study on the influence of pre-entry variables on organisational commitment of new insurance salespeople during the first three months of employment, it was found that an internal locus of control and perceived person-job fit were positively related to salespeople's pre-entry organisational commitment (Werbel, Landau & DeCarlo, 1996).

In a study of the effect of individual difference variables on the willingness to participate in an employee improvement program, it was found that internal locus of control individuals with high growth needs were more willing to participate (Allen, Lucero & Van Norman, 1997). The internal employees evaluated the intrinsic outcomes associated with employee improvement program participation more favourably and demonstrated greater willingness to volunteer than external locus of control employees.

Rothmann and Agathagelou (in press) undertook a study to determine the relationship between locus of control and job satisfaction of senior police personnel in the North West Province of South Africa. The study confirmed a correlation of large effect ($r = 0,69$) between locus of control and job satisfaction. Also, a moderate negative correlation was found between an external locus of control and the job satisfaction of senior police personnel.

3.3.4 Implications of an internal locus of control

According to Rotter (1966) an internal locus of control has been commonly regarded as the more effective and productive end of the internal-external continuum. This means that individuals would attribute to themselves the capacity to exert some control over life events, and to avoid negative states such as passivity, which leads to a perception of an inability to cope, or even learned helplessness (Connor, 1995). The external locus of control end of the continuum has been associated with undersocialization, maladaptive behaviour and less effective communication (Stockdate, Galris & Wolins, 1983).

Research also found that an internal locus of control score on the Nowicki-Strickland scales is significantly related to academic competence and social maturity, and appears to correlate with independent, striving, self-motivated behaviour (Nowicki & Strickland, 1973).

According to Boone et al. (1998) internals and externals use different strategies in learning about the environmental contingencies of success and failure. Internal locus of control people are more likely to probe extensively for the crucial contingencies in the environment

which would serve to govern their behaviour accordingly, whereas external locus of control people wouldn't achieve desirable results from their behaviour because they believe in mere luck, fate or manipulation by uncontrollable forces. Phares (1976) stated that internals are more inclined to search for relevant information and seem to learn more from feedback and past experiences than externals.

Research also showed that internals seems to perform better than externals in achievement-related settings such as career-making and education (Andrisani & Nestel, 1976; Lefcourt,1982). Lefcourt (1982) stated that long-term goal achievement requires a capacity for delaying immediate gratification. It is unlikely for externals to continue making sacrifices in order to attain their long-term goals because they tend to believe achievement of long-term goals depend on luck or external forces. According to Moerdyk (1986) external locus of control employees tend to be passive, slow deciders and to have unrealistic expectations of the work-environment.

The ability of internals to focus their behaviour on long-term goal achievement is supported by research findings stating that external locus of control people are easier aroused and distracted by irrelevant stimuli than internals (Blankstein, 1984).

According to Connor (1995) individuals are more likely to persist in the kinds of behaviour that lead to success and reinforcement if they feel that they have some control over, and some responsibility for events and outcomes.

3.4 THEORETICAL INTEGRATION: THE RELATIONSHIP BETWEEN SENSE OF COHERENCE, SELF-EFFICACY, LOCUS OF CONTROL AND JOB SATISFACTION

In this chapter, the relationship between sense of coherence, self-efficacy and locus of control on the one hand, and job satisfaction as a work-related outcome on the other hand, has been discussed. Consequently, implications can be derived from the dispositional variables and job satisfaction presented in this chapter. The conclusions that are believed

to be relevant to the present study, are drawn from this chapter as they relate to sense of coherence, self-efficacy, locus of control and job satisfaction.

Firstly, *sense of coherence* can be viewed as a relatively stable dispositional health resource, which an employee uses to make sense of and to cope with experiences at work. Because the sense of coherence helps employees to make sense of stressful experiences, to select the appropriate resources at their own or significant other's disposal, and to allocate energy towards stressors because it is seen as challenges, strong sense of coherence employees are less likely to ignore stressful situations or to revert to helplessness. Sense of coherence also helps employees to handle complex tasks within their personal boundaries and to expect that the outcome would be reasonably successful. It also provides a sense of control over the environment, resulting from continuous sense-making and creating of structure which, ultimately, leads to job satisfaction.

Secondly, *self-efficacy* is the belief of employees that they have the ability to come up with resources and motivation to cope effectively with challenges and or tasks at hand. Resulting from this belief, the self-efficacious employee would sustain effort even in the light of unfavourable conditions or uncertain outcomes. Also, self-efficacious employees tend to be self-confident as a result of an accumulation of successful experiences and the demonstration of more effort on a variety of similar or related tasks. Furthermore, self-efficacious employees tend to be less vulnerable to stress and depression, and to be more satisfied with their jobs.

Thirdly, *locus of control* is a relatively stable, fundamental personality variable that refers to the extent that employees feel that they exert control over or are controlled by their environment, as well as the belief in their own abilities, independence and effective problem-solving techniques (autonomy). Employees with an internal locus of control feel that they can control life events and tend to be independent and self-motivated, whereas external locus of control employees tend to be passive and dependent. Also, the internal locus of control employee will not be distracted easily while channelling their energy towards goal-directed behaviour. Employees with an external locus of control are, however, easily

distracted by irrelevant stimuli and find it difficult to concentrate on directed behaviour. Because internal locus of control employees, when compared to external locus of control employees, can commit themselves stronger on a psychological level, their value to the organisation is crucial for successful outcomes in terms of performance. Furthermore, internal locus of control employees are capable to handle stressful situations better and tend to be more satisfied with their jobs, whereas external locus of control employees are not capable to handle pressure, uncertainties and challenges in a demanding work-situation.

The relationships between the dispositional variables of sense of coherence, self-efficacy and locus of control have not been discussed in this chapter. Reported linkages in the literature have been the relationship between self-efficacy and locus of control, the relationship between sense of coherence and locus of control, and the relationship between sense of coherence and self-efficacy.

In the first place, the literature provides considerable amounts of research linking self-efficacy and locus of control. According to Lefcourt (1982) and Rotter (1966) individuals with an external locus of control tend to doubt their personal efficacy. Judge et al. (1998) state that although the constructs of general self-efficacy and locus of control are theoretically related, they differ, according to expectancy theory, in the sense that self-efficacy pertains to expectancy (behaviour control), whereas locus of control is more concerned with instrumentality (outcome control).

Chen et al. (1998) expanded these findings by reporting that two differences can be identified. Firstly, locus of control measures not only behavioural, but also outcome control (Rotter, 1966), whereas self-efficacy only pertains to behaviour control. Secondly, internal-external locus of control is a generalised construct covering a variety of different situations, whereas self-efficacy (from a task specific perspective) measures individuals' belief that they could perform a specific task at a specific level of expertise (Gist, 1987). Consequently, a person can have a strong internal control in general, but low self-efficacy pertaining to specific tasks in specific areas.

The similarities between self-efficacy and locus of control are relatively straight forward (Chen et al., 1998). According to Rotter (1966) both constructs are cognitive and about control. Similarly, Bandura (1977b) explains that self-efficacy and locus of control are theoretically linked when he describes self-efficacy as the belief of individuals in their own abilities to exercise control over events in their lives. Breed (1997) states that the relationship can be expected in the sense that both self-efficacy and locus of control are concerned with the experience of the self in control of his/her own world of experience as well as available resources. Furthermore, Dyal (1984) states that just as self-efficacy can be affected by performance, locus of control can be affected by life experiences.

In a study by Breed (1997) the relationship between the constructs of the salutogenic paradigm have been investigated in two cultural groups, namely whites and others at the University of South Africa. A statistical relationship of 0,37 between self-efficacy and locus of control have been reported for the white group, whereas the other group yielded a correlation of 0,41.

In the case of the relationship between sense of coherence and locus of control, Kalimo and Vuori (1990) stated that the sense of coherence concept involves some of the issues that can be found in locus of control theory. Sense of coherence refers to an internalised sense of control, which also guides the orientation towards coming events. The sense of coherence helps individuals to understand the various facets of control and its consequences through their experience with the environment. It is in this regard that the sense of coherence concept is similar to the concept of locus of control because both lead to anticipatory health-promoting orientations. Individuals develop these healthy orientations because a general, realistic, and active sense of control results from the presence of these concepts (Seeman & Seeman, 1983).

According to Antonovsky (1987a) large differences exist in the conceptual definitions of sense of coherence and locus of control, because sense of coherence also views resources under the control of others as valuable, whereas locus of control views it as an external orientation and a failure to take control of their own destiny. Similarly, correlations between

sense of coherence and locus of control have been established at 0,385 (Antonovsky, 1987a) and 0,44 (Dahlin et al., 1990). In the study of Breed (1997) correlations of 0,39 for the other group and 0,53 for the white group were established. The correlations were higher than theoretically expected. The findings could point to the fact that the availability of resources is more important than the internal or external location (Breed, 1997).

The relationship between self-efficacy and sense of coherence is interesting, because self-efficacy is not primarily conceptualised in the salutogenic paradigm. Self-efficacy, like sense of coherence is concerned with the individual's experience of forcefulness in his/her own world (Breed, 1997). According to Antonovsky (1987a) the components of sense of coherence show similarities with the self-efficacy construct of Bandura (1977b). Antonovsky (1987a) stated that the similarities apply when self-efficacy is dependent on three conditions, namely the belief that a certain outcome is important (meaningfulness); that the execution of certain behaviour contributes to the outcome (comprehensibility), and that behaviour can be executed successfully (manageability). Breed (1997) found in her study a correlation of 0,53 between self-efficacy and sense of coherence for the white group. The other group revealed a correlation of 0,29 in her study.

The above-mentioned research implications and reported theoretical linkages between the variables used in the present study focus the attention on the expected relationships, based on the literature findings, pertaining to the present study.

The expected relationships to be found in the present study between the constructs of locus of control, self-efficacy, sense of coherence and job satisfaction are illustrated in Figure 4. The expected relationships between the dispositional variables of locus of control, self-efficacy and sense of coherence can only be indicated as expected linkages between the constructs in their prediction of job satisfaction, since no real evidence of causality or direction between the dispositional variables could be found in the literature. All three the constructs, however, are expected to predict job satisfaction. The expected relationships are indicated with arrows. The dispositional variables of sense of coherence, self-efficacy and locus of control are indicated with dotted lines, because they are expected to correlate

with each other. The relationship between the dispositional variables are indicated with solid lines, because they are expected to predict job satisfaction.

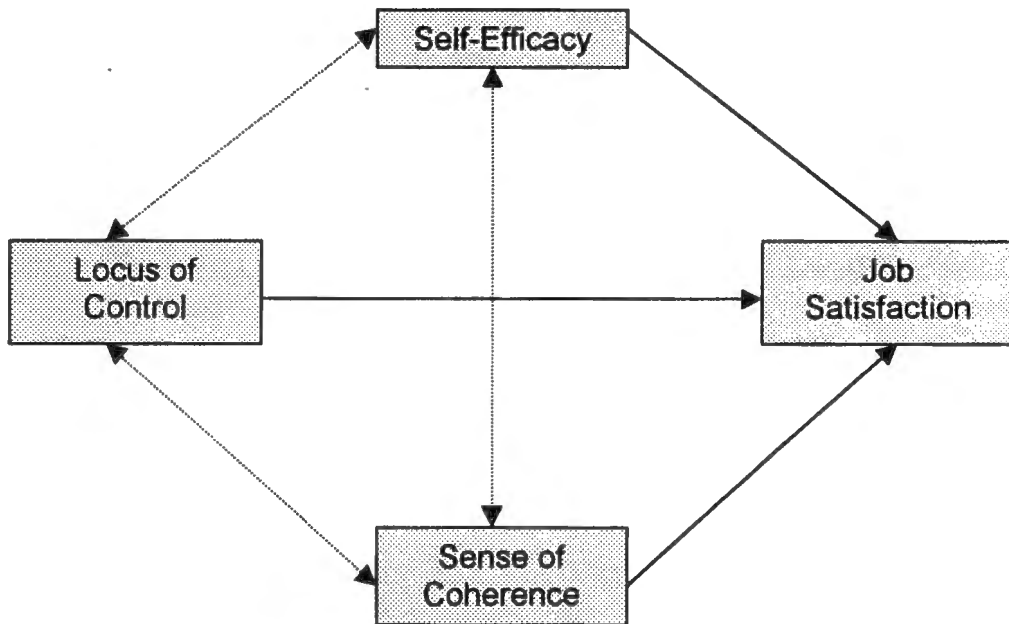


Figure 4: Proposed expected relationships between the variables of sense of coherence, self-efficacy, locus of control and job satisfaction based on literature findings in this chapter.

3.5 CHAPTER SUMMARY

In this chapter, the constructs of sense of coherence, self-efficacy, locus of control, and job satisfaction have been presented. Motivation for the present study has been given and the constructs have been defined and related to each other and the work environment according to the literature. Also, expected relationships in terms of the present study between the variables have been presented, based on reported research findings in the literature.

Hereby, the second specific objective to determine the relationship between job satisfaction on the one hand and sense of coherence, self-efficacy and locus of control on the other hand, according to the literature, has been reached. Also, the second research question has been answered.

The empirical study is described in Chapter 4.

CHAPTER 4

EMPIRICAL STUDY

According to the research procedure outlined in Chapter 1, the second phase in the research procedure is the empirical study which consists of the following steps: In the first place the researcher has to decide on a research design. Secondly, a study population has to be determined. Thirdly, measuring instruments have to be decided on. Fourthly, the research procedure is followed and the data for the study is collected. Finally, the statistical data analysis is carried out.

This chapter focuses on the choice and composition of the study population, the measuring instruments, procedure in terms of scoring and interpretation of the instruments in the measuring battery, as well as the relevant statistical analysis used in the present study. Also, research hypotheses are stated in terms of the present study.

4.1 STUDY POPULATION

In this section, the study population is discussed. Particular attention is given to the population, the sampling procedure and sampling size.

4.1.1 Population

The population consists of marketers in five regions of an organisation in the fertiliser industry, namely Free State, Northern Cape, Highveld, Lowveld and North West. All the marketers who are involved in the particular company used in this study have been included. The participants in the population consists of agricultural representatives (agricultural advisors, field technicians, agents, fertilising advisors, operational managers and marketers) concerned with the marketing of fertiliser.

4.1.2 Sampling

In this study an availability sample has been decided upon to compose the population. Because the agricultural representatives in the fertiliser industry are not bound to specific office hours, and because they cover long distances in their daily tasks and only meet once a month, it was difficult to reach everybody in the population. Consequently, the available agricultural representatives at the scheduled meetings with the consecutive business units constituted the population.

The population consists of 55 agricultural representatives in the five regions of the particular fertiliser company in this study. The population is representative of the agricultural advisors, field technicians, agents, fertilising advisors, operational managers and marketers of the respective regions. The characteristics of the population is given in Table 1.

Table 1**Characteristics of the Sample**

| | | Number of respondents |
|---------------------------|----------------------|------------------------------|
| Business Unit (BU) | BU 1 | 15 |
| | BU 2 | 11 |
| | BU 3 | 7 |
| | BU4 | 7 |
| | BU 5 | 15 |
| Gender | Male | 54 |
| | Female | 1 |
| Age | 20 – 30 yrs | 6 |
| | 31 – 40 yrs | 18 |
| | 41 – 50 yrs | 19 |
| | 51 – 60 yrs | 10 |
| | 60 – 70 yrs | 2 |
| Qualification | Lower than Matric | 1 |
| | Matric | 13 |
| | Diploma | 18 |
| | Baccalaureus degree | 16 |
| | Honours degree | 6 |
| | Masters degree | 1 |
| | Doctors degree | 0 |
| Job description | Agricultural advisor | 10 |
| | Field technician | 4 |
| | Agent | 11 |
| | Fertiliser advisor | 1 |
| | Operational manager | 7 |
| | Marketer | 22 |

According to Table 1, approximately 98% of the population consists of men. The age of the group vary between 20 and 70 years and the qualifications of the group range from lower than matric to a masters degree. Concerning the division of agricultural representatives in

the population, the agricultural advisors represent 18% of the population, field technicians represent 7%, agents 20%, fertilising advisors 2%, operational managers 13%, and marketers 40% of the population.

4.2 THE MEASURING BATTERY

In this section the rationale and development, description, administration and scoring, interpretation and the reliability and validity of the measuring instruments are discussed.

4.2.1 Measurement of job satisfaction

In the measurement of job satisfaction, it has been decided to make use of the long form of the Minnesota Satisfaction Questionnaire (Weiss et al., 1967).

4.2.1.1 The Minnesota Satisfaction Questionnaire (MSQ)

Next, the rationale and development, description, administration and scoring, interpretation, reliability and validity, as well as the motivation for the choice of the Minnesota Satisfaction Questionnaire are discussed.

a. Development and rationale

In 1957 the Minnesota studies addressed the problem of work adjustment (Weiss et al., 1967). The theory of work adjustment was developed and states that the principal reason or explanation for observed work adjustment outcomes, i.e. job satisfaction is the correspondence (or lack of it) between the work personality and the work environment. The theory, therefore, focuses on the integration of the individual personality (needs and ability) with the environment (reinforcers for needs and opportunity to use ability). Consequently, the Minnesota Satisfaction Questionnaire has been developed as a measure of one of the primary indicators of work adjustment, namely job satisfaction.

The questionnaire is very useful in the sense that a measure of satisfaction with various specific aspects of the work and the work environment is provided. Research shows that individuals differ in terms of the reinforcers they need to be satisfied in the job environment. Because it is possible for employees to experience different degrees of satisfaction, it is necessary to measure satisfaction in terms of the specific aspects in the work environment in order to distinguish between them (Weiss et al, 1967). Consequently, it is possible for two employees to experience the same level of general job satisfaction, but one could be satisfied with salary and opportunity for advancement, and the other could be satisfied with physical working conditions, co-workers and supervision. The Minnesota Satisfaction Questionnaire makes it possible to determine these individual differences (Weiss et al., 1967).

Research by Weiss et al. (1967) originally resulted in a pool of 80 items. This was extended to 100 items which represent, in groups of 5, the 20 subscales of the questionnaire.

The rationale for the use of the Minnesota Satisfaction Questionnaire is that it provides a measurement of job satisfaction in respect of various aspects of the job and the work environment, as well as a general measure of job satisfaction (Weiss et al., 1967).

b. Description

Two forms of the Minnesota Satisfaction Questionnaire is available, namely the long and the short form. The long form of the questionnaire is used in the present study and consists of 100 items. Each item refers to a reinforcer in the work environment. The questionnaire measures twenty reinforcers and five items are included for each reinforcer. The reinforcers and their consecutive item numbers are the following (Weiss et al., 1967):

- **Ability utilisation**

For employees to be satisfied in their jobs, it is important to utilise their abilities on a cognitive or physical level. Feelings of competency, pride and self-confidence result from

the utilisation of potential and abilities (Feldman & Arnold, 1983). Item numbers 7, 27, 47, 67 and 87 measure ability utilisation.

- **Achievement**

If employees experience a sense of accomplishment, they tend to be more satisfied. Although the relationship between performance and satisfaction is controversial, research showed that performance at work leads to job satisfaction (Clement, 1993). Achievement is measured by items 19, 39, 59, 79 and 99.

- **Activity**

According to Weiss et al. (1967) the opportunity to be busy all the time could contribute to the enhancement of employees' job satisfaction. Also, activity is related to task variety and also helps prevent boredom. Item numbers 20, 40, 60, 80 and 100 measure activity.

- **Advancement**

Opportunity for advancement in the employees' job is an important variable in determining their job satisfaction. This reinforcer is measured by item numbers 14, 34, 54, 74 and 94.

- **Authority**

According to Weiss et al. (1967) the opportunity to delegate duties at work could enhance job satisfaction. Authority is reflected in item numbers 6, 26, 46, 66 and 86.

- **Company policies and practices**

Company policies concern organisational recruitment and compensation, whereas practices are concerned with procedures in the organisation itself, e.g. the grievance procedure. According to Katz and Van Maanen (1977) perceptions about fair and valid policies and

procedures are positively related to job satisfaction. Item numbers 9, 29, 49, 69 and 89 measure this reinforcer.

- **Compensation**

According to Dawis (1992) it is important that employees' pay compare well with that of their fellow employees. Employees would be dissatisfied in their jobs if they believed that their pay was not adequate. Item numbers 12, 32, 52, 72 and 92 measure compensation.

- **Co-workers**

Demographic similarities and differences between employees influence their perception of satisfaction (Pfeffer, 1983). Also, Fields and Blum (1997) found that both men and women in work groups of equal gender composition experienced higher levels of job satisfaction. Item numbers 16, 36, 56, 76 and 96 measure co-workers.

- **Creativity**

Creative work allows employees to determine their own goals and tasks (Jaques, 1970). Employees tend to be more satisfied in their jobs if they are allowed to use their own methods (Cook et al., 1981). This reinforcer is measured by item numbers 2, 22, 42, 62 and 82.

- **Independence**

Independence can be described as the opportunity to work alone on the job (Weiss et al., 1967). Katz and Van Maanen (1977) found a significant positive relationship between independence and job satisfaction. Independence is reflected by item numbers 4, 24, 44, 64 and 84.

- **Moral values**

Employees will experience job satisfaction if they do not feel that their work is morally wrong (Dawis, 1992). This reinforcer is measured by item numbers 3, 23, 43, 63 and 83.

- **Recognition**

Recognition is one of the single most frequently mentioned events causing job satisfaction and dissatisfaction, especially among blue collar workers (Locke, 1973). Recognition is measured by items 18, 38, 58, 78 and 98.

- **Responsibility**

The freedom of employees to make decisions of their own in their jobs leads to satisfaction with the job. Tetrick and La Rocco (1987) found a positive relationship between the opportunity to accept responsibility and job satisfaction. It is measured by item numbers 17, 37, 57, 77 and 97.

- **Security**

Davy, Kinicki and Scheck (1997) describe security as the expectancy that continuity will prevail in the job. Various studies have linked security in the job with job satisfaction. Security is reflected by item numbers 11, 31, 51, 71 and 91.

- **Social service**

Employees want to do work that is to the advantage of everybody in the society and the organisation (Gordon, 1983). If their jobs offer this, job satisfaction results. Social service is measured by item numbers 1, 21, 41, 61 and 81.

- **Social status**

Social status is the opportunity to be recognised as 'somebody' in society (Weiss et al., 1967). Employees who are greatly respected in society as a result of their jobs, would experience higher levels of job satisfaction. Items numbers 8, 28, 48, 68 and 88 measure social status.

- **Supervision in terms of human relations**

Supervision in terms of human relations is described as the extent to which supervisors share goals with employees and show interest in and consideration for them and will determine how satisfied employees are in their jobs. This reinforcer is determined by item numbers 10, 30, 50, 70 and 90.

- **Supervision in terms of the technical side of the job**

According to Locke (1976) supervision in terms of technical aspects means that supervisors create structure and help employees with important aspects in their jobs. Technical supervision also determines employees' job satisfaction. Item numbers 15, 35, 55, 75 and 95 determine this reinforcer.

- **Variety**

It is important to integrate different abilities in one job to ensure intellectual stimulation and to prevent boredom (Gerber, Nel and Van Dyk, 1995). Task variety correlates positively with job satisfaction (Katz & Van Maanen, 1977). Variety is measured by item numbers 5, 25, 45, 65 and 85.

- **Working conditions**

In general, employees prefer safe and comfortable physical working conditions, because physical discomfort influences their ability to work effectively (Robbins, 1996). According to Herzberg (1966) dissatisfaction with working conditions is symbolic of deep-rooted frustration. Working conditions are measured by item numbers 13, 33, 53, 73 and 93.

c. Administration and scoring

The Minnesota Satisfaction Questionnaire can be administered individually or in groups (Weiss et al., 1967). The respondents read the instructions on the questionnaire themselves. The 100 items are answered according to the feeling of satisfaction or dissatisfaction in terms of each of the reinforcers.

Before scoring, the following forty-eight items of the Minnesota Satisfaction Questionnaire must be reversed: 3, 5, 8, 10, 11, 13, 16, 20, 21, 25, 26, 27, 29, 33, 35, 40, 41, 42, 44, 45, 49, 50, 52, 54, 55, 56, 58, 61, 62, 67, 68, 71, 72, 73, 74, 75, 76, 79, 80, 82, 84, 86, 87, 90, 91, 93, 94, 100.

In scoring the Minnesota Satisfaction Questionnaire, an average score for each reinforcer is determined by the average scores of all five items of each reinforcer. An average score of all 100 items are then determined.

d. Interpretation

The average score of each reinforcer is an indication of the extent to which the respondent is satisfied with the particular reinforcer. The average score of the 100 items is an indication of the general job satisfaction of the respondent. A percentile score of 75 or higher would be indicative of a high degree of job satisfaction, while a percentile score of 25 or lower would indicate a low level of satisfaction. Scores in the middle of the range of percentiles would indicate average satisfaction (Weiss et al., 1967).

e. Reliability and validity

The Minnesota Satisfaction Questionnaire is currently being standardised for South African circumstances. Preliminary results support the reliability and validity of the questionnaire (Schepers, 1997). According to Cook et al. (1981) the Minnesota Satisfaction Questionnaire offers a reliable and valid measure of general job satisfaction.

According to Durham and Smith (1997) the Minnesota Satisfaction Questionnaire demonstrates, in general, valid measurements of job satisfaction, as well as stable and consistent results. Research showed high internal reliability coefficients for all the subscales. Test-retest reliability over a span of one week has been reported to be 0,89 and 0,70 for one year (Cook et al., 1981).

Rothmann and Agathagelou (in press) found in their study on the job satisfaction of police personnel in the North West Province a Cronbach alpha coefficient of 0,96 for the general job satisfaction score. The alpha coefficients of the twenty factors of the questionnaire ranged between 0,49 (Activity) and 0,88 (Recognition). In general, the coefficients can be accepted (Rothman & Agathagelou, in press).

Coetzee (1998) had the questionnaire translated into Afrikaans using a linguist to ensure that the meaning was not altered. Similar Chronbach alpha coefficients to that of the study of Rothmann and Agathagelou (in press) was found.

f. Motivation for choice

In terms of job satisfaction, the viewpoint that various factors in the work-environment influence the job satisfaction of employees, is taken in the present study. The Minnesota Satisfaction Questionnaire supports this operational stance in the sense that the questionnaire measures the satisfaction of employees in terms of twenty factors in the work situation, as well as their overall job satisfaction.

4.2.2 Measurement of psychological strengths

In the measurement of psychological strengths, the Orientation to Life Questionnaire (OLQ), the Self-Efficacy Questionnaire and the Locus of Control Inventory are used. More information in terms of rationale and development, description, administration and scoring, interpretation, reliability and validity, as well as the motivation for the choice of each scale is presented in the sections below.

4.2.2.1 Orientation to Life Questionnaire (OLQ)

The measurement of sense of coherence is carried out using the Orientation to Life Questionnaire (OLQ) of Antonovsky (1987a).

a. Development and rationale

Antonovsky (1987a) developed the Orientation to Life Questionnaire which corresponds with the conceptual description of sense of coherence and termed it the "Orientation to Life Questionnaire". Antonovsky (1987a) based the questionnaire on the assumption that a strong sense of coherence is essential to handle stressors.

In developing the OLQ, Antonovsky (1987a) firstly established criteria for the subjects in a pilot study as follows:

- all the respondents must have experienced a serious traumatic experience with drastic and inescapable consequences for their lives, e.g. death of a parent or loved one, serious physical disability, financial failure, internment in a concentration camp or recent immigration; and
- all the respondents must have been viewed by others as coping successfully at the time despite the traumatic experience.

Antonovsky (1987a) interviewed a group of 51 respondents who met the above-mentioned two requirements. The views and experiences of these people have been used to construct the phrases in the OLQ.

The rationale of the OLQ is that it measures the respondent's global orientation of coping as represented in the construct sense of coherence. Specifically, the three dimensions of comprehensibility, manageability and meaningfulness represents a sense of coherence. The presence of these three dimensions represents a high score, while the absence indicates a low score.

b. Description

The OLQ consists of 29 items (Antonovsky, 1987a). Choices are indicated on a seven point Likert-scale. Scores of one and seven represents the extremes on the scale, and a score of four indicates that both statements are equally relevant.

The OLQ is divided in three subscales (Antonovsky, 1987a). They are the following:

- **Comprehensibility (11 items)**

This scale measures the extent to which the world is viewed as ordered, predictable and as clearly observable. The items on this scale are 1, 3, 5, 10, 12, 15 and 26.

- **Manageability (10 items)**

This scale measures the extent to which people view experiences in their lives as manageable and consists of items 2, 6, 9, 13, 18, 20, 23, 25, 27 and 29.

- **Meaningfulness (8 items)**

This measures the extent to which life is viewed as meaningful and is reflected by items 4, 7, 8, 11, 14, 16, 22 and 28.

c. Administration and scoring

The OLQ can be administered individually or in groups (Antonovsky, 1987a). Respondents read the instructions themselves and answer the 29 items by indicating which point on the scale best describes them.

The OLQ is scored by adding the item scores of each subscale separately to arrive at a score for each subscale. The total score for the OLQ is the sum of the three subscale scores. Thirteen of the items are inversely scored. They are items 1, 4, 5, 6, 7, 11, 13, 14, 16, 20, 23, 25 and 27 (Antonovsky, 1987a).

d. Interpretation

The total score of the three subscales of the OLQ gives a global indication of the respondent's sense of coherence. The subscales could also be interpreted individually. A low score on one subscale indicates that the trait is present only to a lesser extent, whereas a higher score is indicative of the presence of the trait to a greater extent (Antonovsky, 1987a).

e. Reliability and validity

Antonovsky (1987a) reported high internal consistency and reliability by quoting reliability coefficients ranging between 0,84 and 0,93. The study of Rumbaut (1983, as cited in Antonovsky, 1987a) on a sample of 336 people showed a reliability coefficient of 0,88. Furthermore, the results showed a correlation of 0,64 between the OLQ and his own version of the questionnaire. Kalimo and Vuori (1990) found a reliability coefficient of 0,93 for adults (N = 706) between the ages of 31 and 44 years.

The following findings support the construct validity of the OLQ:

- There is an inverted relationship between the OLQ and experienced stress, which shows that individuals with a strong sense of coherence would to a lesser degree evaluate stimuli as stressors.
- The OLQ correlates negatively with the “State-Trait Anxiety Inventory-Trait” of Spielberger et al. (1970, as cited in Frenz, Carey & Jorgensen, 1993) and the “Beck Depression Inventory” (Frenz et al., 1993).
- There is no meaningful relationship between the OLQ and intelligence. This means that individuals’ sense of coherence is not limited by their intellectual capabilities (Frenz et al., 1993).
- Rumbaut (1983, as cited in Antonovsky, 1987a) reports that high scores by students on the OLQ correlate negatively with their test-anxiety.

Hawley, Wolfe and Cathey (1992) found in their study of 1333 rheumatism patients that the OLQ demonstrated high levels of reliability and that the coefficients for the three subscales measured 0,87; 0,90 and 0,80. The reliability coefficient for the total OLQ was 0,95. The correlation of the three subscales was 0,71 or greater and the three subscales correlated 0,90 or higher with the total Orientation to Life Questionnaire.

Antonovsky (1993) summarised the most recent reliability and validity results in various studies as follows:

- The average alpha coefficient in 29 research studies, ranged between 0,91 and 0,85. The consistent high internal reliability has been found in a variety of populations in different culture and language groups in the West.
- Studies about the test-retest reliability, produced coefficients ranging between 0,41 and 0,97.

In the study of Coetzee and Rothmann (1999) on the job satisfaction of managers in the dairy industry, Cronbach alpha coefficients of 0,89 was found for the total score of the OLQ. The subscale coefficients was established at 0,71 (Comprehensibility), 0,75 (Manageability), and 0,84 (Meaningfulness).

f. Motivation for choice

For the purposes of this study, the OLQ has been chosen because it supports the operational view of the construct of sense of coherence the best. Also, according to Antonovsky (1987), the questionnaire can be applied across cultural boundaries.

4.2.2.2 Self-Efficacy Questionnaire (SEQ)

The Self-Efficacy Questionnaire (SEQ) of Sherer and Maddux (1982) has been decided upon for the measurement of self-efficacy in this study.

a. Development and rationale

According to Sherer and Maddux (1982) self-efficacy theory maintains that personal mastery expectations are the primary determinants of behaviour change, and that different individual levels of generalised self-efficacy expectations result from the fact that individuals differ in past experience and attribution of success to skill or chance. Consequently, a scale measuring generalised self-efficacy expectations should be able to distinguish between individuals in terms of their generalised self-efficacy.

Initially, research related self-efficacy to task-specific behaviour (Bandura, 1982). Eventually Bandura (1986) reported that the specific task efficacy might be domain-linked. Woodruff and Cashman (1993) refer to this as domain-efficacy. More recently, Bandura (1997) referred to efficacy as being at the collective level, which supports the notion of a more generalised approach to the development of self-efficacy.

Woodruff and Cashman (1993) commented on the research of Sherer et al. (1982) in proposing that self-efficacy, to be safe, should be looked at on three levels, namely a task specific level, a domain level, and a general level. They also suggested that each should be treated separately, but for the purposes of the present research the treatment and measurement of self-efficacy are carried out at a general level.

Sherer et al. (1982) first developed a scale to measure the global concept of general self-efficacy. Sherer et al. (1982) discussed general self-efficacy from the point of view that the construct is based on experiences from a variety of situations. The reason for this is that the assessment of collective experiences was viewed as being the driving force behind the expectations of a person.

The rationale of the scale of Sherer and Maddux (1982), therefore, is to measure self-efficacy at a general level. According to Tipton and Worthington (1984), who developed a questionnaire similar to that of Sherer and Maddux (1982), the Self-Efficacy Questionnaire measures an individual's expectations of how that person is likely to perform in a wide variety of situations. These situations are challenging and require the individual to harness capabilities and skills in order to perform successfully. The person who expects to be successful in a variety of situations will demonstrate higher levels of self-efficacy.

According to Tipton and Worthington (1984) their general scale of self-efficacy is similar to that of Sherer et al. (1982). In the following sections reference are therefore made to Tipton and Worthington (1984), keeping with the similarity with the scale of Sherer et al. (1982) in mind.

b. Description

The SEQ consists of 27 items. It comprises statements about how the respondents assess their self-efficacy in different situations. The questionnaire is used by choosing responses of 1 to 7, 1 = strongly agree with the statement and 7 = strongly disagree with the statement. Certain items are reversed. They are item numbers 1, 2, 9, 10, 11, 12, 22, 25 and 26. The total score of the scale is simply the sum of the item scores. It is a unidimensional scale measuring generalised self-efficacy situations (Tipton & Worthington, 1984).

c. Administration and scoring

The SEQ can be administered to individuals or groups. Respondents read the instructions themselves and respond to the items according to their agreement or disagreement with the statements (Tipton & Worthington, 1984). The corresponding score on the seven point scale is selected and recorded. There is no time limit, but respondents are requested to work quickly and give their first impressions.

In scoring the instrument, the following steps must be followed (Tipton & Worthington, 1984):

- *Step 1:* Items 1, 2, 9, 10, 11, 12, 22, 25 and 26 must be reversed.
- *Step 2:* Add all the scores in all the items and use only the total score for interpretation.
- *Step 3:* When interpreting, the total score is used as an indication of self-efficacy. It is important to note the fact that the lower the score, the higher the level of self-efficacy, whereas a high score indicates low levels of self-efficacy.

The items are scored from 1 = definitely agree, to 7 = definitely disagree with the statement.

d. Interpretation

According to Bandura (1989) the stronger the sense of self-efficacy, the bolder the behaviour of individuals will be. Bandura (1989) stated that individuals who are strong in self-efficacy, are more likely than people with a weak perception of self-efficacy to:

- be motivated to do things competently;
- withstand failures by viewing tasks as challenges rather than concentrating on their shortfalls;
- deploy attention and effort to the demands of a given situation; and
- be spurred on to greater effort by obstacles.

Because the scale is unidimensional, the overall score reflects the general level of self-efficacy of the respondent (Tipton & Worthington, 1984).

e. Reliability and validity

According to Sherer and Maddux (1982) the SEQ showed good construct validity with six personality measures, as well as good criterion validity with measures of vocational, educational and military career success.

Tipton and Worthington (as cited in Breed, 1997) reported criterion validity of the questionnaire. In a study respondents were divided into two groups, one with high self-efficacy and the other with low self-efficacy. The respondents were instructed to hold a book in their non-dominant hand with their arms parallel to the ground. The hypothesis was that those with high self-efficacy would outlast those with low self-efficacy. The results indicated that those with high self-efficacy did indeed outlast those with low levels of self-efficacy. Also, the results showed that self-efficacy can be generalised to a variety of situations.

In a study at the JCI mine in Johannesburg, Cronbach alpha coefficients of 0,71 and 0,86 were obtained for the questionnaire (Marais, 1997). The Cronbach alpha coefficient values obtained compare favourably with the alpha value of 0,70 recommended by Nunnally (1978) for scales used in basic research.

Apart from this, there is not much available information in the literature regarding the reliability and validity of the questionnaire.

f. Motivation for choice

The SEQ has been chosen on the basis of the promising results of the questionnaire in the South-African context. The questionnaire also allows for individual differences in the study population, allowing the researcher to distinguish between individuals.

4.2.2.3 Locus of Control Inventory (LCI)

The Locus of Control Inventory (LCI) of Schepers (1995) has been chosen to measure locus of control in this study.

a. Development and rationale

Up to date, several locus of control scales have been constructed since the introduction of the concept by Rotter (1966). According to Schepers (1995) the current locus of control scales could be questioned in one way or the other. Well-known scales are the Rotter I-E scale; the Health Locus of Control Scale; the Multidimensional Health Locus of Control Scale; the Nowicki-Strickland Scale; the Internal, Powerful Others and Chance Scales; the Economic Locus of Control Scale; and the Internal Control-Index (Schepers, 1995).

Although the Rotter I-E Scale has been widely used in research and practice, the scale has shortcomings from a psychometric viewpoint (Schepers, 1995). The Rotter I-E scale does not allow inter-individual differences and consequent comparisons because of the ipsative nature of the questionnaire (Bothma & Schepers, 1997). On this grounds, Schepers (1997) developed a new, normative questionnaire fit for South-African conditions, called the Locus of Control Inventory (LCI).

The development of the LCI by Schepers (1995) is conceptually based on the attribution theory of Heider (1958) and the social learning theory of Rotter (1966). Rotter (1966) distinguished between an internal and external locus of control. Individuals with an internal locus of control are convinced that the reinforcement of their behaviour are dependent on their own performance, abilities and dedication. Individuals with an external locus of control believe that coincidental events, fate, luck and certain powerful people are responsible for their behaviour.

Human beings constantly try to find causes for their own behaviour and that of other people. This process of allocating causes to certain behaviour is called attributions and it is the

interpretations of these attributions that determine the individual's perception of the world to a great extent. According to Schepers (1995) individuals ask themselves the following questions to understand the world around them:

- Is this a friendly or malevolent world?
- Is this a fair or unfair world?
- Is this a predictable or unpredictable world?
- Is it possible for humans to control certain events making use of their own abilities, or are their lives determined by certain powerful people?

The attribution theory and the social learning theory are very closely related. The social learning theory is concerned with the nature of reinforcements in the social environment and the influence of the reinforcements on the future behaviour of the learner. The attribution theory is concerned with the way in which individuals gather information about the stable or changing characteristics in other people, namely their motives, intentions and traits, as well as information about the external world (Baron, Byrne & Kantowitz, 1981). According to social learning theory, reinforcement of behaviour leads to a greater expectancy of learners that the specific reinforcement will follow certain behaviour or events in future (Rotter, Chance & Phares, 1972). Attribution theory focuses on the manner in which individuals use information in the environment to find causal explanations for events. According to Heider (1958) attribution theory is characterised by three basic assumptions. They are the following:

- Individuals search for causes of their own behaviour, as well as that of others;
- Individuals attribute causal explanations to behaviour in a systematic manner; and
- Attributions by individuals influence their future behaviour or interactions.

The rationale of the LCI is that it gives an indication of the extent to which respondents believe that control of events in their life are either due to their own actions, or not resulting from their own doing. Specifically, the three independent subscales of internal control, autonomy, and external control measures whether respondents possess either an internal or

external locus of control, whether they believe in their own abilities and whether they can act independently (Schepers, 1995).

b. Description

The LCI consists of 80 items (Schepers, 1995). Choices are indicated on a seven point-scale. Choices on the ends of the scale indicate total agreement with the statement made in the item, whereas a score of 4 indicates that both statements are of equal importance to the respondent.

The LCI can be divided in three subscales (Schepers, 1995), namely:

- **Internal locus of control (25 items)**

This scale determines whether respondents ascribe performance to causes under their own control (ability, behaviour, personal characteristics).

- **External locus of control (31 items)**

This scale determines the extent to which respondents attribute performance to causes outside their control (luck, fate, circumstances or powerful others).

- **Autonomy (24 items)**

This scale determines whether respondents are able to believe in their own abilities, act independently and with confidence and to make decisions and take action steps that lead to problem solution.

According to Schepers (1995) there are three independent items of the inventory that refers to more general aspects and situations. In terms of content, the items cannot be classified among the three scales mentioned.

c. Administration and scoring

The Locus of Control Inventory can be administered individually or in groups (Schepers, 1995). Respondents read the instructions themselves and answer the 80 items indicating on a seven point-scale the extent to which the statement in each item influence their behaviour. Choices range from 1 = does not agree at all to 7 = agree completely.

According to Schepers (1995), the LCI determines to which extent the different factors and situations mentioned in the questionnaire influence the respondent's evaluation and decision-making. No time limit is given, but respondents are encouraged to work quickly and to give their first impressions.

In the scoring of the inventory, the following steps should be taken (Schepers, 1995):

- **Step 1:** Item numbers 1, 15, 39, 59, 71, 72 and 73 are stated negatively and should therefore be turned around to indicate healthy control and judgement by means of a high score
- **Step 2:** The score on External Control is determined by the sum of the values of the following items: 4, 9, 11, 12, 20, 21, 34, 35, 36, 38, 41, 43, 45, 47, 51, 52, 53, 56, 57, 58, 65, 77, 78, 79 and 80.
K = 25
- **Step 3:** The score on Internal Control is determined by the sum of the values of the following items: 6, 7, 8, 10, 16, 18, 25, 26, 27, 31, 32, 37, 40, 42, 48, 49, 54, 55, 59, 60, 61, 63, 69, 75 and 76.
K = 26
- **Step 4:** The score on Autonomy is determined by adding the values of the following items: 1, 2, 3, 5, 13, 14, 15, 17, 22, 24, 28, 29, 30, 39, 44, 46, 62, 64, 66, 67, 68, 79, 71, 72, 73 and 74.
K = 26

d. Interpretation

The interpretation of the three subscales of the LCI (Schepers, 1995) should not be done independently, but must form a logical, integrated unit. Accordingly, individuals with high scores on Internal Control and Autonomy and low scores on External Control, can be viewed as healthy, well-adapted people who could be expected to handle the demands of life well and to perform well. The opposite is true for individuals with low scores on Internal Control and Autonomy and high scores on External Control. These individuals could be prone to blame external factors and the environment for things that go wrong and for poor performance.

Schepers (1995) distinguishes between people with an internal locus and people with an external locus of control in Figure 5.

| Internal Locus of Control | External Locus of Control |
|---------------------------|-----------------------------------|
| Emotionally stable | Emotionally sensitive |
| Mature, calm | Immature, unsure |
| Assertive | Feelings of inferiority |
| Independent | Dependent on approval |
| Unconventional | Conventional, choose familiarity |
| Adventurous | Too careful |
| Socially uninhibited | Timid, reserved |
| Unopposing | Very accommodating, influenceable |
| Responsible | Neglecting |
| Intelligent, good insight | Little self-knowledge |
| Self-confident | Insecure |
| Analytical | Less precise |
| Free-thinking | Narrow-minded, limited insight |
| Relaxing, at ease | Tense, agitated |

Figure 5. The distinction between people with an internal locus of control and people with an external locus of control.⁵

e. Reliability and validity

According to Schepers (1995) positive evidence of the validity and reliability of the Locus of Control Inventory has been found in research.

Concerning the *reliability* of the LCI, the following has been found:

An item-analysis of the three scales revealed a reliability score higher than 0,80. Research by Schepers (1995) established the internal consistency of the three scales of the LCI with Cronbach's coefficient alpha's at 0,85 (Internal Control), 0,87 (External Control) and 0,86 (Autonomy). The study of Rothmann and Agathagelou (in press) revealed Cronbach's

⁵ From "Die lokus van beheer vraelys: Konstruksie en evaluering van 'n meetinstrument," by J.M. Schepers, 1995, Johannesburg: Rand Afrikaans University, p. 19.

coefficient alpha's at 0,81 (External Control), 0,77 (Internal Control) and 0,72 (Autonomy), which is more than the acceptable level of 0,70 (Nunnally, 1978).

All the scales of the LCI, therefore, showed acceptable levels of reliability. The item-correlations and standard deviations are indicated next:

- **Internal Control scale (Schepers, 1995)**

The item-correlations vary between 0,33 and 0,61.

Standard deviations vary between 0,83 and 1,84.

- **External Control scale (Schepers, 1995)**

The item-correlations vary between 0,32 and 0,63.

Standard deviations vary between 1,23 and 1,68.

- **Autonomy scale (Schepers, 1995)**

The item-correlations vary between 0,39 and 0,64.

Standard deviations vary between 0,98 and 1,77.

Concerning the *validity* of the LCI, the following has been found:

Research by Schepers (1995) supported the construct validity of the LCI. Significant correlations with the following measuring instruments support this finding:

- **The Sixteen Personality Factor Questionnaire (16-PF):** Individuals with high scores on Autonomy and Internal Control, and low scores on External Control can be described as emotionally stable, mature, calm, assertive, independent, unconventional, adventurous, socially uninhibited, unopposing, responsible, intelligent, self-confident, analytical, free thinking, relaxed and at ease. Individuals with low scores on Autonomy and Internal Control, and high scores on External Control fall in the opposite category of the above-mentioned personality characteristics (Schepers, 1995).

- **The Jung Personality Questionnaire:** Individuals with high scores on Autonomy and Internal Control, and low scores External Control are more extroverted and intuitive than individuals with low scores on Autonomy and Internal Control, and high scores on External Control. The latter are more introverted and focus more on observation (Schepers, 1995).

- **The Personal, Home, Social and Formal Relations Questionnaire (PHSF):** Individuals with high scores on Autonomy and Internal Control, and low scores on External Control are better adapted as opposed to individuals with low scores on Autonomy and Internal Control, and high scores on External Control in terms of their personal, home, social and formal relationships. Statistically significant differences in terms of the following factors on the Personal, Home, Social and Formal Relationships Questionnaire have been found: self-confidence, self-respect, nervousness, health, personal freedom, sociality-G, sociality-S, moral insight, and formal relationships (Schepers, 1995).

- **The Survey of Study Habits and Attitudes (SSHA):** Individuals with high scores on Autonomy and Internal Control, and low scores on External Control demonstrate good adaptability in the teaching-environment. They possess good study habits and work-methods, avoid postponement and demonstrate a positive attitude towards teaching (Schepers, 1995).

- **The Career Development Questionnaire (CDQ):** Individuals with high scores on Autonomy and Internal Control, and low scores on External Control is generally more career-mature in comparison with individuals with low scores on Autonomy and Internal Control, and high scores on External Control (Schepers, 1995).

- **The Nineteen Field Interest Inventory (19 FII):** Individuals with high scores on Autonomy and Internal Control, and low scores on External Control are especially interested in creative thoughts (Schepers, 1995).

In terms of criterion validity, it has been found that the LCI correlates with a composite criterion of job success ($r = 0,62$). The intercorrelations are as follows (Schepers, 1995):

- The Autonomy scale showed a correlation of 0,49 with the Internal Control scale. Both these scales correlate negatively with the External Control scale.
- The Autonomy scale correlate $-0,26$ with the External Control scale.
- The Internal Control scale correlate $-0,17$ with the External Control scale.

The results of the intercorrelations reflect an important finding in terms of the measurement of locus of control, and that is the fact that the internal and external scales of the construct must be viewed separately. The External and Internal control scales are not two opposites of the same continuum, but are indeed independent constructs (Schepers, 1995). Rothmann and Agathagelou (in press) found in their study intercorrelations of 0,10 between External and Internal control; $-0,29$ between External Control and Autonomy; and 0,49 between Internal Control and Autonomy, which supports the independence of the Internal and External scale. According to Schepers (1995) both these scales contribute to the measurement and understanding of locus of control in their own right.

f. Motivation for choice

The Locus of Control Inventory has been chosen because it allows inter-individual comparison due to the normative nature of the instrument. Individual differences in locus of control can therefore be distinguished in the study population. The LCI is suitable for South African conditions and is available in both English and Afrikaans.

4.3 PROCEDURE

In this section, the procedure used in the conducting and scoring of the measuring instruments used in this study, is explained.

4.3.1 Presenting and motivating the study for approval at managerial level

The first meeting was scheduled to present the scope of the present study and the aim of the Potchefstroom University of Christian Higher Education in delivering tangible, high quality results to the surrounding institutions in the area. The commitment of top management was obtained and the study was approved to be undertaken in the specific fertiliser company. In the light of previous projects being undertaken by the Potchefstroom University for Christian Higher Education in conjunction with the particular company and the good relationships between the institutions, the go-ahead was given.

4.3.2 Negotiations with management

As mentioned in the problem statement in Chapter 1, the particular company has been subjected to tough international competition and a take-over. As a result of this, much strain was put on the company to perform at higher levels. Several changes within the company structure made negotiations difficult due to the fact that the management team with which negotiations had been undertaken, changed considerably. After renewed negotiations, commitment was obtained for the study, as well as an undertaking by the company to give support in providing transport to the different regional offices of the company. A preliminary letter was also prepared in conjunction with top management which stated managerial support and the motivation for the study. It was also decided that feedback would be given in the form of a general, anonymous report to management as well as on individual request.

4.3.3 Administration of the measuring instruments

As mentioned earlier, the particular fertiliser company consists of five regions where the agricultural representatives are stationed. After establishing contact with the different regional offices, dates were set to administer the measuring instruments. The regional

offices were accordingly visited and the measuring instruments were administered on the scheduled times.

4.4 STATISTICAL DATA-ANALYSIS

Statistical analysis has been carried out with the help of the SAS program (SAS Institute, 1996). In the present study, the total population of agricultural marketers are used and consequently, descriptive statistics are employed (Steyn, Smit, du Toit & Strasheim, 1995).

The description and comparison of the results are carried out by arithmetic means, standard deviations, skewness and kurtosis. The arithmetic mean is the best-known measurement of locality (Steyn et al., 1995) and is used to indicate the mean (average) score of the study population on each questionnaire. The standard deviation indicates the distances of all the individual scores from the arithmetic mean. The higher the standard deviation, the greater the distances are, on average, from the arithmetic mean (Steyn et al., 1995). Skewness is a descriptive indication of symmetry, which gives an indication of the level of skewness (positive or negative) of a population, whereas kurtosis indicates the level of pointedness of a distribution of scores (Steyn et al., 1995).

Cronbach's coefficient alpha's are determined to establish the internal consistency of each of the questionnaires used in this study. This index is indicative of the extent to which all the items in the questionnaire are measuring the same characteristic (Huysamen, 1993).

Contrast-groups are used to compare the job satisfaction of the representatives. The practical significance (d) of the differences in the sense of coherence, self-efficacy and locus of control between contrast groups are determined for those candidates below the 30th percentile and above the 70th percentile in terms of their job satisfaction. This means that only those candidates demonstrating a level of sense of coherence, self-efficacy and locus of control below the 30th and above the 70th percentile in terms of their job satisfaction, are included in the contrast groups.

According to Cohen (1988) valid cut-off points for practical significance are the following:

- $d > 0,2$: small effect
- $d > 0,5$: medium effect
- $d > 0,8$: large effect

For the purposes of the present study, the d -values of 0,5 (medium effect) and higher are viewed as practically significant.

The product-moment correlation coefficient (r) is used in this study to determine the extent to which one variable are related to another variable. The product-moment correlation coefficient is based on the assumption that in the case where two variables fluctuate simultaneously, a correlation or relationship exists between them (Kerlinger, 1986). If a relationship exists between the variables, it can be termed a positive or negative relationship. In the case where a decrease in the measurement of one variable also leads to a decrease in the other variable, it can be termed a positive relationship. A negative relationship occurs when a decrease in the measurement of one variable leads to an increase in the other variable (Ferguson, 1981). The product-moment correlation coefficient varies between $-1,00$ to $+1,00$. The closer the absolute value of a correlation coefficient (r) to $-1,00$ or $+1,00$, the more accurate is the prediction that one variable is related to another variable (Ferguson, 1981).

In order to further explain the relationships between the constructs of sense of coherence, self-efficacy, locus of control, and job satisfaction, canonical correlations are determined between locus of control on the one hand and sense of coherence, self-efficacy, and job satisfaction on the other hand. Also, canonical correlations are determined between job satisfaction on the one hand and sense of coherence, self-efficacy and locus of control on the other hand. According to Marriott (1974) the use of canonical correlations are applicable where the relationship between two sets of variables, which are both arranged on a continuum, is determined.

According to Cohen (1988) the following cut-off points in terms of the correlation coefficient are recognised as practically significant (independent of the direction of the relationship) for the purposes of the present study:

- $r = 0,10$: small effect
- $r = 0,30$: medium effect
- $r = 0,50$: large effect

For the purposes of the present study, only correlations (r) higher than 0,30 (medium effect) are regarded as practically significant.

According to Cohen (1988) a correlation (r) can only be better understood by determining its square (r^2). A regression analysis (the square of r , r^2) is used to determine the proportion of the total variance of one variable that is explained by another variable (Moore, 1995). In the present study, a multiple regression analysis is conducted to determine the proportion of the total variance of job satisfaction that is explained by sense of coherence, self-efficacy or locus of control.

4.5 FORMULATION OF HYPOTHESES

In conjunction with the specific aims of the research, the following research hypotheses could be formulated. Since the null hypothesis is the inverse of the alternative hypothesis, only the alternative hypotheses are stated:

| | |
|-----|---|
| H1 | Practically significant positive relationships exists between the dispositional characteristics of sense of coherence, self-efficacy and locus of control of agricultural representatives in the fertiliser industry. |
| H2 | A practically significant positive relationship exists between the sense of coherence and the job satisfaction of agricultural representatives in the fertiliser industry. |
| H3 | A practically significant positive relationship exists between the self-efficacy and the job satisfaction of agricultural representatives in the fertiliser industry. |
| H4 | A practically significant positive relationship exists between internal locus of control and the job satisfaction of agricultural representatives in the fertiliser industry. |
| H5 | A practically significant negative relationship exists between external locus of control and the job satisfaction of agricultural representatives in the fertiliser industry. |
| H6 | A practically significant positive relationship exists between autonomy and the job satisfaction of agricultural representatives in the fertiliser industry. |
| H7 | Practically significant positive relationships exists between sense of coherence, self-efficacy, locus of control and job satisfaction of agricultural representatives in the fertiliser industry. |
| H8 | Practical significant differences exist between the job satisfaction of the contrast groups regarding sense of coherence. |
| H9 | Practical significant differences exist between the job satisfaction of the contrast groups regarding internal locus of control. |
| H10 | Practical significant differences exist between the job satisfaction of the contrast groups regarding external locus of control. |
| H11 | Practical significant differences exist between the job satisfaction of the contrast groups regarding autonomy. |
| H12 | Practical significant differences exist between the job satisfaction of the contrast groups regarding self-efficacy. |
| H13 | Sense of coherence, self-efficacy and locus of control can predict the level of job satisfaction of agricultural representatives in the fertiliser industry. |

4.6 CHAPTER SUMMARY

In this chapter the method used for the empirical study, was explained. The choice and composition of the study population, the measuring instruments, the procedure in terms of scoring and interpretation of the instruments in the measuring battery, as well as relevant statistical analysis used in the present study, were discussed. Also, research hypotheses were stated in terms of the present study.

In Chapter 5, the results of the empirical study are reported and discussed in terms of the research hypotheses.

Chapter 5

RESULTS AND DISCUSSION

In this chapter, the results of the empirical investigation are reported and discussed. Firstly, the descriptive statistics and the reliability coefficients of the measuring instruments are given. The mean (M), standard deviation (SD), skewness, kurtosis and alpha coefficients (α) are reported. Also, the statistical and practical significance of the results are given where applicable.

Furthermore, the relationship between the psychological strengths on the one hand and their relationship with job satisfaction on the other hand, are reported. The significance of differences in job satisfaction between the contrast groups that measure high and low in respect of the different psychological strengths are also indicated. Finally, a multiple regression analysis is carried out in order to determine the predictive value of the consecutive psychological strengths in terms of total job satisfaction.

5.1 DESCRIPTIVE STATISTICS AND RELIABILITY OF THE MEASURING INSTRUMENTS

The mean (M), standard deviation (SD), skewness and kurtosis were determined for the consecutive questionnaires and their subscales. Alpha coefficients (α) were calculated in each case to determine the internal consistency of the measuring instruments.

The descriptive statistics and the internal consistency of the measuring instruments of the different psychological strengths for the total population are reported in Table 2.

Table 2**Descriptive Statistics and Reliability in terms of the Psychological Strengths for the Total Population (N = 55)**

| ITEM | M | SD | SKEWNESS | KURTOSIS | α |
|---------------------------|--------|-------|----------|----------|----------|
| SENSE OF COHERENCE | | | | | |
| OLQ | 139,71 | 20,69 | 0,05 | -0,72 | 0,88 |
| Comprehensibility | 50,98 | 6,83 | 0,26 | 1,01 | 0,63 |
| Manageability | 47,11 | 8,85 | 0,03 | -1,11 | 0,79 |
| Meaningfulness | 41,62 | 9,63 | -0,58 | -0,99 | 0,86 |
| SELF-EFFICACY | | | | | |
| SEQ | 73,13 | 20,75 | 1,09 | 2,93 | 0,89 |
| LOCUS OF CONTROL | | | | | |
| LOC: Internal | 150,84 | 11,39 | 0,05 | -0,35 | 0,81 |
| LOC: External | 79,58 | 20,49 | 0,09 | -0,22 | 0,88 |
| LOC: Autonomy | 142,40 | 13,98 | -0,08 | -0,22 | 0,87 |

The following conclusions in terms of the psychological strengths can be made based on the results in Table 2:

- **Sense of coherence.** The total of the three subscales gives an indication of the sense of coherence of the population, with average scores ranging from 120 to 150. Wissing and Van Eeden (1997) found an average score of 136,52 with a standard deviation of 21,68, while Coetzee and Rothmann (1999) found an average score of 143,11 with a standard deviation of 21,42. The current study, therefore, supports these findings with reporting an average score of 139,71 and a standard deviation of 20,69.

Concerning skewness and kurtosis, Table 2 suggests only a small deviation from zero, which indicate that the scores are relatively normally distributed, with only meaningfulness negatively skew.

According to Table 2, the reliability coefficient of the Orientation to Life Questionnaire is 0,88. The finding is similar to the scores ranging from 0,82 and 0,95 reported by Antonovsky (1993), as well as a score of 0,89 reported by Coetzee and Rothmann (1999). The reliability of the subscales, namely comprehensibility, manageability and meaningfulness range between 0,63 and 0,86. The findings indicate that the subscales provide a reliable measurement of sense of coherence and the components thereof.

- **Self-efficacy.** The average score for self-efficacy is established at 73,13. The level of self-efficacy of the population can, therefore, be described as average, which means that the individuals in the population believe in their ability to cope with challenges successfully. The results also appears to be relatively normally distributed with small level of positive skewness and kurtosis.

According to Table 2, the reliability coefficient of the Self-Efficacy Questionnaire is 0,85. The Self-Efficacy Questionnaire, therefore, can be described as an internal consistent measuring instrument of self-efficacy.

- **Locus of control.** Internal control is the highest average score on the Locus of Control Scale (150,84), followed by Autonomy (142,40) and External Control (79,58). It can therefore be deduced that the population believe that they exert control over their actions.

Concerning skewness and kurtosis, the population seems to be relatively normally distributed, with a small level of curtosis. Only autonomy is negatively skew.

According to Table 2, the subscales of Internal Control, External Control and Autonomy demonstrated reliability coefficients of 0,81, 0,88, and 0,87. The findings support the findings of Agathagelou and Rothmann (in press), which indicated the reliability coefficients of 0,81 (External Control), 0,77 (Internal Control), and 0,72 (Autonomy) for the Locus of Control Inventory. The findings in the current study, therefore, supports

the internal consistency of the Locus of Control Inventory as a measuring instrument for locus of control.

The descriptive statistics and internal consistency for the total population of the Minnesota Satisfaction Questionnaire are given in Table 3.

Table 3**Descriptive Statistics and Reliability in terms of the Minnesota Satisfaction Questionnaire for the Total Population (N = 55)**

| ITEM | M | SD | SKEWNESS | KURTOSIS | α |
|-------------------------|----------|-----------|-----------------|-----------------|----------------------------|
| Total | 503,64 | 63,65 | -0,46 | 0,74 | 0,96 |
| Ability | 27,11 | 4,55 | -0,34 | -0,44 | 0,60 |
| Achievement | 28,49 | 4,10 | -1,36 | 3,23 | 0,69 |
| Activity | 26,64 | 4,24 | -0,12 | -0,70 | 0,42 |
| Advancement | 20,69 | 6,90 | -0,08 | -0,79 | 0,86 |
| Authority | 25,80 | 4,59 | -0,23 | -0,08 | 0,68 |
| Company policy | 17,58 | 6,63 | -0,32 | -0,84 | 0,86 |
| Compensation | 19,36 | 7,07 | -0,20 | -1,02 | 0,87 |
| Co-workers | 27,85 | 4,38 | -0,58 | -0,36 | 0,66 |
| Creativity | 25,91 | 5,40 | -0,43 | -0,40 | 0,77 |
| Independence | 30,91 | 3,06 | -1,01 | 0,99 | 0,70 |
| Moral values | 28,35 | 5,16 | -0,78 | -0,06 | 0,57 |
| Recognition | 22,56 | 6,12 | -0,91 | 0,76 | 0,90 |
| Responsibility | 26,33 | 4,52 | -0,32 | -0,69 | 0,65 |
| Security | 18,75 | 6,05 | -0,08 | 0,33 | 0,72 |
| Social service | 28,78 | 3,84 | -0,41 | 0,02 | 0,57 |
| Social status | 27,60 | 3,47 | 0,03 | -0,61 | 0,50 |
| Supervision – human | 22,84 | 5,93 | -0,51 | -0,10 | 0,76 |
| Supervision – technical | 24,35 | 5,45 | -0,33 | -0,92 | 0,73 |
| Variety | 26,78 | 4,62 | -0,65 | 0,20 | 0,65 |
| Working conditions | 27,35 | 5,27 | -1,02 | 0,96 | 0,78 |

According to Table 3, the total average job satisfaction of the population is 503,64, which indicate that the group experience an above average level of job satisfaction. The job satisfaction score obtained in the current study is higher than the score of 439,10 obtained by Agathagelou and Rothmann (in press) in a sample of senior police personnel and the score of 459,28 obtained by Coetzee and Rothmann (1999) in a sample of employees in the dairy industry.

The respondents seem to the experience the **highest level of job satisfaction** in terms of:

- Independence – the extent to which employees are given the opportunity to work alone on the job.
- Social service – the opportunity to do work that is to the advantage of everybody in the society and the organisation.
- Achievement – the extent to which employees experience a sense of accomplishment in their jobs.
- Moral values – the extent to which employees feel that their work is not morally wrong.

The respondents seem to be **least satisfied** with:

- Company policies – the extent to which policies and procedures are perceived as fair and valid.
- Security – the expectancy that continuity will prevail in the job.
- Compensation – the extent to which employees believe that their pay compares well with that of their fellow employees.
- Advancement – the possibility for mobility and/ or change in status or position which may lead to higher wages or power.

The particular fertiliser company in which the study has been undertaken, depends on their agricultural representatives to market and sell their products, and to give support and advice to their customers. They also cover very large areas and in general do their paper-work from their own home or the regional business unit branch. This could explain the high

satisfaction in terms of independence, social service and moral values. Furthermore, the agricultural representatives are paid according to their performance, but the low level of satisfaction with company policy and compensation could indicate that the employees perceive the allocation of money to them as unfair. The low level of security can be the result of the recent restructuring (and consequent lay-offs) of the company following their merger with an overseas company. Concerning the relative low level of satisfaction with advancement, the company structure is of such a nature that agricultural representatives have limited opportunity for mobility or change in position or status.

Concerning skewness and kurtosis, the population seems to be relatively normally distributed with a small level of kurtosis. The population scores also seem to be predominantly negatively skew, except for social status.

According to Table 3, the reliability coefficients of the consecutive subscales of the Minnesota Satisfaction Questionnaire, range from 0,42 (Activity) to 0,90 (Recognition). The reliability coefficient of the total job satisfaction on the Minnesota Satisfaction Questionnaire, was determined at 0,96. The finding supports the results of Coetzee and Rothmann and that of Rothmann and Agathagelou (in press) who also reported a reliability coefficient of 0,96.

Accordingly, the third specific objective set out at the beginning of the study, has been reached, namely to determine the levels of sense of coherence, self-efficacy, locus of control and job satisfaction of agricultural representatives in the fertiliser industry

5.2 THE RELATIONSHIP BETWEEN SENSE OF COHERENCE, SELF-EFFICACY AND LOCUS OF CONTROL

In this section, Pearson-productmoment correlations (r), are determined to give an indication of the strength of the linear relationship between the variables. The correlations between the different psychological strengths are given in Table 4.

Table 4**The Relationship between Sense of Coherence, Self-Efficacy and Locus of Control**

| | Sense of Coherence | Self-Efficacy | LOC: Internal | LOC: External | LOC: Autonomy |
|---------------------------|---------------------------|----------------------|----------------------|----------------------|----------------------|
| Sense of Coherence | - | -0,31* | 0,22 | -0,23 | 0,34* |
| Self-Efficacy | -0,31* | - | -0,37* | 0,11 | -0,37* |
| LOC:Internal | 0,22 | -0,37* | - | -0,52** | 0,76** |
| LOC:External | -0,23 | 0,11 | -0,52** | - | -0,61** |
| LOC:Autonomy | 0,34* | -0,37* | 0,76** | -0,61** | - |

* Correlation is practically significant $r > 0,30$ (medium effect)

** Correlation is practically significant $r > 0,50$ (large effect)

Based on the results in Table 4, H1 is accepted in respect of seven items. H1 is rejected in terms of Sense of Coherence and Internal Control, Sense of Coherence and External Control, and Self-Efficacy and External Control

According to Table 4, practical significant relationships of large effect ($r = 0,50$) have been found in terms of the following items: Internal Control and External Control, Internal Control and Autonomy, and External Control and Autonomy. Practical significant relationships of medium effect ($r = 0,30$) have been found between Sense of Coherence and Self-Efficacy, Sense of Coherence and Autonomy, Self-Efficacy and Internal Control, as well as Self-Efficacy and Autonomy.

The negative correlations between self-efficacy and the other constructs could be expected because a low score on the Self-Efficacy Questionnaire is indicative of a positive adaptation and a high score of a negative adaptation. The correlations are, however, much lower than previous findings of Breed (1997).

A significant positive relationship exists between sense of coherence and autonomy. Accordingly, it can be deduced that if individuals understand stimuli from their environment, believe that they can manage it and view it as meaningful to expend energy upon, they would typically believe in their own abilities, act independently with confidence and would make decisions and take action steps that lead to problem solving.

Self-efficacy and sense of coherence correlate significantly with each other. The deduction can be made that individuals who understand what happens to them, who perceives it as under the control of the self or significant others, and who sees it as deserving of energy, will view certain behaviour as leading to a specific outcome and that the outcome is important enough for the investment of energy. They will also believe that their behaviour can be executed successfully.

The findings of the present study also support the findings of Schepers (1995) that an internal control and autonomy are related ($r = 0,76$). The finding of Schepers (1995) that an external locus of control and an internal locus of control are not significantly related, is not supported. The findings in the present study indicate that internal locus of control is significantly negative related to external locus of control ($r = -0,52$), which suggests that the two scales are related and not independent.

The results of the present study also indicate that internal control and self-efficacy are significantly related. From this finding it could be concluded that individuals who believe that they can control their behavioural outcomes, could come up with the necessary resources and motivation to cope effectively with challenges and or tasks at hand.

Self-efficacy and autonomy are significantly correlated. It can be deduced from this finding that individuals who believe in their ability to control their behaviour, would also act independently with confidence and would make decisions and take constructive steps towards problem-solving.

Based on the findings discussed above, it can be deduced that the consecutive psychological strengths represent characteristics which form part of the same construct, namely psychological strengths (dispositions). The lower correlations between sense of coherence and internal and external locus of control could indicate that they measure different aspects of behaviour. According to Breed (1997) the findings could indicate that it is the availability of resources that is important and not the internal or external location.¹

It is also worth mentioning that autonomy correlated significantly with all the constructs in Table 4. It can be interpreted that the belief of individuals in their own ability, their ability to act confidently independent, to make decisions and to take steps to solve problems is crucial in the comprehensive construct of psychological strengths mentioned above.

5.3 THE RELATIONSHIP BETWEEN SENSE OF COHERENCE, SELF-EFFICACY, LOCUS OF CONTROL AND JOB SATISFACTION

Pearson-productmoment correlations were used in this study to give an indication of the extent of the linear relationship between the different psychological strengths and job satisfaction. The correlations between the different psychological strengths and job satisfaction are reported in Table 5.

Table 5**The Relationship between Psychological Strengths and Job Satisfaction**

| ITEM | OLQ | SEQ | LOC: Internal | LOC: External | LOC: Autonomy |
|-------------------------|---------|---------|------------------|------------------|------------------|
| Total | 0,2258 | -0,0407 | 0,2573 | -0,4254* | 0,4478 |
| Ability | 0,2327 | -0,1216 | 0,3031* | -0,4074* | 0,3191* |
| Achievement | 0,3325* | -0,0956 | 0,4393* | -0,4097* | 0,5276** |
| Activity | 0,0963 | 0,1058 | 0,0087 | -0,2665 | 0,1406 |
| Advancement | 0,1790 | 0,0035 | 0,0886 | -0,3014* | 0,2292 |
| Authority | 0,2243 | -0,0657 | 0,2836 | -0,4638* | 0,5562** |
| Company policy | 0,0607 | 0,1044 | 0,0221 | -0,1820 | 0,2599 |
| Compensation | 0,3057* | -0,1391 | 0,1888 | -0,2403 | 0,3073* |
| Co-workers | 0,1099 | 0,0141 | 0,2294 | -0,4390* | 0,3227* |
| Creativity | 0,0799 | 0,0576 | 0,1039 | -0,3739* | 0,3489* |
| Independence | 0,2988 | -0,0884 | 0,3001* | -0,4453* | 0,3577* |
| Moral values | 0,1701 | 0,0165 | -0,0287 | -0,1476 | 0,1910 |
| Recognition | 0,1153 | -0,0092 | 0,0752 | -0,2152 | 0,3256* |
| Responsibility | 0,0983 | -0,0724 | 0,3632* | -0,4530* | 0,6058** |
| Security | 0,0053 | -0,0362 | 0,1603 | 0,0194 | 0,0910 |
| Social service | -0,0384 | -0,0608 | 0,1932 | -0,2233 | 0,2360 |
| Social status | -0,0607 | -0,0183 | 0,1842 | -0,2110 | 0,1853 |
| Supervision – human | 0,2525 | 0,0921 | 0,0914 | -0,2334 | 0,1735 |
| Supervision – technical | 0,3227* | -0,0047 | 0,2117 | -0,1309 | 0,0779 |
| Variety | 0,0509 | -0,1801 | 0,0923 | -0,2034 | 0,2797 |
| Working conditions | 0,2761 | -0,0641 | 0,1975 | -0,3296* | 0,2929 |

* Correlation is practically significant $r > 0,30$ (medium effect)

** Correlation is practically significant $r > 0,50$ (large effect)

According to Table 5, H2 is accepted in terms of three items, H4 in terms of four items, H5 in terms of ten items and H6 in terms of nine items. H3 is, however, rejected.

The results in Table 5 indicate that all the psychological strengths had some significant correlations with job satisfaction, except self-efficacy which showed no correlations with job satisfaction.

- Concerning the relationship between sense of coherence and job satisfaction, significant positive correlations (medium effect) were found only for achievement, compensation, and supervision in terms of the technical side of the job. The findings imply that employees who understand demands, believe that they can manage it and who allocate energy towards it, are more satisfied with achievement, compensation and supervision in terms of the technical side of the job than other employees with a low sense of coherence. The fact that no practical significant relationships was found between sense of coherence and total job satisfaction, is contradictory to previous research findings, e.g. Coetzee and Rothman (1999), who found a practical significant relationship of large effect between sense of coherence and job satisfaction ($r = 0,54$). The finding in the present study could indicate that a sense of coherence is not crucial to the agricultural representatives' experience of job satisfaction.
- Self-efficacy did not show any practical significant relationships with job satisfaction and the components thereof. The absence of significant relationships could be attributed to the fact that general rather than work-specific self-efficacy was measured in the study (Bandura, 1982). Another possible explanation of the finding could be attributed to the fact that self-efficacy is not primarily important to agricultural advisors for their experience of job satisfaction. The absence of significant correlations is contradictory to the findings of Judge et al. (1998) that self-efficacy is a better predictor of job satisfaction than locus of control and sense of coherence.
- The relationship between internal locus of control and job satisfaction revealed significant positive correlations (medium effect) only in respect of ability, achievement, independence and responsibility. Employees who feel that they exercise control over the outcomes of their behaviour, will experience more job satisfaction in terms of ability,

achievement, independence and responsibility when compared to employees who feel that they cannot control their behavioural outcomes.

- Concerning the relationship between external control and job satisfaction, practical significant negative relationships (medium effect) have been found between all the components of job satisfaction, except the following: activity, company policy, compensation, moral values, recognition, security, social service, social status, supervision in terms of the human side of the job, supervision in terms of the technical side of the job, and variety. These findings indicate that employees who ascribe their behaviour to forces beyond their control or in the hands of powerful others, will experience less job satisfaction than those employees who do not.
- The relationship between autonomy and job satisfaction revealed significant positive relationships of medium effect with the following components: ability, compensation, co-workers, creativity, independence and recognition. Significant positive relationships of large effect have been found between autonomy and achievement, authority and responsibility. These findings imply that employees who believe in their own ability, who can act confidently independent, who can make decisions and take steps to solve problems, would experience more job satisfaction in terms of ability, compensation, co-workers, creativity, independence, recognition, achievement, authority and responsibility when compared to employees who do not demonstrate autonomy. The finding is surprising because autonomous individuals tend to trust their own ability and tend to act independently, yet the findings suggest that autonomy correlates with satisfaction components such as the opportunity to work together with co-workers and recognition for the work that they do. The significant correlations could be a result of the nature of the agricultural representatives' work in the sense that they are forced to work in relative isolation.

Based on the results of Table 5, only external control correlated significantly negatively with total job satisfaction. The finding suggests that employees who attribute the outcomes of their behaviour to factors beyond personal control or at the hand of powerful others, will

experience less job satisfaction than those who do not. The constructs of sense of coherence, internal locus of control and autonomy shows no significant correlation with total job satisfaction, whereas self-efficacy shows no significant correlation at all with total job satisfaction or any of the components. The findings are contradictory with the findings of Judge et al. (1998) who found significant correlations between the respective dispositional variables of sense of coherence, self-efficacy, locus of control on the one hand and job satisfaction on the other hand.

In order to further explain the relationships between the psychological strengths and job satisfaction, canonical correlations between the three scales of the Locus of Control Inventory, the Orientation to Life Questionnaire, the Self-Efficacy Questionnaire and the Minnesota Satisfaction Questionnaire, were determined. The use of canonical correlations is appropriate when the relationship between two sets of variables, which are both arranged on a continuum, are determined (Marriot, 1974).

The canonical correlations between the different psychological strengths and job satisfaction are given in Table 6.

Table 6

Canonical Correlations between Locus of Control, Sense of Coherence, Self-Efficacy and Job Satisfaction

| | Sense of Coherence | Self-Efficacy | Job Satisfaction |
|-----------------------------|---------------------------|----------------------|-------------------------|
| Locus of Control (r) | 0,35* | 0,43* | 0,51** |

* Correlation is practically significant $r > 0,30$ (medium effect)

* Correlation is practically significant $r > 0,50$ (large effect)

Based on the results in Table 6, H7 is accepted in terms of all the psychological strengths.

Table 6 shows that locus of control as a construct (which includes an internal and external locus of control, as well as autonomy) correlates significantly (large effect) with job satisfaction. Also, sense of coherence and locus of control, as well as self-efficacy and locus of control correlate practically significantly (medium effect). The findings are, however, lower than the findings of Breed (1997), who found significantly positive relationships between self-efficacy and sense of coherence ($r = 0,53$ for the white group and $r = 0,29$ for the other group), sense of coherence and locus of control ($r = 0,53$ for the white group and $r = 0,39$ for the other group). The findings, pertaining to self-efficacy and locus of control in the present study, is higher than that of Breed (1997) ($r = 0,37$ for the white group and $r = 0,41$ for the other group).

5.4 DIFFERENCES BETWEEN THE JOB SATISFACTION OF CONTRAST GROUPS IN TERMS OF PSYCHOLOGICAL STRENGTHS

Next, the differences between the job satisfaction of individuals who measure high (above the 70th percentile) and low (below the 30th percentile) on the consecutive psychological strengths, are reported and discussed.

The significance of the differences between the contrast groups in terms of sense of coherence's job satisfaction, are given in Table 10.

Table 7

Differences between Contrast Groups in terms of Sense of Coherence's Job Satisfaction

| ITEM | HIGH SOC | | LOW SOC | | d |
|-------------------------|----------|-------|---------|-------|-------|
| | M | SD | M | SD | |
| Total | 534,61 | 47,30 | 494,29 | 69,76 | 0,58* |
| Ability | 29,06 | 3,56 | 26,71 | 4,83 | 0,49 |
| Achievement | 30,50 | 2,33 | 27,29 | 4,97 | 0,65* |
| Activity | 27,56 | 4,45 | 26,71 | 3,31 | 0,19 |
| Advancement | 22,72 | 6,87 | 19,65 | 6,95 | 0,44 |
| Authority | 27,78 | 4,37 | 25,06 | 4,88 | 0,56* |
| Company policy | 19,94 | 5,93 | 18,41 | 7,13 | 0,21 |
| Compensation | 22,17 | 6,59 | 16,53 | 7,59 | 0,74* |
| Co-workers | 29,28 | 3,72 | 28,65 | 4,61 | 0,14 |
| Creativity | 26,72 | 5,06 | 25,65 | 5,68 | 0,19 |
| Independence | 31,94 | 2,15 | 30,00 | 2,96 | 0,66* |
| Moral values | 29,89 | 4,10 | 27,71 | 5,00 | 0,44 |
| Recognition | 23,83 | 5,75 | 21,53 | 8,40 | 0,27 |
| Responsibility | 27,56 | 4,36 | 26,24 | 4,72 | 0,28 |
| Security | 20,06 | 5,80 | 19,18 | 6,15 | 0,14 |
| Social service | 29,11 | 3,01 | 29,12 | 3,81 | 0,00 |
| Social status | 27,39 | 2,68 | 28,35 | 3,87 | 0,25 |
| Supervision – human | 25,44 | 5,49 | 21,76 | 6,45 | 0,57* |
| Supervision – technical | 26,56 | 4,22 | 22,76 | 6,37 | 0,60* |
| Variety | 27,50 | 4,77 | 27,06 | 3,58 | 0,09 |
| Working conditions | 29,61 | 3,22 | 25,94 | 5,78 | 0,63* |

* Difference is statistically significant $d \geq 0,5$ (medium effect)

According to Table 7, H8 is accepted in terms of eight components of job satisfaction. Practically significant differences of medium effect exist between the high and low sense of coherence groups in terms of Total job satisfaction, Achievement, Authority, Compensation, Independence, Supervision in terms of the human side of the job, Supervision in terms of the technical side of the job, and Working conditions. This means that individuals with a high sense of coherence experience significantly more Total job satisfaction when compared with the low sense of coherence groups. The high sense of coherence groups may be more inclined to feel that they comprehend the components of achievement, authority, compensation, independence, supervision in terms of the human side of the job, supervision in terms of the technical side of the job, and working conditions. They may also believe that they can control these or that a significant other can control these, and they may view these as worthwhile to spend energy upon. As a consequence, higher levels of job satisfaction is experienced when compared to the lower sense of coherence groups.

Based on the findings in Table 7, H8 is rejected for sense of coherence in terms of the following components of job satisfaction, namely Ability, Activity, Advancement, Company policy, Co-workers, Creativity, Moral values, Recognition, Responsibility, Security, Social service, Social status, and Variety.

Table 7 demonstrates that individuals with a high sense of coherence experience higher total job satisfaction than those with a low sense of coherence. This finding is contradictory to the Pearson productmoment correlations in section 5.3, which established no significant relationship between sense of coherence and job satisfaction. A possible explanation could be that the average sense of coherence score found in the present study could not yield high Pearson correlations, but that the distribution of scores was enough to indicate a significant practical difference. The results indicate that the individuals with a high sense of coherence are significantly more satisfied with aspects of achievement, authority, compensation, independence, supervision in terms of human interaction and technical aspects of the job, and the working conditions when compared to individuals with a low sense of coherence.

The practical significance of differences between contrast groups in terms of internal locus of control's job satisfaction, are given in Table 8.

Table 8

Differences between Contrast Groups in terms of Internal Control's Job Satisfaction

| ITEM | High Internal | | Low Internal | | d |
|-------------------------|---------------|-------|--------------|-------|--------|
| | M | SD | M | SD | |
| Total | 514,67 | 67,38 | 486,94 | 69,70 | 0,40 |
| Ability | 28,33 | 4,97 | 25,56 | 4,27 | 0,56* |
| Achievement | 30,00 | 3,33 | 26,44 | 5,21 | 0,68* |
| Activity | 27,11 | 4,64 | 26,67 | 4,30 | 0,09 |
| Advancement | 20,39 | 7,16 | 20,06 | 6,78 | 0,05 |
| Authority | 27,56 | 4,96 | 24,06 | 3,83 | 0,71* |
| Company policy | 17,28 | 7,51 | 18,61 | 6,46 | 0,18 |
| Compensation | 20,33 | 7,42 | 18,00 | 7,11 | 0,31 |
| Co-workers | 28,67 | 3,76 | 26,00 | 4,65 | 0,57* |
| Creativity | 26,00 | 6,25 | 25,28 | 5,20 | 0,12 |
| Independence | 31,72 | 3,04 | 29,83 | 3,38 | 0,56* |
| Moral values | 27,72 | 5,66 | 28,50 | 4,74 | 0,14 |
| Recognition | 21,89 | 6,47 | 21,61 | 5,11 | 0,04 |
| Responsibility | 27,94 | 4,21 | 23,94 | 3,80 | 0,95** |
| Security | 19,78 | 7,22 | 18,56 | 5,39 | 0,17 |
| Social service | 28,33 | 4,34 | 27,67 | 3,60 | 0,15 |
| Social status | 27,39 | 3,50 | 26,78 | 3,90 | 0,16 |
| Supervision – human | 23,28 | 6,49 | 22,94 | 5,51 | 0,05 |
| Supervision – technical | 26,33 | 5,40 | 23,33 | 4,24 | 0,56* |
| Variety | 26,44 | 6,01 | 26,17 | 4,31 | 0,17 |
| Working conditions | 28,17 | 4,41 | 26,94 | 6,17 | 0,20 |

* Difference is practically significant $d \geq 0,5$ (medium effect)

** Difference is practically significant $d \geq 0,8$ (large effect)

Based on the results in Table 8, H9 is accepted in respect of seven components of job satisfaction. Practical significant differences of medium effect exist between high internal locus of control and low internal locus of control groups for the following components of job satisfaction: Ability, Achievement, Authority, Co-workers, Independence, and Supervision in terms of the technical aspects of the job. A practical significant difference of large effect was found for Responsibility. The implication of these findings could be that the employees feel that they have personal control over the above-mentioned components in their jobs.

H9 is rejected for internal locus of control in terms of Total job satisfaction, Activity, Advancement, Company policy, Compensation, Creativity, Moral values, Recognition, Security, Social service, Social status, Supervision in terms of the human side of the job, Variety, and Working conditions.

Based on the results it can also be concluded that individuals with a high internal locus of control are more satisfied with ability, achievement, authority, co-workers, independence, responsibility and supervision in terms of the technical side of the job when compared to individuals with a low internal locus of control. The findings could indicate that high internal locus of control individuals are more satisfied than low internal control individuals, with opportunities to use their ability, to achieve, to exercise authority, to work with co-workers, to be independent, to take responsibility, and to receive technical supervision possibly because they are willing to accept responsibility to create the opportunities to make it possible themselves.

The significance of differences between contrast groups in terms of external locus of control's job satisfaction, are given in Table 9.

Table 9

Differences between Contrast Groups in terms of External Control's Job Satisfaction

| ITEM | High External | | Low External | | d |
|-------------------------|---------------|-------|--------------|-------|--------|
| | M | SD | M | SD | |
| Total | 478,06 | 72,46 | 531,24 | 49,31 | 0,73* |
| Ability | 24,88 | 4,20 | 28,82 | 5,00 | 0,23 |
| Achievement | 26,76 | 5,03 | 30,53 | 2,90 | 0,79* |
| Activity | 24,59 | 3,59 | 27,65 | 4,34 | 0,71* |
| Advancement | 18,53 | 6,49 | 22,81 | 7,53 | 0,57* |
| Authority | 23,53 | 3,37 | 28,65 | 4,50 | 0,67* |
| Company policy | 16,59 | 7,60 | 19,29 | 6,08 | 0,36 |
| Compensation | 17,18 | 7,79 | 20,00 | 7,25 | 0,36 |
| Co-workers | 25,88 | 5,10 | 29,47 | 3,36 | 0,70* |
| Creativity | 23,53 | 4,85 | 28,35 | 5,80 | 0,83** |
| Independence | 29,53 | 3,79 | 32,00 | 2,32 | 0,65* |
| Moral values | 27,82 | 4,68 | 29,88 | 4,44 | 0,44 |
| Recognition | 22,00 | 7,14 | 23,59 | 6,11 | 0,22 |
| Responsibility | 24,59 | 4,65 | 29,18 | 3,70 | 0,99** |
| Security | 19,65 | 7,56 | 18,65 | 5,60 | 0,13 |
| Social service | 28,06 | 4,29 | 30,06 | 3,15 | 0,47 |
| Social status | 27,12 | 3,69 | 28,59 | 3,55 | 0,40 |
| Supervision – human | 22,06 | 6,66 | 22,71 | 5,32 | 0,10 |
| Supervision – technical | 24,35 | 5,82 | 24,47 | 5,81 | 0,02 |
| Variety | 25,71 | 4,70 | 28,35 | 4,49 | 0,56* |
| Working conditions | 25,71 | 5,76 | 29,53 | 4,77 | 0,66* |

* Difference is practically significant $d \geq 0,5$ (medium effect)

** Difference is practically significant $d \geq 0,8$ (large effect)

Based on the results in Table 9, H10 is accepted in relation to eleven components of job satisfaction. Practical significant differences of medium effect have been found for the high and low external control groups in terms of the following components of job satisfaction:

Total job satisfaction, Achievement, Activity, Advancement, Authority, Co-workers, Independence, Variety, and Working conditions. Practical significant differences of large effect between the two groups' job satisfaction have been found for Creativity and Responsibility.

H10 is rejected for external locus of control in respect of the following components of job satisfaction, namely Ability, Company policy, Compensation, Moral values, Recognition, Security, Social service, Social status, Supervision in terms of the human side of the job, and Supervision in terms of technical aspects of the job.

The findings reported in Table 9 indicate that individuals with a low external locus of control experience significantly more total job satisfaction than individuals with a high external locus of control. The findings also suggest that low external locus of control individuals experience significantly more job satisfaction in terms of achievement, activity, advancement, authority, co-workers, creativity, independence, variety, responsibility and working conditions when compared to high external locus of control individuals. It can be deduced from the finding that individuals who ascribe the outcomes of their behaviour (job satisfaction) to external forces or at the hands of powerful others, experience lower job satisfaction in terms of the aforementioned components of job satisfaction. The finding could be explained in the sense that high external locus of control individuals are less satisfied with the opportunity to achieve, to have much to do, to be advanced, to demonstrate authority, to have the support of co-workers, to be creative, to be independent, to experience variety, to accept responsibility, and to accept the working conditions because they do not accept the responsibility to create the opportunities to be satisfied with the components.

The significance of differences between contrast groups in terms of autonomy's job satisfaction, are given in Table 10.

Table 10

Differences between Contrast Groups in terms of Autonomy's Job Satisfaction

| ITEM | High Autonomy | | Low Autonomy | | d |
|-------------------------|---------------|-------|--------------|-------|--------|
| | M | SD | M | SD | |
| Total | 534,59 | 57,05 | 469,12 | 69,92 | 0,94** |
| Ability | 28,65 | 4,90 | 25,88 | 4,23 | 0,57* |
| Achievement | 30,41 | 2,83 | 26,12 | 4,82 | 0,83** |
| Activity | 27,41 | 4,91 | 26,18 | 4,05 | 0,25 |
| Advancement | 21,88 | 7,23 | 18,82 | 7,23 | 0,42 |
| Authority | 29,53 | 3,68 | 23,12 | 3,24 | 1,74* |
| Company policy | 18,41 | 7,13 | 14,76 | 6,18 | 0,51* |
| Compensation | 21,65 | 6,75 | 17,18 | 7,17 | 0,62* |
| Co-workers | 30,35 | 3,43 | 25,88 | 4,73 | 0,95** |
| Creativity | 27,71 | 5,59 | 23,88 | 5,36 | 0,69* |
| Independence | 32,24 | 2,56 | 29,59 | 3,36 | 0,79* |
| Moral values | 30,41 | 4,42 | 27,06 | 4,72 | 0,71* |
| Recognition | 23,00 | 7,02 | 19,59 | 6,24 | 0,49 |
| Responsibility | 29,53 | 3,71 | 23,00 | 4,05 | 1,61* |
| Security | 19,47 | 6,50 | 17,82 | 6,07 | 0,25 |
| Social service | 29,65 | 3,43 | 27,24 | 3,82 | 0,63* |
| Social status | 28,53 | 3,10 | 26,88 | 4,09 | 0,40 |
| Supervision – human | 23,24 | 6,69 | 21,94 | 6,24 | 0,19 |
| Supervision – technical | 24,76 | 5,70 | 24,12 | 5,33 | 0,11 |
| Variety | 28,76 | 4,34 | 25,00 | 3,94 | 0,87** |
| Working conditions | 29,00 | 4,51 | 25,06 | 6,21 | 0,63* |

* Difference is practically significant $d \geq 0,5$ (medium effect)

** Difference is practically significant $d \geq 0,8$ (large effect)

in terms of the results reported in Table 10, H11 is accepted for autonomy in terms of all the components of job satisfaction, except for Activity, Advancement, Recognition, Security, Social status, Supervision in terms of the human side of the job, and Supervision in terms of

the practical aspects of the job. Practical significant differences of medium effect have been established for Ability, Authority, Company policy, Compensation, Creativity, Independence, Moral values, Responsibility, Social service, and Working conditions. Practical significant differences of large effect have been found for Total job satisfaction, Achievement, Co-workers, and Variety.

H11 for autonomy are rejected for the components of Activity, Advancement, Recognition, Security, Social status, Supervision in terms of the human side of the job, and Supervision in terms of technical aspects of the job.

According to Table 10, individuals with high scores on autonomy would experience significantly more total job satisfaction as well as satisfaction with all the components of job satisfaction (except for activity, advancement, recognition, security, social status, supervision in terms of the human side of the job, and supervision in terms of the practical aspects of the job) in comparison to individuals low on autonomy. It could be deduced that individuals high on autonomy experience a higher need to believe in their own ability, to act confidently and independent, and to make decisions and take steps to solve problems when compared to individuals lower on autonomy. Consequently, higher levels of job satisfaction are experienced by individuals high on autonomy, except in terms of the opportunity to be busy all the time, to be advanced, to receive recognition, to expect prolonged employment, to be regarded as "somebody" in society, to have good relationships with supervisors, and to receive supervision in terms of the practical aspects of the job, when compared with individuals low on autonomy. The fact that the agricultural representatives high on autonomy are not that satisfied with activity, advancement, recognition, security, social status, supervision in terms of the human side of the job, and supervision in terms of the practical aspects of the job, could be ascribed to the fact that they do not feel that they can act independently, decide for themselves or put steps in place to resolve the fact that they are not satisfied with the components.

The significance of the differences between contrast groups in terms of self-efficacy's job satisfaction, are given in Table 11.

Table 11**Differences between Contrast Groups in terms of Self-Efficacy's Job Satisfaction**

| ITEM | High Self-Efficacy | | Low Self-Efficacy | | d |
|-------------------------|--------------------|-------|-------------------|-------|------|
| | M | SD | M | SD | |
| Total | 502,12 | 59,97 | 495,17 | 70,80 | 0,10 |
| Ability | 26,29 | 5,08 | 26,89 | 4,57 | 0,12 |
| Achievement | 28,06 | 4,66 | 28,61 | 3,27 | 0,12 |
| Activity | 26,83 | 4,71 | 25,72 | 4,01 | 0,24 |
| Advancement | 20,69 | 7,36 | 20,00 | 6,83 | 0,09 |
| Authority | 25,82 | 4,42 | 26,11 | 5,11 | 0,06 |
| Company policy | 18,24 | 6,11 | 15,22 | 7,72 | 0,39 |
| Compensation | 18,76 | 6,80 | 20,17 | 7,13 | 0,20 |
| Co-workers | 28,00 | 4,47 | 27,72 | 4,82 | 0,06 |
| Creativity | 26,76 | 6,02 | 25,17 | 5,33 | 0,26 |
| Independence | 30,71 | 3,69 | 31,11 | 3,16 | 0,11 |
| Moral values | 28,53 | 4,00 | 26,39 | 6,75 | 0,32 |
| Recognition | 22,00 | 6,35 | 22,00 | 6,33 | 0,00 |
| Responsibility | 26,18 | 4,25 | 26,50 | 4,64 | 0,07 |
| Security | 17,88 | 6,25 | 18,17 | 7,01 | 0,04 |
| Social service | 29,12 | 4,40 | 28,28 | 3,95 | 0,20 |
| Social status | 28,23 | 4,13 | 27,06 | 3,11 | 0,28 |
| Supervision – human | 23,41 | 3,92 | 21,94 | 7,51 | 0,20 |
| Supervision – technical | 23,65 | 5,09 | 24,44 | 6,02 | 0,13 |
| Variety | 26,65 | 4,91 | 26,89 | 4,54 | 0,05 |
| Working conditions | 27,53 | 6,09 | 26,78 | 4,94 | 0,12 |

Based on the results in Table 11, H12 is rejected for self-efficacy in terms of all the components of job satisfaction. The finding indicates that job satisfaction scores does not differ significantly for the high and low self-efficacy groups. The finding is contradictory to previous findings of Judge et al. (1998).

As mentioned earlier, the findings could be attributed to the fact that general self-efficacy and not work-specific self-efficacy was measured in the previous study. An alternative explanation can be that the population doubt their ability to come up with the necessary motivational and behavioural resources to make themselves happy in their jobs.

Accordingly the second last specific objective set out at the beginning of the study has been reached, namely to determine the relationship between job satisfaction on the one hand and sense of coherence, self-efficacy and locus of control on the other hand among agricultural representatives in the fertiliser industry

5.5 REGRESSION ANALYSIS REGARDING PSYCHOLOGICAL STRENGTHS AND JOB SATISFACTION

Next, a regression analysis of the various psychological strengths (as independent variables) and job satisfaction (as measured by the Minnesota Satisfaction Questionnaire) was conducted. In Table 12, the regression-analysis for the relevant constructs is given.

Table 12

Regression-analysis of Sense of Coherence, Self-Efficacy, Locus of Control and Job Satisfaction

| ANALYSIS OF VARIANCE | | | | | |
|-------------------------|-------|-----------------------|--------------------|----------------|-------------|
| Multiple Correlation | 0,455 | Source of variance | Degrees of freedom | Sum of squares | Mean square |
| R ² | 0,281 | Regression | 5 | 61435,789 | 12287,158 |
| Adjusted R ² | 0,207 | Residue | 49 | 157342,937 | 3211,080 |
| | | F = 0,62 | | | |
| | | f ² = 0,39 | | | |

| VARIABLES IN THE EQUATION | | | | |
|---------------------------|---------|---------------------|---------|--------|
| Independent variables | B | Standard error of B | f-value | p |
| Constant | 344,580 | 182,100 | 1,88 | 0,0656 |
| SOC | 0,390 | 0,408 | 0,955 | 0,3442 |
| Self-Efficacy | 0,383 | 0,422 | 0,908 | 0,3685 |
| Internal LOC | -1,066 | 1,068 | -0,997 | 0,3235 |
| External LOC | -0,723 | 0,487 | -1,483 | 0,1444 |
| Autonomy | 2,070 | 0,957 | 2,162 | 0,0355 |

Table 12 demonstrates that a total of 20,7% of the variance of total job satisfaction (as measured by the Minnesota Satisfaction Questionnaire) is explained by sense of coherence, self-efficacy and locus of control (internal control, external control and autonomy). The multiple correlation of 0,46 is practically significant (large effect) ($f^2 = 0,39$). The findings indicate that sense of coherence, self-efficacy and locus of control predict approximately 21% of the variance in job satisfaction. Autonomy and external locus of control are, however, better predictors. The finding suggests that if agricultural representatives demonstrate a low external locus of control and a high level of autonomy, they will be more satisfied with their jobs.

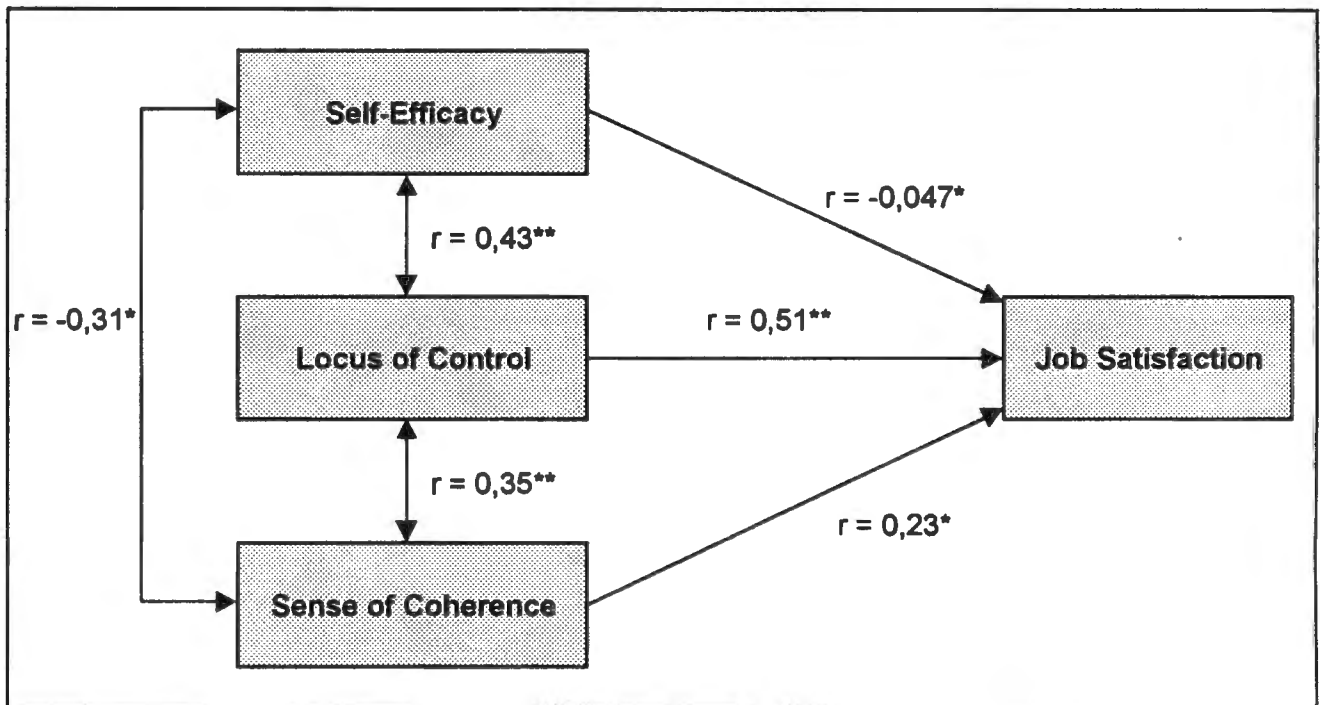
According to these findings, H13 is accepted.

Thus, the last specific objective set out at the beginning of the study have been reached, namely to determine whether sense of coherence, self-efficacy and locus of control can predict the job satisfaction of agricultural representatives in the fertiliser industry.

5.6 DISCUSSION

Based on the results of this study, the agricultural representatives demonstrate a relatively average level of sense of coherence, self-efficacy and locus of control. The group also experiences an average to high level of job satisfaction.

In Figure 6, a summary of the findings pertaining to the relationships of the psychological strengths of sense of coherence, self-efficacy and locus of control with job satisfaction, is presented.



* = Pearson correlation

** = Canonical correlation

Figure 6: Summary of the relationship between the psychological strengths and job satisfaction

According to the results in this study, the deduction can be made that the different psychological strengths form part of the same construct, because practically significant correlations of medium effect have been found between the respective psychological strengths.

The results also indicate that individuals with a high sense of coherence experience significantly higher levels of total job satisfaction than those with a low sense of coherence. Concerning the components of job satisfaction, individuals seem to experience higher levels of job satisfaction with achievement, authority, compensation, independence, supervision in terms of human interaction and technical aspects of the job, and the working conditions when compared to individuals with a low sense of coherence.

In the case of self-efficacy, no significant differences were found between the contrast groups in terms of their job satisfaction, which implies that self-efficacy was not related to job satisfaction in the present study (see Figure 6).

According to the results, high internal locus of control individuals tend to be significantly more satisfied with the opportunity to use their abilities, to achieve, to have authority, to have the support of co-workers, to act independently, to accept responsibility and be supervised in terms of the technical side of the job when compared to individuals with a low internal locus of control. The finding could be explained on the basis of the fact that high internal locus of control individuals tend to accept the responsibility to create the necessary opportunities to be satisfied with the use of their abilities, to achieve, to have authority, to have the support of co-workers, to act independently, to accept responsibility and be supervised in terms of the technical side of the job. Concerning external locus of control, it was found that individuals with a low external locus of control experience significantly higher levels of total job satisfaction than individuals with higher levels of external locus of control. In the case of autonomy, it was found that individuals with high scores on autonomy would experience significantly more total job satisfaction when compared to individuals low on autonomy.

According to the findings in the present study, the psychological strengths predicted 20, 7% of the variance of total job satisfaction, with autonomy and external control the better predictors. Accordingly, it can be concluded that agricultural representatives with a low external locus of control and a high level of autonomy would be more satisfied in their jobs.

5.7 CHAPTER SUMMARY

In this chapter, the results of the empirical study were reported and discussed. Firstly, the descriptive statistics and reliability coefficients of the consecutive measuring instruments were discussed. Thereafter, the relationships between the different psychological strengths were reported as well as their relationship with job satisfaction. The practical significance of the job satisfaction of the contrast groups, that measure high and low in terms of the

different psychological strengths, was reported. Lastly, a multiple regression analysis was carried out in order to determine the predictive value of the consecutive psychological strengths in terms of total job satisfaction.

Thus, the last three specific objectives set out at the beginning of the study have been reached. Consequently, the last three research objectives have also been answered.

In Chapter 6, the conclusions will be made on the basis of the literature findings and empirical investigation, as well as recommendations for the organisation, and future research.

Chapter 6

CONCLUSIONS AND RECOMMENDATIONS

In this chapter, conclusions about the literature findings and the results of the empirical study are made. Furthermore, the limitations of the present study are discussed and recommendations for the organisation and future research are presented.

6.1 CONCLUSIONS

Conclusions are made in the following sections in respect of the specific literature objectives and the empirical findings obtained in the present study.

6.1.1 Conclusions in terms of the specific literature objectives of the study

The following conclusions can be made in respect of the constructs of job satisfaction and psychological strengths used in this study:

Job satisfaction is conceptualised in the literature as a positive or negative emotional response to work resulting from individual needs that must be fulfilled by the job. Employees compare their expected outcomes with the perceived real outcomes offered by the job and when the perceived outcomes are less than expected, a negative emotional response toward the job, which leads to job dissatisfaction, is experienced. When the perceived outcomes are equal to or exceed the expected outcomes, a positive emotional response towards the job is experienced, which is indicative of job satisfaction. There are several factors in the work-environment, as well as the characteristics of employees that influence the extent of their expectations in the workplace. Accordingly, job satisfaction is

influenced by the extent to which there is correspondence between the situational characteristics of the work-environment and the dispositional characteristics of individual employees.

The constructs of sense of coherence, self-efficacy and locus of control are from the fortigenic paradigm (Strümpfer, 1990), which study the origin of psychological strengths. In the present study, the constructs are viewed from a dispositional origin, in other words the characteristics inherent to individuals which assist them in their interaction with their work-environment and situations that might arise as a consequence thereof.

Sense of coherence is conceptualised in the literature as a dispositional characteristic that helps employees to make sense of stressful experiences, to select the appropriate resources under their own or significant other's disposal, and to allocate energy towards stressors which are viewed as challenges. Consequently, it can be inferred that individuals with a strong sense of coherence regard information from the environment as comprehensible, manageable and meaningful. A strong sense of coherence helps individuals to face stressful situations and to handle complex tasks because demands from the environment are understood and believed to be under personal or significant other control, and challenging enough to expend energy upon.

Self-efficacy is conceptualised as the belief of individuals in their ability to arise with the necessary resources and motivation to handle challenges and tasks effectively. Self-efficacy, therefore, refers to the belief of individuals that they can arise with and use the relevant behavioural, cognitive and motivational resources to deal with the task at hand. Self-efficacy is also concerned with the control over behaviour based on the experience gained from the environment.

Locus of control is conceptualised in the literature as a relatively stable, fundamental dispositional variable that refers to the extent to which individuals feel that they exert control over (internal locus of control) or are controlled by (external locus of control) their environment. The ability of individuals to believe in their own ability, to act independently, to

make decisions on their own and to implement action steps to solve problems also plays a crucial role in locus of control. Locus of control is concerned not just with control over own behaviour, but also with the expectancy to exert control over behavioural outcomes.

Based on the literature findings, it can be concluded that the dispositional variables of sense of coherence, self-efficacy and locus of control are crucial in contributing to the belief of individuals that they have access to the necessary resources to exert control over their behaviour or the outcomes thereof. These furthermore assist them in handling complex and demanding situations in their daily lives and to promote general psychological well-being. It was postulated that the presence of the different psychological strengths would lead to the satisfaction of work-needs.

6.1.2 Conclusions in terms of the specific empirical objectives of the study

The findings can be summarised as follows:

The agricultural representatives experience an average to high level of job satisfaction. They also experience a relatively average level of sense of coherence, self-efficacy and locus of control.

Similar to the expectation that a relationship exists between the consecutive psychological strengths, practically significant relationships of medium effect have been found between the respective strengths, suggesting that the psychological strengths form part of the same construct, namely psychological strengths.

The expectation that sense of coherence and job satisfaction would be positively related, was not supported for most of the components of job satisfaction. The results, however, indicated that individuals with a high sense of coherence experience significantly higher levels of total job satisfaction than those with a low sense of coherence. Concerning the components of job satisfaction, individuals with a high sense of coherence seem to

experience higher levels of job satisfaction with achievement, authority, compensation, independence, supervision in terms of human interaction and technical aspects of the job, and the working conditions, when compared to individuals with a low sense of coherence.

Pertaining to the expectation that locus of control would be significantly related to job satisfaction, it was found that high internal locus of control individuals tend to be significantly more satisfied with ability, achievement, authority, co-workers, independence, responsibility and supervision in terms of the technical side of the job when compared to individuals with a low internal locus of control. Concerning external locus of control, it was found that individuals with a low external locus of control experience significantly higher levels of total job satisfaction than individuals with higher levels of external locus of control. In the case of autonomy, it was found that individuals with high scores on autonomy would experience significantly more total job satisfaction when compared to individuals low on autonomy.

Although significant relationships between self-efficacy and job satisfaction were expected, no significant differences were found between the contrast groups in terms of their job satisfaction, which implies that self-efficacy was not a very good predictor of job satisfaction in the present study.

Concerning the predictive value of the psychological strengths in relation to job satisfaction, the findings in the present study indicated that the psychological strengths predicted 20, 7% of the variance of total job satisfaction, which is practically significant. Especially external locus of control and autonomy are better predictors of job satisfaction.

6.2 LIMITATIONS OF THE PRESENT STUDY

One of the limitations of the present study, is the fact that an availability sampling method has been used rather than a randomised group design method, which implies that the findings can not be generalised but pertain only to the population investigated in the study. Furthermore, the study population consisted only of agricultural representatives and is therefore not representative of employees at all the different levels in the organisation. Only

one organisation has been used in the study and the possibility that the specific organisational culture influenced the results is not excluded.

Another limitation of the present study is the fact that in the case of self-efficacy, a general measure was used to determine the self-efficacy beliefs of the study population. The poor results in this regard could be indicative of the need to introduce a work-specific measure in future studies.

6.3 RECOMMENDATIONS

Recommendations pertaining to the specific organisation used in this study, as well as recommendations for future research are made in this section.

6.3.1 Recommendations for the organisation

Significant differences between the contrast groups' job satisfaction regarding sense of coherence have been established. The organisation could therefore benefit from enhancing the sense of coherence of their employees. The organisation could contribute to the development of employees' sense of coherence by presenting information in a constant, structured, orderly way that is completely understood by the employees. Employees must also be able to identify their place in the greater structure of the organisation in order to enhance the comprehensibility component of sense of coherence. By providing the necessary knowledge, skills, material, instruments, support and other resources, as well as ensuring that there is a balance between the execution of tasks, employees will feel that the work demands are under personal or other control. Furthermore, by allowing a degree of independence and freedom of choice to execute the task at hand in their own way, employees will feel that their jobs are meaningful. Participation in decision-making will also enhance the feeling of ownership and would also contribute to the meaningfulness component of sense of coherence. If employees' sense of coherence can be enhanced within the organisation, the organisation could contribute to the enhancement of the job satisfaction of their employees. Attention should therefore be given to the development of

employees, the opportunity to be busy all the time, the opportunity for advancement, the way in which employees perceive the company policies and practices, the relationship with co-workers, the opportunity for employees to determine their own goals and tasks, the extent to which employees feel that their work is morally sound, the opportunity for recognition, the provision of more responsibilities, the extent to which employees feel that they can expect stable employment, the opportunity to serve people in the organisation and community, the opportunity to be respected in society as a result of their jobs, and the integration of different abilities in one job to provide intellectual stimulation and prevent boredom.

Although self-efficacy has no significant relationship with the job satisfaction of employees, it can still contribute to enhance the level of performance of employees. Employees with a high level of self-efficacy would also sustain effort even in the light of unfavourable conditions or uncertain outcomes. Also, self-efficacious employees tend to be self-confident as a result of an accumulation of successful experiences and the demonstration of more effort on a variety of similar or related tasks. Furthermore, self-efficacious employees tend to be less vulnerable to stress and depression. The organisation could therefore benefit from stimulating the self-efficacy of their employees by providing opportunity for enactive mastery (personal attainments), vicarious learning (modelling), by means of verbal persuasion and by emotional or cognitive appeals aimed at convincing employees that they can perform a specific task at a specific level (psychological arousal).

A relationship also exists in relation to locus of control and job satisfaction. Employees with an internal locus of control feel that they exert control over the outcomes of their behaviour (e.g. job satisfaction), except over the components of total job satisfaction, activity, advancement, company policy, compensation, creativity, moral values, recognition, security, social service, social status, supervision in terms of the human side of the job, variety, and working conditions.

The relationship between external locus of control and job satisfaction indicates that employees attribute the outcomes of their behaviour to external forces or to powerful others

in terms of ability, company policy, compensation, moral values, recognition, security, social service, social status, supervision in terms of the human side of the job, and supervision in terms of technical aspects of the job. The organisation could enhance the level of job satisfaction of agricultural representatives by stimulating an internal locus of control and by unlearning an external locus of control. This process can start with the selection and recruitment of new employees and with socialising mechanisms within the organisation, namely selection programmes, induction programmes, performance-appraisal, training and development programmes and remuneration.

A relationship exists between autonomy and job satisfaction. It means that employees do not believe in their own ability, won't act confidently independently, and would not make decisions and take steps to solve problems with regard to activity, advancement, recognition, security, social status, supervision in terms of the human side of the job, and supervision in terms of technical aspects of the job. The organisation can enhance their employees' belief in their own abilities and their confidence by empowering them to make decisions on their own with regard to the components mentioned above and to give them more independence to make decisions on their own. The organisation can also enhance the autonomy of their employees by means of accurate feedback regarding performance appraisals, and by means of remuneration, supervision, training and development.

6.3.2 Recommendations for future research

The following recommendations can be made for future research:

- The relationship between self-efficacy and job satisfaction should be investigated in a wide variety of organisational settings and job-levels, because the expected relationships was not obtained in the present study.
- The relationship between self-efficacy and job satisfaction could be investigated in larger samples.
- Work specific self-efficacy, rather than general self-efficacy needs to be used in future studies in organisational settings.

- Sense of coherence, self-efficacy and locus of control could be investigated in relation to other work outcomes such as performance and coping with work-related stress.
- Sense of coherence, self-efficacy and locus of control could also be investigated in relation to other variables, such as training and development.
- The inclusion of other dispositional strengths, such as resilience, personality hardiness, potency, stamina, learned resourcefulness, personal causation, self-directedness, and human agency, social interest, and sense of humour should be investigated in the study of job satisfaction.

REFERENCES

- Abel-Halim, A. (1980). Effects of person-job compatibility on managerial reaction to role ambiguity. *Organisational Behaviour and Human Performance*, 26, 193-211.
- Allen, R.E., Lucero, M.A., & Van Norman, K.L. (1997). An examination of the individual's decision to participate in an employee involvement program. *Group and Organisation Management*, 22(1), 117-143.
- Andrisani, P.J., & Nestel, G. (1976). Internal-external control as contributor to and outcome of work experience. *Journal of Applied Psychology*, 61, 156-165.
- Anstey, G. (1989). *The effect of sense of coherence on work stressors and outcomes in blue collar workers*. Unpublished master's dissertation, University of Cape Town.
- Antonovsky, A. (1979). *Health, Stress and Coping*. San Francisco, CA: Jossey-Bass.
- Antonovsky, A. (1987b). Health promoting factors at work: the sense of coherence. In R. Kalimo, M. Eltatawi & C. Cooper (Eds.), *Psychological factors at work and their effects on health* (World Health Organisation, Geneva), pp. 153-167.
- Antonovsky, A. (1987a). *Unravelling the mystery of health: How people manage stress and stay well*. San Francisco, CA : Jossey-Bass.
- Antonovsky, A. (1993). The structure and properties of the Sense of Coherence Scale. *Social Science and Medicine*, 36(6), 725-733.
- Antonovsky, H., & Sagy, S. (1986). The development of a sense of coherence and its impact on responses to stress situations. *Journal of Social Psychology*, 126(2), 213-225.
- Arnold, H., & Feldman, D. (1982). A multivariate analysis of the determinants of job turnover. *Journal of Applied Psychology*, 67, 350-360.
- Arvey, R.D., Bouchard, T.J., Segal, N.J., & Abraham, L.M. (1989). Job satisfaction: Environmental and genetic components. *Journal of Applied Psychology*, 74, 187-192.
- Ashford, S., Lee, D., & Bobko, P. (1989). Content, causes and consequences of job insecurity: A theory based measure and substantive test. *Academy of Management Journal*, 32, 803-829.

- Ball, G.A., Trevino, L.K., & Simms, H.P. (1994). Just and unjust organisational punishment: Influences on subordinate performance and citizenship. *Academy of Management Journal*, 37, 299-322.
- Ballantine, K., & Nunns, C.G. (1998). The moderating effect of supervisory support on the self-efficacy work-performance relationship. *South African Journal of Psychology*, 28(3), 164-173.
- Bandura, A. (1977a). *Social learning theory*. Englewood Cliffs, NJ: Prentice Hall.
- Bandura, A. (1977b). Self-efficacy: Toward a unifying theory of behaviour change. *Psychological Review*, 84, 191-215.
- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, 37, 122-147.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice Hall.
- Bandura, A. (1988a). Self-regulation of motivation and action through goal systems. In V. Hamilton, G.H. Bower & N.H. Frijda (Eds.), *Cognitive perspectives on emotion and motivation* (pp. 37-61). Dordrecht, Netherlands: Kluwer Academic Publishers.
- Bandura, A. (1988b). Organisational applications of social cognitive theory. *Australian Journal of Management*, 13, 137-164.
- Bandura, A. (1989). Human agency in social cognitive theory. *American Psychologist*, 44, 1175-1184.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W.H. Freeman and Company.
- Bandura, A. & Adams, N.E. (1977). Analysis of self-efficacy theory of behavioural change. *Cognitive Therapy and Research*, 1, 287-308.
- Bandura, A., Adams, N.E., Hardy, A.B., & Howells, G.N. (1980). Tests of the generality of self-efficacy theory. *Cognitive Therapy and Research*, 4, 39-66.
- Barber, G. (1986). Correlates of job satisfaction among human service workers. *Administration in Social Work*, 10(1), 25-37.
- Barling, J., & Abel, M. (in press). Self-efficacy beliefs and tennis performance. *Cognitive Therapy and Research*.

- Barling, J., & Beattie, R. (1983). Self-efficacy beliefs and sales performance. *Journal of Organisational Behaviour Management*, 5(1), 41-51.
- Baron, R.A. (1983). *Behaviour in organisations: Understanding and managing the human side of work*. Newton, MA: Allyn and Bacon.
- Baron, R.A. (1986). *Behaviour in organisations: Understanding and managing the human side of work*. Newton, MA: Allyn & Bacon.
- Baron, R.A., Byrne, D., & Kantowitz, B.H. (1980). *Understanding behaviour*. (2nd ed.). New York: Holt, Rinehart and Winston.
- Bennett, A. (1990). A white-collar guide to job security. *Wall Street Journal*, pp. B1, B12.
- Bernardi, R.A. (1997). The relationships among locus of control, perceptions of stress and performance. *Journal of Applied Business Research*, 13(4), 1-8.
- Blankstein, K.R. (1984). Psychophysiology and perceived locus of control: Critical review, theoretical speculation and research direction. In H.M. Lefcourt (Ed.), *Research with the locus of control construct: Vol. 3. Extensions and limitations*. New York: Academic Press.
- Blau, G. (1993). Testing the relationship of locus of control to different performance dimensions. *Journal of Occupational and Organisational Psychology*, 66, 125-138.
- Bogazzi, R.P. (1980). Performance and satisfaction in an industrial sales force: An examination of their antecedents and simultaneity. *Journal of Marketing*, 44, 65-77.
- Boone, C., & De Brabander, B. (1997). Self-reports and CEO locus of control research: A note. *Organisation Studies*, 18(6), 949-971.
- Borg, I., & Elizur, D. (1992). Job insecurity: Correlates, moderators and measurement. *International Journal of Manpower*, 13(2), 13-26.
- Boshof, C., & Meis, G. (1994). The influence of supervision, organisational commitment and job satisfaction on performance: A path analytical study. *Bestuursdynamika*, 3(3), 1-33.
- Bothma, A.C., & Schepers, J.M. (1997). The role of locus of control and achievement motivation in the work performance of black managers. *Journal of Industrial Psychology*, 23(3), 44-52.
- Bozionelos, N. (1996). Organisational promotion and career satisfaction. *Psychological Reports*, 79, 371-375.

- Bray, D.W., Campbell, R.J., & Grant, D.L. (1974). *Formative years in business*. New York: Wiley.
- Brayfield, A.H., & Rothe, H.F. (1951). An index of job satisfaction. *Journal of Applied Psychology*, 35, 307-311.
- Breed, M. (1997). *Bepalende persoonlikheidstrekke in die salutogeneties paradigma*. Unpublished doctoral thesis, University of South Africa, Pretoria.
- Brownell, P. (1981). Participation in budgeting, locus of control and organisational effectiveness. *The Accounting Review*, 56, 844-860.
- Campbell, D.J. (1988). Task complexity: A review and analysis. *Academy of Management Review*, 13, 40-52.
- Campbell, N.K., & Hackett, G. (1986). The effects of mathematics task performance on math self-efficacy and task interest. *Journal of Vocational Behaviour*, 28, 149-162.
- Cantor, N. (1990). From thought to behaviour: "Having" and "doing" in the study of personality and cognition. *American Psychologist*, 45, 735-750.
- Carmel, S., & Bernstein, J. (1989). Trait-anxiety and sense of coherence: A longitudinal study, *Psychological Reports*, 65, 221-222.
- Carr, S.C., McLoughlin, D., Hodgson, M., & MacLachlan, M. (1996). Effects of unreasonable pay discrepancies for under- and overpayment on double demotivation. *Genetic, Social and General Psychology Monographs*, 122(4), 475-494.
- Cervone, D. (1985). *Self-efficacy judgement under uncertainty: Availability biases in perceived self-efficacy and behaviour*. Unpublished doctoral dissertation, Stanford University, Stanford, California.
- Chadwick-Jones, J.K. (1969). *Automation and behaviour*. New York: Wiley.
- Chen, C.C., Greene, P.G., & Crick, A. (1998). Does entrepreneurial self-efficacy distinguish entrepreneurs from managers? *Journal of Business Venturing*, 13, 295-316.
- Christianson, D. (1998). Racism reinvented: Employment equity bill. *Finance Week*, 76(5), 32.
- Clark, L.A., & Watson, D. (1991). General affective dispositions in physical and psychological health. In C.R. Snyder & D.R. Forsyth (Eds), *Handbook of social and clinical psychology: The health perspective* (pp. 221-245). New York: Pergamon.

- Clement, R.W. (1993). Happy employees are not all alike. *Across the Board*, Jan/Feb 51-52.
- Coetzee, S.C. (1998). *Aangeleerde vernuf, koherensiesin en werkstevredenheid by werknemers in die suiwelbedryf*. Unpublished master's dissertation, Potchefstroom University for Christian Higher Education, Potchefstroom.
- Coetzee, S.C., & Rothmann, S. (1999). Die verband tussen koherensiesin en werkstevredenheid by bestuurders. *Journal of Industrial Psychology*, 25(3), 31-38.
- Cohen, G.J. (1985). *The nature of management*. London: Graham & Trotman.
- Cohen, J. (1977). *Statistical power analysis for the behavioral sciences*. (Rev. ed.). Orlando: Academic Press.
- Connor, M.J. (1995). Locus of control. *Therapeutic care and education*, 4(1), 16-26.
- Cook, J.D., Hepworth, S.J., Wall, T.D., & Warr, P.B. (1981). *The experience of work: A compendium and review of 249 measures and their use*. London: Academic Press.
- Cooper, C.L., & Kelly, M. (1993). Occupational stress in headteachers: A national UK study. *British Journal of Educational Psychology*, 63, 130-143.
- Coster, E.A. (1992). The perceived quality of working life and job facet satisfaction. *Journal of Industrial Psychology*, 18(2), 6-9.
- Cranny, C.J., Smith, P.C., & Stone, E.F. (1992). *Job satisfaction: How people feel about their jobs and how it affects their performance*. New York: Macmillan.
- Dahlin, L., Cederblad, M., Antonovsky, A., & Hagnell, O. (1990). Childhood vulnerability and adult invincibility. *Acta Psychiatria Scandinavica*, 82, 228-232.
- Daley, D.M. (1986). Humanistic management and organisational success: The effect of job and work environment characteristics on organisational effectiveness, public responsiveness, and job satisfaction. *Public Personnel Management*, 15(2), 143-159.
- Danana, Z. (1989). *Relationship between stressors and outcomes amongst nurses*. Unpublished honours research project, University of Cape Town.
- Daniels, K., & Guppy, A. (1992). The dimensionality and well-being related correlates of work locus of control. *European Work and Organisational Psychologist*, 2, 319-330.
- Davis-Blake, A., & Pfeffer, J. (1989). Just a mirage: The search for dispositional effects in organisational research. *Academy of Management Review*, 14, 385-400.

- Davy, J.A., Kinicki, A.J., & Scheck, C.L. (1997). A test of job security's direct and mediated effects on withdrawal cognitions. *Journal of Organisational Behaviour*, 18, 323-349.
- Davy, J.A., Kinicki, A.J., Kilroy, J., & Scheck, C.L. (1988). After the merger: Dealing with people's uncertainty. *Training and Development Journal*, 42(11), 56-61.
- Dawis, R.V. (1992). Person-environment fit and job satisfaction. In C.J. Cranny, P.C. Smith & E.F. Stone (Eds.), *Job satisfaction: How people feel about their jobs and how it affects their performance* (pp. 69-88). New York: Macmillan.
- De Brabander, B., Boone, C., & Gerits, P. (1992). Locus of control and cerebral asymmetry. *Perceptual and Motor Skills*, 75, 131-143.
- De Wet, R.R. (1990). *Locus of control and achievement motivation of unskilled Eskom employees to participate in training and advancement programmes*. Unpublished research paper, Rand Afrikaans University, Johannesburg.
- Du Brin, A.J. (1984). *Human relations: A job orientated approach*. Reston, VA: Reston Publishing Company.
- Du Toit, S.C. (1994). *Bestuursfaktore wat die werkstevredenheid van die swart onderwysers beïnvloed*. Unpublished masters' dissertation, Potchefstroom University for Christian Higher Education, Potchefstroom.
- Dubin, R., & Champoux, J.F. (1977). Central life interests and job satisfaction. *Organisational Behaviour and Human Performance*, 18, 336-337.
- Durham, R.B., & Smith, C.A. (1997). The measurement and dimensionality of job characteristics. *Journal of Applied Psychology*, 61, 404-409.
- Dyal, J.A. (1984). Cross-cultural research with the locus of control construct. In H.M. Lefcourt (Ed.), *Research with the locus of control construct: Vol. 3*. (pp. 209-306). New York: Academic press.
- Eden, D., & Zuk, Y. (1995). Seasickness as a self-fulfilling prophecy: Raising self-efficacy to boost performance at sea. *Journal of Applied Psychology*, 80, 628-635.
- Erikson, E. (1950). *Childhood and society*. New York: Norton.
- Esterhuizen, J.L.P. (1989). *Die werksmotivering van die onderwyser in die primêre skool*. Unpublished master's dissertation, Potchefstroom University for Christian Higher Education, Potchefstroom.

- Feldman, D.C., & Arnold, H.J. (1983). *Managing individual and group behaviour in organisations*. New York: McGraw-Hill.
- Feldt, T. (1997). The role of sense of coherence in well-being at work: Analysis of main and moderator effects. *Work and Stress*, 11(2), 134-147.
- Ferguson, G.A. (1981). *Statistical analysis in psychology and education*. (5th ed.). Singapore: McGraw Hill.
- Fields, D.L., & Blum, T.C. (1997). Employee satisfaction in work groups with different gender composition. *Journal of Organisational Behaviour*, 18, 181-196.
- Fisher, S. (1984). *Stress and the perception of control*. London: Lawrence Erlbaum.
- Fisher, V.E., & Hanna, J.V. (1931). *The dissatisfied worker*. New York: MacMillan.
- Flannery, R.B., & Flannery, G.J. (1990). Sense of coherence, life stress, and psychological distress: A prospective methodological enquiry. *Journal of Clinical Psychology*, 46, 415-420.
- Fleishman, E.A. (1967). *Studies in Personnel and Industrial Psychology*. Homewood, IL: The Dorsey Press.
- Frase, L.E., & Sorenson, L. (1992). Teacher motivation and satisfaction: Impact on participatory management. *NASSP Bulletin*, 76(540), 37-43.
- French, W.L., & Bell, C.H. (1995). *Organisation development: Behavioural science interventions for organisation development*. (5th ed.). Englewood Cliffs, NJ: Prentice-Hall.
- Frenz, A.W., Carey, M.P., & Jorgensen, R.S. (1993). Psychometric evaluation of Antonovsky's sense of coherence scale. *Psychological Assessment*, 5, 145-153.
- Fritz, G. (1989). *The relationship of sense of coherence to health and work in data processing personnel*. Unpublished master's dissertation, University of Cape Town.
- Frucot, V., & Shearon, W.T. (1991). Budgetary participation, locus of control, and Mexican managerial performance and job satisfaction. *The Accounting Review*, 66(1), 80-99.
- Ganellen, R.J., & Blaney, P.H. (1984). Hardiness and social support as moderators of the effect of life stress. *Journal of Personality and Social Psychology*, 47, 156-163.

- Gardner, D.G., & Pierce, J.L. (1998). Self-esteem and self-efficacy within the organisational context: An empirical examination. *Group and Organisation Management*, 23(1), 48-70.
- Garson, B.E., & Stanwyck, D.J. (1997). Locus of control and incentive in self-managing teams. *Human Resource Development Quarterly*, 8(3), 247-258.
- Gerber, P.D., Nel, P.S., & Van Dyk, P.S. (1985). *Menslike hulpbronbestuur*. (3rd ed.). Cape Town: Nasionale Boekdrukkery.
- Gerhart, B. (1987). How important are dispositional factors as determinants of job satisfaction? Implications for job design and other personnel programs. *Journal of Applied Psychology*, 72, 366-377.
- Gist, M.E. (1987). Self-efficacy: Implications for organisational behaviour and human resource management. *Academy of Management Journal*, 12, 472-485.
- Gist, M.E., & Mitchell, T.R. (1992). Self-efficacy: A theoretical analysis of its determinants and malleability. *Academy of Management Review*, 17(2), 183-211.
- Gordon, J.R. (1983). *A diagnostic approach to organisational behaviour*. Boston, MA: Allyn & Bacon.
- Grannis, J.C. (1992). Students' stress, distress and achievement in an urban intermediate school. *Journal of Early Adolescence*, 4-27.
- Greenberg, J., & Baron, R.A. (1993). *Behaviour in organisations: Understanding and managing the human side of work*. (4th ed.). Needham Heights, MA: Allyn Bacon.
- Greenfield, W., & Blase, J.J. (1981). Opportunities for principals – Motivating teachers: Understanding the factors that shape performance. *NASSP – Bulletin*, 65(448), 1-10.
- Gruneberg, M.M. (1979). *Understanding job satisfaction*. London: MacMillan.
- Guion, R.M. (1992). Agenda for research and action. In C.J. Cranny, P.C. Smith & E.F. Stone (Eds.), *Job satisfaction: How people feel about their jobs and how it affects their performance* (pp. 257-281). New York: Macmillan.
- Gumbhir, A.K. (1979). Compensating your personnel. *American Pharmacy*, 19, 44-49.
- Guppy, A., & Rick, J. (1996). The influences of gender and grade on perceived work stress and job satisfaction in white collar employees. *Work and Stress*, 10(2), 154-164.

- Gurin, G., Veroff, J., & Feld, S. (1960). *Americans view their mental health*. New York: Basic Books.
- Hackman, J.R., & Lawler, E.E. (1971). Employee reactions to job characteristics. *Journal of Applied Psychology*, 55, 259-283.
- Hackman, J.R., & Oldham, G.R. (1975). Development of the job diagnostic survey. *Journal of Applied Psychology*, 60, 159-170.
- Hackman, J.R., & Oldham, G.R. (1976). Motivation through the design of work: Test of a theory. *Organisational Behaviour and Human Performance*, 16, 250-279.
- Hackman, J.R., & Oldham, G.R. (1980). *Work redesign*. Reading, MA: Addison-Wesley.
- Hammersclag, S.F. (1984). *Locus of control and self-esteem in weight reduction*. Unpublished master's thesis, Rand Afrikaans University, Johannesburg.
- Hanges, P.J., Schneider, B., & Niles, K. (1990). Stability of performance: An interactionist perspective. *Journal of Applied Psychology*, 75, 658-667.
- Hawley, D.J., Wolfe, F., & Cathey, M.A. (1992). The Sense of Coherence Questionnaire in patients with rheumatic disorders. *Journal of rheumatology*, 19(12), 1912-1918.
- Hayeslip, D.W., Jr. (1982). *Determinants of job satisfaction and job satisfaction among correctional officers: An exploratory study*. Unpublished doctoral dissertation, Michigan State University.
- Heider, F. (1958). *The psychology of interpersonal relations*. New York: Wiley.
- Heller, H.W., Clay, R., & Perkins, C. (1993). The relationship between job satisfaction and leadership style. *Journal of School Leadership*, 3(1), 74-86.
- Hendriks, T.M. (1985). *Locus of control, personality and self-esteem: a comparison between cohabiting and married women*. Unpublished master's thesis, University of Port Elizabeth, Port Elizabeth.
- Heron, A.A. (1952). A psychological study of occupational judgement. *Journal of Applied Psychology*, 36, 385-387.
- Herzberg, F. (1966). *Work and the nature of man*. Cleveland: World Publishing.
- Herzberg, F. (1968). *Work and the nature of man*. London: Staples.
- Herzberg, F., Mausner, B., Peterson, R.O., & Capwell, D.F. (1957). *Job attitudes: Review of research and opinion*. Pittsburgh: Psychological Service of Pittsburgh.

- Hill, T., Smith, N.D., & Mann, M.F. (1987). Role of efficacy expectations in predicting the decision to use advanced technologies. *Journal of Applied Psychology, 72*, 307-314.
- Hillman, S., Wood, P., & Sawilowsky, S. (1992). Externalisation as a self protection mechanism in a stigmatised group. *Psychological Reports, 70*(2), 641-642.
- Hoppock, R. (1935). *Job satisfaction*. New York: Harper.
- House, R.J. (1971). A path goal theory of leader effectiveness. *Administrative Science Quarterly, 16*, 321-338.
- House, R.J., Shane, S.A., & Herold, D.M. (1996). Rumours of the death of dispositional research are vastly exaggerated. *Academy of Management Review, 21*, 203-224.
- Howard, J.L., & Frink, D.D. (1996). The effects of organisational restructure on employee satisfaction. *Group and Organisation Management, 21*(3), 278-303.
- Hoy, W.K., & Miskel, C.G. (1991). *Educational administration: Theory, research and practice*. New York: McGraw-Hill.
- Hunt, J. (1986). Alienation among managers – the new epidemic or the social scientists' invention? *Personnel Review, 15*, 21-26.
- Hysamen, G.K. (1993). *Metodologie vir die sosiale en gedragwetenskappe*. Johannesburg: Southern Boekuitgewers.
- Ivancevich, J.M., & Glueck, W.F. (1983). *Foundations of personnel: Human resources management*. Plano, TX: Business Publication.
- Jacobson, D. (1991). Toward a theoretical distinction between the stress components of the job insecurity and job loss experiences. In S.B. Bacharach (Ed.), *Research in the sociology of organisations: Vol. 9*. (pp. 1-19). Greenwich: JAI Press.
- Jain, V.K., McLaughlin, D.G., Lall, R., & Johnson, W.B. (1996). Effects of locus of control, occupational stress and psychological distress on job satisfaction among nurses. *Psychological Reports, 78*, 1256-1258.
- Jaques, E. (1970). *Work, creativity, and social justice*. New York: International Universities Press.
- Judge, T.A. (1993). Does affective disposition moderate the relationship between job satisfaction and voluntary turnover? *Journal of Applied Psychology, 78*, 395-401.

- Judge, T.A., & Locke, E.A. (1993). Effect of dysfunctional thought processes on subjective well-being and job satisfaction. *Journal of Applied Psychology, 78*, 475-490.
- Judge, T.A., Locke, E.A., & Durham, C.C. (1997). The dispositional causes of job satisfaction: A core evaluations approach. *Research in Organisational Behaviour, 19*, 151-188.
- Judge, T.A., Locke, E.A., Durham, C.C., & Kluger, A.N. (1998). Dispositional effects on job and life satisfaction: The role of core evaluations. *Journal of Applied Psychology, 83*(1), 17-34.
- Kalimo, R., & Vuori, J. (1990). Work and sense of coherence: Resources for competence and life satisfaction. *Behavioural Medicine, 16*(2), 76-89.
- Katz, R., & Van Maanen, J. (1977). The loci of work satisfaction: Job, interaction and policy. *Human relations, 30*(5), 469-486.
- Kavimäki, M., Vahtera, J., Thompson, L., Griffiths, A., Cox, T., & Pentti, J. (1997). Psychological factors predicting employee sickness absence during economic decline. *Journal of Applied Psychology, 82*(6), 858-872.
- Kerlinger, F.N. (1986). *Foundations of behavioural research*. (3rd ed.). New York: CBS Publishing Japan.
- Kerr, S., Schriesheim, C.A., Murphy, C.J., & Stogdill, T.M. (1974). Toward a contingency theory of leadership based upon the consideration and initiating structure literature. *Organisational Behaviour and Human Performance, 12*, 62-82.
- King, A., & Botha, D. (1997). Die organisatoriese determinante van beroepsbevrediging in maatskaplike werk. *The Social Work Practitioner-Researcher, 10*(2), 107-119.
- Kirkcaldy, B.D., Cooper, C.L., & Furnham, A.F. (1999). The relationship between Type A, internality-externality, emotional distress and perceived health. *Personality and Individual Differences, 26*(2), 223-235.
- Klarreich, S.H. (1988). *Work without stress: A practical guide to emotional and physical well-being on the job*. New York: Brunner/Mazel.
- Kleynhans, F.H. (1981). Motiveer die onderwyser. *NEON, 32*, 29-30.
- Kobasa, S.C. (1979). Stressful life events, personality and health: An inquiry into hardiness. *Journal of Personality and Social Psychology, 37*, 1-11.

- Lao, R. (1974). *The development trend of the locus of control*. Paper presented at the meeting of the American Psychological Association, New Orleans.
- Lasswell, H.D.M. (1948). *Morale*. In E.R.A. Seligman & A. Johnson. (Eds.), *Encyclopedia of the social sciences: Vol. 10* (pp. 640-642).
- Lawler, E.E. (1971). *Pay and organisational effectiveness: A psychological review*. New York: McGraw-Hill.
- Lawler, E.E., & Hall, D.T. (1970). Relationship of job characteristics to job involvement, satisfaction and intrinsic motivation. *Journal of Applied Psychology, 54*(4), 305-312.
- Lawrence, J.H. (1985). Developmental needs as intrinsic incentives. *New Directions for Higher Education, 51*, 59-68.
- Lazarus, R.S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer.
- Lee, C. (1990). Interactive effects of type A behaviour and perceived control on worker performance, job satisfaction, and somatic complaints. *The Academy of Management Journal, 33*, 870-881.
- Lee, C., & Bobko, P. (1994). Self-efficacy beliefs: Comparison of five measures. *Journal of Applied Psychology, 79*, 364-369.
- Lefcourt, H. (1982). *Locus of control: Current trends in theory and research*. New York: Wiley.
- Lent, R.W., Brown, S.D., & Larkin, K.C. (1987). Comparison of three theoretical derived variables in predicting career and academic behaviour: Self-efficacy, interest congruence, and consequence thinking. *Journal of Counselling Psychology, 34*, 293-298.
- Lester, P.E. (1987). Development and factor analysis of the teacher Job Satisfaction Questionnaire (TJSQ). *Educational and Psychological Measurement, 47*, 222-233.
- Levenson, H. (1972). *Distinctions within the concept of internal-external control*. Proceedings of the 80th Annual Convention of the American Psychological Association.
- Levin, I., & Stokes, J.P. (1989). Dispositional approach to job satisfaction: Role of negative affectivity. *Journal of Applied Psychology, 74*, 752-758.
- Lickert, R. (1961). *New patterns of management*. New York: McGraw-Hill.

- Locke, E.A. (1969). What is job satisfaction? *Organisational Behaviour and Human Performance*, 4, 309-336.
- Locke, E.A. (1973). Satisfiers and dissatisfiers among white collar and blue collar employees. *Journal of Applied Psychology*, 58, 67-76.
- Locke, E.A. (1976). The nature and causes of job satisfaction. In M.D. Dunnette (Ed.), *Handbook of industrial and organisational psychology* (pp. 1297-1349). Chicago, IL: Rand McNally.
- Locke, E.A. (1984). Job satisfaction. In M. Gruneberg & T. Wall (Eds.), *Social psychology and organisational behaviour* (pp. 93-117). London: Wiley.
- Locke, E.A., & Henne, D. (1986). Work motivation theories. In C.L. Cooper & I. Robertson (Eds.), *International review of industrial and organisational psychology* (pp. 1-35). London: Wiley.
- Locke, E.A., & Latham, G.P. (1990a). *A theory of goal setting and task performance*. Englewood Cliffs, NJ: Prentice Hall.
- Locke, E.A., & Latham, G.P. (1990b). Work motivation and satisfaction: Light at the end of the tunnel. *Psychological Science*, 1, 240-246.
- Lofquist, L.H., & Dawis, R.V. (1969). *Adjustment to work: A psychological view of man's problems in a work-orientated society*. New York: Appleton-Century-Crofts.
- Longenecker, J.G., & Pringle, C.D. (1984). *Management*. (6th ed.). Columbus, OH: Charles E. Merrill Publishing.
- Luthans, F. (1989). *Organisational behaviour*. (5th ed.). Singapore: McGraw-Hill.
- Luthans, F., Baack, D., & Taylor, L. (1987). Organisational commitment: Analysis of Antecedents. *Human Relations*, 40, 219-236.
- Lykken, D., & Tellegen, A. (1996). Happiness is a stochastic phenomenon. *Psychological Science*, 7, 186-189.
- Maddux, J.E. (1995). *Self-efficacy, adaptation, and adjustment: theory, research and application*. New York: Plenum Press.
- Mager, R.F. (1992). No self-efficacy, no performance. *Training*, 32-36.
- Mankayi, D.T. (1996). *An investigation into the relationship between satisfaction with life and sense of coherence amongst the unemployed*. Unpublished master's dissertation, University of Western Cape, Cape Town.

- Marais, C.P. (1997). *Salutogenesis as paradigm in change management*. Unpublished Master's thesis, University of South Africa, Pretoria.
- Marais, E.N., & Schepers, J.M. (1996). The effect of organisational restructuring on job satisfaction, career aspirations and stress levels of employees. *Journal of Industrial Psychology*, 22(3), 1-6.
- Maram, A., & Miller, K. (1998). An empirical assessment of the construct 'work locus of control'. *Journal of Industrial Psychology*, 24(3), 48-51.
- Markus, H. (1977). Self-schemata and processing information about the self. *Journal of Personality and Social Psychology*, 35, 63-78.
- Marriott, F.H.C. (1974). *The interpretation of multiple observations*. London: Academic Press.
- Maslow, A. (1974). A theory on human motivation. In V.H. Vroom & E.L. Deci (Eds.), *Management and motivation* (pp. 27-41). Great Britain: Penguin Education.
- Massie, J.L. (1971). *Essentials of management*. (2nd ed.). Englewood Cliffs, NJ: Prentice Hall.
- Mavuya, M.E. (1991). *Stressors and their work-related consequences among black managers*. Unpublished master's report, University of Cape Town, Department of Psychology.
- McAllister, J.C., Mackowiak, A.R., & Mackowiak, J.I. (1986). Professional staff management. In T.R. Brown & M.C. Smith (Eds.), *Handbook of institutional pharmacy* (pp. 212-219). Los Angeles: Williams & Wilkins.
- McClelland, D.C. (1961). *The achieving society*. New York: Harper and Row.
- McCormick, E.J., & Ilgen, D. (1981). *Industrial Psychology*. Englewood Cliffs, NJ: Prentice Hall.
- McCormick, J., & Solman, R. (1992). Teachers' attributions of responsibility for occupational stress and satisfaction: An organisational perspective. *Journal of Educational Studies*, 18(2), 201-222.
- McKenna, E., & Beech, N. (1995). *The essence of human resource management*. London: Prentice-Hall.

- Miller, J., & Rose, R. (1982). Family resemblance in locus of control: A twin-family study of the internal-external scale. *Journal of Personality and Social Psychology*, 42, 535-540.
- Mitchell, R.T., Smyser, C.M., & Weed, S.E. (1975). Locus of control: Supervision and work satisfaction. *The Academy of Management Journal*, 18, 623-631.
- Moore, D.S. (1995). *The basic practice of statistics*. New York: W.H. Freeman.
- Mouton, J., & Marais, H.C. (1992). *Basiese begrippe: Metodologie van die geesteswetenskappe*. Pretoria: RGN.
- Mukesh, D.B. (1990). *Job satisfaction among hospital pharmacists*. Unpublished doctoral thesis, University for Christian Higher Education, Potchefstroom.
- Mukheibir, S.C. (1994). *The relationship between sex role identity, locus of control and self-concept amongst adolescent females within a historically disadvantaged community*. Unpublished master's thesis, University of Stellenbosch, Stellenbosch.
- Newton, T., & Keenan, T. (1991). Further analysis of the dispositional argument in organisational behaviour. *Journal of Applied Psychology*, 76, 781-787.
- Niedinger, H. (1997). Self-efficacy and performance. *Tydskrif vir Dieetkunde en Huishoudkunde*, 25(1), 71-72.
- Noe, R.A., Hollenbeck, J.R., Gerhart, B., & Wright, P.M. (1994). *Human resource management: Gaining a competitive advantage*. Burr Ridge, IL: Richard D. Irwin.
- Nowicki, S., & Strickland, B. (1973). A locus of control scale for children. *Journal of Consulting and Clinical Psychology*, 40(1), 148-154.
- Nunnally, J. (1978). *Psychometric theory*. (2nd ed.). New York: Wiley.
- O'Quinn, K., & LoTempio, S. (1998). Job satisfaction and intentions to turnover in human services agencies perceived as stable or nonstable. *Perceptual and Motor Skills*, 86, 339-344.
- Oldham, G., Julik, C., Ambrose, M., Stepina, L., & Brand, J. (1986). Relations between job facet comparisons and employee relations. *Organisational Behaviour and Human Decision Processes*, 38, 28-47.
- Ommen, C.H. (1995). *The relationship between self-efficacy and locus of control in alcoholism*. Unpublished master's dissertation, Rand Afrikaans University, Johannesburg.

- Organ, D.W. (1995). The subtle significance of job satisfaction. In B.M. Staw (Ed.), *Psychological dimensions of organisational behaviour* (2nd ed., pp. 108-114). Englewood Cliffs, N.J: Prentice-Hall.
- Organ, D.W., & Greene, C.N. (1974). The perceived purposefulness of job behaviour: Antecedents and consequences. *The Academy of Management Journal*, 17, 69-77.
- Orpen, C. (1991). The Work Locus of Control Scale as a predictor of employee attitudes and behaviour: A validity study. *Psychological Studies*, 36, 67-69.
- Pedersen, N., Gatz, M., Plomin, R., Nesselroade, J., & McClearn, G. (1989). Individual differences in locus of control during the second half of the life span for identical and fraternal twins reared apart and reared together. *Journal of Gerontology*, 44, 100-105.
- Pfeffer, J. (1983). Organisational demography. *Research in Organisational Behaviour*, 5, 299-357.
- Phares, E.J. (1976). *Locus of control in personality*. Morris Town, NJ: General Learning Press.
- Pierce, J.L., & Dunham, R.B. (1987). Organisational commitment: Pre-employment propensity and initial work experiences. *Journal of Management*, 13, 163-178.
- Plug, C., Louw, D.A., Gouws, L.A., & Meyer, W.F. (1997). *Verklarende en vertalende sielkundewoordeboek*. Johannesburg: Heinemann.
- Porter, L.W., & Lawler, E.E. (1975). *Behaviour in organisations*. New York: McGraw-Hill.
- Porter, L.W., Lawler, E.E., & Hackman, J.R. (1975). *Behaviour in organisations*. New York: McGraw-Hill.
- Pretorius, M.D. (1996). *Die verband tussen leierskapstyl, werkstevredenheid en organisasie-verbondenheid in 'n hoëtegnologie organisasie*. Unpublished master's dissertation, Potchefstroom University for Christian Higher Education, Potchefstroom.
- Pritchard, R.D., Dunette, M.D., & Jorgenson, D.O. (1972). Effects of perception of equity and inequity on worker performance and satisfaction. [Monograph]. *Journal of Applied Psychology*, 56, 75-94.
- Pryer, M.W., & Distefano, M.K. (1971). Perception of leadership behaviour, job satisfaction, and internal-external control across three nursing levels. *Nursing Research*, 20, 524-537.

- Reeves, C. (1994). *The struggle to teach*. Johannesburg: SACCHED.
- Reyes, P., & Shin, H. (1995). Teacher commitment and job satisfaction: A causal analysis. *Journal of School Leadership, 5*, 22-39.
- Riggs, M.L., Warka, J., Babasa, B., Betancourt, R., & Hooker, S. (1994). Development and validation of self-efficacy and outcome expectancy scales for job-related applications. *Educational and Psychological Measurement, 54*, 793-802.
- Robbins, S.P. (1993). *Organisational behaviour concepts, controversies, and applications*. London: Prentice Hall.
- Robbins, S.P. (1996). *Organisational behaviour: Concepts, controversies and applications*. (7th ed.). Englewood Cliffs, NJ: Prentice Hall.
- Roberts, H.E., & Foti, R.J. (1998). Evaluating the interaction between self-leadership and work structure in predicting job satisfaction. *Journal of Business and Psychology, 12*(3), 257-267.
- Roberts, H.E., & Roseanne, F.J. (1998). Evaluating the interaction between self-leadership and work structure in predicting job satisfaction. *Journal of Business and Psychology, 12*(3), 257-267.
- Roethlisberger, F.J., & Dickenson, W.J. (1939). *Management and the worker*. Cambridge: Harvard University Press.
- Rothmann, S., & Agathagelou, A.M. (in press). Die verband tussen lokus van beheer en werkstevredenheid by senior polisiepersoneel. *Journal of Industrial Psychology*.
- Rotter, J.B. (1954). *Social learning and clinical psychology*. Englewood Cliffs, NJ: Prentice Hall.
- Rotter, J.B. (1966). Generalised expectancies for internal versus external control of reinforcement. *Psychological Monographs, 80* (No. 609).
- Rotter, J.B. (1975). Some problems and misconceptions related to the construct of internal versus external control of reinforcement. *Journal of Consulting and Clinical Psychology, 43*, 932-946.
- Rotter, J.B., Chance, J.E., & Phares, E.J. (1972). *Applications of a social learning theory of personality*. New York: Holt, Rinehart & Winston.

- Rousseau, D.M. (1977). Technological differences in job characteristics, employee satisfaction and motivation: A synthesis of job design research and sociotechnical systems theory. *Organisational Behaviour and Human Performance*, 19, 18-42.
- Runyan, K.E. (1973). Some interactions between personality variables and management style. *Journal of Applied Psychology*, 57, 288-294.
- Sadri, G., & Robertson, I.T. (1993). Self-efficacy and work-related behaviour: A review and meta-analysis. *Applied Psychology: An international Interview*, 42, 139-152.
- Salancik, G.R., & Pfeffer, J. (1978). A social information processing approach to job attitudes and task design. *Administrative Science Quarterly*, 23, 224-253.
- SAS INSTITUTE. (1996). *SAS users guide: Basics*. (6th ed.). Cary, NC: SAS Institute.
- Schafer, W.E., & McKenna, J.F. (1991). Perceived energy and stress resistance: A study of city managers. *Journal of Social Behaviour and Personality*, 271-282.
- Schappe, S.P. (1998). Understanding employee job satisfaction: the importance of procedural and distributive justice. *Journal of Business and Psychology*, 12(4), 493-503.
- Schepers, J.M. (1995). *Die lokus van beheer vraelys: Konstruksie en evaluering van 'n meetinstrument*. Johannesburg: RAU.
- Schepers, J.M. (1997). *The reliability and validity of the Minnesota Satisfaction Questionnaire*. Verbal communication with study leader.
- Schneier, C.J. (1990). *Sense of coherence and self-esteem as moderators in the relationship between job-related stressors and outcome in nurses*. Unpublished honours research project, University of Cape Town.
- Schouwstra, A.A. (1992). *Die verband tussen enkele eksterne werksfaktore en werkstevredenheid*. Unpublished master's thesis, Potchefstroom University for Christian Higher Education, Potchefstroom.
- Schunk, D.H. (1981). Modelling and attributional effects on children's achievements: A self-efficacy analysis. *Journal of Educational Psychology*, 73, 93-105.
- Schunk, D.H. (1983). Ability versus effort attributional feedback: Differential effects on self-efficacy and achievement. *Journal of Educational Psychology*, 75, 848-856.

- Schwoerer, C.E., & May, D.R. (1996). Age and work outcomes: The moderating effects of self-efficacy and tool design effectiveness. *Journal of Organisational Behaviour*, 17, 469-487.
- Seeman, M., & Seeman, T.E. (1983). Health behaviour and personal autonomy: A longitudinal study of the sense of control in illness. *Journal of Health and Social Behaviour*, 24, 144-160.
- Segaloe, S.S. (1991). *Sense of coherence as a moderator in the relationship between stressors and their work-related consequences among black public service personnel*. Unpublished master's research report, University of Cape Town, Department of Psychology.
- Sergiovanni, T.J. (1987). *The principalship: A reflective practice perspective*. Boston, MA: Allyn & Bacon.
- Sergiovanni, T.J., & Starratt, R.J. (1993). *Supervision: A redefinition*. New York: McGraw-Hill.
- Sherer, M., & Maddux, J.E. (1982). The self-efficacy scale: Construction and validation. *Psychological Reports*, 51, 663-671.
- Sherer, M., Maddux, J.E., Mercandante, B., Prentice-Dunn, S. Jacobs, B., & Rogers, R. (1982). The Self-Efficacy Scale construction and validation. *Psychological Reports*, 53, 899-902.
- Shore, L.M., & Tetrick, L.E. (1991). A construct validity study of the survey of perceived organisational support. *Journal of Applied Psychology*, 76, 637-643.
- Shreeve, W.C., Norby, J.R., Goeteer, G.J., Stueckle, A.F., Midgely, T.K., & Goetter, P.S. (1988). Job satisfaction: An imperative for the coming of teacher shortage. *Early Childhood Development and Care*, 36, 181-195.
- Smith, J.A., & Foti, R.J. (1998). A pattern approach to the study of leadership emergence. *Leadership Quarterly*, 9(2), 147-160.
- Smith, P.C. (1955). The prediction of individual differences in susceptibility to industrial monotony. *Journal of Applied Psychology*, 39, 322-329.
- Smith, P.C. (1985). *Global measures: Do we need them?* Paper presented at the meeting of the American Psychological Association, Los Angeles.

- Smith, P.C. (1992). In pursuit of happiness: Why study general job satisfaction? In C.J. Cranny, P.C. Smith & E.F. Stone (Eds.), *Job satisfaction: How people feel about their jobs and how it affects their performance* (pp. 5-19). New York: Macmillan.
- Smith, P.C., Kendall, L.M., & Hulin, C.L. (1969). *The measurement of satisfaction in work and retirement: A strategy for the study of attitudes*. Chicago: Rand McNally.
- Spector, P.E. (1982). Behaviour in organisations as a function of employee's locus of control. *Psychological Bulletin*, 9, 482-497.
- Spector, P.E. (1986). Perceived control by employees: A meta-analysis of studies concerning autonomy and participation at work. *Human Relations*, 39, 1005-1016.
- Spector, P.E. (1988). Development of the Work Locus of Control Scale. *Journal of Occupational Psychology*, 69, 335-340.
- Stajkovic, A.D., & Luthans, F. (1998). Social cognitive theory and self-efficacy: Going beyond traditional motivational and behavioural approaches. *Organisational Dynamics*, 26(4), 62-74.
- Staw, B.M., & Ross, J. (1985). Stability in the midst of change: A dispositional approach to job attitudes. *Journal of Applied Psychology*, 70, 469-480.
- Staw, B.M., Bell, N.E., & Clausen, J.A. (1986). The dispositional approach to job attitudes: A lifetime longitudinal test. *Administrative Science Quarterly*, 31, 56-77.
- Steel, R.P., & Rentsch, J.R. (1997). The dispositional model of job attitudes revisited: Findings of a 10-year study. *Journal of Applied Psychology*, 82(6), 873-879.
- Steers, R.M., & Porter, L.W. (1975). *Motivation and work behaviour*. New York: McGraw Hill.
- Steyn, A.G.W., Smit, C.F., Du Toit, S.H.C., & Strasheim, C. (1995). *Modern statistics in practice*. (5th ed.). Pretoria: J.L. van Schaik.
- Steyn, G.M. (1990). Enkele faktore in die onderwysstelsel wat die beroepsbevrediging van die onderwyser beïnvloed. *Tydskrif van Geesteswetenskappe*, 30(2), 145-154.
- Steyn, G.M., & Van Wyk, J.N. (1999). Job satisfaction: Perceptions of principals and teachers in urban black schools in South Africa. *South African Journal of Education*, 19(1), 37-44.
- Steyn, H.S. (1999). *Praktiese beduidendheid: Die gebruik van effekgroottes*. Potchefstroom: Potchefstroom University for Christian Higher Education.

- Stochdate, D., Galris, I., & Wolins, L. (1983). Co-operative –competitive preferences and behavioural correlates as a function of sex and age of school children. *Psychological Reports*, 53, 739-750.
- Stoner, J.A., & Freeman, R.E. (1992). *Management*. (5th ed.). Englewood Cliffs, NJ: Prentice Hall.
- Stoner, J.A.F., & Wankle, C. (1986). *Management*. Englewood Cliffs, NJ: Prentice Hall.
- Strümpfer, D.J.W. (1990). Salutogenesis: A new paradigm. *South African Journal of Psychology*, 20(4), 265-276.
- Strümpfer, D.J.W. (1995). The origins of health and strength: from 'salutogenesis' to 'fortigenesis'. *South African Journal of Psychology*, 25(2), 81-89.
- Strümpfer, D.J.W., & Louw, D.A. (1989). *Stress among farmworkers in Western Cape agribusiness organisations*. Paper presented at annual congress, South African Psychological Association, Durban, Kwazulu-Natal, South Africa.
- Strümpfer, D.J.W., Danana, N., Gouws, J.F., & Viviers, M.R. (1998). Personality dispositions and job satisfaction. *South African Journal of Psychology*, 28(2), 92-100.
- Strümpfer, D.J.W., Fritz, G., & Page, M.J. (1991). *Relationship of sense of coherence to health and work in data processing personnel*. Unpublished report, University of Cape Town, Department of Psychology.
- Stumpf, S.A., Brief, A.P., & Hartman, K. (1987). Self-efficacy expectations and coping with career-related events. *Journal of Vocational Behaviour*, 31, 91-108.
- Sutton, R., & Kahn, R.L. (1986). Prediction, understanding, and control as antidotes to organisational stress. In Lorch, J. (Ed.), *Handbook of organisational behaviour*. Englewood Cliffs, NJ: Prentice-Hall.
- Taylor, M.S., Locke, E.A., Lee, C., & Gist, M.E. (1984). Type A Behaviour and faculty research productivity: What are the mechanisms? *Organisational Behaviour and Human Decision Processes*, 34, 402-418.
- Teas, R.K. (1983). Supervisory behaviour, role stress and the job satisfaction of industrial salespeople. *Journal of Marketing Research*, 20, 84-91.
- Teas, R.K., & Horrel, J.F. (1981). Salespeople satisfaction and performance feedback. *Industrial Marketing Management*, 10, 49-57.

- Tetrick, L.E., & LaRocco, J.M. (1987). Understanding, prediction, and control as moderators of the relationships between perceived stress, satisfaction, and psychological well-being. *Journal of Applied Psychology*, (72)4, 538-541.
- Tipton, R.M. & Worthington, E.L. (1984). The measurement of generalised self-efficacy: A study of construct validity. *Journal of personality assessment*, 48, 545-548.
- Tomasko, R.M. (1990). *Downsizing: Reshaping the corporation for the future*. New York: AMACOM.
- Torrington, D., & Weightman, J. (1989). *The reality of school management*. England: Blackwell Education.
- Tosi, H.L., Rizzo, J.R., & Carrol, S.J. (1990). *Managing organisational behaviour*. (2nd ed.). New York, NJ: Harper Collins Publishers.
- Tsjovold, D. (1991). Foolproof your restructuring plan. *HR Magazine*, 79-83.
- Turner, A.N., & Miclette, A.L. (1962). Sources of dissatisfaction in repetitive work. *Occupational Psychology*, 36, 215-231.
- Van der Westhuizen, P.C. (1991). Educational management tasks. In P.C. van der Westhuizen (Ed.), *Effective educational management* (pp. 194-204). Pretoria: HAUM.
- Van Vuuren, S.M., & Schepers, J.M. (1993). Die konstruksie en evaluering van 'n werkstevredenheidvraelys vir predikante. *Journal of Industrial Psychology*, 19(1), 23-27.
- Visser, E. (1990). *Organisatoriese veranderlikes en lewenstyl as voorspellers van werkstevredenheid en -prestasie*. Unpublished master's thesis, University of the Orange Free State, Bloemfontein.
- Visser, P.J., Breed, M., & Van Breda, R. (1997). Employee satisfaction: A triangulation approach. *Journal of Industrial Psychology*, 23(2), 19-24.
- Vroom, V.H. (1964). *Work and motivation*. New York: Wiley.
- Wanous, J.P. (1974). A causal-correlational analysis of the job satisfaction and performance relationship. *Journal of Applied Psychology*, 59(2), 139-144.
- Wanous, J.P., & Lawler, E.E. (1972). Measurement and meaning of job satisfaction. *Journal of Applied Psychology*, 56, 95-107.

- Weiss, D.J., Dawis, R.V., England, G.W., & Lofquist, L.H. (1967). *Manual for the Minnesota Satisfaction Questionnaire*. Minneapolis, MN: University of Minnesota.
- Weiss, H.M., & Cropanzano, R. (1996). Affective events theory: A theoretical discussion of the structure, causes, and consequences of affective experiences at work. *Research in Organisational Behaviour, 18*, 1-74.
- Weitz, J. (1952). A neglected concept in the study of job satisfaction. *Personnel Psychology, 5*, 201-205.
- Werbel, J., Landau, J., & DeCarlo, T.E. (1996). The relationship of pre-entry variables to early employment organisational commitment. *Journal of Personal Selling and Sales Management, 2*, 25-36.
- Wesolowski, M.A., & Mossholder, K.W. (1997). Relational demography in supervisor-subordinate dyads: Impact on subordinate job satisfaction, burnout and perceived procedural justice. *Journal of Organisational Behaviour, 18*, 351-362.
- White, R.W. (1959). Motivation reconsidered: The concept of competence. *Psychological Review, 66*, 297-333.
- Wissing, M.P., & Van Eeden, C. (1997, July). *Facing the challenge to explicate mental health salutogenically: Sense of coherence and psychological well-being*. Paper presented at the 55th Annual Convention of the International Council of Psychology. Graz, Austria.
- Wood, R., & Bandura, A. (1989). Social cognitive theory of organisational management. *Academy of Management Review, 14*, 361-384.
- Wood, R.E., & Bandura, A. (1989). Impact of conceptions of ability on self-regulatory mechanisms and complex decision-making. *Journal of Personality and Social Psychology, 56*, 407-415.
- Wood, R.E., & Locke, E.A. (1987). The relation of self-efficacy and grade goals to academic performance. *Educational and Psychological Measurement, 47*, 1013-1024.
- Woodruff, S.L., & Cashman, J.F. (1993). Task domain and general efficacy: A re-examination of the self-efficacy scale. *Psychological reports, 72*, 423-432.

Xaba, M.I. (1996). *Factors influencing the job satisfaction of senior teachers in schools predominantly attended by black students*. Unpublished master's dissertation, Potchefstroom University for Christian Higher Education, Potchefstroom.

Appendix 1: The Measuring Battery

1. Minnesota-Tevredenheidsvraelys

Vorm A

Die doel van hierdie vraelys is om u die geleentheid te bied om te verduidelik hoe u omtrent u huidige werk voel, met watter sake u tevrede is, en met watter sake u ontevrede is.

Daar is nie regte of verkeerde antwoorde nie.

Op die volgende bladsye sal u vrae aangaande u huidige werk vind. U moet die antwoord op elke vraag op 'n sewepuntskaal aandui.

- ⇒ Lees elke vraag noukeurig.
- ⇒ Let op die verduidelikings aan die eindpunt van elke skaal en besluit dan waar op die skaal u respons sal val.
- ⇒ Maak 'n kruisie om die nommer op die skaal aan te dui wat u gevoelens die beste weergee.

Doen dieselfde t.o.v al die vrae en beantwoord asseblief elke item.

Wees openhartig en eerlik. Gee 'n getroue weerspieëling van u gevoelens aangaande u huidige werk.

Moenie te veel tyd aan enige spesifieke vraag bestee nie; u eerste spontane reaksie is gewoonlik die geldigste.

Werk so vinnig as wat u kan, aangesien u tyd beperk is.

NB. Die glossarium van terme is aangeheg om te raadpleeg in verband met moeilike of dubbelsinnige woorde of frases:

GLOSSARIUM

| | |
|-----------------------|--|
| "aan die gang" | besig wees |
| bevoegdheid | bekwaamheid |
| deleger | met 'n opdrag afvaardig, bevoegdhede oordra |
| gevoel van vervulling | gevoel van verwesenliking of voldoening |
| indruis | in stryd met |
| omvang van werk | inhoud van die werk; hoeveelheid van die werk |
| tegniese kennis | kennis ten opsigte van tegniese aspekte van die werk |
| tevrede | voldaan, genoegsaam, ingenome, vergenoegd |
| verantwoordelikheid | die verligting tot rekenskap |

ENGLISH ON THE NEXT PAGE

1. Minnesota Satisfaction Questionnaire

Form A

The purpose of this questionnaire is to give you a opportunity to explain **how you feel about your present job**, what things you are satisfied with and what things you are not satisfied with.

There are no right or wrong answers.

On the following pages you will find questions concernig your present job. Your are to record your answers to each question on a seven point scale.

- ⇒ Read each question carefully
- ⇒ Note the descriptions at the end points of each scale and then decide where on the scale to mark your response
- ⇒ Using a cross, mark the number on the scale that reflects your feeling

Do this for all questions. Please answer every item.

Be frank and honest. Give a true reflection of your feelings concerning your present job.

Do not spend too much time on any particular question, rather be spontaneous by giving your first response to each question.

Work as quickly as you can, as you have limited time.

NB. The glossary of terms is attached for referral concerning difficult or ambigious words or frases.

GLOSSARY

| | |
|---------------------------|--|
| delegates | assign work to someone |
| feeling of accomplishment | feeling of achievement or fulfilment |
| "on the go" | busy |
| responsibility | being responsible or anserable for |
| "rub elbows" | work together with |
| satisfaction | contentment, well-being, gratification, acceptableness |
| satisfy | meeting your wishes or expectations |
| suited to | fits, compatible with, match |
| surroundings | enviroment |
| technical "know how" | technical knowledge |

1. In watter mate is u tevrede met die geleentheid om ander tot diens te wees?
To what extent are you satisfied with your opportunity to be of service to others?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

2. In watter mate is u tevrede met die geleentheid om sommige van u eie idees op proef te stel?
To what extent are you satisfied with your opportunity to try out some of your own ideas?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

3. In watter mate is u ontevrede omdat u meen u werk is moreel verkeerd?
To what extent are you dissatisfied because you feel your job is morally wrong?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

4. In watter mate is u tevrede met die geleentheid om selfstandig te werk?
To what extent are you satisfied with the opportunity you have to work by yourself?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

5. In watter mate is u ontevrede met die verskeidenheid van u werk?
To what extent are you dissatisfied with the variety in your work?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

6. In watter mate is u tevrede met die feit dat ander werkers na u opsien om leiding?
To what extent are you satisfied with your opportunity to have other workers look to you for direction?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

7. In watter mate is u tevrede met die geleentheid om werk te doen waarin u u bes kan lewer?
To what extent are you satisfied with your opportunity to do the kind of work you do best?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

8. In welke mate is u ontevrede met die sosiale posisie in die gemeenskap wat met u werk gepaard gaan?
To what extent are you dissatisfied with the social position in the community that goes with your job?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

9. Wat is u graad van tevredenheid aangaande die beleid en praktyke van die maatskappy jeens die werknemers?
What is your degree of satisfaction concerning the policies and practices of your company towards its employees?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Baie laag
Very low

Baie hoog
Very high

10. Wat is u graad van ontevredenheid met die mate van begrip tussen u en u toesighouer?
What is your degree of dissatisfaction with the way you and your supervisor understand each other?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Baie laag
Very low

Baie hoog
Very high

11. In watter mate is u ontevrede met u werksekuriteit?
To what extent are you dissatisfied with your job security?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

12. Wat is u graad van tevredenheid ten opsigte van die salaris wat u ontvang vir die werk wat u doen?
What is your degree of satisfaction with the amount of pay that you receive for the work you do?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Baie laag
Very low

Baie hoog
Very high

13. Wat is u graad van ontevredenheid met werksomstandighede in u organisasie (bv. verhitting, beligting, ventilasie ens.)?
What is the degree of your dissatisfaction with the working conditions in your company (i.e. heating, lighting, ventilation, etc.)?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Baie laag
Very low

Baie hoog
Very high

14. In welke mate is u tevrede met die geleenthede vir vordering in u werk?
To what extent are you satisfied with your opportunities for advancement in your work?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

15. Wat is die graad van tevredenheid met u toesighouer se tegniese kennis?
What is your degree of satisfaction with your supervisor's technical "know how"?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Baie laag
Very low

Baie hoog
Very high

16. In watter mate is u ontevrede met die gees van samewerking onder u kollegas?
To what extent are you dissatisfied with the spirit of cooperation among your co-workers?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

17. In watter mate is u tevrede met die geleentheid om vir die beplanning van u eie werk verantwoordelik te wees?
To what extent are you satisfied with your opportunity to be responsible for planning your work?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

18. Wat is die graad van u tevredenheid aangaande die wyse waarop daar van u kennis geneem word wanneer u goeie werk verrig?
What is the degree of your satisfaction concerning the way you are noticed when you do a good job?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Baie laag
Very low

Baie hoog
Very high

19. In welke mate is u tevrede om resultate te kan sien ten opsigte van die werk wat u doen?
To what extent are you satisfied with being able to see the results of the work you do?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

20. Wat is u graad van ontevredenheid met die geleentheid om die meeste van die tyd aktief te wees?
What is your degree of dissatisfaction with your opportunity to be active most of the time?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Baie laag
Very low

Baie hoog
Very high

21. Wat is u graad van ontevredenheid met die geleentheid om ander mense tot diens te wees?
What is the degree of dissatisfaction with your opportunity to be of service to people?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Baie laag
Very low

Baie hoog
Very high

22. In watter mate is u tevrede met die geleentheid om nuwe en oorspronklike dinge selfstandig te doen?
To what extent are you satisfied with your opportunity to do new and original things on your own?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

23. In watter mate is u daarmee tevrede om dinge te doen wat nie indruis teen u godsdienstige oortuigings nie?
To what extent are you satisfied with being able to do things that don't go against your religious beliefs?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

24. Wat is die graad van u tevredenheid met die geleentheid om u werk alleen te doen?
What is the degree of your satisfaction with your opportunity to work alone on the job?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Baie laag
Very low

Baie hoog
Very high

25. Wat is die graad van u ontevredenheid met die geleentheid om van tyd tot tyd verskillende dinge te doen?
What is the degree of your dissatisfaction with your opportunity to do different things from time to time?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Baie laag
Very low

Baie hoog
Very high

26. Wat is die graad van u ontevredenheid met die geleentheid om aan ander werkers voor te skryf hoe om dinge te doen?
What is the degree of your dissatisfaction with your opportunity to tell other workers how to do things?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

27. Wat is u graad van ontevredenheid met die geleentheid om werk te doen wat by u vermoëns pas?
What is your degree of dissatisfaction with your opportunity to do work that is well suited to your abilities?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Baie laag
Very low

Baie hoog
Very high

28. Wat is die graad van u tevredenheid met die geleentheid om "iemand" in die samelewing te wees?
What is the degree of your satisfaction with your opportunity to be "somebody" in the community?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Baie laag
Very low

Baie hoog
Very high

29. Wat is die graad van u ontevredenheid met maatskappybeleid en die manier waarop dit toegepas word?
What is your degree of dissatisfaction with company policies and the way in which they are administered?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Baie laag
Very low

Baie hoog
Very high

30. In watter mate is u tevrede met die wyse waarop u werkgever sy personeel behandel?
To what extent are you satisfied with the way your boss manages his people?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

31. Wat is u graad van tevredenheid met die wyse waarop u werk vir sekuriteit in die toekoms voorsiening maak?

What is your degree of satisfaction with the way your job provides for a secure future?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Baie laag
Very low

Baie hoog
Very high

32. In welke mate is u tevrede met die geleentheid om net soveel geld as u vriende te verdien?

To what extent are you satisfied with your opportunity to make as much money as your friends?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

33. Wat is die graad van u ontevredenheid met die fisiese omgewing waarin u werk?

What is the degree of your dissatisfaction with the physical surroundings that you work in?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Baie laag
Very low

Baie hoog
Very high

34. In watter mate is u tevrede met die geleentheid om vooruit te kom in hierdie werk?

To what extent are you satisfied with your chances of getting ahead on this job?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

35. In watter mate is u ontevrede met die bevoegdheid van u toesighouer om besluite te neem?

To what extent are you dissatisfied with the competence of your supervisor in making decisions?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

36. Wat is u graad van tevredenheid met die geleentheid om hegte vriendskappe met u kollegas te ontwikkel?

What is the degree of your satisfaction with your opportunity to develop close friendships with your co-workers?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Baie laag
Very low

Baie hoog
Very high

37. In watter mate is u tevrede met die geleentheid om u eie besluite te neem?

To what extent are you satisfied with your opportunity to make decisions on your own?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

38. Wat is die graad van u tevredenheid met die manier waarop u volle erkenning kry vir die werk wat u doen?

What is the degree of your satisfaction with the way you get full credit for the work you do?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Baie laag
Very low

Baie hoog
Very high

39. In watter mate is u tevrede om trots te wees op 'n taak wat goed verrig is?

To what extent are you satisfied with being able to take pride in a job well done?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

40. In watter mate is u ontevrede om nie die meeste van die tyd iets te doen nie?

To what extent are you dissatisfied with not being able to do something most of the time?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

41. In watter mate is u ontevrede met die geleentheid om ander mense te help?
To what extent are you dissatisfied with your opportunity to help people?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

42. In watter mate is u ontevrede met u geleentheid om iets anders te probeer doen?
To what extent are you dissatisfied with your opportunity to try something different?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

43. In watter mate is u tevrede om dinge te doen wat nie teen u gewete indruis nie?
To what extent are you satisfied with being able to do things that don't go against your conscience?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

44. In watter mate is u ontevrede met die geleentheid om alleen te werk?
To what extent are you dissatisfied with your opportunity to be alone on the job?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

45. In watter mate is u ontevrede met die roetine in u werk?
To what extent are you dissatisfied with the routine in your work?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

46. In watter mate is u tevrede met die geleentheid om oor ander mense toesig te hou?
To what extent are you satisfied with your opportunity to supervise other people?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

47. In watter mate is u tevrede met die geleentheid om van u beste vermoëns gebruik te maak?
To what extent are you satisfied with your opportunity to make use of your best abilities?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

48. In watter mate is u tevrede met die geleentheid om met belangrike mense saam te werk?
To what extent are you satisfied with your opportunity to "rub elbows" with important people?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

49. Wat is die graad van u ontevredenheid met die manier waarop werknemers aangaande maatskappybeleid ingelig word?
What is the degree of your dissatisfaction with the way employees are informed about company policy?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Baie laag
Very low

Baie hoog
Very high

50. In watter mate is u ontevrede met die wyse waarop u toesighouer sy mense by topbestuur ondersteun?
To what extent are you dissatisfied with the way your boss backs his men up with top management?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

51. In watter mate is u tevrede met die manier waarop daar in u pos vir werksekuriteit voorsiening gemaak word?
To what extent are you satisfied with the way your job provides for steady employment?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

52. Wat is die graad van u ontevredenheid met hoe u salaris met dié van gelyksoortige poste in ander firmas vergelyk?
What is the degree of your dissatisfaction with the way your pay compares with that of similar jobs in other companies?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Baie laag
Very low

Baie hoog
Very high

53. In watter mate is u tevrede met u aangename werksomstandighede?
To what extent are you satisfied with the pleasantness of your working conditions?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

54. Wat is u graad van ontevredenheid met die wyse waarop bevordering in hierdie werk geskied?
What is your degree of dissatisfaction with the way promotions are given out on this job?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Baie laag
Very low

Baie hoog
Very high

55. Wat is u graad van ontevredenheid met die wyse waarop u toesighouer werk aan ander delegeer?
What is your degree of dissatisfaction with the way your boss delegates work to others?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Baie laag
Very low

Baie hoog
Very high

56. In welke mate is u ontevrede met die vriendelikheid van u kollegas?
To what extent are you dissatisfied with the friendliness of your co-workers?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

57. In watter mate is u tevrede om vir ander se werk verantwoordelik te wees?
To what extent are you satisfied with your opportunity to be responsible for the work of others?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very low

Meerdere mate
Very high

58. Wat is die graad van u ontevredenheid oor die erkenning wat u kry vir werk wat u gedoen het?
What is the degree of your dissatisfaction with the recognition you get for the work you do?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Baie laag
Very low

Baie hoog
Very high

59. Wat is u graad van tevredenheid ten opsigte van die feit dat u in staat is om iets te doen wat die moeite werd is?
What is your degree of satisfaction with being able to do something worthwhile?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Baie laag
Very low

Baie hoog
Very high

60. In watter mate is u tevrede om besig te kan bly?
To what extent are you satisfied with being able to stay busy?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

61. In welke mate is u ontevrede met u geleentheid om dinge vir ander mense te doen?
To what extent are you dissatisfied with your opportunity to do things for other people?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

62. Wat is die graad van u ontevredenheid met die kans om nuwe en beter maniere te ontwikkel om u werk te verrig?
What is the degree of your dissatisfaction with your opportunity to develop new and better ways to do this job?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Baie laag
Very low

Baie hoog
Very high

63. In watter mate is u tevrede met die geleentheid om dinge te doen wat ander nie skade kan berokken nie?
To what extent are you satisfied with your opportunity to do things that don't harm other people?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

64. In watter mate is u tevrede met die geleentheid om onafhanklik van ander te kan werk?
To what extent are you satisfied with your opportunity to work independently of others?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

65. Wat is die graad van u tevredenheid met die kans om elke dag iets anders te doen?
What is the degree of your satisfaction with your opportunity to do something different every day?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Baie laag
Very low

Baie hoog
Very high

66. Wat is die graad van u tevredenheid met die geleentheid om aan ander te sê wat om te doen?
What is the degree of your satisfaction with your opportunity to tell people what to do?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Baie laag
Very low

Baie hoog
Very high

67. In watter mate is u ontevrede met die kans om iets te doen wat die gebruik van u vermoëns verg?
To what extent are you satisfied with your opportunity to do something that makes use of your abilities?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

68. In watter mate is u ontevrede met die kans om in die oë van ander mense belangrik te wees?
To what extent are you dissatisfied with your opportunity to be important in the eyes of others?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

69. Wat is u graad van tevredenheid aangaande die wyse waarop maatskappybeleid in die praktyk toegepas word?
What is your degree of satisfaction regarding the way company policies are put into practice?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Baie laag
Very low

Baie hoog
Very high

70. Wat is u graad van tevredenheid met die wyse waarop u werkgever klagtes van werknemers hanteer?
What is your degree of satisfaction with the way your boss takes care of complaints brought to him by his men?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Baie laag
Very low

Baie hoog
Very high

71. In watter mate is u ontevrede aangaande die standvastigheid van u eie pos?
To what extent are you dissatisfied concerning the steadiness of your job?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

72. In watter mate is u ontevrede met u salaris en die omvang van die werk wat u doen?
To what extent are you dissatisfied with your pay and the amount of work you do?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

73. Wat is die graad van u ontevredenheid met u fisiese werksomstandighede?
What is your degree of dissatisfaction with the physical working conditions of the job?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Baie laag
Very low

Baie hoog
Very high

74. In watter mate is u ontevrede met die geleenthede om in u huidige pos vooruit te kom?
To what extent are you dissatisfied with your chances for advancement on this job?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

75. Wat is u graad van ontevredenheid ten opsigte van die wyse waarop u toesighouer hulp met moeilike probleme verleen?
What is your degree of dissatisfaction with the way your boss provides help on difficult problems?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Baie laag
Very low

Baie hoog
Very high

76. In watter mate is u ontevrede met die gemak waarmee u met kollegas vriende kan maak?
To what extent are you dissatisfied with the way your co-workers are easy to make friends with?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

77. In welke mate is u tevrede met die vryheid om u eie oordeel te gebruik?
To what extent are you satisfied with your freedom to use your own judgement?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

78. In watter mate is u tevrede met die manier waarop meegedeel word dat u u werk goed doen?
To what extent are you satisfied with the way they usually tell you when you do your job well?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

79. In watter mate is u ontevrede met die geleentheid om te alle tye u bes te lewer?
To what extent are you dissatisfied with your opportunity to do your best at all times?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

80. In watter mate is u ontevrede met die kans om gedurig "aan die gang" te bly?
To what extent are you dissatisfied with your opportunity to be "on the go" all the time?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

81. In watter mate is u tevrede met die geleentheid om ander persone tot diens te wees, al is dit gering?
To what extent are you satisfied with your opportunity to be of some small service to other people?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

82. In watter mate is u ontevrede met die geleentheid om u eie metodes in u werk toe te pas?
To what extent are you dissatisfied with your opportunity to try your own methods of doing the job?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

83. In watter mate is u tevrede om u werk te doen sonder dat u voel dat u iemand verkul?
To what extent are you satisfied with your opportunity to do the job without feeling that you are cheating anyone?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

84. In watter mate is u ontevrede met die kans om alleen te werk, weg van ander?
To what extent are you dissatisfied with your opportunity to work away from others?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

85. Wat is u graad van tevredenheid met die geleentheid om baie verskillende dinge in u werk te kan doen?
What is your degree of satisfaction with your opportunity to do many different things on the job?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Baie laag
Very low

Baie hoog
Very high

86. In watter mate is u ontevrede om aan ander voor te skryf wat om te doen?
To what extent are you dissatisfied with your opportunity to tell others what to do?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

87. In watter mate is u ontevrede met die geleentheid om u vermoëns en vaardighede te gebruik?
To what extent are you dissatisfied with your opportunity to make use of your abilities and skills?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Baie laag
Very low

Baie hoog
Very high

88. Wat is u graad van tevredenheid met u kans om 'n besliste plek in die gemeenskap vol te staan?
What is the degree of your satisfaction with your opportunity to have a definite place in the community?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Baie laag
Very low

Baie hoog
Very high

89. Wat is die graad van u tevredenheid aangaande die wyse waarop die organisasie sy werknemers behandel?
What is the degree of your satisfaction regarding the way the company treats its employees?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Baie laag
Very low

Baie hoog
Very high

90. Wat is u graad van ontevredenheid met die persoonlike verhouding wat u toesighouer met sy ondergeskiktes het?
What is your degree of dissatisfaction with the personal relationship between your boss and his personnel?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Baie laag
Very low

Baie hoog
Very high

91. In watter mate is u ontevrede met die wyse waarop afbetalings en oorplasinge in u werk vermy word?
To what extent are you dissatisfied with the way layoffs and transfers are avoided in your jobs?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

92. Wat is u graad van tevredenheid met hoe u salaris met dié van ander kollegas vergelyk?
What is your degree of satisfaction concerning how your pay compares with that of other workers?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Baie laag
Very low

Baie hoog
Very high

93. Wat is u graad van ontevredenheid met u werksomstandighede?
What is the degree of your dissatisfaction with your working conditions?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Baie laag
Very low

Baie hoog
Very high

94. In watter mate is u ontevrede met u kans op bevordering?
To what extent are you dissatisfied with your chances for advancement?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

95. Wat is u graad van tevredenheid met die wyse waarop u toesighouer sy personeel oplei?
What is your degree of satisfaction with the way your boss trains his personnel?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Baie laag
Very low

Baie hoog
Very high

96. Wat is u graad van tevredenheid met die wyse waarop u kollegas met mekaar oor die weg kom?
What is your degree of satisfaction with the way your co-workers get along with each other?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Baie laag
Very low

Baie hoog
Very high

97. Wat is u graad van tevredenheid met die verantwoordelikheid wat u pos behels?
What is your degree of satisfaction with your responsibility for your job?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Baie laag
Very low

Baie hoog
Very high

98. In watter mate is u tevrede met die lof wat u kry as u 'n taak goed verrig het?
To what extent are you satisfied with the praise your get for doing a good job?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

99. In watter mate is u tevrede met die gevoel van vervulling wat u in u werk ervaar?
To what extent are you satisfied with your feeling of accomplishment you get from your job?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

100. In watter mate is u ontevrede omdat u nie in staat is om die hele tyd besig te bly nie?
To what extent are you dissatisfied with not being able to keep busy all the time?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Mindere mate
Very little

Meerdere mate
Very much

Vraelys/Questionnaire 2

OLQ - Antonovsky

Instruksies:

Hier volg 'n reeks vrae wat verband hou met verskillende aspekte van ons lewens. Elke vraag het sewe moontlike antwoorde. Merk asseblief met 'n kruisie (X) die nommer wat aandui tot watter mate die stelling op jou van toepassing is. Let op dat die nommer 1 en 7 uiterstes op die kontinuum aandui, terwyl nommer 4 telkens aandui dat beide stellings in gelyke mate op jou van toepassing is. Indien die beskrywing onder nommer 1 jou antwoord verteenwoordig merk dan nommer 1, en indien die antwoord onder nommer 7 jou antwoord verteenwoordig, merk dan nommer 7. Indien jy voel dat een van die ander nommers op jou van toepassing is, toon dit aan. Merk asseblief net een nommer per vraag.

Instructions:

Here is a series of questions relating to various aspects of our lives. Each question has seven possible answers. Please indicate with a cross (X) the number which best expresses the extent to which the statement are applicable to you. Note that number 1 and 7 are the extreme answers, while number 4 means that both statements are equally applicable to you. If the words under 1 are right for you, mark 1; if the words under 7 are right for you, mark 7. If you feel differently, mark the number which best expresses your feeling. Please give only one answer to each question.

1. Wanneer jy met mense kommunikeer, kry jy die gevoel dat hulle jou nie verstaan nie?
When you talk to people, do you have the feeling that they don't understand you?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Kry nooit die gevoel nie
Never have this feeling

Kry altyd die gevoel
Always have this feeling

2. Wanneer jy tevore iets moes doen wat afhanklik was van ander mense se samewerking, het jy die gevoel gekry dat dit:
In the past, when you had to do something which depended upon co-operation with others, did you have the feeling that it:

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Verseker nie gedoen sal word nie
Surely wouldn't get done

Verseker gedoen sal word
Surely would get done

3. Dink aan die mense met wie jy daaglik in aanraking kom, afgesien van die persone teenoor wie jy die naaste voel. Hoe goed ken jy die meeste van hulle?
Think of all the people with whom you come into contact daily, apart from the ones to whom you feel closest. How well do you know most of them?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Jy voel dat hulle vreemdelinge is
You feel that they are strangers

Jy ken hulle baie goed
You know them very well

4. Het jy die gevoel dat jy nie regtig omgee wat om jou aangaan nie?
Do you have the feeling that you don't really care about what goes on around you?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Baie selde of nooit
Very seldom or never

Baie dikwels
Very often

5. Het dit al voorheen gebeur dat jy verras is deur die gedrag van mense wie jy gedink het jy goed ken?
Has it happened in the past that you were surprised by the behavior of people whom you thought you know well?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Het nog nooit gebeur nie
Never happened

Gebeur altyd
Always happened

6. Het dit al gebeur dat mense op wie jy staat gemaak het, jou teleurgestel het?
Has it happened that people whom you counted on disappointed you?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Het nog nooit gebeur nie
Never happened

Gebeur altyd
Always happened

7. Die lewe is:
Life is:

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Baie interessant
Full of interest

Slegs roetine
Complete routine

8. Tot nou toe het jou lewe:
Until now your life has had:

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Geen duidelike doelwitte of sin
gehad nie
No clear goals or purpose

Duidelike doelwitte gehad en
is dit sinvol
Very clear goals and purpose

9. Kry jy die gevoel dat jy onregverdig behandel word?
Do you have the feeling that you are being treated unfairly?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Baie dikwels
Very often

Baie selde of nooit
Very seldom or never

10. In die afgelope tien jaar was jou lewe:
In the past ten years your life has been:

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Vol veranderinge sonder dat jy geweet
het wat volgende gaan gebeur
*Full of changes without you
knowing what will happen next*

Totaal konsekwent en duidelik
Completely consistent and clear

11. Die meeste van die dinge wat jy in die toekoms gaan doen, sal waarskynlik:
Most of the things you do in the future will probably be:

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Totaal fassinerend wees
Completely fascinating

Tot die dood toe vervelig wees
Deadly boring

12. Kry jy die gevoel dat jy in 'n onbekende situasie is en nie weet wat om te doen nie?
Do you have the feeling that you are in an unfamiliar situation and don't know what to do?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Baie dikwels
Very often

Baie selde of nooit
Very seldom or never

13. Wat is die mees gepaste beskrywing van hoe jy die lewe sien?
What best describes how you see life?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

'n Mens kan altyd 'n oplossing vir
pynlike gebeure in die lewe vind
*One can always find a solution
to painful things in life*

Daar is geen oplossing vir
pynlike gebeure in die lewe nie
*There is no solution to painful
things in life*

14. Wanneer jy aan jou lewe dink, dink jy dikwels:
When you think about your life, you very often:

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Hoe goed dit is om te lewe
Feel how good it is to be alive

Dat jy nie weet waarom jy lewe nie
Ask yourself why you exist at all

15. Wanneer jy voor 'n moeilike probleem te staan kom, is die keuse van 'n oplossing:
When you face a difficult problem, the choice of a solution is:

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Altyd verwarrend en moeilik
om te vind
Always confused and hard to find

Altyd volkome duidelik
Always completely clear

16. Jou daaglikse take is vir jou:
Doing things you do every day is:

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

'n Bron van groot plesier en bevrediging
A source of deep pleasure and satisfaction

'n Bron van pyn en verveling
A source of pain and boredom

17. Jou lewe vorentoe sal waarskynlik:
Your life in the future will probably be:

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Vol veranderinge wees sonder dat jy weet wat volgende gaan gebeur
Full of changes without you knowing what will happen next

Volkome konsekwent en duidelik wees
Completely consistent and clear

18. Wanneer 'n onaangename ondervinding in die verlede plaasgevind het, was jy geneig om:
When something unpleasant happened in the past, your tendency was:

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Toe te laat dat dit jou hewig ontstel
"To eat yourself up" about it

Te sê: "dit het nou gebeur. Ek sal maar net daarmee moet saamleef"
To say "OK, that's that. I have to live with it"

19. Het jy baie deurmekaar en verwarrende gevoelens en idees?
Do you have very mixed-up feelings and ideas?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Baie dikwels
Very often

Baie selde of nooit
Very seldom or never

20. Wanneer jy iets doen wat jou goed laat voel:
When you do something that gives you a good feeling:

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Is jy seker dat die gevoel sal voortduur
It's certain that you'll go on feeling good

Is jy seker dat iets sal gebeur wat die gevoel sal bederf
It's certain that something will happen to spoil the feeling

21. Gebeur dit dat jy gevoelens beleef wat jy eerder nie wil beleef nie?
Does it happen that you have feelings inside, that you would rather not feel?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Baie dikwels
Very often

Baie selde of nooit
Very seldom or never

22. Jy voorpel dat jou persoonlike lewe in die toekoms:
You anticipate that your personal life in the future will be:

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Heeltemal sonder sin of doel
 gaan wees
*Totally without meaning or
 purpose*

Vol betekenis en doelgerig gaan
 wees
Full of meaning and purpose

23. Dink jy dat daar in die toekoms altyd mense sal wees op wie jy kan staat maak?
Do you think that there will always be people whom you'll be able to count on in the future?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Jy is seker daar sal altyd wees
You are certain there will be

Dit is te betwyfel of daar altyd sal wees
You doubt there will always be

24. Kry jy die gevoel dat jy nie presies weet wat in die onmiddellike toekoms gaan gebeur nie?
Does it happen that you have the feeling that you don't know exactly what's about to happen?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Baie dikwels
Very often

Baie selde of nooit
Very seldom or never

25. Baie mense – selfs dié met die 'n sterk persoonlikheid – voel soms soos verloorders in sekere situasies. Hoe dikwels in die verlede het jy al so gevoel?
Many people – even those with a strong character – sometimes feel like losers in certain situations. How often have you felt this way in the past?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Nooit
Never

Baie dikwels
Very often

26. Wanneer iets gebeur het, het jy gewoonlik gevind dat:
When something happened, have you generally found that:

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Jy die belangrikheid daarvan oor- of onderskat het
You overestimated or underestimated its importance

Jy dit in die regte perspektief gesien het
You saw it in the right proportion

27. Wanneer jy dink aan probleme wat jy moontlik sal teëkom wat belangrike aspekte van jou lewe raak, kry jy die gevoel dat:
When you think of difficulties you are likely to face in important aspects of your life, do have the feeling that:

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Jy die probleme altyd suksesvol sal kan hanteer
You will always succeed in overcoming the difficulties

Jy nie die probleme suksesvol sal kan hanteer nie
You won't succeed in overcoming the difficulties

28. Hoe dikwels kry jy die gevoel dat daar weinig sin is in dié dinge wat jy in jou daaglikse lewe doen?
How often do you have the feeling that there's little meaning in the things you do in your daily life?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Baie dikwels
Very often

Baie selde of nooit
Very seldom or never

29. Hoe dikwels het jy gevoelens wat jy nie seker is of jy dit kan beheer nie?
How often do you have feelings that you're not sure that you can keep under control?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Baie dikwels
Very often

Baie selde of nooit
Very seldom or never

Vraelys/Questionnaire 3

(Schepers)

Instruksies:

Hierdie vraelys handel oor verskeie faktore en omstandighede, wat tot 'n mindere of meerdere mate 'n invloed op ons gedrag uitoefen. Onthou dat daar geen regte of verkeerde antwoorde op die vrae is nie. Ons wil 'n bepaling maak van hoe die verskillende faktore en omstandighede 'n invloed uitoefen, op u beoordeling en besluitneming van sake.

Lees elke vraag versigtig deur en besluit dan of die faktor/omstandigheid waarna daar verwys word 'n invloed op u gedrag sal hê of nie. Neem kennis van die beskrywings aan die eindpunte van die sewepuntskaal wat by elke vraag (item) voorkom. Bepaal dan waar in die skaal om u respons te merk.

Merk asseblief u antwoord, deur in die toepaslike blokkie 'n kruis (X) te trek. Hierdeur gee u 'n aanduiding van hoe sterk u voel rondom die bepaalde saak.

Moenie te lank nadink oor 'n bepaalde item nie. U laaste spontane reaksie is gewoonlik die mees betroubaarste. Maak asseblief seker dat u alle vrae beantwoord het.

Instructions:

The questionnaire deals with a variety of factors and circumstances which to a greater or lesser extent may influence your behavior. Remember that there are no right or wrong answers to the questions. We merely want to determine how the different factors and circumstances will influence your judgement and decisions on matters.

Read each question carefully and then decide whether the factor or circumstance, which is referred to will influence your behaviour or not. Note the descriptions at the end-points of the seven-point scale which follows each question (item) and then decide where in the scale to place your response. Mark the applicable space with a cross (X) on the scale.

Do not ponder too long over any one item. Your last spontaneous reaction is normally the most reliable. Ensure that you answer all the questions.

1. Tot watter mate betwyfel u u eie vermoëns, indien u werk gekritiseer sou word?
To what extent do you doubt your own capabilities when your work is being criticised?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Tot 'n groot mate
To a great extent

2. Hoe sterk is u daarop ingestel om te verseker dat u saak wen tydens 'n konfliktsituasie?
How strongly are you geared towards ensuring that your case triumphs during a conflict situation?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Baie sterk
Very strongly

3. Hoe gereeld is u bereid om risiko's te neem?
How readily would you take risks?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Baie gereelik
Very readily

4. Hoe sterk is u daarvan oortuig dat 'n persoon sonder geld nêrens sal kom nie – ongeag hoe hard hy/sy werk?
How strongly are you convinced that a person without money will get nowhere, no matter how hard he/she works?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Not at all
Glad nie

Very strongly
Baie sterk

5. Hoe gereelik kan u iemand anders oortuig van u standpunt?
How readily can you convince someone else of your viewpoint?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Baie gereelik
Very readily

6. Hoe sterk is u daarvan oortuig dat persoonlike insig 'n voorvereiste is vir goeie, interpersoonlike verhoudings?
How strongly are you convinced that personal insight is 'n prerequisite for good interpersonal relationships?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Baie sterk
Very strongly

7. Tot watter mate behoort die struktuur /roetine van 'n persoon se werk bepaal te word deur homself/haarself?
To what extent should the structure and routine of a person's work be determined by himself/herself?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Tot 'n groot mate
To a great deal

8. Hoe gereedlik is u bereid om verantwoordelikheid te aanvaar vir foute wat in u werk voorkom?
How readily do you accept responsibility for mistakes that appear in your work?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Baie gereedlik
Very readily

9. Hoe dikwels gebeur dit dat persone goeie posisies beklee, bloot omdat hulle die regte mense ken?
How often does it happen that people obtain good positions simply because they know the right people?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Bykans nooit
Hardly ever

Baie dikwels
Very often

10. Tot watter mate is u oortuig daarvan dat sukses hoofsaaklik verband hou met 'n persoon se vermoëns en toewyding?
To what extent are you convinced that success is mainly related to a person's ability and dedication?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Baie sterk
Very strongly

11. Hoe sterk is u daarvan oortuig dat indien u eenmaal misluk het met 'n saak, dit bykans onmoontlik is om weer sukses daarin te behaal?
How strongly are you convinced that once you have failed at something, it is virtually impossible to achieve in it again?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Baie sterk
Very strongly

12. Hoe sterk is u daarvan oortuig dat u onderworpe is aan die gang van die noodlot?
How strongly are you convinced that you are subject to the whims of fate?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Baie sterk
Very strongly

13. Hoe sterk is u daarvan oortuig dat u sukses sal behaal wanneer u belangrike take aanpak?
How strongly are you convinced that you will succeed when undertaking important tasks?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Baie sterk
Very strongly

14. Hoe dikwels laat u dinge gebeur deur middel van u eie insette, eerder as om te wag dat dinge moet gebeur?
How often do you make things happen through you own input, rather than wait for things to happen?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Bykans nooit
Hardly ever

Baie dikwels
Very often

15. Hoe dikwels wag u vir ander perone om beheer te neem oor 'n situasie, eerder as wat u self die beheer neem?
How often do you wait for other people to take charge, rather that take charge yourself?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Bykans nooit
Hardly ever

Baie dikwels
Very often

16. Hoe dikwels neem u self besluite aangaande sake eerder as wat u sal wag vir ander persone om namens u 'n besluit te neem?
How often so you decide on matters yourself, rather than wait for others to take a decision on your behalf?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Bykans nooit
Hardly ever

Baie dikwels
Very often

17. Tot watter mate spoor mislukking u aan om u prestasie te verbeter?
To what extent do failure spur you on to improve your performance?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Tot 'n groot mate
To a great extent

18. Tot watter mate spoor erkenning u aan om selfs nog beter te presteer?
To what extent does recognition encourage you to perform even better?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Tot 'n groot mate
To a great extent

19. Tot watter mate moedig sukses u aan om harder te werk en groter hoogtes te bereik?
To what extent does success encourage you to work harder and achieve greater heights?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Tot 'n groot mate
To a great extent

20. Hoe dikwels gebeur dit dat u misluk as gevolg van ander persone wat inmeng met u besigheid?
How often does it happen that you fail on account of other people interfering in your business?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Bykans nooit
Hardly ever

Baie dikwels
Very often

21. Tot watter mate is u afhanklik van die advies van ander, om sodoende kwaliteit werk te kan verrig?
To what extent are you dependent on the advice or clues of others, in order to produce quality work?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Tot 'n groot mate
To a great extent

22. Tot watter mate verkies u om self besluite te neem?
To what extent do you like taking decisions yourself?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Tot 'n groot mate
To a great extent

23. In 'n groepsituasie, hoe geredelik sal u 'n groepsbeluit ondersteun indien u nie met dit saamstem nie?
In a group situation, how readily would you support a group decision if you do not agree with it?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Baie geredelik
Very readily

24. Hoe dikwels sal u u mening hersien wanneer dit verskil van iemand anders s'n?
How often would you air your views when they differ from someone else's?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Met groot moeite
With great difficulty

Baie geredelik
Very readily

25. Tot watter mate sal u verkies om u eie kop te volg, eerder as om iemand anders se instruksies te volg?
To what extent would you prefer to follow your own mind, rather than have to follow someone else's instructions?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Tot 'n groot mate
To a great extent

26. Tot watter mate sal u aandring op erkenning vir u eie individuele prestasie?
To what extent do you insist on recognition of your own individual achievement?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Baie sterk
Very strongly

27. Tot watter mate neem u verantwoordelikheid vir u eie intellektuele ontwikkeling?
To what extent do you take responsibility for your own intellectual development?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Tot 'n mindere mate
To a minor degree

Ten volle
Fully

28. Tot watter mate geniet u dit om 'n leierskapsposisie te beklee?
To what extent do you like occupying a leadership position?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Baie
Very much

29. Hoe sterk sal u hou by u standpunt indien iemand vir wie u groot respek het, van u verskil?
How strongly would you stick to your viewpoint when someone for whom you have great respect disagree with you?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie sterk nie
Not at all strongly

Baie sterk
Very strongly

30. Tot watter mate hou u daarvan om komplekse probleme op te los?
To what extent do you like solving complex problems?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Baie
Very much

31. Hoe belangrik is dit vir u om terugvoer te ontvang in verband met take wat u aangepak het?
How important is it for you to receive feedback on tasks which you have performed?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Baie belangrik
Very important

32. Tot watter mate is beloning vir prestasie op verdienste gegrond?
To what extent is reward for achievement earned?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Tot 'n groot mate
To a great extent

33. Hoe geredelik is u bereid om verantwoordelikheid te aanvaar vir foute binne die werksituasie, selfs al is u nie die skuldige nie?
How readily would you accept responsibility for mistakes in the work situation even though you are not liable?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Baie geredelik
Very readily

34. Tot watter mate speel "geluk" 'n rol in u lewe?
To what extent does Lady Luck play a role in your life?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Tot 'n groot mate
To a great extent

35. Hoe sterk glo u in fatalisme?
How strong do you believe in fatalism?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Baie sterk
Very strongly

36. Tot watter mate word u lewe beïnvloed deur "toevallighede"?
To what extent is your life influenced by coincidences?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Tot 'n groot mate
To a great extent

37. Tot watter mate hang die bereiking van u persoonlike doelwitte af, van uself?
To what extent does achievement of your personal objectives depend on yourself?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Tot 'n mindere mate
To a minor degree

Ten volle
Fully

38. Tot watter mate is ander persone verantwoordelik vir u welsyn?
To what extent are other people responsible for your well-being?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Tot 'n groot mate
To a great extent

39. Hoe dikwels voel u dat u geen kontrole het oor u eie omstandighede nie?
How often do you feel that you have no control over your own circumstances?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Nooit
Never

Baie dikwels
Very often

40. Hoe gereedelik aanvaar u verantwoordelikheid vir u eie swak prestasie?
How readily do you accept responsibility for your own poor performance?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Baie gereedelik
Very readily

41. Tot watter mate is u oortuig dat mislukking in die lewe toegeskryf kan word aan die noodlot?
To what extent are you convinced that failure in life could be attributed to fate?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Baie sterk
Very strongly

42. Hoe sterk is u daarvan oortuig dat die respek wat u ontvang, direk verband hou met u gedrag?
How strongly are you convinced that the respect you receive is directly related to your behavior?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Baie sterk
Very strongly

43. Tot watter mate word u huidige prestasie beïnvloed deur die negatiewe ervarings in u verlede?

To what extent are your present achievements adversely affected as a result of negative experience in your past?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Baie sterk
Very strongly

44. Hoe dikwels bereik u gestelde doelwitte, ongeag die omstandighede?
How often do you achieve set objectives, irrespective of the conditions?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Bykans nooit
Hardly ever

Byna altyd
Nearly always

45. Hoe sterk is u daarvan oortuig dat ander persone in beheer van u lewe is, en dat hulle die uitkoms van sake bepaal?

How strongly are you convinced that other people are in charge of your life and that they determine the outcome of issues?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Baie sterk
Very strongly

46. Hoe sterk is u daarvan oortuig dat u die meeste van u probleme kan hanteer en oplos ongeag die omstandighede?

How strongly are you convinced that you can solve most of your problems, irrespective of the conditions?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Baie sterk
Very strongly

47. Tot watter mate stem u saam dat 'n persoon nie iets kan bereik sonder die regte geleenthede nie?

To what extent do you agree that a person cannot achieve without the right opportunities?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Baie sterk
Very strongly

48. Tot watter mate stem u saam dat mislukkings in die lewe toegeskryf kan word aan 'n gebrek aan toewyding?
To what extent do you agree that failure in life can be attributed to a lack of dedication?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Baie sterk
Very strongly

49. Hoe sterk is u daarvan oortuig dat sukses hoofsaaklik afhang van harde werk?
How strongly are you convinced that success depends mainly on hard work?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Baie sterk
Very strongly

50. Hoe sterk is u daarvan oortuig dat sukses hoofsaaklik afhang van gelyke geleenthede in die lewe?
How strongly are you convinced that success depends mainly upon equal opportunities in life?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Baie sterk
Very strongly

51. Tot watter mate glo u dat vooruitgang in die lewe bepaal word deur u meerderes?
To what extent do you believe that advancement in life is determined by your superiors?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Baie sterk
Very strongly

52. Tot watter mate het u ouers u prestasie op skool negatief beïnvloed as gevolg van inmenging in u lewe?
To what extent did your parents/guardians negatively influence your achievement at school, because of interference in you affairs?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Tot 'n groot mate
To a great extent

53. Tot watter mate word u huidige prestasie negatief beïnvloed deur mense wat u nie goedgesind is nie?
To what extent is your present achievement negatively influenced by people who are not favourably disposed towards you?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Tot 'n groot mate
To a great extent

54. Tot watter mate neem u persoonlik verantwoordelikheid vir daardie dinge wat skeefloop in u lewe?
To what extent do you take personal responsibility for the things that go wrong in your life?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Tot 'n mindere mate
To a minor degree

Tot 'n groot mate
To a great extent

55. Tot watter mate word die uitkoms van sake bepaal deur u eie insette?
To what extent is the outcome of matters determined by our own inputs?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Tot 'n groot mate
To a great extent

56. Hoe dikwels is u vooruitgang in die verlede gekniehalter en belemmer deur persone wat u nie goedgesind is nie?
How often has your progress in the past been thwarted by people that were hostile towards you?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Nooit
Never

Baie dikwels
Very often

57. Hoe sterk is u daarvan oortuig dat slegs daardie mense wat op die regte plek op die regte tyd is, bevorder sal word?
How strongly are you convinced that only people who are at the right place at the right time get promoted?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Baie sterk
Very strongly

58. Hoe sterk is u daarvan oortuig dat slegs daardie mense wat aan die regte politieke party behoort, 'n "kans" in die lewe het?
How strongly are you convinced that only people who belong to the right political party have a chance in life?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Baie sterk
Very strongly

59. Tot watter mate is u oortuig dat u eie insette geen verband hou met die uitkoms van sake nie?
To what extent are you convinced that your own input bears no relation to the outcome of matters?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Baie sterk
Very strongly

60. Tot watter mate is u oortuig dat u prestasie afhang van die optimale benutting van u eie, God-gegewe talente?
To what extent are you convinced that achievement depends upon utilising your own God-given talents to the full?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Ten volle
Fully

61. Hoe sterk is u oortuig daarvan dat die prestasies wat u bereik het, verdien is, en nie slegs toe te skryf is aan "geluk" nie?
How strongly are you convinced that the achievements you have obtained were deserved and not only due to luck?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Baie sterk
Very strongly

62. Hoe goed kan u voorspel of u 'n eksamen geslaag het, wat u sopas geskryf het, of nie?
How well can you predict whether you have passed an examination, which you have just written on not?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Baie goed
Very well

63. Hoe sterk is u daarvan oortuig dat bevordering verdien word deur harde werk en volharding?
How strongly are you convinced that promotion is earned through hard work and perseverance?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Baie sterk
Very strongly

64. Hoe maklik of moeilik vind u dit om kieskeurige persone tevrede te stel?
How easy or difficult do you find it to satisfy choosy people?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Baie moeilik
Very difficult

Baie maklik
Very easy

65. Hoe sterk is u daarvan oortuig dat "klieks" die mees belangrikste bepaler is van sosiale aanvaarding?
How strongly are you convinced that clique formation is the most important determinant of social acceptance?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Baie sterk
Very strongly

66. Hoe sterk is u daarvan oortuig dat u beskik oor die vermoë om werk van die hoogste gehalte te lewer?
How strongly are you convinced that you possess the ability to produce work of the highest quality?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Baie sterk
Very strongly

67. Hoe sterk sal u u aksie/optrede verdedig indien die toepaslikheid daarvan bevraagteken sou word deur ander?
How strongly would you defend your actions if the appropriateness thereof were to be questioned by others?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Baie sterk
Very strongly

68. Hoe sterk is u daarvan oortuig dat u voldoende gekwalifiseerd is vir die werk wat u doen?
How strongly are you convinced that you are sufficiently qualified for the work that you are doing?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Baie sterk
Very strongly

69. Tot watter mate verkies u om u eie werksprogram te beplan en te koördineer?
To what extent do you prefer to plan and co-ordinate your own work programme?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Tot 'n groot mate
To a great extent

70. Tot watter mate verkies u uitdagende werk bo roetine werk?
To what extent do you prefer challenging work to routine work?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Tot 'n groot mate
To a great extent

71. Hoe dikwels gebeur dit dat u die korrektheid van die besluite wat u geneem het, bevraagteken?
How often does it happen that you subsequently doubt the correctness of the decisions that you have taken?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Bykans nooit
Hardly ever

Baie dikwels
Very often

72. Tot watter mate is u afhanklik van die ondersteuning en goeie gesindheid van ander in die uitvoering van u take?
To what extent are you dependant on the support and goodwill of others in the execution of tasks?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Tot 'n groot mate
To a great extent

73. Hoe gereidelik sal u moed opgee terwyl u sukkel en worstel met 'n komplekse probleem?

How readily would you quit if you are battling with a complex problem?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Baie gereidelik
Very readily

74. Hoe dikwels neem u die inisiatief in 'n poging om oplossings te vind vir moeilike probleme?

How often do you take the initiative in finding solutions for troublesome problems?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Baie dikwels
Very often

75. Hoe sterk is u daarvan oortuig dat die prestasies wat u bereik het, die gevolg is van harde werk en toewyding?

How strongly are you convinced that the achievements you have obtained are the result of hard work and dedication?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Baie sterk
Very strongly

76. Hoe sterk is u daarvan oortuig dat die mislukkings in die lewe die gevolg is van 'n gebrek aan volharding?

How strongly are you convinced that failures in life are due to a lack of perseverance?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Baie sterk
Very strongly

77. Hoe sterk is u daarvan oortuig dat bevordering binne die nuwe Suid-Afrika sal afhang van hoofsaaklik velkleur?

How strongly are you convinced that promotion in the new South Africa will depend largely on skin-colour?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Baie sterk
Very strongly

78. Hoe sterk is u daarvan oortuig dat dit onmoontlik is om "uit te styg" bo u eie omgewing?
How strongly are you convinced that it is impossible to rise above your own environment?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Baie sterk
Very strongly

79. Hoe sterk is u oortuig daarvan dat u lewenslot bepaal word deur gebeure waaroor u geen beheer het nie?
How strongly are you convinced that your fate is determined by coincidental events over which you have no control?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Baie sterk
Very strongly

80. Hoe sterk is u daarvan oortuig dat u vooruitgang in die lewe bepaal sal word deur sekere invloedryke persone?
How strongly are you convinced that your advancement in life will be determined by certain influential people?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|

Glad nie
Not at all

Baie sterk
Very strongly

Vraelys/Questionnaire 4

(Sherer & Maddux)

Instruksies:

Die volgende stellings handel oor houdings en gevoelens wat jy mag hê oor jousef en jou prestasie in 'n verskeidenheid take. Jy word gevra om op elke vraag die mate aan te dui waartoe jy saamstem of verskil met elk van hierdie stellings deur 'n kruisie (X) te maak aan die een kant van die skaal of aan die anderkant indien jy heeltemal saamstem of heeltemal verskil. Plaas 'n kruisie (X) in die tweede spasie indien jy grootliks saamstem of grootliks verskil en plaas 'n kruisie (X) in die derde spasie indien jy slegs effens saamstem of effens verskil. Plaas jou kruisie (X) in die middel van die skaal indien jy nie saamstem of verskil nie. Werk vinnig en gee jou eerste indruk.

Instructions:

The following statements concerns attitudes and feelings you might have about yourself and your performance on a variety of tasks. You are asked to indicate the extent to which you agree or disagree with each of these statements by making a cross (X) in the space at one end of the scale or the other if you completely agree or completely disagree. Place a cross (X) in the space second from the end if you somewhat agree or somewhat disagree and place a cross (X) in the space third from the end if you only slightly agree or slightly disagree. Place your cross (X) in the middle of the scale if you neither agree nor disagree. Work quickly and give your first impression.

| 1 = Stem sterk saam (Strongly agree) 2 = Stem saam (Agree) 3 = Stem effens saam (Slightly agree) 4 = Verskil nie en stem ook nie saam nie (Neither agree nor disagree) 5 = Verskil effens (Slightly disagree) 6 = Verskil (Disagree) 7 = Verskil sterk (Strongly disagree) | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| 1. Ek vind dit uiters onaangenaam om bang te wees. <i>I find it extremely unpleasant to be afraid.</i> | | | | | | | |
| 2. Ek vermy soms moeilike take. <i>I sometimes avoid difficult tasks.</i> | | | | | | | |
| 3. Ek is 'n baie gedetermineerde persoon. <i>I am a very determined person.</i> | | | | | | | |
| 4. As ek eers vas besluit het om iets te doen, kan amper niks my keer nie. <i>Once I set my mind to a task almost nothing can stop me.</i> | | | | | | | |
| 5. Ek het baie selfvertroue. <i>I have a lot of self-confidence.</i> | | | | | | | |
| 6. Ek is op my beste as ek regtig uitgedaag word. <i>I am at my best when I am really challenged.</i> | | | | | | | |
| 7. Ek glo dat dit skandelik is om iets wat ek begin het, te los. <i>I believe that it is shameful to give up something I started.</i> | | | | | | | |
| 8. Ek het meer as die gemiddelde mate van vasbeslotenheid. <i>I have more than the average amount of self-determination.</i> | | | | | | | |

| 1 = Stem sterk saam (Strongly agree) 2 = Stem saam (Agree) 3 = Stem effens saam (Slightly agree) 4 = Verskil nie en stem ook nie saam nie (Neither agree nor disagree) 5 = Verskil effens (Slightly disagree) 6 = Verskil (Disagree) 7 = Verskil sterk (Strongly disagree) | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| 9. Soms lyk dinge net nie die moeite werd nie. <i>Sometimes things just don't seem worth the effort.</i> | | | | | | | |
| 10. Ek sal eerder nie iets probeer wat ek nie goed kan doen nie. <i>I would rather not try something that I'm not good at.</i> | | | | | | | |
| 11. Ek het meer vrese as meeste mense. <i>I have more fears than most people.</i> | | | | | | | |
| 12. Ek vind dit moeilik om risiko's te neem. <i>I find it difficult to take risks.</i> | | | | | | | |
| 13. Mense het baie probleme, maar niks wat hulle nie uiteindelik sal kan oplos nie. <i>People have a lot of problems but none they will not eventually be able to solve.</i> | | | | | | | |
| 14. As ek vasberade is, kan ek amper enige iets regkry. <i>I can succeed in almost any endeavour to which I set my mind.</i> | | | | | | | |
| 15. Niks is onmoontlik as ek regtig vasberade is nie. <i>Nothing is impossible if I really put my mind to it.</i> | | | | | | | |

| 1 = Stem sterk saam (Strongly agree) 2 = Stem saam (Agree) 3 = Stem effens saam (Slightly agree) 4 = Verskil nie en stem ook nie saam nie (Neither agree nor disagree) 5 = Verskil effens (Slightly disagree) 6 = Verskil (Disagree) 7 = Verskil sterk (Strongly disagree) | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| 16. Ek voel dat ek beter daaraan toe is om myself te vertrou vir 'n oplossing, wanneer dinge werklik sleg lyk. <i>I feel I am better off to rely on myself for a solution when things are looking bad.</i> | | | | | | | |
| 17. As ek beproef word, sal ek getrou aan my ideale bly. <i>When put to the test I would remain true to my ideas.</i> | | | | | | | |
| 18. As 'n persoon in homself glo, kan hy/sy dit in die wêreld maak. <i>If a person believes in himself, he/she can make it in the world.</i> | | | | | | | |
| 19. Ek voel die kans is baie goed dat ek my lewensdoelwitte kan bereik. <i>I feel that chances are very good that I can achieve my goals in life.</i> | | | | | | | |
| 20. In die algemeen stem ek saam dat "aanhouer wen". <i>In general I agree that "if first I do not succeed, I'll try again".</i> | | | | | | | |
| 21. Wanneer ek sukkel om te kry wat ek wil hê, probeer ek net harder. <i>When I have difficulty getting what I want, I try harder.</i> | | | | | | | |
| 22. Ek blink in min dinge uit. <i>I excel at few things.</i> | | | | | | | |

| 1 = Stem sterk saam (Strongly agree) 2 = Stem saam (Agree) 3 = Stem effens saam (Slightly agree) 4 = Verskil nie en stem ook nie saam nie (Neither agree nor disagree) 5 = Verskil effens (Slightly disagree) 6 = Verskil (Disagree) 7 = Verskil sterk (Strongly disagree) | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| 23. Ek het al dikwels tot laat in die nag gewerk om 'n taak voor die sperdatum te voltooi <i>I have often burned the midnight oil to finish a task before the deadline.</i> | | | | | | | |
| 24. Ek het meer wilskrag as die meeste mense. <i>I have more willpower than most people.</i> | | | | | | | |
| 25. Ek raak gefrustreerd wanneer ek fisiese ongemak ervaar. <i>I become frustrated when I experience physical discomfort.</i> | | | | | | | |
| 26. Niks is dit werd om myself aan pyn bloot te stel as ek dit kan vermy nie. <i>Nothing is worth subjecting myself to pain for, if I can avoid it.</i> | | | | | | | |
| 27. Ek sal fisiese ongemak verduur om 'n taak te voltooi omdat ek gewoon nie daarvan hou om op te gee nie. <i>I would endure physical discomfort to complete a task because I just don't like to give up.</i> | | | | | | | |