THE RELATIONSHIP BETWEEN EMPLOYEE WELLNESS AND CAREER ANCHORS

by

MATHILDE DE VILLIERS

submitted in part fulfilment of the requirements for the degree

MASTER OF COMMERCE

in the subject

INDUSTRIAL AND ORGANISATIONAL PSYCHOLOGY

at the

UNIVERSITY OF SOUTH AFRICA

SUPERVISOR: Prof M Coetzee

FEBRUARY 2009
ACKNOWLEDGEMENTS

I would like to express my sincere thanks and deepest gratitude to the following people:

- The Lord, my Creator and Saviour, who gave me the strength to persevere and complete my dissertation;
- Professor Melinde Coetzee, my Supervisor, for her patience, valuable input and persistent enthusiasm;
- My husband, Fred, for always believing in me and allowing me all the time in the world to finish what I needed to get done;
- My mother, Herma, for her continuous interest, assistance, love and patience;
- Monica Coetzee, for her statistical assistance;
- Karen Breckon, for editing the manuscript; and
- Renée Kruger, for assisting with the layout of text, figures, diagrams and tables.
DECLARATION

I, Mathilde de Villiers, declare that this dissertation entitled THE RELATIONSHIP BETWEEN EMPLOYEE WELLNESS AND CAREER ANCHORS is my own work, and that all the sources that I have used or have quoted from have been indicated and acknowledged by means of complete references.

_____________________
Mathilde de Villiers   28 FEBRUARY 2009
Student no: 31946461
SUMMARY

The general aim of this study was to investigate whether a relationship exists between employee wellness (specifically sense of coherence, burnout, sources of job stress and work engagement) and career anchors, and to determine whether gender, race, employment and age groups differed in terms of the employee wellness and career anchors variables. The study was conducted among a random sample of 90 employees in a typical South African work context.

The data was collected by means of the Orientation to Life Questionnaire (OLQ), Maslach’s Burnout Inventory (MBI), Sources of Job Stress, the Utrecht Work Engagement Scale (UWES) and the Career Orientations Inventory (COI). Supporting evidence indicates significant associations between employee wellness and the career anchors variables. The results also showed significant differences between the career anchors of males, females, blacks, whites, permanent staff, contract staff and age groups. The findings contribute valuable new knowledge to the wellness and career literature and organisational practices related to employee wellness and career decision making.

KEY TERMS

Employee wellness, sense of coherence, burnout, sources of job stress, work engagement, career, career anchors, career decision making.
<table>
<thead>
<tr>
<th>TABLE OF CONTENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGEMENTS</td>
</tr>
<tr>
<td>DECLARATION</td>
</tr>
<tr>
<td>SUMMARY</td>
</tr>
<tr>
<td>KEY TERMS</td>
</tr>
<tr>
<td>TABLE OF CONTENTS</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CHAPTER 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCIENTIFIC ORIENTATION TO THE RESEARCH</td>
</tr>
</tbody>
</table>

| 1.1 | BACKGROUND AND MOTIVATION | 1 |
| 1.2 | PROBLEM STATEMENT        | 3 |
| 1.2.1 | Research questions with regard to the literature review | 5 |
| 1.2.2 | Research questions with regard to the empirical study | 5 |
| 1.3 | AIMS                   | 6 |
| 1.3.1 | General aim          | 6 |
| 1.3.2 | Specific aims        | 6 |
| 1.4 | THE PARADIGM PERSPECTIVE | 7 |
| 1.4.1 | The intellectual climate | 7 |
| 1.4.1.1 | The salutogenic paradigm | 7 |
| 1.4.1.2 | The humanistic paradigm | 8 |
| 1.4.1.3 | The functionalist paradigm | 8 |
| 1.4.2 | The market of intellectual resources | 9 |
| 1.4.2.1 | Metatheoretical statements | 9 |
| 1.4.2.2 | Theoretical models | 11 |
| 1.4.2.3 | Conceptual descriptions | 11 |
| 1.4.2.4 | Central hypothesis | 13 |
| 1.5 | RESEARCH DESIGN        | 13 |
| 1.6 | RESEARCH METHOD        | 14 |
| CHAPTER LAYOUT | 17 |
| CHAPTER SUMMARY | 17 |
## CHAPTER 2  EMPLOYEE WELLNESS

### 2.1  PARADIGMATIC AND CONCEPTUAL FOUNDATIONS

#### 2.1.1 Paradigmatic foundations: salutogenic paradigm

#### 2.1.2 Conceptual foundations of wellness

- **2.1.2.1 Employee wellness and health**
- **2.1.2.2 Sense of coherence (SOC)**
- **2.1.2.3 Burnout**
- **2.1.2.4 Stress**
- **2.1.2.5 Coping**
- **2.1.2.6 Work engagement**
- **2.1.2.7 An integration of the conceptual foundations of wellness**

### 2.2  THEORETICAL MODELS

#### 2.2.1 Jahoda’s positive mental wellness model

- **2.2.1.1 Benefits / usefulness of the model**
- **2.2.1.2 Limitations of the model**

#### 2.2.2 Adam’s, Bezner and Steinhardt’s perceived wellness model

- **2.2.2.1 Benefits and disadvantages of the perceived wellness model**

#### 2.2.3 Antonovsky’s sense of coherence (SOC) model

- **2.2.3.1 Usefulness of the sense of coherence model**

#### 2.2.4 Maslach’s burnout model

- **2.2.4.1 Usefulness of Maslach’s model of burnout**

#### 2.2.5 Harter, Schmidt and Keyes’ model of employee engagement

- **2.2.5.1 Elements of employee engagement**
- **2.2.5.2. Factors influencing employee engagement**
- **2.2.5.3 Benefits and disadvantages of employee engagement**
- **2.2.5.4 Usefulness of the model**

#### 2.2.6 Integration of models

### 2.3  VARIABLES INFLUENCING EMPLOYEE WELLNESS

#### 2.3.1 Cross-cultural influences

#### 2.3.2 Gender influences

#### 2.3.3 Age

#### 2.3.4 Person influences

### 2.4 IMPLICATIONS FOR EMPLOYEE WELLNESS PRACTICE
<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.4.1</td>
<td>Globalisation</td>
<td>45</td>
</tr>
<tr>
<td>2.4.2</td>
<td>Work conditions</td>
<td>46</td>
</tr>
<tr>
<td>2.4.3</td>
<td>Supervisor / Management behaviour</td>
<td>46</td>
</tr>
<tr>
<td>2.4.4</td>
<td>Trust</td>
<td>47</td>
</tr>
<tr>
<td>2.4.5</td>
<td>Focus areas of the industrial psychologist in the workplace</td>
<td>47</td>
</tr>
<tr>
<td>2.5</td>
<td>CHAPTER SUMMARY</td>
<td>48</td>
</tr>
<tr>
<td>3.1</td>
<td>PARADIGMATIC AND CONCEPTUAL FOUNDATIONS</td>
<td>49</td>
</tr>
<tr>
<td>3.1.1</td>
<td>Paradigmatic foundations: career psychology</td>
<td>49</td>
</tr>
<tr>
<td>3.1.2</td>
<td>Conceptual foundations</td>
<td>50</td>
</tr>
<tr>
<td>3.1.2.1</td>
<td>Career</td>
<td>50</td>
</tr>
<tr>
<td>3.1.2.2</td>
<td>Career orientations</td>
<td>52</td>
</tr>
<tr>
<td>3.1.2.3</td>
<td>Career characteristics</td>
<td>53</td>
</tr>
<tr>
<td>3.1.2.4</td>
<td>Career planning, development and management</td>
<td>55</td>
</tr>
<tr>
<td>3.1.2.5</td>
<td>Career decision making</td>
<td>57</td>
</tr>
<tr>
<td>3.2</td>
<td>THEORETICAL MODELS</td>
<td>58</td>
</tr>
<tr>
<td>3.2.1</td>
<td>The social cognition career theory (SCCT)</td>
<td>58</td>
</tr>
<tr>
<td>3.2.2</td>
<td>Super’s career development theory</td>
<td>62</td>
</tr>
<tr>
<td>3.2.2.1</td>
<td>Contributions and limitations of Super’s model</td>
<td>63</td>
</tr>
<tr>
<td>3.2.3</td>
<td>Schein’s career anchor model</td>
<td>63</td>
</tr>
<tr>
<td>3.2.3.1</td>
<td>Technical / functional competence</td>
<td>68</td>
</tr>
<tr>
<td>3.2.3.2</td>
<td>General managerial competence</td>
<td>68</td>
</tr>
<tr>
<td>3.2.3.3</td>
<td>Autonomy / independence</td>
<td>69</td>
</tr>
<tr>
<td>3.2.3.4</td>
<td>Security / stability</td>
<td>70</td>
</tr>
<tr>
<td>3.2.3.5</td>
<td>Entrepreneurial creativity</td>
<td>70</td>
</tr>
<tr>
<td>3.2.3.6</td>
<td>Sense of service / dedication to a cause</td>
<td>71</td>
</tr>
<tr>
<td>3.2.3.7</td>
<td>Pure challenge</td>
<td>71</td>
</tr>
<tr>
<td>3.2.3.8</td>
<td>Lifestyle</td>
<td>72</td>
</tr>
<tr>
<td>3.2.3.9</td>
<td>Further division of career anchors</td>
<td>72</td>
</tr>
<tr>
<td>3.2.3.10</td>
<td>Benefits and disadvantages of the career anchor model</td>
<td>74</td>
</tr>
<tr>
<td>3.2.4</td>
<td>Integration of career models</td>
<td>74</td>
</tr>
<tr>
<td>3.3</td>
<td>VARIABLES INFLUENCING CAREER DECISION MAKING</td>
<td>77</td>
</tr>
<tr>
<td>3.3.1</td>
<td>Race / ethnicity</td>
<td>77</td>
</tr>
</tbody>
</table>
3.3.2 Gender influences 78
3.3.3 Age / career life-span stages 78
3.3.4 Person influences 80
3.3.5 Marital status 81
3.3.6 Educational levels 81
3.4 IMPLICATIONS FOR CAREER DECISION MAKING PRACTICE 82
3.5 INTEGRATION: THEORETICAL RELATIONSHIP BETWEEN EMPLOYEE WELLNESS AND CAREER ANCHORS 83
3.6 SUMMARY 86

CHAPTER 4 EMPIRICAL STUDY 87
4.1 DETERMINATION AND DESCRIPTION OF THE SAMPLE 87
4.1.1 Composition of the gender groups in the sample 89
4.1.2 Composition of the race groups in the sample 89
4.1.3 Composition of the age groups in the sample 90
4.1.4 Composition of the sample in terms of employment status 91
4.2 MOTIVATION OF THE PSYCHOMETRIC BATTERY 93
4.2.1 Antonovský’s orientation to life questionnaire (OLQ) 94
4.2.1.1 Development of the OLQ 94
4.2.1.2 Rationale of the OLQ 94
4.2.1.3 Description of the OLQ 95
4.2.1.4 Administration of the OLQ 95
4.2.1.5 Interpretation of the OLQ 95
4.2.1.6 Validity and reliability of the OLQ 95
4.2.2 Maslach’s burnout inventory (MBI) 96
4.2.2.1 Development of the MBI 96
4.2.2.2 Rationale of the MBI 97
4.2.2.3 Description of the MBI 97
4.2.2.4 Administration of the MBI 97
4.2.2.5 Interpretation of the MBI 98
4.2.2.6 Validity and reliability of the MBI 98
4.2.3 The Utrecht work engagement scale (UWES) 99
4.2.3.1 Development of the UWES 100
4.2.3.2 Rationale of the UWES 100
4.2.3.3 Description of the UWES 100
CHAPTER 5  RESEARCH FINDINGS

5.1 DESCRIPTIVE STATISTICS

5.1.1 Reporting of item-reliability and Cronbach’s alpha coefficients (OLQ; MBI; UWES AND COI) 112

5.1.2 Interpretation of item-reliability and Cronbach’s alpha coefficients 114

5.1.3 Reporting and interpretation of means and standard deviations 115

5.1.3.1 Means and standard deviations: Orientation to Life Questionnaire (OLQ) 115

5.1.3.2 Means and standard deviations: Maslach’s Burnout Inventory (MBI) 116

5.1.3.3 Means and standard deviations: Utrecht Work Engagement Scale (UWES) 117

5.1.3.4 Means and standard deviations: Career Orientations Inventory (COI) 117

5.2 CORRELATIONAL STATISTICS

5.2.1 Reporting of Pearson-product moment correlation coefficients (MBI; OLQ AND UWES) 119

5.2.1.1 Relationship between UWES and MBI variables 120

5.2.1.2 Relationship between UWES and OLQ variables 121

5.2.1.3 Relationship between MBI and OLQ variables 122

5.2.2 Interpretation of Pearson-product moment correlation coefficients (MBI; OLQ AND UWES) 124

5.2.2.1 Relationship between UWES and MBI variables 124

5.2.2.2 Relationship between UWES and OLQ variables 125

5.2.2.3 Relationship between MBI and OLQ variables 126

5.2.3 Reporting of Pearson-product moment correlation coefficients (Sources of Job Stress and UWES) 126

5.2.4 Interpretation of Pearson-product moment correlation coefficients (Sources of Job Stress and UWES) 128

5.2.5 Reporting of Pearson-product moment correlation coefficients (Sources of Job Stress and MBI) 129

5.2.6 Interpretation of Pearson-product moment correlation coefficients (Sources of Job Stress and MBI) 130

5.2.7 Reporting of Pearson-product moment correlation coefficients (Sources of Job Stress and OLQ) 131
5.2.8 Interpretation of Pearson-product moment correlation coefficients (Sources of Job Stress and OLQ) 133
5.2.9 Reporting of Pearson-product moment correlation coefficients (Sources of Job Stress and COI) 135
5.2.10 Interpretation of Pearson-product moment correlation coefficients (Sources of Job Stress and COI) 136
5.2.11 Reporting of Pearson-product moment correlation coefficients (OLQ and COI) 137
5.2.12 Interpretation of Pearson-product moment correlation coefficients (OLQ and COI) 138
5.2.13 Reporting of Pearson-product moment correlation coefficients (MBI and COI) 139
5.2.14 Interpretation of Pearson-product moment correlation coefficients (MBI and COI) 140
5.2.15 Reporting of Pearson-product moment correlation coefficients (UWES and COI) 140
5.2.16 Interpretation of Pearson-product moment correlation coefficients (UWES and COI) 142
5.3 INFERENTIAL STATISTICS 143
5.3.1 Reporting of differences in mean scores for gender groups (UWES, MBI AND OLQ) 144
5.3.2 Interpretation of differences in mean scores for gender groups (UWES, MBI AND OLQ) 144
5.3.3 Reporting of differences in mean scores for gender groups (Sources of Job Stress) 144
5.3.4 Interpretation of differences in mean scores for gender groups (Sources of Job Stress) 146
5.3.5 Reporting of differences in mean scores for gender groups (COI) 148
5.3.6 Interpretation of differences in mean scores for gender groups (COI) 149
5.3.7 Reporting and interpretation of differences in mean scores for race groups (UWES; MBI; OLQ AND COI) 150
5.3.8 Reporting of differences in mean scores for race groups (Sources of Job Stress) 152
5.3.9 Interpretation of differences in mean scores for race groups (Sources of Job Stress) 153
5.3.10 Reporting of differences in mean scores for employment groups (UWES; MBI AND OLQ) 154
5.3.11 Interpretation of differences in mean scores for employment groups (UWES; MBI AND OLQ) 155
5.3.12 Reporting of differences in mean scores for employment groups (Sources of Job Stress) 156
5.3.13 Interpretation of differences in mean scores for employment groups (Sources of Job Stress) 157
5.3.14 Reporting of differences in mean scores for employment groups (COI) 157
5.3.15 Interpretation of differences in mean scores for employment groups (COI) 159
5.3.16 Reporting of differences in mean scores for age groups (UWES; MBI AND OLQ) 160
5.3.17 Interpretation of differences in mean scores for age groups (UWES; MBI AND OLQ) 161
5.3.18 Reporting of differences in mean scores for age groups (COI and Sources of Job Stress) 162
5.3.19 Interpretation of differences in mean scores for age groups (COI and Sources of Job Stress) 163
5.4 INTEGRATION OF RESEARCH FINDINGS 163
5.4.1 Employee wellness 164
5.4.2 Career anchors 180
5.4.3 The relationship between employee wellness and career anchors 183
5.5 CHAPTER SUMMARY 186

CHAPTER 6 CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS 187

6.1 CONCLUSIONS 187
6.1.1 Conclusions regarding the literature review 187
6.1.1.1 The first objective: Conceptualising employee wellness (in particular sense of coherence, burnout, sources of job stress and work
engagement) and career anchors and explaining their relationship theoretically

6.1.1.2 The second objective: Conceptualising the implications of the theoretical relationship between the employee wellness variables (sense of coherence, burnout, sources of job stress and work engagement) and career anchor variables for employee wellness and career decision making practices 188

6.1.2 Conclusions regarding the empirical study 189

6.1.2.1 The first objective: Investigate the relationship dynamics between employee wellness (in particular sense of coherence, burnout, sources of job stress and work engagement) and career anchors as manifested in a sample of participants employed in the South African work context 190

6.1.2.2 The second objective: Determine the differences between the employee wellness (in particular sense of coherence, burnout, sources of job stress and work engagement) of the gender, race, employment and age groups as manifested in the sample 194

6.1.2.3 The third objective: Determine the differences between the career anchors of the race, gender, employment and age groups as manifested in the sample 197

6.1.3 Conclusions regarding the central hypothesis 198

6.1.4 Conclusions about contributions to the field of industrial and organisational psychology 198

6.2 LIMITATIONS OF THE STUDY 200

6.3 RECOMMENDATIONS 201

6.3.1 Recommendations regarding employee wellness and career decision making practices 202

6.3.1.1 Sense of coherence 202

6.3.1.2 Burnout 203

6.3.1.3 Sources of job stress 203

6.3.1.4 Work engagement 204

6.3.1.5 Career anchors 205

6.3.2 Recommendations for industrial psychologists working in the field of employee wellness and career development 206

6.3.3 Recommendations for further research 208

6.4 INTEGRATION OF THE RESEARCH 209

6.5 CHAPTER SUMMARY 210
REFERENCES

LIST OF FIGURES

Figure 2.1 Integration of the conceptual foundations 25
Figure 2.2 The perceived wellness model 29
Figure 3.1 The formation of the career anchor pattern 66
Figure 3.2 Integrated theoretical model of the construct career anchors 73
Figure 3.3 Integration of career models 76
Figure 3.4 Theoretical integration of employee wellness and career anchors 86
Figure 4.1 Response rate of participants 89
Figure 4.2 Gender group distribution of the sample 90
Figure 4.3 Race group distribution of the sample 91
Figure 4.4 Age group distribution of the sample 92
Figure 4.5 Employment status group distribution of the sample 93
Figure 5.1 Mean total scores: COI 119
Figure 5.2 Summary of key associations between the UWES and OLQ 166
Figure 5.3 Summary of key associations between the UWES and MBI 166
Figure 5.4 Summary of key associations between the MBI and OLQ 167
Figure 5.5 Summary of the overall work engagement profile of the sample 170
Figure 5.6 Summary of the overall burnout profile of the sample 171
Figure 5.7 Summary of the overall SOC profile of the sample 172
Figure 5.8 Summary of the overall Sources of Job Stress profile of the sample 173
Figure 5.9 Significant differences in mean scores for biographical groups 185

LIST OF TABLES

Table 2.1 A theoretical comparison of the models discussed: views of employee wellness 41
Table 4.1 Initial and final sample size 89
Table 4.2 Gender distribution of the sample 90
Table 4.3 Race distribution of the sample 90
Table 4.4 Age group distribution of the sample 92
| Table 4.5 | Employment status distribution | 93 |
| Table 5.1 | Reliability statistics of the OLQ, MBI, UWES and COI | 114 |
| Table 5.2 | Item analysis of the technical/functional subscale (COI) | 115 |
| Table 5.3 | OLQ variables: mean scores and standard deviations | 116 |
| Table 5.4 | MBI variables: mean scores and standard deviations | 117 |
| Table 5.5 | Sources of job stress variables: mean scores and standard deviations | 117 |
| Table 5.6 | UWES variables: means and standard deviations | 118 |
| Table 5.7 | Mean total scores: COI | 119 |
| Table 5.8 | Pearson-product moment correlations for total mean scores: UWES, MBI and OLQ | 120 |
| Table 5.9 (a) | Pearson-product moment correlations: UWES, MBI and OLQ | 124 |
| Table 5.9 (b) | Reporting of Pearson-product moment correlation coefficients (OLQ; MBI and UWES) | 125 |
| Table 5.10 | Pearson-product moment correlations: Sources of Job Stress and UWES | 129 |
| Table 5.11 | Pearson-product moment correlations: Sources of Job Stress and MBI | 131 |
| Table 5.12 | Pearson-product moment correlations: Sources of Job Stress and OLQ | 133 |
| Table 5.13 | Pearson-product moment correlations: Sources of Job Stress and COI | 138 |
| Table 5.14 | Pearson-product moment correlations: OLQ and COI | 139 |
| Table 5.15 | Pearson-product moment correlations: MBI and COI | 140 |
| Table 5.16 | Pearson-product moment correlations: UWES and COI | 143 |
| Table 5.17 | T-test for gender: UWES, MBI and OLQ | 146 |
| Table 5.18 | Mean scores for significant mean differences for gender: UWES, MBI and OLQ | 146 |
| Table 5.19 (a) | T-test for gender: Sources of Job Stress | 148 |
| Table 5.19 (b) | Mean scores for significant mean differences for gender: Sources of Job Stress | 148 |
| Table 5.20 | T-test for gender: COI | 149 |
| Table 5.21 | Mean scores for significant mean differences for gender: COI | 150 |
Table 5.22 Significant differences in mean scores for race groups: UWES, MBI and OLQ 152
Table 5.23 T-test for race groups: Sources of Job Stress 153
Table 5.24 Mean scores for significant mean differences for race: Sources of Job Stress 154
Table 5.25 (a) T-test for employment groups: UWES, MBI and OLQ 155
Table 5.25 (b) Mean scores for significant mean differences for employment groups: UWES, MBI and OLQ 156
Table 5.26 (a) T-test for employment groups: Sources of Job Stress 157
Table 5.26 (b) Mean scores for significant mean differences for employment groups: Sources of Job Stress 158
Table 5.27 (a) Significant differences in mean scores for employment groups: COI 159
Table 5.27(b) Mean scores for significant mean differences for employment groups: COI 159
Table 5.28 (a) Significant differences in mean scores for age groups: UWES, MBI and OLQ 161
Table 5.28(b) Mean scores for significant mean differences for age groups: UWES, MBI and OLQ 162
Table 5.29 (a) ANOVA for age groups: COI and Sources of Job Stress 163
Table 5.29 (b) Mean scores: COI and Sources of Job Stress 164
Table 5.30 Summary of the overall employee wellness profile of the sample 169
Table 5.31 Summary of the overall career anchors profile of the sample 181
Table 5.32 Summary of the significant associations between employee wellness and career anchor variables 185
Table 5.33 Summary of decisions on research hypotheses 186
CHAPTER 1
SCIENTIFIC ORIENTATION TO THE RESEARCH

This dissertation is exploratory in nature. It focuses on the relationship between employee wellness and career anchors. The focus areas of discussion in this chapter are as follows: background to and motivation for the research; the problem statement; the aims of the study; paradigm perspective; research design and methodology as well as the chapter layout.

1.1 BACKGROUND AND MOTIVATION
The focus of this research is individual behaviour in an organisational context, with particular emphasis on employee wellness and career anchors.

Organisations have taken increasing cognisance of the important relationship between employee well-being and improved productivity (Schreuder & Coetzee, 2006). For businesses, big or small, the wellness of their employees makes all the difference to the profit margin, to employee loyalty and to company growth (Van der Merwe, 2004). Employee wellness is a proactive, dynamic process whereby the individual and the group become aware of their life choices and “response-ability”, and then take the decision to lead a life that promotes wellness. Employee wellness is a conscious and continuous process leading towards the enhancement of individual, organisational and community health and wellbeing (Van der Merwe, 2004).

In the context of this study, employee wellness is explored in terms of how the employee’s sense of coherence; experience of burnout; sources of job stress and work engagement, contribute to a sense of wellbeing. Sense of coherence refers to the extent to which one has a pervasive, enduring though dynamic, feeling of confidence that one’s environment is predictable and that things will work out as well as can reasonably be expected (Antonovsky, 1979). In other words, it is a mixture of optimism and control.
Furthermore, burnout is a psychological term for the experience of long-term exhaustion and diminished interest, as opposed to work engagement, which is a concept that is generally viewed as managing discretionary effort, that is, when employees have choices, they will act in a way that furthers their organisation's interests. An engaged employee is a person who is fully involved in, and enthusiastic about, his or her work. Sources of job stress are factors in the work environment that lead to employees feeling stressed and sometimes contributes to burnout.

Furthermore, since the 1970s the career context has undergone drastic change (Baruch, 2004). Careers have become more transitional and flexible; the dynamics of restructuring and uncertainty blur the former routes to success and people have increasingly developed new perspectives of what career success entails for them. People now have multi-optional criteria for assessing success in their careers. These can be inner satisfaction, life balance, autonomy and freedom alongside the traditional external measures of income, rank and status (Baruch, 2004).

Against the foregoing background, there appears to be a paradigm shift towards the internal career with an increasing emphasis on subjective career success. Schein (1990, p.257) describes the internal career as those themes and concepts one develops that enable one to make sense out of one’s own occupational pursuits. This includes the attitudes, needs, values and perceptions that an individual has about a career. There has also been a shift regarding the concept of mutual support in the workplace. According to Schein (1990), people mistakenly believe that all human beings are naturally competitive and adversarial. However, people have the free will to choose creative environments that are nurturing, supportive, harmonious and joyous, and not necessarily competitive and adversarial.

Contemporary companies that are more aware have started to realise that their employees are their most important asset. Such companies increasingly strive to assist their employees to improve the general quality of their lives and their overall sense of well-being to increase employees’ engagement in their work (Van der Merwe, 2004). Work engagement is positively associated with job resources; that is, with those aspects of the job that have the capacity to reduce job demands, are functional in achieving work goals, and may stimulate personal growth, learning and development (Schreuder & Coetzee, 2006).
Work engagement is, for instance, positively related to social support from co-workers and superiors, performance feedback, coaching, job control, task variety and training facilities (Rothmann, Steyn & Mostert, 2005). Hence, the more job resources that are available, the more likely that employees will feel and become engaged in their work.

Organisations tend to implement practices that attempt to reduce costs and increase productivity, which leads to a mentality that favours profitability over the welfare of people (Schreuder & Coetzee, 2006). This approach of companies generally puts great stress upon individuals and leads to burnout. In recent years, “burnout” has become a popular way to describe the personal agony of job stress (Maslach, 2006). Contributors to burnout can be work related only (job ambiguity and lack of career success) or relate to both work and non-work contexts (role ambiguity, work schedule inflexibility, job/parent responsibility conflicts, lack of career progress) (Aryee, 1993). In this context, it appears that ways to handle stress and to adapt to a stressful workplace and business environment are essential to ensure employee wellness.

When individuals are faced with daily psychological threats in an organisation, these cumulative stresses build up into feelings of ‘dis-ease’ equally harmful to the individual and to the organisation (Van der Merwe, 2004). This means that the employee has a responsibility to choose an organisation that contributes to his/her general well-being and the employer, on the other hand, has a responsibility to adjust the culture of the organisation in order for employees to be able to function optimally.

However, the primary responsibility of the careerist is self-insight (Schein, 1990). People generally seek environments where they can exercise their preferences, skills and abilities (Wagner, 1995). People should choose work that will enable them to fulfill their interests and where they can be truly engaged. In this regard, work provides a way for people to stabilize and give meaning and direction to their lives (Ellison, 1997).

Career anchors are a key determinant of an individual’s choice of career or workplace. Schein (1990) describes the concept of career anchors as being “inside” a person, consisting of a pattern of self-perceived talents and abilities, values and motives that influence a person’s career-related choices and decisions.
If individuals move into a situation that does not meet their needs, compromises their values or does not enhance their experiences of subjective career success, satisfaction and general wellbeing, they are more likely to feel “pulled back”. They may also tend to become less engaged in their work and strive to move towards a more congruent environment, hence the metaphor of an anchor (Schein, 1990).

1.2 PROBLEM STATEMENT
Against the aforementioned background, it is evident that knowledge of employees’ wellness and career anchors will enhance understanding of how employees’ general sense of wellbeing is influenced by their career orientations, motives and values and experiences of subjective career success. This research as such aims to contribute to the field of Industrial and Organisational Psychology and to add new knowledge regarding the relationship between employees’ sense of wellness and career anchors in a South African work context.

The purpose of this study is to investigate whether employee wellness (in particular their sense of coherence, burnout, sources of job stress and work engagement) can be regarded as an outcome of individual experiences of subjective career satisfaction as determined by the expression of their self-perceived talents, abilities, values and motives (or career anchors) in the workplace. As such the study aims to explore how employees’ sense of wellness relates to their career anchors.

However, research on the relationship between employee wellness and career anchors, particularly in South Africa’s diverse and multi-cultural work context appears to be limited. In this regard, research on the relationship dynamics between the individual employee’s wellness and career anchors could therefore make an important contribution to the discipline of Industrial and Organisational Psychology. The results of the study will enable industrial psychologists and human resource (HR) practitioners to develop career guidance and counselling practices that could positively influence employees’ general wellness levels, job and career satisfaction in the workplace.
In the light of the foregoing, the research aims to answer the following research questions:

### 1.2.1 Research questions with regard to the literature review

Research question 1: How is employee wellness and in particular sense of coherence, burnout, sources of job stress and work engagement conceptualised by the literature?

Research question 2: How are career anchors conceptualised by the literature?

Research question 3: What is the theoretical relationship between employee wellness and career anchors and the implications for employee wellness and career decision making practices?

### 1.2.2 Research questions with regard to the empirical study

Research question 1: What is the nature of the empirical relationship between employee wellness (in particular sense of coherence, burnout, sources of job stress and work engagement) and career anchors in a sample of participants employed in a typical South African organisational setting?

Research question 2: How do the gender, race, employment and age groups differ with regard to their levels of employee wellness (in particular sense of coherence, burnout, sources of job stress and work engagement) and career anchors?

Research question 3: What recommendations can be formulated for employee wellness and career decision making practices as well as possible future research in the field of Industrial and Organisational Psychology?
1.3 AIMS
Given the specific problem to be investigated, the aims of the research project are listed below:

1.3.1 General aim
The general aim of this research is to determine the relationship between employee wellness (in particular sense of coherence, burnout, sources of job stress and work engagement) and career anchors and whether males and females, various race, employment and age groups differ in terms of these variables.

1.3.2 Specific aims
The theoretical aims of the study are to:
• Conceptualise employee wellness and in particular sense of coherence, burnout, sources of job stress and work engagement;
• Conceptualise career anchors;
• Explore the theoretical relationship between employee wellness and career anchors and the implications for employee wellness and career decision-making practices.

The empirical aims of the study are to:
• Determine the empirical relationship between employee wellness (in particular sense of coherence, burnout, sources of job stress and work engagement) and career anchors in a sample of participants employed in a typical South African organisation;
• Determine the differences between gender, race, employment and age groups with regard to the employee wellness (in particular sense of coherence, burnout, sources of job stress and work engagement) and career anchors variables;
• Formulate recommendations for employee wellness and career decision making practices and further research in the field of Industrial and Organisational Psychology.
1.4 THE PARADIGM PERSPECTIVE
The paradigm perspective refers to the intellectual climate or variety of meta-theoretical, theoretical and methodological beliefs and assumptions underlying the theories and models that form the definitive context of a study (Mouton & Marais, 1990). The present study is imbedded in the field of Industrial and Organisational Psychology.

1.4.1 The intellectual climate
Thematically the literature survey will cover firstly employee wellness theories and, secondly, on theories related to career development, choice and decision making, including career anchors. The literature review on employee wellness will be presented from the salutogenic paradigm, whilst the literature review on career development, choice and decision making and career anchors will be presented from the humanistic paradigm. The empirical study will be presented from the functionalistic paradigm.

1.4.1.1 The salutogenic paradigm
Salutogenesis (as a paradigm) makes the following assumptions (Antonovsky, 1987; De Wet, 1998; Strümpfer, 1990):

- The salutogenic paradigm assumes that stress is omnipotent and neutral in terms of effect on illness; the effect of the stressor is determined by the individual’s reaction to the stressor, however, stressors are not inherently bad.
- The salutogenic paradigm does away with the dichotomy of illness-health and evaluates it as a continuum with an individual falling anywhere between the two extremes. Antonovsky (1987, p.49) calls this the “health ease/dis-ease continuum”. By investigating the “story” of the person, it enables the researcher to seek an understanding of the factors involved in the individual’s maintenance of health on a health continuum.
- The salutogenic paradigm focuses on research (Antonovsky & Bernstein, 1986; Strümpfer, 1990), which states that people stay healthy in spite of the numerous stressors they face.
1.4.1.2 The humanistic paradigm

According to Meyer, Moore and Viljoen (1989, p.13), the basic assumptions of the humanistic paradigm are as follows:

- **The individual is an integrated whole**

  The current study focuses on perceptions of individuals in an organisation as collective. It goes beyond exploring the views of individuals of that unit, taking into consideration the impact of the collective on the individual.

- **The individual is a dignified human being**

  Human beings have qualities that distinguish them from other objects such as stones and trees. The current study is interested in the population sample’s opinions and perceptions.

- **Human nature is positive**

  People are basically good and their destructive behaviour is due to environmental influences such as unemployment, poverty, favouritism, discrimination and racism.

- **The individual has conscious processes**

  Conscious processes dictate individuals’ decisions. This is the focus of the study and organisational commitment will be used to obtain information about the way individuals perceive the organisation.

- **The individual is an active being**

  Individuals are active participants in life, make choices and are responsible for the course their life takes. Individuals’ career anchors will be used to obtain information about the reasons why individuals choose a particular occupation.

1.4.1.3 The functionalist paradigm

The empirical study will be presented from the functionalist paradigm. According to Morgan (1980), the functionalist paradigm:

- Is primarily regulative and pragmatic in its basic orientation.
- Is concerned with understanding society in a way that generates useful empirical knowledge.
- Assumes that society has a concrete, real existence and a systematic character oriented to produce an ordered and regulated state of affairs.
- Encourages an approach to social theory that focuses on understanding the role of human beings in society.
- Sees behaviour as being contextually bound in a real world of concrete and tangible social relationships.
Thematically the empirical study will be on the relationship between the variables employee wellness (in particular sense of coherence, burnout, sources of job stress and work engagement) and career anchors.

1.4.2 The market of intellectual resources
The market of intellectual resources refers to the collection of beliefs that have a direct bearing on the epistemic states of scientific statements (Mouton & Marais, 1990). For the purposes of this study, the theoretical models, metatheoretical statements and conceptual descriptions about employee wellness and career anchors and the central hypothesis are described below.

1.4.2.1 Metatheoretical statements
The metatheoretical statements represent an important category of assumptions underlying the theories, models and paradigms of this research. In the disciplinary context this study focuses on Industrial and Organisational Psychology as a field of application (Mouton & Marais, 1990). More specifically the focus in the literature survey is on employee wellness and career anchors. In terms of the empirical study, the focus is on psychometrics and statistical analysis. Meta-theoretical statements are presented on the following:

a) Industrial and Organisational Psychology
This study is undertaken in the context of Industrial and Organisational Psychology, which is conceptually described as the application of psychological principles, theory and research to the work setting. It includes a study of the factors that influence work behaviour such as socio-cultural influences, employment-related legislation, personality, gender, race/ethnicity, and life-span development (Landy & Conte, 2004). The study examines the employee wellness and career anchors of different gender, race employment and age groups.

The industrial psychologist recognises the interdependence of individuals, organisations and society, and the impact of factors such as increasing government influences, growing consumer awareness, skills shortages, and the changing nature of the workforce. The industrial psychologist facilitates responses to issues and problems involving people at work by serving as an advisor and catalyst for business, industry, labour, public, academic, community, and health organisations.
The industrial psychologist is a scientist who derives principles of individual, group and organisational behaviour through research; a consultant and staff psychologist who develops scientific knowledge and applies it to solve problems at work; and a teacher who trains in the research and application of Industrial and Organisational Psychology (Landy & Conte, 2004, p.6, 7).

b)  
**Career Psychology**
Career psychology is the study of career development and career behaviour as an integral part of human development. According to Greenhaus, Callanan and Godschalk (2000), career development refers to an ongoing process by which an individual progresses through a series of stages, each of which is characterised by a relatively unique set of issues, themes or tasks. Vocational choice is the result of a development process during which career maturity and concomitant skills are progressively developed and acquired. This study explores this as career development, career choice, decision-making and career anchors.

c)  
**Personnel Psychology**
Within the field of Industrial and Organisational Psychology, the study of Personnel Psychology pays attention to the measurement of personality characteristics of individuals. The study of personality focuses on the individual person’s characteristic and the similarities and differences between people (Meyer, et al., 1989). Personnel Psychology focuses on the psychological elements of the employee (Muchinsky, Kriek & Schreuder, 2002). This study investigates individuals’ levels of employee wellness (particularly their sense of coherence, burnout, sources of job stress and work engagement) and career anchors as measures of their personality characteristics.

d)  
**Growth Psychology**
Growth psychology is an umbrella concept for all theories and concepts referring to growth and psychological development. The purpose of the field of psychological growth is not only to study a person with neuroses and psychoses, but also to study the vast human potential to actualise and fulfil the individual’s capabilities and to find deeper meaning in life. In short, Growth Psychology attempts to expand, enlarge and enrich knowledge about the human personality (Schultz, 1976).
Thematically, this study focuses on the individual’s growth capability and the mediating effect of the relationship dynamics between the constructs employee wellness and career anchors.

e) Psychometrics
This branch of Psychology relates to the principles and practices of psychological measurement such as the development and standardisation of psychological tests and related statistical procedures (Plug, Meyer, Louw & Gouws, 1986, p.295). Psychometrics enables researchers in a position to measure behaviour in its various forms, providing different explanations for inter- and intrapersonal functioning.

In this study, questionnaires are used to measure the constructs of employee wellness (in particular sense of coherence, burnout, sources of job stress and work engagement) and career anchors.

1.4.2.2 Theoretical models
The literature survey on employee wellness will be presented from a salutogenic perspective. The theories of Antonovsky’s (1987) model of sense of coherence; Maslach, Jackson and Leiter’s (1996) model of burnout and Schaufel, Salanova, González-Romá, and Bakker’s (2002) model of work engagement will be reviewed. The literature review on career anchors will be presented from the perspective of Schein’s (1990) career anchor theory.

1.4.2.3 Conceptual descriptions
The following conceptual descriptions serve as a point of departure for discussion in this research:

a) Employee wellness
Employee wellness is a broad category that encompasses a number of workplace factors (Keyes & Haidt, 2006). Within the overall category of wellness, it is explained that employee engagement (a combination of cognitive and emotional variables in the workplace) generates higher frequency of positive affect (job satisfaction, commitment, joy, fulfilment, interest and caring). Positive affect then relates to the efficient application of work, employee retention, creativity and ultimately business outcomes.
In the context of this study, employee wellness is studied with specific reference to the constructs sense of coherence, burnout, sources of job stress and work engagement as aspects of the construct employee wellness.

b) Sense of coherence (SOC)
In the context of this study, sense of coherence is defined as a global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that one’s internal and external environments are predictable and that there is a high probability that things will work out as well as can reasonably be expected (Antonovsky, 1987).

c) Burnout
In the context of this study, burnout is defined as employees’ experiences of work overload, which decreases work effort and results in a negative approach to the job (Feldman & Weitz, 1988). The three burnout dimensions that will be explored are emotional exhaustion, professional efficacy and cynicism/depersonalisation. Furthermore, the following sources of job stress as precursors to experiences of burnout will also be investigated: job and role ambiguity, relationships, job tools and equipment, career advancement prospects, job security, lack of job autonomy, work/home conflict/stress, workload, compensation and benefits and lack of leadership/management support and guidance (Feldman & Weitz, 1988).

d) Work engagement
Maslach and Leiter (1997, p.23) redefined burnout as “an erosion of engagement with the job”. In the view of these authors, employee engagement is regarded for the purposes of this study, as being the characteristics of energy, involvement and the efficacy of individuals, thus, the direct opposites of the three burnout dimensions (emotional exhaustion, professional efficacy and cynicism/depersonalisation respectively. The following three dimensions of work engagement will be explored: vigour, dedication and absorption (Schaufeli et al., 2002).

e) Career
Over the years, the most popular definition of career is the notion that career is the number of upward moves (promotions) during an individual’s career life.
This is also referred to as the linear career pattern or career as advancement (Brousseau, 1990; Driver, 1979). However, for the purposes of this study, career has been defined as a *lifelong sequence of work experiences*. Schreuder and Coetzee (2006) also defined a career in terms of the modern-day perspective of a career, namely that a career is *any sequence of employment-related experiences*.

**f) Career anchors**

For the purposes of this study, a career anchor is regarded as a descriptive and predicative tool that serves to guide, constrain, stabilise and integrate the person’s career (Schein, 1978). The career anchor is regarded as being “inside the person, functioning as a set of driving and constraining forces on career decisions and choices” (Schreuder & Coetzee, 2006, p.220).

**1.4.2.4 Central hypothesis**

The central hypothesis of this study is as follows: Employees’ life orientation (sense of coherence), levels of burnout, sources of job stress and work engagement, (as aspects of their general wellness), are significantly associated with their career anchors. People from different gender, race, employment and age groups will differ significantly in terms of their life orientation (sense of coherence), levels of burnout, sources of job stress and work engagement as well as their career anchors.

**1.5 RESEARCH DESIGN**

According to Mouton and Marais (1994), the aim of a research design is to plan and structure a given research project in such a manner that the eventual external and internal validity of the research findings is maximised. In the presentation of the literature survey and the empirical study, the study can be categorised as exploratory in nature.

A quantitative approach will be followed, which translates constructs and concepts into operational definitions and finally into numerical indices (Mouton & Marais, 1994). Structured questionnaires will be used as a data collection method and the unit of analysis will be individuals. The research will measure the effects of the independent variable on the dependant variable.
In this study, the criterion data of employee wellness measuring instruments (more specifically the Orientation to Life Questionnaire, Maslach’s Burnout Inventory, including Sources of Job Stress variables and the Utrecht Work Engagement Scale) serve as the dependent variables, and the criterion data of the career anchor measuring instrument (more specifically the Career Orientation Inventory) serves as the independent variable. The findings will be interpreted within the context of their practical value and implication for practices related to employee wellness and career choice and decision making.

In this research strategy the internal validity on a contextual level is ensured through:
- Models and theories chosen in a representative manner and presented in a standardised manner; and
- Measuring instruments chosen in a responsible and representative way and presented in a standardised manner.

In this research the external validity is ensured by the selection of the sample to be representative of the total population. The findings therefore have greater validity than merely for the project in which they were generated (Mouton & Marais, 1994).

As stated previously, in the presentation of the literature survey and empirical study, the research can essentially be categorised as exploratory (Mouton & Marais, 1994). However, it will also be descriptive in nature as a research hypothesis will be formulated regarding the probable relationship between the variables employee wellness (in particular sense of coherence; burnout; sources of job stress and work engagement) and career anchors. This will allow for empirical testing of the relationship between these variables. The integration of the aforementioned in the conclusion and recommendations will be contextualised regarding the present problem and research aims.

1.6 RESEARCH METHOD

The research will be presented in two phases, namely, the literature review and the empirical study.
Phase 1: Literature review

Step 1 Employee wellness
A literature survey on employee wellness theories, in particular sense of coherence, burnout, sources of job stress and work engagement will be presented.

Step 2 Career anchors
A literature survey on career development, choice and decision making, and career anchors will be presented.

Step 3 The relationship between employee wellness and career anchors
The theoretical relationship between employee wellness (in particular sense of coherence, burnout, sources of job stress and work engagement) and career anchors will be discussed.

Step 4 The implication for employee wellness and career decision making practices will be defined.

Phase 2: Empirical study
The empirical investigation will consist of 9 steps, namely:

Step 1 Determination and description of the sample
The population and sample will be determined and described.

Step 2 Motivation of the psychometric battery
Antonovsky’s (1987) Orientation to Life Questionnaire (as a measurement of the construct sense of coherence); Maslach et al’s., (1996) Burnout Inventory (MBI) (as a measure of the construct burnout, including sources of job stress variables); Schaufeli et al’s., (2002) Utrecht Work Engagement Scale (UWES) (as a measure of the construct work engagement) and Schein’s (1990) Career Orientations Inventory (COI) (as a measure of the construct career anchors) will be applied to achieve the aims of the study.
Step 3  **Administration of the psychometric battery**  
This step involves the collection of data from the chosen sample.

Step 4  **Scoring of the psychometric battery**  
The responses of subjects to each of the items of the measuring instruments will be captured in an electronic database, which will then be converted to an SPSS data file.

Step 5  **Statistical processing of the data**  
The statistical procedures relevant to this research include descriptive statistics (Cronbach alpha coefficients; means and standard deviations); explanatory statistics (Pearson’s product-moment correlation coefficients) and inferential statistics (Levene’s test of equality of error variances, t-tests and analysis of variance – ANOVA).

Step 6  **Formulation of the research hypotheses**  
Hypotheses regarding the relationship between employee wellness and career anchors will be formulated.

Step 7  **Reporting and interpretation of the results**  
The results and interpretation of the research findings will be discussed.

Step 8  **Integration of the research findings**  
The research findings will be integrated with the literature review.

Step 9  **Formulation of the research conclusions, limitations and recommendations**  
The aims of the research process will be used to formulate the conclusions, limitations and recommendations of this study based on the research findings.
1.7 CHAPTER LAYOUT
Chapter 2  Employee wellness
Chapter 3  Career anchors
Chapter 4  Empirical study
Chapter 5  Research findings
Chapter 6  Conclusion, limitations and recommendations

1.8 CHAPTER SUMMARY
In chapter 1 the scientific orientation to the research has been discussed. The chapter contained the background and motivation, the research problem, aims, the paradigm perspective, the research design and method.

Chapter 2 discusses the construct employee wellness.
CHAPTER 2
EMPLOYEE WELLNESS

In Chapter 2, the paradigmatic and conceptual foundations of employee wellness are discussed as well as theoretical models of employee wellness. Further, variables influencing employee wellness are outlined as well as the implications for practice.

2.1 PARADIGMATIC AND CONCEPTUAL FOUNDATIONS

For the purpose of this study, the concept of employee wellness is interpreted within the salutogenic paradigm. The core concepts of wellness, namely health; stress; coping; sense of coherence; coping mechanisms; burnout and work engagement are also discussed, as these are intertwined and have an effect upon each other.

2.1.1 Paradigmatic foundations: salutogenic paradigm

Strümpfer (1990, p.265) defines salutogenesis as the origin of health or wellness and considers the fact that coping with unavoidable stress can lead to illness (distress) or even growth (eustress). The salutogenic paradigm does not deny the stress-illness relationship, but it concludes that “stressors are omnipresent in human existence” and that “the human condition is stressful” (Antonovsky, 1979, p.9).

Antonovsky (1987) points out three implications of the salutogenic paradigm: First the focus is on problem solving or finding solutions. Second, it identifies General Resistance Resources (GRR’s) which can be described as factors that help people to move in the direction of positive health and thirdly it identifies a global and pervasive sense in individuals, groups, populations or systems that serves as the overall capacity for sense of coherence. Sense of coherence is defined by Antonovsky (1987, p.19) as 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 [comprehensibility]; (2) the resources available to one meet the demands posed by these stimuli [manageability]; and (3) these demands are challenges, worthy of investment and engagement [meaningfulness]".
According to the salutogenic paradigm, not all people become ill as a result of stress and not all people will become burned out. The literature states that personality traits such as dominance, emotional stability, shrewdness, introversion and extraversion act as moderator variables in buffering the effect of the stress (Dhaniram, 2003).

What is common to all salutogenic constructs is their preoccupation with successful coping and the studying of health instead of disease. The literature suggests that individuals who have good salutogenic functioning (those scoring high on these salutogenic constructs) move closer to the health side of the ease/dis-ease continuum (Kraft, Mussman, Rimann, Udris & Muheim, 1993; Schroder, Reschrke, Johnston & Maes, 1993).

Over the past decade (1998 – 2008) the focus on individual salutogenic functioning has spread from the field of growth psychology to include its application in the work environment (Breed, Cilliers, & Visser, 2006). Through the application in the work environment, clear guidelines have been set for improving growth and wellness of employees and managers. When taking into account that work takes up the largest share of an adult’s waking life, it is of utmost importance to try to promote employee wellness in the workplace. Harter, Schmidt and Keyes (2002) believe that the well-being of employees is in the best interest of communities and organisations.

2.1.2 Conceptual foundations of wellness

The following concepts of wellness will be discussed: employee wellness and health; sense of coherence; stress; coping; burnout and work engagement.

2.1.2.1 Employee wellness and health

Employee wellness is a broad concept that encompasses a number of workplace factors (such as work engagement, productivity, dedication, commitment and loyalty) (Keyes & Haidt, 2006). Within the overall domain of wellness, it is explained that employee engagement (a combination of cognitive and emotional variables in the workplace) generates higher frequency of positive affect (job satisfaction, commitment, joy, fulfilment, interest and caring). Positive affect then relates to the efficient application of work, employee retention, creativity and ultimately business outcomes (Keyes & Haidt, 2006).
The term *health*, when applied to organisational settings, is used when specific physiological or psychological aspects are of concern (Schreuder & Coetzee, 2006). *Wellness* on the other hand, refers to individual’s life experiences such as life satisfaction and happiness and job-related experiences such as job satisfaction, job attachment and satisfaction with pay or co-workers (Danna & Griffin, 1999).

In understanding wellness of employees, Pettit and Peabody (2008) use an interesting analogy to explain the relationship of health and wellness: health is to wellness as a seed is to a flower. In other words, health provides a foundation for wellness. Another interesting comparison of *health and wellness* can be explained by using a soccer ball as model. The centre pentagon of the soccer ball represents health and each side of the pentagon represents a dimension of health. The side of the pentagon joins to form wellness. Furthermore, the adjacent pentagons symbolise external influences on health and wellness (e.g., environment, access to health care, education, income, culture and technology). Individuals have limited control over external influences on their health and wellness, but considerable control over lifestyle behaviours (diet, physical activity and substance use) (Pettit & Peabody, 2008).

Butler (2001) states the descriptions of health as being physical, mental, spiritual, emotional and social. Wellness refers to the dynamic integration of these dimensions of health:

- **Physical**: describes biological and physiological elements of health.
- **Mental**: involves an individual’s faculties, decision making skills and problem-solving skills.
- **Spiritual**: refers to individuals’ connectedness to a higher power and sense of meaning to life.
- **Emotional**: pertains to the individual’s ability to recognise, express and manage a wide array of emotions.
- **Social**: describes the breadth and quality of the individual’s network of friends, family members, peers, and other confidents.
According to Roslender, Stevenson and Kahn (2006), there is significant gain from regarding employees in general and their wellness in particular, as more than simply a cost to the enterprise. Thinking of employees as a cost to the enterprise is largely inconsistent with implementing comprehensive programmes designed to provide a safe, low-stress working environment in which employees are provided with helpful information on how they can simultaneously improve their own wellness for the benefit of themselves and those close to them as well as their employees. In the context of this study, the concept of employees’ wellness refers specifically to individuals’ sense of coherence and experiences of burnout, sources of job stress and work engagement as aspects of their general well-being.

2.1.2.2 Sense of coherence (SOC)

Sense of coherence is defined as a global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that one’s internal and external environments are predictable and that there is a high probability that things will work out as well as can reasonably be expected (Antonovsky, 1987). Various research findings showed that sense of coherence is related to the three dimensions of burnout, namely emotional exhaustion; depersonalisation and reduced personal accomplishment (Basson & Rothmann, 2002; Gilbar, 1998; Levert, Lucas & Ortlepp, 2000).

Sense of coherence is viewed as a relatively stable dispositional orientation (Antonovsky, 1987). It is possible that employees with a weak sense of coherence will develop burnout, while those who have developed a strong sense of coherence will show work engagement. Studies (Antonovsky, 1987; Rothmann, 2003) have confirmed that a person’s sense of coherence is an important component of one’s health and well-being.

Each person’s sense of coherence requires certain inherent prerequisites for coping successfully, which are represented by the concepts of comprehensibility (the ability to perceive the stimuli stemming from both the internal and the external environment as structured, predictable and as making cognitive sense); manageability (the extent to which individuals perceive that they possess the personal and social resources to meet and cope with the demands of their environment) and meaningfulness (the degree to which people’s lives make emotional sense and to which the demands confronted by them are seen as challenges worthy of energy, investment and commitment (Antonovsky, 1987).
2.1.2.3 Burnout

Burnout can be defined as a persistent, negative, work-related state of mind developing in so-called “normal” individuals, characterised by an array of physical, psychological and attitudinal symptoms, primarily exhaustion. Burnout is generally accompanied by distress, a sense of reduced effectiveness, decreased motivation, and the development of dysfunctional personal and societal attitudes and behaviours at work. This psychological condition develops gradually but may remain unnoticed for a long time by the individual involved (Rothman, et al., 2005).

The three components of the burnout syndrome are described as emotional exhaustion (a reduction in the emotional resources of an individual); (reduced) professional efficacy (a feeling of being unable to meet clients’ needs and to satisfy essential elements of job performance) and cynicism/depersonalisation (a cynical and insensitive attitude towards work, colleagues, clients and/or patients) (Maslach, et al., 1996).

In the same way that employers recognise that they must endeavour to maintain a safe, and thereby a healthy working environment, it is desirable that they minimise the levels of stress their employees are subject to, as for most people, being consistently overworked (burnt out) due to stress, is a profoundly distressing experience (Roslender, et al., 2006). According to Roslender et al., (2006), perhaps the single most important practice that employers can put in place to minimise employee stress is to ensure that there are sufficient numbers of employees to perform the work that needs to be done.

2.1.2.4 Stress

Occupational stress is considered to be the product of an imbalance between environmental demands and individual capabilities (Lazarus & Folkman, 1984). However, most researchers adopt the fairly common practice of using the term “stress” to describe either the external stimulus from the environment or the response of the individual, or sometimes both meanings simultaneously.

In the second half of the twentieth century it was mental rather than physical health that became more widespread, with attention being focused on workplace stress as a major challenge to the wellness of workforces (Cooper & Dewe, 2004; Karasek & Theorell, 1990; Levi, 2002; Theorell, 1997).
Stress, itself a generic term for a wide range of damaging processes that individuals can experience in the workplace and beyond, gives rise to both physical and mental conditions. In the former case hypertension and heart disease are the most commonly known, while breakdowns, phobias and fixations have become increasingly common-place. Stress is also recognised to lead to a number of individual activities that in turn can result in significant levels of ill-health, again both physical and mental: overeating; excessive alcohol consumption; substance abuse and gambling (Sapolsky, 2004).

People’s life experiences and job-related experiences affect their general sense of wellbeing at work. Employee wellness practitioners and career counsellors therefore often have to deal with clients who experiences job-related stress. Sources of job-related stress generally include the following (Cartwright & Cooper, 2002; De Bruyn & Taylor, 2006; Schreuder & Coetzee, 2006):

- **Job and role ambiguity:**
  Employees might find themselves in a situation which is ambiguous or difficult to interpret. If employees are not able to handle this ambiguity, they may jump to conclusions, thus gaining a distorted view of reality.

- **Relationships:**
  Poor or unsupportive relationships with colleagues and/or superiors, isolation and unfair treatment may lead to psychological strain and emotional distress.

- **Job tools and equipment:**
  The fundamental nature of the job, which includes physical working conditions, type of tasks and the amount of satisfaction derived from the job itself, is a major cause of emotional distress.

- **Career advancement prospects:**
  People’s perceptions of a lack of opportunity for further advancement within the company are a major source of emotional distress, particularly in today’s uncertain and unstable workplace.

- **Job security:**
  Job insecurity and uncertainty are extremely detrimental to people’s attitudes and emotional wellbeing.
• **Lack of job autonomy:**
Environments where individuals experience a lack of job control can lead to distress.

• **Work/home conflict/stress:**
Dual career couples often experience inter-role conflict where the role pressures from the work and family domains are mutually incompatible in some respect, leading to strain-based conflict.

• **Workload:**
Working long hours, meeting deadlines, responding to time pressures and role overload area often causes of strain.

• **Compensation and benefits:**
The financial rewards that work brings determine people’s type of lifestyle, feelings of self-worth and perception of their value to the organisation.

• **Lack of leadership/management support and guidance:**
Employees need managers to provide them with adequate career-management support practices, such as performance appraisals; career counselling; mentoring and career planning.

### 2.1.2.5 Coping

Carver, Scheier and Pozo (1992) define coping as an effort to create conditions that permit a person to continue moving towards desired goals or efforts to disengage from goals that are no longer seen as attainable. Coping is described by Schreuder and Coetzee (2006, p.348) as the efforts individuals make to manage situations they have appraised as potentially harmful or stressful. Coping resources play an important role in the stress-illness relationship, as well as in the intervention process regarding effective coping (Houtman, 1990). The ability to cope with stressors is dependable on the coping resources available to the individual, which can be defined as stable characteristics of the individual or the social environment in which the individual functions.

Individuals who work in an environment that permits them to continue moving towards desired goals and efforts experience job satisfaction, which is positively related to individual performance. The emotional well-being of employees and their satisfaction with their work and workplace affect productivity; turnover rates and performance ratings (Keyes & Haidt, 2006).
2.1.2.6 Work engagement

Burnout research seems to shift towards its opposite: work engagement (Storm & Rothmann, 2003). Work engagement can be defined as an energetic state in which the employee is dedicated to excellent performance at work and is confident of his or her effectiveness. Employees with high levels of work engagement appear to be able to accomplish large amounts of work with enthusiasm and pleasure, without becoming sick or being burned out.

Findings of a study conducted by Rothmann, et al., (2005) indicated that some individuals, regardless of high job demands and long working hours, do not show symptoms of burnout. Instead, it seems that they find pleasure in working hard and dealing with job demands. Such individuals could be described as engaged in their work. Burnout and work engagement (being aspects of work-related well-being) are regarded as an outcome of job stress and moderating or mediating individual difference variables, for example sense of coherence.

2.1.2.7 An integration of the conceptual foundations of wellness

The conceptual foundations discussed can be summarised or integrated as positive elements (consequences) of employee wellness (ease) or negative elements (consequences) of dis-ease when wellness factors are not considered in the organisation.

![Diagram showing integration of conceptual foundations](image)

Figure 2.1: Integration of the conceptual foundations (based on the models of Antonovsky, 1987; Maslach, et al., 1996; Schaufeli et al., 2002).
From a positive perspective, wellness and health promote employees’ ability to cope with stressors in the workplace and being engaged in their work. Individuals that cope with stressors and are engaged in their work, often display a strong sense of coherence. On the negative side of the continuum are employees who experience dis-ease (“un”-wellness) due to stress and work overload which leads to burnout. Individuals that are burnt out and stressed often display a weak sense of coherence (Antonovsky, 1987; Maslach, et al., 1996; Schaufeli et al., 2002).

2.2 THEORETICAL MODELS

Over the last two decades psychologists have moved away from pathology to more health-orientated models (Snyder & Lopez, 2002). The importance of wellness models is acknowledged in previous research (Van Eeden, 1996). Two wellness models will be discussed (Jahoda, 1958; Adams, Beznor & Steinhardt, 1997) to conceptualise the psychological wellness of employees, as well as Antonovsky’s (1987) sense of coherence model; Maslach and Jackson’s (1981) model of burnout and Harter, et al’s., (2002) model of employee engagement. In the context of this study, employee wellness is studied with specific reference to the concepts of sense of coherence; burnout; sources of job stress and work engagement.

2.2.1 Jahoda’s positive mental wellness model

During the late fifties and early sixties, Jahoda (1958) studied the existing literature and empirical findings of her time. She discusses mental health by defining it as a quality of the individual human organism and notes that it can meaningfully be defined in terms of the individual. She believes the quality of the state of mental health can’t just be defined as the absence of mental disease but that the quality of the state of health and the quality of the state of illness are in important ways independent of each other (Jahoda, 1958).

Jahoda (1958) identified the concepts of what she calls “positive mental wellness”. She identified six categories that give an indication of “positive mental wellness”. These categories and criteria are as follows:
• **Attitude of an individual toward his/her own self**, including accessibility of the self to consciousness; correctness of the self-concept; feelings about the self-concept and sense of identity.

• **The individual's style and degree of growth, development or self-actualisation**, including motivational processes and investment in living.

• **Integration**, including balance of psychic forces; a unifying outlook on life and resistance to stress.

• **Autonomy**, including regulation of behaviour from within and independent behaviour.

• **Perception of reality**, including perception free from need-distortion and empathy or social sensitivity.

• **Environmental mastery**, including the ability to love; adequacy in love, work and play; adequacy in interpersonal relations; meeting of situational requirements; adaptation and adjustment as well as problem-solving.

According to Jahoda (1958), the absence of mental disease as a criterion has proved to be an insufficient indication in view of the difficulty of defining disease. From the perspective of the individual, Jahoda (1958) approaches the problem of mental health through a multifactor that includes the six attributes in her model. According to her these attributes are indicative of mental health and may be used as the basis of the study of mental health. She realises that the ability to tolerate anxiety is a constructive force in the development and maturing of the individual.

### 2.2.1.1 Benefits / usefulness of the model

Jahoda’s (1958) model is one of the first to give proof that positive psychological wellness has other characteristics than originally accepted. The concepts of what she identified as **positive mental wellness** can be regarded as the original thinking about psychological wellness (Gropp, 2006). Two dimensions, namely aspects of the self and other domains of life in which the person manifests him/herself are reflected in this model. Jahoda (1958) believes the categories of her model are the minimum requirements for obtaining wellness and as such focus on the holistic functioning of an individual. Gropp (2006) reckons that Jahoda’s (1958) six categories will be used as the foundation in determining the dimensions of psychological wellness.
In summary, Jahoda’s (1958) approach to the positive concepts in mental health acknowledges the complexities of the human personality. She avoids the pitfall of attaching value judgements to structural parts of the personality or conflicts therein. She also avoids the assigning of value judgement to elements of the environment or culture.

2.2.1.2 Limitations of the model
Jahoda (1958) acknowledges the limitations of her model and states that the cultural and environmental factors could not be weighted. She understands that the value attached to the integrative and creative functioning of the individual can’t be shared by all cultures and therefore she indicates the need for an approach that is not influenced by culture or bias.

2.2.2 Adams, Bezner and Steinhardt’s perceived wellness model
When studying wellness, it is essential to rely on an individual’s own perspective (Ryff & Singer, 1998). It would make little sense to pronounce that a particular person is happy unless that person thought (perceived) him/herself to be so. According to Adams, et al., (1997), perceived wellness is a multidimensional, salutogenic construct which should be conceptualised, measured and interpreted consistent with an integrated systems view. Perceived wellness is defined as the sense that one is living in a manner that permits the experience of consistent, balanced growth in the emotional, intellectual, physical, psychological, social and spiritual dimensions of human existence.

The perceived wellness model (Figure 2.2) is one of the first models to indicate psychological wellness of employees as a specific dimension within wellness as a whole (Adams, et al., 1997). This model is founded in systems theory and the salutogenic orientation. According to the systems theory, each part of a system is both an essential sub-element of a larger system and an independent system with its own sub-elements. Therefore individual wellness involves an integrated method of functioning and it reinforces the opinion that wellness is not a fixed state but a developing process that continues on a daily basis (Rothmann & Ekkerd, 2007).
The perceived wellness model identifies six wellness dimensions that are represented in the form of a cone. The definitions of the components of perceived wellness are as follows (Adams et al., 1997):

- **Physical wellness**: a positive perception and expectation of physical health.
- **Spiritual wellness**: a belief in a unifying force between the mind and body or a positive perception of meaning and purpose in life.
- **Psychological wellness**: a general perception that one will experience positive outcomes to the events and circumstances of life.
- **Social wellness**: the perception of having support available from family or friends in times of need and the perception of being a valued supportive provider.
- Emotional wellness: the possession of a secure self-identity and a positive sense of self-regard. Self-identity refers to one’s internal image of oneself, whilst self-regard is the value placed on self-identity (i.e. the extent to which one values and likes oneself).

- Intellectual wellness: the perception of being internally energised by an optimal amount of intellectually stimulating activity.

According to Adams et al. (1997), practitioners and researchers could focus on the salutogenic pole of each dimension represented in Figure 2.2 by measuring wellness perceptions which precede observable symptoms. The model in Figure 2.2 incorporates vertical and horizontal directions. Vertical movement occurs between the illness and wellness poles, whereas horizontal movement is the dynamic, balance-seeking force along each dimension of wellness. The top of the model represents wellness because it is extended to the fullest possible extent, whilst the tightly constricted bottom represents illness. In between are combinations of wellness in several dimensions and the various states of balance among them.

2.2.2.1 Benefits and disadvantages of the perceived wellness model

The concept wellness and well-being is increasingly regarded as an important construct in South Africa (Adams et al., 1997; Rothmann & Ekkerd, 2007). However, the perceived wellness model fills a void in perceived health research and demonstrates potential utility as a research tool. Research has shown (Adams, et al., 1997) that when employees’ wellness is important to the employer and the organisation acts accordingly, it will have a positive effect on the employees and the organisation will also benefit, because individuals with various risk factors for disease tend to be higher-cost employees in terms of health care. However, employees who are well have lower cost implications, while also being more productive (Rothmann & Ekkerd, 2007).
2.2.3 Antonovsky’s sense of coherence (SOC) model

Van Eeden (1996) states that sense of coherence (SOC) is the central concept identified in the salutogenic paradigm described by Antonovsky (1987). SOC develops through repeated experiences of making sense of countless stressor in an individual’s life (Strümpfer, 1990). Antonovsky (1987, p.16) identified three core dimensions of sense of coherence, namely: comprehensibility, manageability and meaningfulness. He explained each of the three SOC subcomponents and their contribution to the SOC constructs as follows:

- **Comprehensibility**
  According to Antonovsky (1987), comprehensibility refers to the extent to which individuals perceive the stimuli that confront them as making cognitive sense, as information that is ordered, consistent, structured, clear and therefore predictable, rather than noisy, chaotic, disordered, random, accidental and unpredictable. Antonovsky (1987, p.17) mentions that the person high on sense of comprehensibility expects that the stimuli he or she will encounter will be predictable or, at the very least, when they do come to surprises, be orderable and explicable. A person high on comprehensibility would be able to make sense of sad things happening.

- **Manageability**
  According to Antonovsky (1987, p.118), manageability refers to the extent to which people perceive that resources that are adequate to meet demands posed by stimuli are at their disposal. These resources available to the person may be friends, colleagues, God, a union or even religious structures.

  Antonovsky (1987, p.19) also mentions that there will be no sense to feeling victimised by events or being treated unfairly by life. Even the mere fact that individuals perceive that help is available may contribute to the concept of manageability. When people are high on manageability, they have the sense that supported by their own resources or by those of others, they will be able to cope and not grieve endlessly.
Meaningfulness

Meaningfulness, according to Antonovsky (1987), refers to the extent to which a person feels that life makes sense emotionally, rather than cognitively.

People who are high on meaningfulness feel that life makes sense emotionally, that at least some of the problems and demands posed by living are worth investing energy in, are worthy of commitment and engagement, and are challenges that are welcome rather than burdens that they would much rather do without.

Antonovsky (1987, 1993) points out that the meaningfulness component is the most important component of the three dimensions of the construct sense of coherence. He also proposed that a high level of meaningfulness enables individuals to transform their coping resources from potential to actual utilisation. Antonovsky (1993) mentions that he sees meaningfulness as representative of the motivational element. Therefore, individuals classified as having a strong sense of coherence always appear to speak of areas in life that are important to them, that they care about and that make sense to them in the emotional and not only the cognitive way. Those individuals classified as having a weak sense of coherence give little evidence that anything in life seem to matter particularly to them. Those high on sense of coherence will willingly take up challenges and will be determined to do his or her best to overcome problems with dignity.

Antonovsky (1987) regards the construct sense of coherence as a universal mechanism that could be applicable to any culture. Further, individuals’ sense of coherence seems to be a property that develops over the lifespan, meaning it can be learned. It has a strong correlation to perceived health, mental well-being and quality of life (Antonovsky, 1987).

2.2.3.1 Usefulness of the sense of coherence model

From a salutogenic perspective, the sense of coherence model has proved to be an excellent model to use in understanding coping and wellness, because its focuses are on health and not illness (Antonovsky, 1987). The most important consequence of thinking salutogenically is that it focuses our attention on those factors that
contribute to coping. From a salutogenic perspective, individuals who experience high degrees of stress without falling ill have a personality structure differentiating them from persons who become sick under stress (Ratliff-Crain & Baum, 1990, p.227).

2.2.4 Maslach’s burnout model

Maslach’s model of burnout (Maslach & Jackson, 1981) was introduced in the early 1980’s. Based on years of exploratory research in a variety of “people-oriented” professions, Maslach and Jackson (1981) have developed a three component model of burnout which is presently accepted as the most comprehensive model in research testing. According to Schaufeli (2003), burnout consists of three interrelated but conceptually distinct characteristics, namely exhaustion, cynicism and low professional efficacy.

• **Exhaustion** describes a reduction in the emotional resources of an individual. When asked how they feel, burned-out employees typically answer that they feel drained or used up and physically fatigued (Schaufeli, 2003).

• **Cynicism** refers to the interpersonal dimension of burnout and is a negative, callous or detached response to various aspects of the job and/or cynical and insensitive attitudes towards work, colleagues, clients and/or patients (Schaufeli, 2003).

• **Low professional efficacy** refers to a feeling of being unable to meet clients’ needs and to satisfy essential elements of job performance (Schaufeli, 2003).

The notion of exhaustion presupposes a prior state of high arousal or overload rather than one of low arousal or underload, which implies that burnout is not a response to tedious, boring or monotonous work (Schaufeli, 2003). However, exhaustion fails to capture a critical aspect of the relationship people have with their work. Chronic exhaustion can lead people to distance themselves emotionally and cognitively from their work, so that they are less involves with, or responsive to the needs of other people or the demands of the task. According to Maslach (1998), distancing is such an immediate reaction to exhaustion that a strong relationship from exhaustion to depersonalisation or cynicism is consistently found in burnout research.
Furthermore, a work situation with chronic, overwhelming demands that contribute to exhaustion or cynicism is likely to erode an individual’s sense of accomplishment or effectiveness. Also, it is difficult to gain a sense of accomplishment when feeling exhausted or when helping people toward whom the individual is hostile. In some situations, the lack of efficacy seems to arise more clearly from a lack of relevant resources, while exhaustion and cynicism appear from the presence of work overload and social conflict (Maslach, 1998).

2.2.4.1 Usefulness of Maslach’s model of burnout
Maslach’s model of burnout is the most widely used model in research on burnout and is generally regarded as the measure of choice for any self-reported assessment of this syndrome (Maslach, et al., 1996). However, to date, no clinical research, on either burnout symptom-analogy or on diagnostic criteria has been done using the Maslach’s Burnout Inventory. As such, it cannot be used for individual diagnosis. Individuals can only compare themselves to see where they stand in relation to other people their occupational group. This exercise can help people develop an awareness of whether burnout is an issue that they need to address. The awareness that a problem exists can be the first step in alleviating any form of job burnout (Maslach et al., 1996).

2.2.5 Harter, Schmidt and Keyes’ model of employee engagement
The employee engagement model of Harter, et al., (2002) focuses on the well-being approach to understand the benefits of promoting the well-being of employees. Harter et al., (2002) see well-being as a broad category, which include a number of workplace factors. Within the overall category of well-being they discuss a hypothesised model that employee engagement (a combination of cognitive and emotional antecedent variables in the workplace) generates higher frequency of positive affect (job satisfaction, commitment, joy, fulfilment, interest, caring). Positive affect relates to the efficient application of work, employee retention, creativity, and ultimately business outcomes.

Harter et al., (2002) also see the workplace as a significant part of an individual’s life that affects his or her life and wellbeing. According to Spector (1996), a small but
growing body of research suggests that facets of well-being are associated with a host of positive business unit outcomes, such as increased productivity and reduced turnover.

2.2.5.1 Elements of employee engagement

Harter et al., (2002) describe the following elements of employee engagement in their model, namely basic human needs in the workplace; contributing to the organisation; sense of belonging and creating the right environment:

(a) Basic human needs in the workplace

It has been proved that there are basic human needs in the workplace that transcend company and industry boundaries (Harter et al., 2002). To fulfil in the basic needs of the employee, the company must help the employee to understand the ultimate outcomes and must supply the employee with what he/she needs to get the work done. Basic needs start with clarity of expectations, and the basic materials and equipment to do the job properly must be provided. When employees’ needs are met, the credibility of the organisation or company will be reflected to some extent and it will also result in positive emotions of the employee such as interest. If needs are not met, negative emotions such as boredom or resentment may result, and the employee may then become focused on surviving more than thinking about how he can help the organisation succeed (Harter et al., 2002).

(b) Contribution to the organisation

It is important that employees feel that they are contributing to the organisation. According to Harter et al., (2002), the most important basic element of this contribution is perhaps the person-environment fit. This means that the right people must be in the right job. Individual employees must have an opportunity to do what they do best in their current roles. The talents, knowledge and skills of an employee must be understood and acknowledged. Frequent and immediate recognition for good work is important to create positive emotions and the authors feel is also necessary to understand how each person’s prefers to be recognised.

Harter et al., (2002) mention that great managers appear to be very keen at finding the connection between the needs of an individual and the needs of an organisation,
which can lead to greater frequency of positive emotion such as joy, interest and caring.

(c) Sense of belonging
A sense of belonging to something beyond oneself is an important element of employee engagement and a basic human need (Baumeister & Vohs, 2002). When decisions that affect employees are made in the workplace, having their opinions heard and involving them in the decisions can influence interest. Employees who can connect their work to a larger, meaningful mission or purpose of the overall organisation are likely to have higher levels of interest and ownership of organisational outcomes (Wrzesniewski, McCauley, Rozin & Schwartz, 1997). According to Harter et al., (2002), the employee must be reminded, through the mission of the company, of the big-picture impact of what the work relates to. Furthermore, the importance of friendships and how positive emotions that occur through friendships at work will likely build resources that reinforce creativity and communication are also emphasised. Harter et al., (2002) believe that great managers appear to be good at creating opportunities for people at work to get to know each other.

(d) Creating the right environment
Harter et al., (2002) believe an environment must be created in which employees have opportunities to discuss their progress and grow and this will lead to positive emotions. This implies that employees must have chances to grow and develop and pick up new skills and knowledge.

Work environments that are perceived to facilitate personal goals should foster greater employee satisfaction and well-being, with stronger effects in the case of highly valued personal goals. Ilies and Schwind (2007) describe job satisfaction as a pleasurable or positive emotional state resulting from the appraisal of one’s job or job experiences. Work climates that also support the satisfaction of three universal psychological needs – competence, autonomy and relatedness – promote work engagement and psychological well-being (Ter Doest, Maes, Gebhardt & Koelewijn, 2006).

Maslach and Leiter (1997, p.23) redefined burnout as “an erosion of engagement with the job”. In the view of these authors, employee engagement is characterised
by energy, involvement and efficacy, which are considered the direct opposites of the three burnout dimensions, namely exhaustion, cynicism and lack of professional efficacy respectively.

Employee engagement consists of three dimensions, namely vigour, dedication and absorption (Schaufeli & Bakker, 2003).

- **Vigour** is characterised by high levels of energy and mental resilience while working, the willingness to invest effort in one’s work, not being easily fatigued and persistence even in the face of difficulties.
- **Dedication** is characterised by deriving a sense of significance from one’s work, by feeling enthusiastic and proud about one’s job and by feeling inspired and challenged by it.
- **Absorption** is characterised by being totally and happily immersed in one’s work and having difficulties detaching oneself from it. Time passes quickly and one forgets everything else that is around.

According to Schaufeli and Bakker (2003), **vigour** (exhaustion) and **dedication** (cynicism) are related to burnout. **Vigour** refers to the activation dimension of well-being, while **dedication** refers to identification with work. However, absorption and profession efficacy seem to be less related than the other dimension, but both dimensions might also be regarded as components of work engagement.

### 2.2.5.2. Factors influencing employee engagement

The following factors or sources of job stress increase or decrease employees’ engagement (Schreuder & Coetzee, 2006):

Factors that increase employee engagement are the absence of work-family conflict; job stability and employment; growth and development; up-to-date knowledge and skills; good working relationships; a proper work-life balance; balanced job load; adequate pay and benefits; job satisfaction; good physical work conditions and job security (Schreuder & Coetzee, 2006).
Factors that decrease employee engagement are work-family conflict; job loss/unemployment; plateauing; obsolescence; work relationships; work-life balance; job overload; pay and benefits; aspects of the job; job insecurity and underemployment (Schreuder & Coetzee, 2006).

2.2.5.3 Benefits and disadvantages of employee engagement

Well-being in the workplace is, in part, a function of helping employees do what is naturally right for them by freeing them up or allowing them to do so – through behaviours that influence employee engagement and therefore that increase the frequency of positive emotions (Harter et al., 2002). Behaviours that increase the frequency of positive emotions lead to increasing clarity of expectations, the understanding and use of resources that is congruent with company goals, individual fulfilment in work, a bonding of individuals through a sense of caring, ownership for the altruistic and tangible impact of the company, and learning that is in line with this shared mission. In the long run, these aspects benefit both the employee and the company (Schaufeli & Bakker, 2003).

2.2.5.4 Usefulness of the model

The model of employee engagement is of importance to this study as employee satisfaction and commitment, joy and caring, which are important elements of employee engagement, are important aspects of employee wellness. The model includes several dimensions that are operationalised and interpreted consistent with the systems approach (Adams et al., 1997).

The well-being perspective is quite applicable to business and when the four elements or dimensions of employee engagement (basic human needs in the workplace; contributing to the organisation; sense of belonging and creating the right environment) of the model are followed, it may increase the opportunity for success of the organisation (Harter et al., 2002). Workplaces with engaged employees, on average, do a better job of keeping employees, satisfying customers, and being financially productive and profitable. Workplace well-being and performance are not independent. Rather, they are complimentary and inter-dependent components of a financially and psychologically healthy workplace (Schaufeli & Bakker, 2003).
2.2.6 Integration of models

The aforementioned theoretical models discussed are based on the principles of systems theory which assumes that each part of a system is both an essential sub-element of a larger system with its own sub-elements (Schaufeli & Bakker, 2003).

The multi-dimensional aspects of psychological wellness (well-being and health; sense of coherence; stress; coping; burnout and work engagement) as well as the interaction between different dimensions are explored. Taking the different models into consideration, it appears that psychological wellness is multi-dimensional, with optimal functioning occurring when all dimensions are in balance. Psychological wellness functions thus in a complex system that changes with time and place, as well as with the integration of the different dimensions (Gropp, 2006).

Jahoda (1958) is one of the first writers who gave empirical proof that positive psychological wellness has other characteristics than originally accepted and she believes these concept categories are the minimum requirements for obtaining wellness. According to Gropp (2006), Jahoda’s model will be used as the foundation in determining the dimensions of psychological wellness.

Adams et al's., model (1997) is one of the first models to indicate psychological wellness as a specific dimension within wellness as a whole. This model reinforces the opinion that wellness is not a fixed state but a developing process that continues on a daily basis. A definite link between psychological wellness and overall wellness is confirmed in using the model.

The sense of coherence within an individuals’ psychological functioning is characterised by the comprehension of stimuli stemming from the environment as clear, ordered and structured (Antonovsky, 1987). Individuals are motivated by what they want, prefer, like and choose. Individuals with strong sense of coherence take responsibility for themselves and their performance at work. They are not afraid to make decisions for themselves in the work situation (Antonovsky, 1987).

Burnout is used as an umbrella term, referring to three related reactions to a job (exhaustion; cynicism and low professional efficacy) (Maslach, 1981). Obtaining
specific information on these three components permits a greater focus for organisational development initiatives, by facilitating the development of strategies suited to the challenge confronting the organisation. It also provides a clearer answer to the question of whether the intervention had the intended impact.

Harter et al., (2002) see the workplace as a significant part of an individual’s life that affects his or her life and well-being. Their model of employee engagement is of importance to this study as employee satisfaction and commitment, joy, fulfilment, interest and caring is an important aspect of employee wellness. Table 2.1 gives a theoretical integration of the models discussed.

Gropp, Geldenhuys and Visser (2007) argue that despite the current interest in psychological wellness, little effort has been made in evaluating how psychological dimensions are related to overall wellness. These authors believe there is no general agreement about how psychological wellness should be measured and there is little consensus between the different models and theories of psychological wellness.

However, Gropp (2006) came to the conclusion that two dimensions, namely aspects of the self (interpersonal, affective or cognitive behaviour, spirituality, personal growth) and other domains of life (interpersonal, social and contextual and work) in which the self manifests itself appear to be consistent in all the wellness models. Van Eeden (1996) compared various models of psychological wellness and according to her, the models focused on the holistic functioning of an individual, evolving from interactions of factors and systems.

The above mentioned studies by Gropp et al., (2007) and van Eeden (1996) also apply to the three models discussed in this study. The models point out that it is important to take a holistic approach to address employee well-being and satisfaction in the workplace because events and experiences at work (and off work) spill over and affect employee well-being.

In a review of eighty-one studies providing sufficient data on the relationship between health and well-being of one type or another, Zautra and Hempel (1984) report that the predominance of studies find a moderate association between self-reported health and an index of subjective well-being. Antonovsky (1987) agrees with Zautra and Hempel (1984) that there is a relationship between health and well-
being which is more than likely to be reciprocal. Because the sense of coherence is indeed related to health, it could reasonably be expected that health should be related to a variety of aspects of well-being. If successful coping with life stressors has positive consequences for health, it could also have positive consequences for satisfaction, happiness, morale and positive affect (Antonovsky, 1987).
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Construct</td>
<td>Positive mental wellness</td>
<td>Perceived wellness</td>
<td>Sense of Coherence (SOC)</td>
<td>Burnout</td>
<td>Employee engagement</td>
</tr>
</tbody>
</table>
| Category / dimension differentiation  | Six concept categories  
  - Attitude towards own self  
  - Individual style & degree of growth  
  - Integration  
  - Autonomy  
  - Perception of reality  
  - Environmental mastery | Six wellness dimensions  
  - Physical  
  - Social  
  - Intellectual  
  - Occupational  
  - Spiritual  
  - Emotional | Three dimensions  
  - Comprehension  
  - Manageability  
  - Meaningfulness | Three dimensions  
  - Exhaustion  
  - Cynicism  
  - Low professional efficacy | Three dimensions  
  - Vigour  
  - Dedication  
  - Absorption |
| What is the relationship between categories / dimensions?  | Person manifests him/herself through aspects of self and other domains of life. | The individual functions within multiple dimensions simultaneously. | Individuals with a strong SOC, cope better with life's stressors which lead to higher career and life satisfaction. | Individuals who are overloaded experience symptoms of exhaustion, cynicism and low professional efficacy which influence well-being in a negative way. | Individuals who experience vigour, dedication and absorption have a higher sense of well-being and dedication to work through identification. |
| How is employee wellness attained?  | Through focusing on the holistic functioning of the individual. | Through job tasks and work environments that make sense to individuals and which they find meaningful and manageable. | Through assigning work roles in which individuals can express themselves freely and not feel distanced due to being overloaded or through the organisation setting unrealistic demands. | | |
| What is the theory’s usefulness for employee wellness practices?  | Useful in recognising the importance of employee wellness which will lead to lowered anxiety; lowered costs and increased productivity. | Useful in identifying career and stress factors and minimising these to allow for optimum individual coping and functioning. | Useful as it recognises the need for a balance between individuals’ and the organisation’s needs, preferences and demands which will lead to employee job satisfaction, general well-being, engagement, commitment and fulfilment. | | |
2.3 VARIABLES INFLUENCING EMPLOYEE WELLNESS

The variables cross-cultural influences; gender influences; age and person influences will be addressed.

2.3.1 Cross-cultural influences

Given the diversity of the South African population, the question arises whether there are differences in psychological wellness between the various population groups. Societal and cultural contexts of life shape the perceptions of individuals to pursue identity development, goals and happiness. One may expect differences between population groups regarding perceptions and levels of psychological wellness, because values differ across cultures as well as across subgroups (Gropp, et al., 2007).

2.3.2 Gender influences

Although the literature does not indicate that gender is a reliable predictor of psychological well-being, it does indicate that women often score less favourably (Gilbreath & Benson, 2004). Golembiewski, Munzenrider and Stevenson (1985) indicated that women were more likely to experience advanced phases of burnout than men. Manning (1988) found that women scored higher on an index of job-related strain and proved that other studies have found a tendency for women to score higher on Goldberg’s measure of psychiatric disturbance. It is therefore important to include gender as a control variable in studies of well-being.

Antonovsky (1987) argued that cultural, social and role patterns constructed for men and women, as well as lack of socio-economic value of women’s contributions to society and the labour market play a large role in females’ levels of psychological well-being. However, one would nowadays have to interpret these findings within the context of the Employment Equity initiatives, striving for gender equality and female empowerment (Viljoen & Bosman, 2005).
2.3.3 Age

In a study conducted in the South African police service, two factors related to well-being were found, namely wellness and unwellness (Rothmann & Ekkerd, 2007). Wellness consisted of positive aspects of psychological, emotional, social, physical, spiritual and intellectual well-being. Unwellness consisted of the negative aspects of the above mentioned aspects. Statistically significant differences were found between the perceived wellness and unwellness of different age groups. The youngest age group (20 – 30 years) showed the highest levels of perceived wellness, while the age group (41 – 50 years) scored the lowest on perceived wellness. The age group (20 – 30 years) also scored the highest on unwellness, while the age group (41 – 50 years) scored the lowest on unwellness. Other studies also found that younger individuals appear to experience lower psychological well-being and higher burnout than their older, more experienced counterparts (Rothmann & Ekkerd, 2007).

As people age, many of them should be able to engineer their way into jobs they enjoy. They may also develop more realistic expectations about what to expect from a job and a supervisor. These changes should reduce older employees’ stress and increase their satisfaction and mental health, as supported by research showing negative correlations between age and burnout and between age and job related strain (Gilbreath & Benson, 2004).

2.3.4 Person influences

One reason for the traditional emphasis on environment rather than personal sources of well-being has been pragmatic: aspects of the environment (for instance, in a stressful job) can in principle be modified as a means to improve well-being (Warr, 2006). Employee counselling or stress management training at the individual level often includes prescriptive advice about specific improvement goals or about procedures for personal relaxation or the management of time. Individual tailored interventions could identify an employee’s cognitive schemata that reflect how he or she construes the environment. Strategies to alter selected schemata could then be applied to an employee’s own construct system.
Such an approach would create systematic kinds of person-specific helping interventions within organisations that so far appear not have been explored (Warr, 2006).

Perceived stress because of job demands and a lack of support contributed to a weak sense of coherence of employees. Job stress has a strong influence on burnout and engagement and this effect is both direct and indirect. Employees with a strong sense of coherence were found to experience less burnout and more work engagement, presumably because stimuli from the environment are perceived as making cognitive sense, as being under control of both the employee and significant others, and as being motivationally relevant and meaningful (Rothmann, et al., 2005).

2.4 IMPLICATIONS FOR EMPLOYEE WELLNESS PRACTICE

Research into employee well-being has often sought to characterise key elements in a job or organisation that may influence employee reactions (Warr, 2006). In a survey that was done by employee assistance professionals in South Africa it was found that the most prevalent problems in the workplace are family issues (25 %), stress (23 %), depression (21 %), alcoholism (14 %), job conflict (9%) and drug abuse (2 %). There are numerous stressors that employees have to contend with in the organisational environment, for example globalisation; work conditions; management behaviour and trust (Nel & Spies, 2006). These are a few main areas in practice making it useful and important to study employee wellness.

Harter et al., (2002) explain that work is a pervasive and influential part of the individual and the community’s well-being. Work affects the quality of an individual’s life and his or her mental health, and thereby can affect the productivity of entire communities. The ability to promote well-being rather than engendering strains and mental illness is of considerable benefit not only to employees in the community but also the employer’s bottom line. The emotional well-being of employees and their satisfaction with their work and workplace affect citizenship at work, turnover rates, and performance ratings.
However, researchers have conceived employee well-being broadly and often not in a way that is intuitively actionable for managers and employees (Harter et al., 2002). Moreover, few studies have linked a measure of employee well-being to business unit outcomes, such as employee turnover, customer loyalty, productivity and profitability. It would therefore be extremely valuable to study and research employee wellness further, particularly in the South African organisational context.

2.4.1 Globalisation

Globalisation and the changing world of workplaces demands on organisations to perform better and be more competitive. The result is workplace reductions, unemployment and outsourcing and this takes its toll on the well-being of employees as it leads to job insecurity and uncertainty (Cooper, 2005; Rothmann, et al., 2005; Viljoen & Bosman, 2005). The anticipation of negative change sometimes even causes greater stress than the actual change itself, which has led to what employers now refer to as “the flexible workforce” although in “family friendly” terms it is anything but flexible. The psychological contract between employer and employee in terms of “reasonably permanent employment for work well done” is truly being undermined, as more and more employees no longer regard their employment as secure, with many more engaged in short-term contract or part-time working (Cooper, 2005).

If organisations buy most of the skills they need either from individuals working at home or by hiring people to do specific jobs or carry out specific projects, these arrangements will lead to little or no personal contact with co-workers and communication via electronic technologies. Working from home can affect the delicate balance between home and work and human beings will have to be able to cope with permanent job insecurity (Cooper, 2005). Although there are positive elements including a great deal of control, individuals will need to take responsibility for their own personal development in regard to their work towards balancing work and the family, and better utilisation of disposable personal time (Cooper, 2005).
Also, with fewer staff doing more work in nearly every industry, employees experience exhaustion both mentally and physically. Moreover, skilled workers for newly developed positions are difficult to find, causing added workloads for employees (Rothmann, et al., 2005). These factors might lead to individuals going into a phase of burnout which has a negative effect on employee wellness.

2.4.2 Work conditions
The way people feel at work is largely a function of conditions at work and has a direct influence on employee wellness (Csiernik, 1995). It is not the nature of work that is the primary risk but rather the lack of control over how one meets the job’s demands and how one uses one’s skills. It is not necessarily the demands of work but the organisational structure of work that is the major culprit in causing stress-related illnesses and affect employee wellness in a negative way (Csiernik, 1995).

Csiernik (1995) argues that despite some progressive trends it is still the individual employee who is considered sick and who requires reshaping to better fit the needs of the workplace environment. If Employee Assistance Programs (EAP’s) are to continue to evolve, the field needs to better understand the full nature of wellness and the relationship between wellness and the nature of work. EAP’s will need to work towards not only assisting in enhancing workers’ wellness but also in creating well workplaces (Schreuder & Coetzee, 2006).

2.4.3 Supervisor / management behaviour
In a study conducted by Gilbreath and Benson (2004) it was proved that supervisor behaviour can affect employee well-being and suggests that those seeking to create healthier workplaces should not neglect supervision but abate psychosocial hazards. Employees reporting that their supervisor was high on both consideration and initiation of job structure reported lower levels of stress than employees whose supervisors were low on both these factors. Harsh criticism delivered by supervisors was positively associated with burnout and psychological distress which led to lower levels of employee wellness (Gilbreath & Benson, 2004).
Renwick (2003) conducted a study that found human resources managers to be both engaging in the process of enhancing employee well-being at work, and also acting against it. Employee attitudes to work differed. Employees felt that their job required them to work very hard and yet management don’t support skill development. Very few employees felt satisfied with their jobs and thought management strategy and structure being to retain control and contain costs. Very few employees were engaged at work and specific employee concerns included a lack of resources to the job, development not being encouraged, and not achieving due recognition.

Conclusions drawn from human resources approaches were that while the advantages to employee wellbeing through adopting a strategy led by human resources managers are numerous, the potential costs to employee well-being are also significant. The latter must be addressed by organisations if future employee commitment is to be secured (Renwick, 2003).

2.4.4 Trust
Another factor that influences employee well-being is trust (Bagaim & Hime, 2007). Trust is fundamental to the existence of human relationships (including the workplace relationship between employees and their co-workers and supervisors) as it has demonstrated its practical significance in the determination of commitment and job satisfaction. Trust has also been implicated in the successful management of change, teamwork and diversity initiatives (Bagaim & Hime, 2007).

2.4.5 Focus areas of the industrial psychologist in the workplace
It is important for industrial psychologists to focus on the effects of the organisational environment on workers’ quality of life and performance. Strain (too much challenge) or boredom (too little challenge) often hinders employees’ quality of life and performance. A healthy work force means the absence of strain or boredom (Edwards, Caplan & Van Harrison, 1998).
Proponents of the well-being perspective argue that the presence of positive emotional states and positive appraisals of the worker and his or her relationships within the workplace accentuate worker performance and quality of life. When environments provide and people seek out interesting, meaningful and challenging tasks, individuals in these situations are likely to have what Brim (1992) has called manageable difficulties and Csikszentmihalyi (1997) has described as optimal states. That is when demands match or slightly exceed resources individuals experience positive emotional states (pleasure, joy, energy) and they perceive themselves as growing, engaged and productive (Waterman, 1993). From the well-being perspective, a healthy work force means the presence of positive feelings in the worker that should result in happier and more productive workers.

2.5 CHAPTER SUMMARY
The aim of the chapter was to conceptualise employee wellness and salutogenic factors assisting in individual coping. The paradigmatic and conceptual foundations of employee wellness were discussed as well as theoretical models of employee wellness. Further, variables influencing employee wellness were outlined as well as its implications for practice.

In Chapter 3, the paradigmatic and conceptual foundations of career anchors will be discussed as well as a theoretical model of the construct career anchors.
CHAPTER 3
CAREER ANCHORS

In Chapter 3, the paradigmatic and conceptual foundations related to the concept of career anchors are discussed as well as the theoretical models of Bandura (2001), Super (1992) and Schein (1978). The variables influencing career decision making as well as the implications for practice are outlined. The chapter is concluded with an integration of the theoretical principles outlined in Chapters 2 and 3.

3.1 PARADIGMATIC AND CONCEPTUAL FOUNDATIONS
The concept of career anchors will be discussed from the perspective of career psychology. An overview of the field of career psychology will be given as well as the main focus areas.

3.1.1 Paradigmatic foundations: career psychology
Career Psychology is the study of career development and career behaviour that is an integral part of human development (Greenhaus, et al., 2000). Career development as an aspect of human development, refers to an ongoing process by which an individual progresses through a series of stages, each of which is characterised by a relatively unique set of issues, themes or tasks across the life span of individuals (Schreuder & Coetzee, 2006).

Crites (1969, p.16) defines career behaviour as "all responses the individual make in choosing and adjusting to an occupation". As a concept, career choice can have different meanings (Schreuder & Coetzee, 2006). It can be defined in the subjective context of the individual’s preferences, aspirations, orientations, images and intentions, as well as in the objective context of economic conditions and sociological factors such as family and education. As a construct in psychological theorising, career choice acquires meaning in accordance with how it is conceptualised by different theorists. Some theorists distinguish between career choice, career or work adjustment and career development, while others use the terms as relatively interchangeable. In this study, career choice, adjustment and development are seen as related concepts in the field of enquiry denoted as career choice (Schreuder & Theron, 2002).
Schreuder and Coetzee (2006) describe three main theories of career choice, namely content theories; process theories and post-modern theories. So-called content theories are aimed at explaining or predicting career choice in terms of specific factors, that is, individual characteristics or psychological phenomena that are involved in choice. Theorising about career choice had its origins in the matching-men-and-jobs approach early in the twentieth century. This approach gave rise to the focus on the content of career choice. On the other hand, the so-called process theories are conceptualisations of career choice as a dynamic process that evolves over stages of development. In the post-modern approach, the focus is on individuals’ subjective experience of their career development and individuals are the agents who construe their careers (Schreuder & Coetzee, 2006).

In this study, career behaviour (including career choice) will be addressed within the context of career anchors as the internal factors influencing career decision making. Career anchors involve people’s perceptions of their transferable talents, motives and values; as well as external variables such as work experience influencing their career decision making.

3.1.2 Conceptual foundations
The following concepts of relevance to the study will be discussed, namely career, career orientations, career characteristics, career planning, development and management and career decision making.

3.1.2.1 Career
The term “career” is used in many different ways and has many connotations (Schein, 2006). However, generally Schein (2006) describes four distinct meanings that are assigned to the concept “career”, namely (i) career as advancement; (ii) career as profession, (iii) career as lifelong sequence of work experiences and (iv) career as lifelong sequence of role-related experiences. Over the years, the most popular definition is the notion of career as the number of upward moves (promotions) during an individual’s career life. This is also referred to as the linear career pattern or career as advancement (Brousseau, 1990; Driver, 1979).
As organisations are changing, becoming more flexible, introducing fewer structures, contracting out services and using more freelance workers, careers are increasingly being viewed in terms of lifelong learning rather than in terms of upward movements (Schreuder & Coetzee, 2006). The traditional concept of a career that spans a lifetime doing one type of work in one organisation no longer exists. Frequent job changes are becoming the norm and it is likely that an individual may have three or four careers during the span of his work life (Schreuder & Coetzee, 2006).

For the purpose of this study, career has therefore been defined as a *lifelong sequence of work experiences*. Schreuder and Coetzee (2006) also define career in terms of the modern-day perspective of a career, namely that a career is *any sequence of employment-related experiences*. Coetzee (2006, p. 1) describes careers of the 21st century as “significant learnings and experiences that identify an individual’s professional life, direction, competencies and accomplishments through positions, jobs, roles and assignments”.

There has been an increasing emphasis on the distinction between an internal and external career (Ellison & Schreuder, 2000). The internal career involves a subjective sense of where an individual is going in his/her work life, as opposed to the external career. The external career includes the formal stages and roles defined by organisational policies and social concepts of what an individual can expect in the organisational structure (Ellison & Schreuder, 2000; Schein, 2006). Arthur (1992) argues that in order for the individual to adapt to the fast-changing environment, there is a need to shift from external to internal career thinking, that is to cease interpreting career according to organisational position and status and rather rely on a personal interpretation of the individual’s changing and cumulative work experience. By viewing career from a subjective perspective, the accuracy of predicting a match between the individual and his/her occupation can probably be increased (Savickas, 1992).
In contemporary times a “boundaryless” career or a “protean” career exists that is more free-form, has to be managed more by the career occupant, and may involve movements across many employers (Hall, 2002). Aspects of the internal (subjective) career are included in the protean career. Schein (1990) describes the internal career as those “themes and concepts one develops that make sense out of one’s own occupational pursuits”. This includes attitudes, needs, values and perceptions that an individual has about a career. According to Cascio (2003, p.373), the subjective career is held together by a self-concept that consists of (1) perceived talents and abilities, (2) basic values and (3) career motives and needs. Whereas the subjective career consists of a sense of where one is going in one’s work life, the objective career refers to the sequence of employment-related experiences during the course of an individual’s lifetime (Schreuder & Coetzee, 2006).

3.1.2.2. Career orientations
Career orientations determine the nature of the learning cycles that individuals experience throughout their career lives (Coetzee, 2006). The careers individuals choose are based on their beliefs and viewpoints about different types of careers and that they view as most desirable. Career interests, career values, personality type preferences, unique talents and viewpoints about individuals’ possible selves (the possible working roles individuals could have) also play an important role when making career choices.

When first appointed, individuals are usually trained in some or other specialised field, but until they are appointed to the career of their choice, individuals will not know whether their capabilities meet the demands of their potential career (Schreuder & Coetzee, 2006). Employees achieve more self-knowledge and develop a clearer concept about their careers. This self-concept comprises of self perceived talents and abilities; self perceived motives and needs as well as self perceived attitudes and values, which together form the individual’s career anchor or dominant career orientation (Schein, 2006).
Career success and advancement can indicate whether or not an individual’s career is oriented around a specific career anchor (Schein, 1990) and can also be indicative of the career patterns that individuals follow (Brousseau, 1990). Career patterns suggest that individuals have their own unique views about the paths their careers should follow and define their career movements and career decisions across the life/career span.

3.1.2.3 Career characteristics

Whereas organisations used to promise “employment security”, employers are increasingly promising nothing at all or only “employability security”, implying that individuals will need to learn on the job skills that will make them more employable elsewhere (Schein, 2006). Employment security in the 21st century resides in the person rather than the position and will depend on the individual developing important characteristics as a worker and as a person (Coetzee, 2006). These characteristics include (but are not limited to) career self-efficacy; career maturity; career competency and career resilience.

Based on the work of Bandura (1986), self-efficacy is seen as a key concept in career decision making. Self-efficacy is the belief in one’s capabilities to successfully engage in a specific area of behaviour and refers to the individual’s sense of having some control over events that affect his/her life (Betz, 2004). Many factors influence high/low levels of self-efficacy, such as gender; family origin; background; socio-economic status and the nature and quality of educational opportunities.

Hacket and Betz (1981) suggest that men and women differ with regard to expectations of self-efficacy. In contrast to men, women have low expectations of self-efficacy because their socialisation experiences result in their having low expectations of success, particularly in areas of work traditionally associated with men, when in fact such scores may simply reflect lower confidence or less familiarity (Dagley & Salter, 2004).
Coetzee (2006, p.9) describes *career maturity* as “being able to make career decisions that reflect decisiveness, self-reliance, independence and being willing to compromise between one’s personal needs and the requirements of one’s current career situation”. Career maturity includes types of behaviour conducive to adjustment. It refers to general types of behaviour in specific life stages, as well as to prior aspects of behaviour manifested in the particular developmental tasks of a given stage. In this context, career maturity is not a unitary trait that increases with age. Age is a factor in career maturity only in that a person is evaluated in terms of the behaviour of other people in the same stage; that is, a person may be mature at any age, depending on his/her adjustment in a stage associated with that age. Career maturity amounts to readiness to make career decisions and to cope with the developmental tasks of particular life stages (Super, 1992).

Jones and De Fillippi (1996) describe *career competency* as the abilities (or intelligence) regarding the “know-why” (values, attitudes, internal needs, identity and lifestyle), the “know-how” skills (expertise capabilities: tacit and explicit knowledge) and “know-whom” (networking relationships and how to find the right people). In addition, career competency also include abilities such as “know-what” (opportunities, threats and job requirements), “know-where” (entering a workplace, training and advancing), and “know-when”, (timing of choices and activities).

According to Van Vuuren and Fourie (2000), the behavioural component of *career resilience* encompasses the ability to

1. adapt to changing circumstances,
2. be positive about a job and organisational changes,
3. be comfortable to work with new and different people,
4. exhibit self-confidence and
5. exhibit a willingness to take risks.

Career resilience is related to a low fear of failure, a low need for security and a high tolerance for uncertainty and ambiguity. However, an individual does not need to possess all of these characteristics to be considered resilient (Van Vuuren & Fourie, 2000).
In view of the definition of career resilience, adverse career circumstances that careerists could encounter include: fewer stable attachments in the workplace; less explicit career paths; acute uncertainty about future and alternative working arrangements; challenges to individuals’ sense of security and identity; multiple roles; high stress levels and balancing work and non-work demands (King, 2001).

In order to survive in the present working environment individuals must develop resilience (Schreuder & Coetzee, 2006). To facilitate growth towards career resilience, it is suggested by Collard, Epperheimer and Saign (1996) that employees are encouraged to take control of their own careers; emphasise continuous learning as an important element of career development and include work content and work strategy skills as part of career assessment. Individuals should also be made aware of the changing environment by developing a future focus; benchmark individuals’ skills against standards of excellence in their particular field and make individuals aware of their career success in order to minimise anxiety (Lankard, 1996).

3.1.2.4 Career planning, development and management

Career planning can be described as the process by which employees obtain knowledge about themselves (their values, personality, preferences, interests, abilities) and information about the working environment and then make an effort to achieve a proper match (Schreuder & Coetzee, 2006, p.59). Career planning is merely a process whereby the individual, either on his/her own or with organisational assistance, determines short- and long-term career goals. The literature indicated that the responsibility for career planning rests primarily with the individual (Cabrera & Albrecht, 1993; Caudron, 1994; Haywood, 1993). In today’s unpredictable and rapidly changing environment, it is even more important for the employee to take control of his/her own career. It cannot be solely in the hands of the employer. Self knowledge is a prerequisite for successful career planning. This involves knowledge of one’s interests, skills, values, strengths and weaknesses. An individual who knows himself/herself well can make more rational decisions (Schreuder & Coetzee, 2006).
From an organisational perspective, career development is viewed as an ongoing, formalised effort by the organisation that focuses on developing and enriching the organisation’s human resources in light of both the employees’ and the organisation’s needs (Byars & Rue, 2004, p.226). From the perspective of the individual, career development can be described as the ongoing process by which individuals progress through a series of stages, each of which is characterised by a relatively unique set of issues, themes or tasks (Greenhaus et al., 2000, p.13). A career consists of different stages and the individual is confronted with different issues during each of these stages. Effective career management therefore requires knowledge of the distinctive physical and psychological needs of the individual embedded in each life/career stage because the career needs of the learner, those of the employee in mid-career and those of an employee approaching retirement are not the same.

One of the key career concepts related to career development and career choice is career management. Career management can be described as an ongoing process whereby the employee (1) obtains self-knowledge (interests, values, abilities, personality, career anchors; (2) obtains a knowledge of the working environment (job and organisations); (3) develops career goals; (4) develops a strategy and (5) obtains feedback on the effectiveness of the strategy and the relevance of the goals (Greenhaus & Callanan, 1994).

Career management involves making realistic choices, which includes greater attention to the individual’s skills and the demand for those skills in the labour market (Armstrong & Crombie, 2000). Traditionally, career management tended to focus on hierarchical moves (development) of the employee but contemporary career studies show that younger employees increasingly tend to seek lateral rather than hierarchical paths and these paths are upheld by career anchors and values (Marshall & Bonner, 2003). Lateral moves create cross-functional experiences and opportunities by moving on a horizontal level through rotation in various positions on the same level (Baruch, 2003).
Career management is the shared responsibility of the employer and employee. The individual is primarily responsible for taking control of his/her career, while, on the other hand, the employer has a supportive role to play (Stevens, 1990). The employer plays a career planning training role and provides facilities such as career workshops, career workbooks, career centres and counselling to assist employees in making better career decisions (Schreuder & Coetzee, 2006).

3.1.2.5 Career decision making
Career decision making refers to the selection of a course of action that has implications for an individual’s work-related experiences over time (Singh & Greenhaus, 2004). Many career related behaviours explicitly or implicitly involve a career decision. It is reasonable to expect that the emergence of shorter and more frequent career cycles will require individuals to make a greater number of career decisions over the course of their lives (Borman, Ilgen & Klimoski, 2003).

In making career decisions throughout the career life-span, an individual needs to have as many of the following skills as possible: self knowledge; knowledge of employment opportunities; developing career goals; developing a strategy; implementing and experimenting; and obtaining feedback on the effectiveness of the strategy and the relevance of the goals (Coetzee & Roythorne-Jacobs, 2007, p.52).

A decision making process can be divided into two phases, each involving different steps of decision behaviours, namely *anticipation* and *implementation* (Schreuder & Coetzee, 2006; Miller-Tiedeman & Tiedeman, 1990). In the *anticipation phase*, four steps may be discernible, namely:

- *Exploration*, which refers to becoming aware of job requirements and possibilities;
- *Crystallisation*, in which awareness is focused on particular and alternative patterns of choice;
- *Choice*, which involves making a tentative choice; and
- *Clarification*, which involves organising and preparing to implement the choice.
Miller-Tiedeman and Tiedeman (1990) further define the *implementation stage*, consisting of three steps, namely:

- *Induction*, which involves entry into the job;
- *Reformation*, which involves becoming proficient in the job and feeling good about it; and
- *Reintegration*, which, as it involves the emergence of meaningful methods of experience, provides the individual with a perspective about himself and the work sphere.

These steps illustrate the nature of a decision making process. Career development over the lifespan, however, does not involve only one process, but multiple decision making processes of this kind. The sequence of the steps is not necessarily the same in each process. As the individual’s life direction can change, so too can the steps of a decision making process (Schreuder & Coetzee, 2006).

### 3.2 THEORETICAL MODELS

The following career models of relevance to the study will be discussed: the social cognition career theory (SCCT) of Bandura (2001); Super’s (1957) career development theory and Schein’s (1978) career anchor model, the latter forming the foundation of this research.

#### 3.2.1 The social cognition career theory (SCCT)

The social cognition career theory (SCCT) has grown out of Albert Bandura’s (2001) social cognitive theory and attempts to address issues of culture, gender, genetic endowment, social context and unexpected life events that may interact with the effects of career-related choices (Lent, et al., 1994). The SCCT focuses on the connection between self-efficacy, outcome expectations and personal goals that influence an individual’s career choice. SCCT proposes that career choice is influenced by the beliefs the individual develops and refines through the following four major sources, namely mastery experience; vicarious learning; social persuasion and physiological factors (Bandura, 2001).
• *Mastery experience* is the most important factor deciding a person’s self-efficacy. Simply put, success raises self-efficacy and failure lowers it.

• *Vicarious learning* is a process of comparison between a person and someone else. When people see someone succeeding at something, their self-efficacy will increase; and where they see people failing, their self-efficacy will decrease.

• *Social persuasion* relates to encouragements/discouragements. These can have a strong influence – most people remember times where something said to them significantly altered their confidence. Whereas positive persuasions increase self-efficacy, negative persuasions decrease it.

• *Physiological factors* implies that in unusual, stressful situations, people commonly exhibit signs of distress; shakes; aches and pains; fatigue, fear and nausea. A person’s perceptions of these responses can markedly alter a person’s self-efficacy. It is the person’s belief on the implications of their physiological response that alters their self-efficacy rather than the sheer power of the response.

These four aspects work together through a process in which an individual develops an expertise or ability for a particular endeavour which is met with success and therefore reinforces the individual’s self-efficacy or belief in future continued success in the use of this particular ability or expertise (Bandura, 2001). As a result, the individual is likely to develop goals that involve continuing involvement in the activity or endeavour. Through an evolutionary process beginning in early childhood and continuing throughout adulthood, individuals narrow the scope to successful endeavours to focus on and form a career goal/choice. The extent to which an individual views the activity as one at which they are successful and offers them valued compensation, is critical to the success of the process (Schreuder & Coetzee, 2006).
The social cognition career theory proposes four core concepts, as described by Lent, Brown and Hacket (2002), which are triadic reciprocity, self-efficacy expectation, outcome expectations and goals. *Triadic reciprocity* emphasises the interrelatedness of several factors in an individual’s career development. Attributes of the individual (gender, attitudes, aptitude and feeling), aspects of the environment and the actual behaviour of the individual all interact in a bi-directional manner. Underlying the principle of triadic reciprocity is the belief that individuals can be active agents in their career development, that they can shape their environment just as the environment shapes them (Lent et al., 2002).

The concept of *self-efficacy expectations* is rooted in Bandura’s (1997) original self-efficacy concept and explores the beliefs individuals have concerning their capabilities to act on certain career tasks. Career tasks are more likely to be attempted and successfully accomplished if individuals believe that they can do this. Individuals acquire such expectations through direct experiences of success or failure (personal accomplishments), observing others succeed or fail (vicarious learning), receiving encouragement from significant others (social or verbal persuasion) or as a consequence of their anxiety levels which can lower their self-efficacy expectations (psychological and affective states) (Lent, et al., 2002).

*Outcome expectations* refer less to individuals’ beliefs in their capacity to perform a task and more to their belief about what the results of such behaviour will be. As Osipow and Fitzgerald (1996) point out, the former belief focuses on the question of “Can I do it”, while the latter focuses on the question of “If I do it, what will happen?” or “Will I like the results if I do it?” (De Bruyn, 1999). If the answer to the last question implies positive outcomes then the individuals are more likely to attempt the behaviours involved.

The concept of *goals* reflects individuals’ determination to undertake a particular activity or to reach a particular outcome. Lent et al. (2002, p.263) state that goals constitute a critical mechanism through which people exercise personal agency or self-empowerment.
The four conceptual factors (triadic reciprocity, self-efficacy expectations, outcome expectations and goals) come into play by influencing the individual’s perception of the probability of success (Lent et al., 2002). If the person perceives few barriers the likelihood of success reinforces the career choice, but if the barriers are viewed as significant there is a weaker interest and choice actions. By adolescence, most people have a sense of their competence in a vast array of performance areas, along with convictions about the likely outcomes of a career. Through a process of intervening learning experiences that further shape one’s abilities and impacts self-efficacy and outcome beliefs, one’s vocational interests, choices and performances are shaped and reshaped (Lent, et al., 1994).

The social cognition career theory differs from the majority of existing career theories in its dynamic nature. Through its focus upon the role of the self-system and the individual’s beliefs the inherent influence of the social and economic contexts are addressed. Of particular relevance for South African career psychology is the recognition by social cognition career theory of the critical role that contextual and environmental factors play in individual career development (De Bruyn, 1999). The aspect of contextual and environmental factors in the social cognition career theory introduces the concept of barriers to career development, which traditional career theories did not address. Barriers to career development may include one’s own limitations; gender discrimination; racial- or ethnic discrimination; being in the wrong working environment; one’s boss and one’s peers (Schreuder & Coetzee, 2006).

Stead, Els and Fouad (2004) used a sample of black and white South African high school students. Stead et al., (2004) found that most students did not perceive gender discrimination or personal characteristics as potential career barriers. White students, however, perceived racial or ethnic discrimination as the most problematic career barrier. Patton, Creed and Watson (2003) examined the perception of work and non-work barriers on a cross-national sample of South African and Australian high school students. The findings of the study indicated a relationship between perception of career barriers and certain career development variables. Students who were less career mature and evidenced higher career indecision reported a greater perception of career barriers (Patton et al., 2003).
3.2.2. Super’s career development theory

Central to Super’s (1957) theory of career development is the notion of the self-concept (Betz, 1994). Self-concept is basically how individuals picture themselves (Super, 1957). The self-concept has been defined as "the constellation of self attributes considered by the individual to be vocationally relevant" (Super, 1963, p.20). The description of self-concept includes one's abilities, personality traits, values, self-esteem, and self-efficacy. Super (1963) suggested that individuals attempt to implement their self-concept through occupational choice. Given the definitional breadth of Super's (1963) construct, one's self-concept may also include beliefs about one's image, personal appearance, and physical attractiveness. Perceptions of one's image may influence beliefs about which occupations would allow for the implementation of the self-concept (Betz, 1994).

Super's (1963) theory proposes that individuals progress through five stages of career development across the life span (Super, Savickas & Super, 1996; Zunker, 1998). The five stages are regarded as growth, exploration, establishment, maintenance, and disengagement.

In the growth stage, an individual begins to develop his or her self-concept (Super, 1957). The growth stage (birth to age ± 12 - 14) involves an individual's first introduction to the world of occupations (Super, 1990). Individuals in the exploration stage (adolescence, age ± 14 - 25) gather more specific information about themselves and the world of work. The stereotypes learned in the growth stage are refined as adolescents and young adults learn more about the world of work and more accurate information is obtained about specific occupations. Individuals then act on this information by matching their interests and capabilities to occupations in an attempt to implement their self-concept at work and in other life roles (Super, 1957).

During the establishment stage (early adulthood, age ± 25 – 45), individuals are concerned with career advancement in their chosen occupation. They are trying to establish a stable work environment with the potential for growth and the opportunity for promotions (Super, 1957).
During the **maintenance** stage (middle adulthood, age ± 45 – 65), individuals are concerned with maintaining their self-concept and their present job status. In the maintenance stage, individuals are faced with career choices, such as whether to remain in their chosen occupation and whether to continue working for their present company (Super, 1957). Some individuals may choose to move off the public stage as they age beyond what many would consider the age norm for their professions. They may make career changes by starting businesses, changing industries, or devoting themselves to nonprofits, foundations and public service (Bloch, 2005).

In addition to occupational change, individuals may change organisations during the maintenance stage (Davis, 2003). As people age, they may feel that they no longer fit the image of the majority of employees who work for their company. Working with significantly younger colleagues, recruiting significantly younger applicants, or being supervised by someone a generation younger than oneself may be difficult issues for some older workers (Brewington & Nassar-McMillan, 2000). Individuals in the maintenance stage may question whether they are too old to work for their company or whether they will be able to compete in the market against younger applicants.

During the **disengagement** stage (old age from ± 65), individuals are focused on developing a self-image and a self-concept that are independent of and separate from work. Advances in health care, the aging of the workforce, and the desire to remain active in the workplace throughout one’s 60s and 70s suggest that people today may spend a longer time in the maintenance stage and delay disengaging from work than was true of their parents and grandparents (Brewington & Nassar-McMillan, 2000).

### 3.2.2.1 Contributions and limitations of Super’s model

One of Super’s (1957) greatest contributions to career development has been his emphasis of the role self-concept development plays. Super (1963) recognised that the self-concept changes and develops throughout people’s lives as a result of experience.
People successively refine their self-concept(s) over time and application to the world of work creates adaptation in their career choice. Although Super's (1957) career development theory provides a foundation for the professional workforce, its research has omitted women, people of colour and the poor. Therefore, with the changing work force and nature of work, the theory has been called into question (Schreuder & Theron, 1997).

Harris-Bowlsbey (2003) noted that there are certain limitations to careers research, which include studies across individuals' entire life spans (Vondracek, 2001). The early and late stages of Super's (1990) model have received limited attention from academics (Swanson, 1992) and there is very little research on the growth stage of Super's (1957) model (Schultheiss, Palma & Manzi, 2005). The disengagement stage has also received limited study (Vondracek, 2001) and only sparse information exist for counselling this population.

3.2.3 Schein's career anchor model
The career anchor concept originated from several decades of research conducted by Schein and others on how individuals define themselves in relation to their work (Ellison, 1997). Schein’s (1978) career research questioned how and why individuals make career decisions. A career anchor is a descriptive and predicative tool that “serves to guide, constrain, stabilise and integrate the person’s career (Schein, 1978). The career anchor is regarded as being “inside the person, functioning as a set of driving and constraining forces on career decisions and choices” (Schreuder & Coetzee, 2006, p.220). The career anchor consists of three components, namely skills and competencies; motives and values. These components are designed to highlight the gradual integration of these components in the person’s total self-concept (Schein, 2006).

- Skills and competencies:
  Individuals need to learn from each experience what they are good at; the learning outcomes both from individuals’ own assessment and from the feedback received from others.
• **Motives:**
Individuals need to learn from each experience what it is they really desire; early in life individuals think they know what they want and what their career aspirations are, but with each experience they discover that there are things they like or don’t like, that some of their aspirations are unrealistic, and that they develop new ambitions.

• **Values:**
Individuals further need to learn from each experience what it is they value in the context of what their occupation or organisation considers important, what their colleagues values, and how the kind of organisational climate they encounter fits with those values.

Being regarded to be “inside” the person, career anchors appear to influence career choices and decisions. If an individual moves into a situation that does not meet his/her needs, compromises his/her values or does not utilise his/her abilities, he/she is likely to feel “pulled back” into a more congruent environment hence the metaphor of an anchor (Schein, 1978). The career anchor can therefore be defined as those aspects of the individual’s occupational self-concept that he/she would not give up if forced to make a choice (Schein, 1990; Schein, 2006). This definition allows for only one anchor – the one set of talents, values and motives at the top of one’s personal hierarchy. However, many career situations make it possible to fulfil several sets of talents, motives and values; making a choice unnecessary and thus preventing a person from finding out what is really at the top of his/her hierarchy. According to Schein (2006), an analysis of an individual’s past educational and occupational decisions is ultimately the most reliable way to determine his/her career anchor. If no anchor emerges, another possibility is that the individual has not had enough life experience to develop priorities that determine how to make those choices.

Derr (1980) developed a graphic presentation of the development of a single stable career anchor over time. As shown in Figure 3.1a, the pre-anchor young adult at an early career stage has numerous needs, values, attitudes and abilities starting to join together into several patterns or trends.
Figure 3.2b shows that typically at the ages 29-35, as individuals approach mid-career, a more definite anchor pattern might emerge for most people. Derr (1980) noted that at this stage careerists are not as receptive to diverse possibilities as in the earlier stage. However, this period includes a surer self-knowledge and careerists considering different work options have a clearer idea of which opportunities would be satisfying and which not.

![Anchor patterns](image.png)

**Figure 3.1: The formation of the career anchor pattern (Derr, 1980)**

As depicted in Figure 3.3c, a distinct career anchor normally becomes established. Derr (1980) suggests that this hardening in the career pattern could trigger one of several reactions. In the first instance, a careerist might experience a mid-life crisis due to a possible mismatch between his work reality and his dominant career anchor. A second reaction could occur when the career anchor pattern becomes so distinct that the resulting rigidity may actually contribute to a personal crisis as the individual loses the ability to adapt to change. The third possibility is when the pattern combines into a sense of integration, wholeness and self-knowledge.

The formation process of a career anchor develops over different career stages and permits flexibility and change in response to the dynamics of life and work in the early stages, but the dominant trend of a person’s needs, values, attitudes and abilities becomes increasingly fixed over time and eventually guides life and career decisions (Derr, 1980).
Schein (1978) indicates that this stabilising tendency is integral to the career anchor concept namely: “to identify a growing area of stability within the person”. Feldman (1989) claims that career anchors can be pulled up and changed, but dramatic changes will require great effort and are not likely to occur very frequently.

One of Schein’s (1978) basic theoretical premises is that individuals’ career values, motivations and attitudes are consistent; mutually interactive and inseparable throughout their careers after an initial adjustment following the first three years or so of workplace experience. An important point about Schein’s (1978) career anchor theory is that despite numerous researchers’ follow-up studies which have sought to refute the theory, the basic typology has held firm (Marshall & Bonner, 2003).

Marshall and Bonner (2003) postulate that career anchors can enhance or lower an individual’s level of career resilience in the context of unstable career conditions. For instance, if an individual’s career anchor has a firm patterning or is well differentiated, the individual could potentially not exhibit high levels of career resilience and vice versa. It is hypothesised that there is a negative relationship between career anchor differentiation and career resilience. The rationale for this hypothesis rests on the postulate relating to the inherent tendency of career anchors becoming a stabilising force in guiding life and career choices (Schein, 1978). It is argued that if the career anchor pattern becomes firmly established, i.e. clearly differentiated, the implied rigidity may lower an individual’s level of career resilience. This, in turn, could pose a severe constraint on individual’s flexibility and adaptability to changing work arrangements (Van Vuuren & Fourie, 2000).

Schein (1978) identified eight "career anchors" that can assist individuals in making the right career choice (Ellison & Schreuder, 2000; Schein, 2006), namely technical/functional competence; general managerial competence; autonomy/independence; security/stability; entrepreneurial creativity; service/dedication to a cause; pure challenge and lifestyle.
3.2.3.1 Technical / functional competence

For people with a preference for the technical/functional career anchor, the satisfaction of being an expert in a particular field is more important than anything else. If they moved into other fields of work they would probably experience less satisfaction as they feel drawn back to their specific area of competence due to the fact that the identity is built around the content of their work. People with a preference for the technical/functional career anchor are therefore committed to being a specialist rather than climbing the organisational ladder (Schein, 2006).

The single most important characteristic of desirable work for people with a preference for the technical/functional career anchor is that it should be challenging to them. Although others might be more concerned about the context of the work, people with a technical/functional competence is more concerned about the intrinsic content of the work and they demand maximum autonomy in executing them (Ellison & Schreuder, 2000). People with a preference for the technical/functional career anchor want to be paid for their skills levels, usually defined by level of education and work experience. These people are oriented toward external equity, meaning that they will compare their salaries to what others of the same skill level earn in other organisations. Moving ahead is measured by the increasing technical challenge that is provided by new job assignments. “Promotion” is also measured by increasing autonomy and support for educational opportunities (Schein, 2006).

3.2.3.2 General managerial competence

The managerial-anchored individual has an interest in general management. He/she differs from the technically competent anchored individual in that he/she places value on the skill of general management as an end in itself, as opposed to a technical individual who would regard it as a necessary, but unfulfilling part of the job. He/she is interested in making or co-ordinating major policy decisions, rather than focusing on specialist information (Schein, 2006).
The managerial-anchored individual differs from people with other anchors, primarily in that they have a combination of analytical competence, interpersonal and intergroup competence, and emotional competence. It is the combination of skills that is essential for the managerial-anchored individual and they want high levels of responsibility; challenging, varied, and integrative work; leadership opportunities; and opportunities to contribute to the success of their organisations (Ellison & Schreuder, 2000). Managerial-anchored individuals measure themselves by their income levels and expect to be very highly paid. They are oriented more toward internal equity than external equity. They prefer promotion to a higher level or greater responsibility based on merit, measured performance and results, the latter being the critical criterion (Schein, 2006).

3.2.3.3 Autonomy / independence
An individual with this anchor avoids being subjected to people’s norms. He/she values freedom to do things his/her own way above all. Self-reliance and independent judgement are hallmarks of his/her character. He/she finds organisational life intrusive and restricting and seeks out employment situations where he/she can be master of his/her own fate (Schein, 2006).

People with autonomy/independence prefer clearly delineated, time-bounded kinds of work within his/her area of expertise. Contract or project work is acceptable and often desirable. He/she would prefer merit pay for performance, immediate payoffs, bonuses, and other forms of compensation with no strings attached. People with a preference for autonomy/independence respond most to promotions that reflect past accomplishments and promotion must provide more autonomy. Furthermore, individuals with an autonomy/independence career anchor respond best to form of recognition that are portable, for example prizes or awards, and most organisational reward systems are not at all geared to dealing with the autonomy-anchored person (Ellison & Schreuder, 2000).
3.2.3.4 Security / stability
The overriding need of an individual with a security anchor is the need to feel safe and secure within an organisation. It is for this reasons that individuals with this anchor choose well-established and reliable organisations that offer long-term security. Individuals with security/stability prefer stable, predictable work and are more concerned about the context of the work than the nature of the work itself. Individuals prefer to be paid in steadily predictable increments based on length of service. Individuals with a security/stability career anchor prefer a seniority-based promotion system and welcome a published grade-and-rank system that spells out how long he/she must serve in any given grade before promotion can be expected (Schein, 2006).

3.2.3.5 Entrepreneurial creativity
The entrepreneurial creativity career anchor is characterised by an overriding need to create or exercise creativity. The individual with an entrepreneurial anchor will continually seek to establish new business, new organisations and/or develop new products and services. It is important to the entrepreneur that his/her new creations must be identified as his/her own personal efforts. Individuals with an entrepreneurial creativity anchor are obsessed with the need to create, and they tend to bore easily. These individuals tend to be restless and continually require new creative challenges (Ellison & Schreuder, 2000).

Ownership is ultimately the most important issue for individuals with an entrepreneurial creativity anchor. If individuals with entrepreneurial creativity develop new products, they want to own the patents. Entrepreneurs want to accumulate wealth, not so much for its own sake but as a way of showing the world what they have accomplished. Entrepreneurs want career systems that permit them to be wherever they need to be at any given point during their careers. Entrepreneurs want the power and the freedom to move into other roles they consider to be key and to meet their own needs. Building fortunes and sizeable enterprises are two of the most important ways that members of this group achieve recognition. In addition, entrepreneurs tend to be rather self-centred, seeking high personal visibility and public recognition (Schein, 2006).
3.2.3.6 Sense of service / dedication to a cause

The sense of service/dedication to a cause anchored individuals have an overriding need to express their values in the context of their work. The expression of values in the work context is of greater importance than utilising their talents. The sense of service/dedication to a cause anchored individual has a great need to improve the world and assist people through the framework of his/her belief system. Individuals with a sense of service/dedication to a cause anchor clearly want work that permits them to influence their employing organisations in the direction of their values and want fair pay for their contributions and portable benefits (Ellison & Schreuder, 2000).

Money per se is not central to the sense of service/dedication to a cause anchored individual but they are concerned about external equity; that is, being paid fairly in relation to what others in their field receive. For these individuals, more important than monetary rewards is a promotional system that recognises the contribution of the individual and moves them into positions with more influence and the freedom to operate more autonomously. Individuals with a preference for the sense of service/dedication to a cause career anchor want recognition and support, both from their professional peers and from their superiors; they want to feel that their values are shared by higher levels of management (Schein, 2006).

3.2.3.7 Pure challenge

An individual with a preference for the pure challenge anchor values the challenge of his/her work above all else. These individuals consistently search for opportunities for self-tests in order to prove to themselves that they can overcome impossible obstacles. The pure challenge individuals’ goal is to solve unsolvable problems and win against all odds. To them life and work are a competition in which winning means everything. Type of work desired, pay and benefits, career growth and form of recognition will vary immensely in the pure challenge individual as a function of the actual kind of work they are doing. There is no easy generalisation for the pure challenge individual, which is also the case for the lifestyle individual (Schein, 2006).
3.2.3.8 Lifestyle

The lifestyle anchor may appear as a contradiction in terms. If an individual values lifestyle above all else, it is logical to assume that his/her career may not be of value to him/her. According to Schein (2006), this is not necessarily true – more and more people are searching for meaningful careers that can accommodate other lifestyle factors. The overriding need of a lifestyle-anchored individual is flexibility. Lifestyle-anchored individuals will be most comfortable in an organisation that respects personal and family concerns. An integration of career and lifestyle issues is itself an evolving process. Hence people who find themselves in this situation want flexibility more than anything else. Lifestyle-anchored individuals look more for an organisational attitude than a specific program; an attitude that reflects respect for personal and family concerns and that makes genuine renegotiation of the work contract possible (Schein, 2006).

3.2.3.9 Further division of career anchors

Feldman and Bolino (2000) as well as Kniveton (2004) reconceptualised Schein’s eight career anchors into three distinct groupings along with their inherent motivation, namely talent-based, need-based and value-based anchors. In addition, Baruch (2004, p.80) includes the following three career anchors that are emerging in the twenty-first century – employability, work-family balance and spiritual purpose. Feldman and Bolino’s (2000) re-conceptualisation provides a useful framework for the career counsellor in understanding clients’ career behaviour and decisions.

The talent-based anchors consist of managerial competence (willingness to solve complex, whole-of-organisation problems and undertake subsequent decision making), technical/functional competence (the achievement of expert status among peers), entrepreneurial creativity (opportunity for creativity and identification of new businesses, products or services) and employability (ability for gaining access to, adjusting to, and being productive in the workplace) (Feldman & Bolino, 2000; Kniveton, 2004).
The need-based anchors consist of security and stability (long-term employment for health benefits and retirement options), autonomy and independence (personal freedom in job content and settings) and lifestyle or work-family balance (obtaining balance between personal and the family’s welfare with work commitments), whilst the value-based anchors consist of pure challenge (testing personal endurance through risky projects or physically challenging work), service and dedication to a cause (working for the greater good of organisations or communities) and spiritual purpose (finding a deeper meaning in the pursuit of creative self-expression through work (Baruch, 2004; Kniveton, 2004). Coetzee and Schreuder (2008) propose an integrated theoretical model of the construct career anchors in Figure 3.2.

![Diagram of career anchors]

- **Objective/external career**
- **Subjective/internal career**

A composite of the individual’s self-perceived career/work orientation (attitudes, needs & values) and talents that develop over time and which when developed, shapes and guides career choices and directions.

**Career Anchors**

- Occupational experiences
- Experiences with regards to work environment/circumstances
- Rewards & career opportunities
- Career paths

- Career identity
- Central component of the self-concept
- Long-term and fairly permanent preferences for work/work environment
- Non-monetary & psychological factors influencing career choices/decision making and experiences of subjective career success and satisfaction
- Stabilising force in total personality which guides and constrains future career decisions

**Needs-based Career Anchors**
- Autonomy/Independence
- Security/Stability
- Lifestyle

**Values-based Career Anchors**
- Service/Dedication to a cause
- Pure challenge

**Talents-based Career Anchors**
- Technical/functional competence
- General managerial competence
- Entrepreneurial creativity

**Figure 3.2: Integrated theoretical model of the construct career anchors (Coetzee & Schreuder, 2008)**
3.2.3.10 Benefits and disadvantages of the career anchor model
Schein’s (1978) work has made a major contribution to how career scholars conceptualise the development of a stable career identity and distinguish that process from initial vocational choice (Feldman & Bolino, 1996). On the other hand, the career anchor theory has several key limitations. First, though it is well known and widely used both by individuals and organisations, it has been subject to limited empirical investigations (Arnold, 1997; Yarnall, 1998). For example, the empirical validation of career anchor classification deserves future attention due to the inconsistency of results (Feldman & Bolino, 1996).

Second, the idea that individuals have only one stable dominant career anchor, has been questioned. Schein (1978) himself also sees that anchors may appear to be changed through work experience that leads to greater self-discovery, but still sees that there is one dominant anchor to be observed. Some other authors see that career orientations can change with age and due to external influences (Derr, 1986; Yarnall, 1998). For example, personality research suggests that people’s personality is quite stable during adulthood, while lifespan developmental psychology views development in terms of tasks people face as they progress through life (Arnold, 1997).

Third, Feldman and Bolino (1996) see that it is possible for individuals to have both primary and secondary career anchors. For those individuals with multiple career anchors, an important factor to consider is whether those career anchors are complementary or mutually inconsistent, i.e. whether it is possible to find a job which fulfils both or all preferences. Contradictory to expectations, Schein’s (1978) own empirical findings indicate that approximately one-third of participants report that they have multiple career anchors.

3.2.4 Integration of career models
An integration of the career models discussed is set out in Figure 3.3. As shown in Figure 3.3, the individual progresses through five stages of career development during the life span of his/her career (Super, 1963).
Central to Super’s (1957) original theory of career development is the notion of the self-concept (Betz, 1994). The description of self-concept includes one’s abilities, personality traits, values, self-esteem, and self-efficacy, which is embedded in an individual’s career anchor (Schein, 1978). Super (1963) suggested that individuals attempt to implement their self-concept through occupational choice and cognitive decision making processes.

The social cognition career theory (SCCT) (Bandura, 2001) focuses on the connection between self-efficacy, outcome expectations and personal goals that influence an individual’s career choice. SCCT proposes that career choice is influenced by the beliefs the individual develops and refines through four major sources, namely mastery experience; vicarious learning; social persuasion and physiological factors (Bandura, 2001). These four aspects work together through a process in which an individual develops an expertise or ability for a particular endeavour which is met with success and therefore reinforces the individual’s self-efficacy or belief in future continued success in the use of this ability or expertise (Bandura, 2001).

Career choice is further influenced by an individual’s career anchor, which can be described as an individual’s career motives and values that impact on career decision making and psychological attachment to an occupation (Feldman & Bolino, 2000; Kniveton, 2004). Career anchors are a key determinant of an individual’s choice of a career or workplace. Individuals often become aware of their career anchor when their self-image is boosted or damaged by compulsory career moves, such as promotion or discharge (Schein, 1990). The career anchor has the function of organising individuals’ experiences, identifying long-term contributions, and establishing criteria for success by which individuals can measure themselves (Coetzee & Roythorne-Jacobs, 2007).
Figure 3.3: Integration of the career models (Bandura, 2001; Super, 1957 and Schein, 1978)
3.3 VARIABLES INFLUENCING CAREER DECISION MAKING

Döckel (2003) proposes that the implications of career anchors for career decision making practices cannot be overlooked since identifying one’s career anchor through a self-diagnostic process strengthens the individual’s ability to make more informed career choices. A measure of career anchors enables the organisation to find a match between the needs of the organisation and those of the individual in order to structure the job accordingly.

Career models that can provide the individual with greater self-insight can serve as an important guide when making career choices in today’s turbulent working environment (Ellison & Schreuder, 2000). Contemporary careers indicate that self-insight is achievable not only by understanding the career choices an individual makes, but also by understanding why he/she makes them and how he/she feels about them (Coetzee & Roythorne-Jacobs, 2007).

Some of the variables influencing career anchors include race / ethnicity; gender; age and personal influences. In a study conducted by Marshall and Bonner (2003), simple linear regressions were undertaken to investigate the impact of age, gender and geographic region (culture) on the career anchors as independent variables. The variable of age was found to be a significant predictor of importance placed on the autonomy / independence and service / dedication to a cause career anchors. Gender was found to be a significant predictor of managerial competence, entrepreneurial / creativity and pure challenge career anchors. Culture significantly impacted on the entrepreneurial creativity and technical/functional competence career anchors. Further research conducted, to support these findings are discussed in more detail (Brott, 2001; Coetzee & Schreuder, 2008; Coetzee, Schreuder & Tladinyane, 2006; Ellison & Schreuder, 2000; Marshall & Bonner, 2003).

3.3.1 Race / ethnicity

In a study conducted by Coetzee, et al., (2006), black participants showed a higher preference for the values-based career anchors (service/dedication to a cause and pure challenge) and the needs-based lifestyle career anchor than for the talent-based career anchor, while the black and white male participants showed a preference for the autonomy career anchor.
The findings indicated that the race and gender groups differed significantly regarding their career anchors.

A further study conducted by Coetzee and Schreuder (2008) showed a significant difference between the various South African race and language groups on the entrepreneurial creativity anchor. However, an interesting observation is that the minority cultural groups, English-speaking coloureds, Indians and white (English- and Afrikaans-speaking) participants show higher mean scores on the entrepreneurial creativity career anchor, whilst the African participants achieved higher mean scores on the general management, lifestyle, security/stability and technical/functional career anchors.

### 3.3.2 Gender influences

Changes in the business environment do not necessarily affect everyone the same. For example, Marshall and Bonner (2003) found males and females focussed on different career anchors. Females, more than males, put more emphasis on factors such as working conditions, facilities for child rearing, career certainty and working hours in their choice of career. Males are more likely to run their own businesses than females. Females, more than males, desire intrinsic rather than extrinsic rewards from their employment. Both males and females have similar views of their career orientation. However, despite employment law, organisations are less responsive to females. Females do have family responsibilities, which on the whole males do not. However, care needs to be taken not to let traditional gender stereotyping affect career development opportunities (Marshall & Bonner, 2003).

An interesting observation from the findings of a South African study conducted by Coetze and Schreuder (2008) is that, as far as the lifestyle career anchor is concerned, no differences were found between males and females.

### 3.3.3 Age / career life span stages

Career development, changes and events occur over the life span of an individual’s career and cannot always be explained in terms of chronological age (Brott, 2001; Schreuder & Coetzee, 2006; Sharf, 1997).
Coetzee and Roythorne-Jacobs (2007) describe three career development stages, namely early life/career stage (17 – 39 years); mid life/career stage (40 – 59 years) and late life/career stage (60+ years).

Greenhaus et al., (2000) see establishment and achievement as the two main career issues during the *early life/career stage* (age 17 – 39) and suggest that it has to be dealt with by both the individual and the organisation. During *career establishment*, the organisation must assist new employees in fitting into their jobs and provide necessary training, while employees should be willing to learn about the job and themselves in order to evaluate their job match. *Career achievement* is related to an advancement phase because it involves a period during which the individual displays a desire for promotion and advancement within the organisation (Brott, 2001; Schreuder & Coetzee, 2006; Sharf, 1997).

Individuals in the early life/career stage are significantly higher needs-driven in terms of their career orientation than participants in the midlife- and late life career stages (Coetzee & Schreuder, 2008). Another characteristic of the early life/career stage participants are that they appear to prefer work situations in which they will be, as far as possible, free of organisational constraints and restrictions and free to develop their professional competence. Their need for autonomy and independence is therefore often stronger than participants in the midlife- and late life career stages (Coetzee & Schreuder, 2008).

The *midlife/career stage* (age 40 - 59) is actually the first realistic opportunity when the individual is able to assess his career anchor accurately. The midcareer period is highlighted by career development theorists as having a large impact on the career of the individual. This period is significant in that it is a period of assessment for the individual and may provide opportunities for growth as well as stress. At this time, it is common for the individual to ask what it is he really wants and he has the opportunity to make some judgement of relative success or failure in meeting goals. Research on career psychology often contains references to this stage as problematic, in fact in most instances is referred to as a midcareer or midlife crisis (Ellison & Schreuder, 2000).
It is therefore common that during the midlife/career stage, the individual will begin to decide what he/she really wants and how much he/she is willing to sacrifice to achieve their goals. He/she may learn to recognise those aspects of him/herself that are most central to his/her character, in other words, those aspects of his/her career that he would not give up if a choice had to be made. The midcareer stage is theoretically the pivotal point in an individual’s life and career cycle, the point at which he/she has the tools to create a balance between his/her internal and external career. The demands of the external career, such as promotion, transfers, the development of the internal career and the consolidation of needs, values and attitudes, coincide at this stage to provide the individual with the wherewithal to make the right career choice at the right time (Ellison & Schreuder, 2000). A mid-life crisis may manifest in individuals of this stage and remaining productive can be hampered by career issues such as job loss, feelings of becoming obsolete in the organisation and discrimination (Schreuder & Coetzee, 2006).

Career issues during the *late life/career stage* (age 60+) may include, for example, life expectancy of individuals. Higher life expectancy might influence individuals’ availability for work (Schreuder & Coetzee, 2006). In late adulthood, individuals can still make valuable contributions to the organisation. Participants in the mid life and late life/career stages appear to place higher value on being in challenging positions where they have the authority and power to influence and lead others in the task of making the world a better place to work and live in (Coetzee & Schreuder, 2008). These participants appear to be active learners who require ongoing training and further development opportunities through on-the-job experience that enables them to sharpen their talents and skills (thus making it possible for them to influence and lead others in a service-oriented work environment).

### 3.3.4 Person influences

Holland’s (1985) theory of vocational personalities predicts occupational choice on the basis of personality type. He believes that career choice is dependent on the interaction between personality and the environment. People lean toward environments that are congruent with their personal orientation.
Choosing a job or an occupation is a choice of lifestyle in which the total personality has to find expression to as great extent as possible (Coetzee, 2006). Personality, which encompasses people’s values, drives, preferences and needs, is perceived as an important determinant of career choice. Choosing a career facilitates the self-expression of personality and people generally seek environments where they can exercise their preferences, skills and abilities. People also possess different ideas about how their careers should develop (Coetzee, 2006; Järlstrom, 2000).

3.3.5 Marital status
In a study conducted by Coetzee and Schreuder (2008), the results showed a significant difference between the career anchors of participants that were single, married or widowed. It appears from the findings that single participants are more attracted towards careers that afford them opportunities to develop their skills and talents in challenging environments in which they have the freedom and power to create their own. On the other hand, married participants appeared to have a stronger need for a career that offer stable and steady employment and benefit packages. This pattern could be attributed to the high need to integrate family concerns with work and career concerns. Widowed participants appeared to have a noticeably higher need than either single or divorced participants to pursue careers in which they can apply their talents and abilities in creating products, services and new ideas (Coetzee & Schreuder, 2006).

3.3.6 Educational levels
An interesting pattern shown by the findings of the study conducted by Coetzee and Schreuder (2008) is the observation that participants with a diploma or first year level degree qualification seemed to be significantly more achievement oriented. They also appear to be more aware and concerned about the skills they need in their jobs. On the other hand, participants with a degree and post-graduate qualification showed a higher concern for their lifestyle needs and the need to have the opportunity to provide a service to others.
3.4 IMPLICATIONS FOR CAREER DECISION MAKING PRACTICE

Change has always been a part of individuals' lives, but it seems that the pace of change is accelerating. Business firms, not-for-profit, public and private organisations – all experience a combination of fast developments in multiple areas – economy, technology, and society in general. These have wide implications for the management and development of people at work, and in particular the planning and management of careers (Baruch, 2003).

In the past, once an individual decided on a career, he/she stayed in that career until retirement. That is not the case anymore: The notion of lifetime employment has been replaced with lifetime employability (Coetzee, 2006). This means that an individual can't rely on his/her employers to maintain employment. Individuals themselves are responsible for their career progression and development (Coetzee, 2006). Career management and planning in an environment where the individual him/herself is responsible for progression and development, is a challenge. If individuals want to remain satisfied and fulfilled by the work they're doing, they need to adjust their career development activities accordingly (Schein, 2006).

Career development is no longer only about gaining the skills and knowledge employees need to move up within one company. Career development today is about achieving flexibility and continuously evaluating and developing skills in order to remain employable and fulfilled over the long term, regardless of who employees are working for, and what industry they are working in (Schreuder & Coetzee, 2006).

To achieve this level of flexibility, employees need to have a very strong sense of who they are and what they want from their work. Because of the way that careers are structured, one’s job and one’s career anchor often do not match (Schreuder & Coetzee, 2006). People are able to perform somewhat in such situations, but they are not happy and do not feel that their real selves are engaged. They can adapt to circumstances and make the best of them, but their anchors do not change; as soon as there is an opportunity they will seek a better match. Not everyone is motivated by the same thing, and ambitions vary greatly.
Some people thrive on being creative and innovative whereas others prefer stability and continuity. Challenge and constant simulation may be important to one person, while creating a work/life balance is paramount to another (Schein, 2006).

Organisations need people with divergent career anchors as they provide a flexible, diverse workforce. Attracting, retaining and motivating good quality employees is accomplished by the employee receiving ongoing development through the provision of advice on which career options to strive for given their skills, interests and perceived potential, all of which may be represented in their career anchors (Marshall & Bonner, 2003). Employees should be encouraged to become aware of their established career anchor as its value in career decision making should not be underestimated. By identifying an individual's career anchor, the vacuum that is often left by psychological tests can be filled (Schreuder & Coetzee, 2006).

3.5 INTEGRATION: THEORETICAL RELATIONSHIP BETWEEN EMPLOYEE WELLNESS AND CAREER ANCHORS

A literature review was undertaken to define employee wellness (more specifically sense of coherence, burnout, sources of job stress and work engagement) and career anchors, in order to be able to examine the theoretical link between these constructs and discover the implications for employee wellness and career decision making practices. Figure 3.4 illustrates the proposed integrated theoretical relationship between the constructs employee wellness and career anchors.

Career anchors are very relevant in today’s turbulent world of work and is a valuable asset in assisting individuals in making decisions about their careers. People can form a strong self-concept and develop career characteristics needed such as, for example career self-efficacy; career maturity; career competence and career resilience to hold their inner career together when changes occur in their external career (Schein, 1990).
Attracting, retaining and motivating good quality employees are accomplished by the employee receiving ongoing development. Development is obtained through career planning and management. Career options to strive for, given the individual’s skills, interest and perceived potential are represented in their career anchors (Marshall & Bonner, 2003). Therefore, an understanding of their career anchor will help individuals in making better informed career choices (Schein, 1990).

Through ongoing development, planning and management of the individual’s career, positive outcomes will result (Feldman, 1976), such as general satisfaction (an overall satisfaction and happiness which is experienced by the employee); mutual influence (the extent to which employees feel control over the way work is carried out); internal work motivation (this can be referred to as the degree to which employees are self-motivated); and job involvement and engagement (the degree of personal involvement in their work). This in turn will have a positive effect/influence on employees’ health and well-being in the workplace (Feldman, 1976).

Occupational health and well-being refer to the physical and mental health of workers. Well-being refers to individuals’ life experiences such as life satisfaction and happiness and job-related experiences such as job satisfaction, job attachment and satisfaction with pay or co-workers (Danna & Griffin, 1999, p. 364). Research shows that work, and more specifically goal-directed, structured activity, translates directly into other mental health outcomes (Kelloway & Barling, 1991) and indirectly affect employees’ life satisfaction (Hart, 1999). Ryff and Singer (1998) concluded that the key dimensions in life, central to positive mental health, are having purpose in life, worthwhile connections with others, self-regard and mastery.

Individuals are influenced and motivated by both intrinsic and extrinsic factors in the career decision making process (Schreuder & Coetzee, 2006). However, when there is a lack of motivation (whether it be intrinsic- or extrinsic motivation), employees may feel dissatisfied which could lead to stress, lower work engagement, inability to cope and in some instances even burn out if individuals feel overloaded (Feldman & Weitz, 1988).
Figure 3.4: Theoretical integration of employee wellness and career anchors

- Employment security
  - Career anchors
    - Technical / Functional competence
    - General managerial competence
    - Autonomy / independence
    - Security / stability
    - Entrepreneurial creativity
    - Service / dedication to a cause
    - Pure challenge
    - Lifestyle
  - Employee wellness
    - Sense of coherence
      - Comprehensibility
      - Manageability
      - Meaningfulness
    - Health
    - Stress and Sources of Job Stress
    - Coping vs. burnout (emotional exhaustion; professional efficacy and cynicism/depersonalisation)
    - Work engagement
      - Basic human needs in the workplace
      - Contributing to the organisation
      - Sense of belonging
      - Creating the right environment
  - Individual / employee characteristics
    - Career self-efficacy
    - Career maturity
    - Career competence
    - Career resilience
  - Career outcomes
    - Self knowledge
    - Successful goal setting
    - Mastery of skills
    - Job involvement
    - Job satisfaction
    - Good person / organisation fit
    - Performance
  - Variables influencing employee wellness and career anchors
    - Race
    - Gender
    - Age
    - Person
    - Marital status
    - Educational levels

- Affects
  - Career planning
  - Career development
  - Career decision making
  - Career management
The wellness constructs discussed, such as sense of coherence, stress, coping, burnout and work engagement are linked to career anchors through individuals’ self-perceived skills, talents, motives and values, which have a direct influence on the individuals’ sense of career satisfaction of dissatisfaction and general well-being. Mismatches between individuals’ and organisation’s needs, motives and values may lead to experiences of job stress. The social cognition career theory (Bandura, 2001) proposes that career choice is influenced by the beliefs the individual develops and refines through mastery experience; vicarious learning; social persuasion and physiological factors. Mismatches between these four variables can markedly alter a person’s career self-efficacy and may lead to feelings of dissatisfaction and distress.

Employee wellness and career anchors are further influenced by variables, such as race, gender, age, personal attributes, marital status and educational levels (Coetzee & Schreuder, 2008; Gilbreath & Benson, 2004; Rothmann & Ekkerd, 2007; Schreuder & Coetzee, 2006).

3.6 SUMMARY

This chapter presented the paradigmatic and conceptual foundations of career anchors; career models; variables influencing career decision making and implications for career decision making practice. Chapters 2 and 3 were summarised through an integration of the theoretical relationships between employee wellness and career anchors.

Herewith phase 1 of the study has been concluded. The research questions pertaining to the literature review have now been answered by means of the theoretical integration.

Chapter 4 introduces the empirical phase of the research project.
CHAPTER 4  
EMPIRICAL STUDY  

Chapter 4 outlines the empirical investigation with the specific aim to describe the statistical strategies that will be employed to investigate the relationship dynamics between employee wellness and career anchors. Research hypotheses are also formulated regarding the relationship between these variables. This phase consists of nine steps as outlined below:

Step 1  Determination and description of the sample  
Step 2  Motivation of the psychometric battery  
Step 3  Administration of the psychometric battery  
Step 4  Scoring of the psychometric battery  
Step 5  Statistical processing of the data  
Step 6  Formulation of the research hypotheses  
Step 7  Reporting and interpretation of the results  
Step 8  Integration of the research findings  
Step 9  Formulation of the research conclusions, limitations and recommendations

Steps 1 to 6 are addressed in this chapter and steps 7 to 9 in chapters 5 and 6.

4.1  DETERMINATION AND DESCRIPTION OF THE SAMPLE  

For sampling to be carried out effectively a few initial decisions had to be taken concerning populations to be sampled and the choice of sample size. These decisions will be presented briefly. It was decided to limit the population to a single organisation and to sample individuals on different job levels, including consultant; senior consultant; manager; senior manager; principal and directorate/associate from a specific division in the chosen organisation. The total population was targeted and comprised of contractors and permanent employees.

A population can be defined as the entire collection of events in which the researcher is interested (Howell, 1995). A sample is a representative group of people or behaviours from which predictions can be made with respect to a total population.
There are different types of samples, for example random or representative (Christie, 1996; Howell, 1995). Assuming that a sample is a truly random sample, meaning that each and every element of the population has an equal chance of being included in the sample, not only can the researcher estimate parameters of the population, but the researcher can also have a very good idea of the accuracy of his/her estimates. To the extent that a sample is not a random sample, the researcher’s estimates may be meaningless, because the sample may not accurately reflect the entire population (Howell, 1995). In this study, a random sample was selected.

The participants in this study were part of the Business Process Solutions (BPS) division of a financial institution. Although questionnaires were sent to 250 individuals, only 90 usable questionnaires were returned, therefore rendering a response rate of 36 % which is a moderate response in terms of the total population. The researcher collected the questionnaires upon completion by the participants.

Table 4.1 indicates the initial and final sample sizes.

**TABLE 4.1 INITIAL AND FINAL SAMPLE SIZE**

<table>
<thead>
<tr>
<th>Initial sample</th>
<th>Questionnaires returned and used</th>
<th>Response rate %</th>
</tr>
</thead>
<tbody>
<tr>
<td>250</td>
<td>90</td>
<td>36 %</td>
</tr>
</tbody>
</table>

**Figure 4.1: Response rate of participants (N = 90)**
4.1.1 Composition of the gender groups in the sample

Table 4.2 shows that females predominated the sample (68 %) whilst males comprised only 32 % of the total sample.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Number of participants</th>
<th>Percentage of total sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>29</td>
<td>32.2 %</td>
</tr>
<tr>
<td>Female</td>
<td>61</td>
<td>67.8 %</td>
</tr>
<tr>
<td>Total</td>
<td>90</td>
<td></td>
</tr>
</tbody>
</table>

Figure 4.2: Gender group distribution of the sample (N = 90)

4.1.2 Composition of the race groups in the sample

As shown in table 4.3, 43 % of the participants were blacks and 57 % were whites.

<table>
<thead>
<tr>
<th>Race</th>
<th>Number of participants</th>
<th>Percentage of total sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blacks</td>
<td>39</td>
<td>43.3 %</td>
</tr>
<tr>
<td>Whites</td>
<td>51</td>
<td>56.7 %</td>
</tr>
<tr>
<td>Total</td>
<td>90</td>
<td></td>
</tr>
</tbody>
</table>
4.1.3 Composition of the age groups in the sample

Observation of Table 4.4 shows that 19 % of the participants were 25 years and younger; 64 % were between 26 and 40 years; 16 % were between 41 and 55 years and 1 % were 56 years and older. Four age categories were measured, yet the category of 56 and older only had 1 % representation and was therefore collapsed with the 41-55 year group for statistical purposes. Only three age groups were therefore compared in terms of their scores on the variables of relevance to the study, namely 25 years and younger (early adulthood life stage or exploration career phase); 26 to 40 years (mid- to late early adulthood life stage or establishment career phase) and older than 40 years (mid- to late life stage or career achievement / maintenance career phase). As shown in table 4.4, the majority of participants were clustered in the age group 26-40 years (the establishment career phase), implying well-established career anchors (Schein, 2006).

According to Super (1992), individuals in the establishment phase of their career become occupied with security/stability, further growth and development, and advancement. Frustration due to unsuccessful stabilisation may lead to either stagnation or to change in the form of career transitions.
Some individuals, however, thrive on change – they do not stabilise and their careers may consist of a series of trial periods. Super (1992) contends that most people, including those who find stabilisation and those who favour change, see the years of early adulthood (specifically the exploration and establishment phases) as the best years of their lives.

**TABLE 4.4 AGE GROUP DISTRIBUTION OF THE SAMPLE (N = 90)**

<table>
<thead>
<tr>
<th>Age groups</th>
<th>Number of participants</th>
<th>Percentage of total sample</th>
<th>Super’s (1992) life stages/career phases</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 years and younger</td>
<td>17</td>
<td>18.9 %</td>
<td>Early adulthood life stage (Exploration career phase)</td>
</tr>
<tr>
<td>26 – 40 years</td>
<td>58</td>
<td>64.4 %</td>
<td>Early adulthood life stage (Establishment career phase)</td>
</tr>
<tr>
<td>41 years and older</td>
<td>15</td>
<td>15.6 %</td>
<td>Midlife (Achievement/maintenance career phase)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>90</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

![Age group distribution](image)

Figure 4.4: Age group distribution of the sample (N = 90)

4.1.4 Composition of the sample in terms of employment status

Table 4.5 shows that 56 % of the participants were contractors and 44 % were permanent employees. The predominance of contractors in the sample group could imply that these participants may have experiences of job instability or insecurity due to impermanence of their job positions. This aspect was taken into account in the interpretation of the empirical findings.
In summary, the biographical profile obtained shows that the main sample characteristics that need to be considered in the interpretation of the empirical results are the following: The participants are predominantly white, contractually employed females in the establishment phase of their life/career stage (26 – 40 years). Research findings by Coetzee, et al., (2006) show that females tend to be more committed to organisations that respect personal and family concerns. Females also appear to prefer more stable, predictable work environments that reward loyalty and steady performance and provide benefit packages that emphasise insurance and retirement programmes, as well as the assurance of steady employment (Kniveton, 2004). If females experience job instability and job insecurity, it might lead to increased feelings of stress (Coetzee & Roythorne-Jacobs, 2007).
4.2 MOTIVATION OF THE PSYCHOMETRIC BATTERY

The selection of the psychometric battery was guided by the literature review. A psychometric battery refers to the measuring instruments or questionnaires used for the purposes of the study. A questionnaire is a list of items or questions that have no right or wrong answers. For example, a questionnaire is generally aimed at assessing a person’s interests, values, motivation or personality rather than his/her abilities (Christie, 1996). In this study, the aim was to measure individuals’ wellness as indicated by their sense of coherence (as measured by the Orientation to Life Questionnaire); level of burnout and sources of job stress (as measured by the Maslach Burnout Inventory); level of work engagement (as measured by the Utrecht Work Engagement Scale) and career anchors (as measured by the Career Orientations Inventory).

In choosing the psychometric instruments, particular emphasis was placed on the validity and reliability of the various instruments. Validity is the extent to which an assessment or test measures what it is supposed to measure, that is, it refers to the degree of correspondence between a test result and relevant criteria. Reliability refers to the “repeatability” of a person’s performance on a test of other method of assessment, such as an interview. If a test is reliable, individuals will tend to obtain the same specific score on different occasions (Christie, 1996; Huysamen, 1986).

The following measuring instruments were used for this study:

- A biographical questionnaire to obtain the personal information needed for the statistical analysis of the data, including gender, race, employment status and age group. The decision to include this information was based on the theoretical review of variables that might have an influence on the empirical results.
- Antonovsky’s (1987) Orientation to Life Questionnaire (OLQ) (as a measurement of the sense of coherence construct).
- Maslach et al.’s., (1996) Burnout Inventory (MBI) (as a measurement of the construct of burnout, including sources of job stress as an additional measurement).
- Schaufeli and Bakker’s (2003) Utrecht Work Engagement Scale (UWES) (as a measurement of the construct of engagement).
• Schein’s (1990) Career Orientations Inventory (COI) (as a measurement of the construct of career anchors).

4.2.1 Antonovsky’s orientation to life questionnaire (OLQ)
Antonovsky’s Orientation to Life Questionnaire (Antonovsky, 1987) will be discussed in terms of its development, rationale of the questionnaire, description of scales, administration, interpretation, validity and reliability.

4.2.1.1 Development of the OLQ
The OLQ is aimed at measuring a series of questions relating to various aspects of people’s lives. The questionnaire measures the constructs comprehensibility, manageability and meaningfulness as elements of the construct of sense of coherence (SOC).

People’s SOC functions as a “sixth sense” for survival and generates health promoting abilities (Antonovsky, 1987; Lindström & Eriksson, 2006). It is therefore not regarded as a fixed state, but rather as a measure of people’s views about and experiences of their life.

4.2.1.2 Rationale of the OLQ
Lindström and Eriksson (2006) describe the rationale of the OLQ as designed to assist individuals in understanding their lives and being understood by others; helping them to perceive that they are able to manage any given situation; and most important to assist them in perceiving the situation as meaningful enough to find motivation and continue with their daily tasks. Empirical research has proved that the OLQ is a universal mechanism and as such applicable to any culture. Further, the construct SOC as measured by the OLQ seems to be a characteristic that develops over the lifespan, meaning it can be learned. Orientation to life as measured by individuals’ sense of coherence has a strong correlation to perceived health, mental well-being and quality of life (Ericksson & Lindström, 2005).
4.2.1.3 Description of the OLQ
In this study, the 1987 version of Antonovsky’s OLQ is used. The OLQ consists of a set of 29 items with three subscales (comprehension; manageability and meaningfulness) to which subjects respond in terms of how true the statement is (Antonovsky, 1987; Ericksson & Lindström, 2005). The comprehension subscale consists of 11 items; the manageability subscale consists of 10 items and the meaningfulness subscale consists of 8 items. The scale used is a summated rating in the form of a seven-point Likert-type scale.

4.2.1.4 Administration of the OLQ
The questionnaire can be administered to individuals and groups, and requires 10 to 15 minutes for administration. The instructions are stipulated on the response sheet. The participants complete the items by making a cross on the seven-point Likert scale. The examiner can either score the form manually or by means of a software program. Supervision is not necessary as the questionnaire is self-explanatory (Antonovsky, 1987). In scoring the questionnaire, items 1, 4, 5, 6, 7, 11, 13, 14, 16, 20, 23, 25 and 27 are reversed scored, before adding sub scores of comprehension, manageability and meaningfulness. Step three involves calculating the total score to determine individuals’ orientation to life or SOC.

4.2.1.5 Interpretation of the OLQ
Each subscale (comprehension; manageability and meaningfulness) is measured separately and reflects the participants’ perception and feelings on these dimensions. As a result, an analysis of responses can be carried out as to what dimensions are perceived to be true for the participants and which are not. The lower the score, the less comprehension, manageability and meaningfulness the individual attach to his/her life. Put differently, the more negatively the individual views their life, chances are good that it will have a negative influence on their overall health and well-being (Antonovsky, 1987).

4.2.1.6 Validity and reliability of the OLQ
The OLQ has been used in at least 33 languages in 32 countries with at least 15 different versions of the questionnaire. In 124 studies using the OLQ to measure SOC, the Cronbach’s Alpha coefficients ranged from 0.70 to 0.95.
The alpha Coefficient values in 127 studies measuring SOC by using the OLQ, ranged from 0.70 to 0.92, and in 60 studies using a modified SOC scale ranged from 0.35 to 0.91. Test-retest correlation studies showed stability and ranged from 0.69 to 0.78 (1 year), 0.64 (3 years), 0.42 to 0.45 (4 years), 0.59 to 0.67 (5 years) to 0.54 (10 years) (Ericksson & Lindström, 2005).

After 10 years, the construct SOC seems to be comparatively stable, but not as stable as Antonovksy (1987) initially assumed (Ericksson & Lindström, 2005). Research shows that SOC tends to increase with age. Moreover, the factorial structure of the construct SOC seems to be multidimensional rather than unidimensional (Rothmann, Jackson & Kruger, 2003). Although divergent findings have been reported, the SOC construct seems to predict a positive outcome within a long term perspective, although there are divergent findings reported. The OLQ scale, as a measure of the construct SOC is generally regarded to be a reliable, valid, and cross culturally applicable measurement of how people manage stressful situations and stay well (Ericksson & Lindström, 2005).

4.2.2 Maslach burnout inventory (MBI)

The Maslach Burnout Inventory (MBI) (Maslach, et al., 1996) will be discussed in terms of its development, rationale of the questionnaire, description of scales, administration, interpretation, validity and reliability.

4.2.2.1 Development of the MBI

Burnout is a psychological syndrome of emotional exhaustion, cynicism/depersonalisation and reduced personal accomplishment (professional efficacy) that can occur among individuals who work with other people in some capacity (Maslach, et al., 1996). Items from the MBI were designed to measure hypothetical aspects of the burnout syndrome. The interview and questionnaire data collected during earlier, exploratory research by Maslach, et al., (1996) were valuable sources for ideas about the attitudes and feelings that characterise burned-out workers. The MBI is designed to assess the three components of the burnout syndrome, namely: emotional exhaustion, cynicism/depersonalisation and reduced personal accomplishment (professional efficacy) (Maslach, et al., 1996).
4.2.2.2 Rationale of the MBI
The MBI provides a distinct perspective on people’s relationship to their work. The MBI is the most widely used measure in research on burnout and is generally regarded as the measure of choice for any self-reported assessment of the burnout syndrome (Maslach, et al., 1996).

4.2.2.3 Description of the MBI
The MBI (Maslach, et al., 1996) consists of 16 items, which are divided into three subscales (emotional exhaustion, cynicism/depersonalisation and reduced personal accomplishment (professional efficacy)). The emotional exhaustion subscale consists of 5 items; the cynicism/depersonalisation subscale consists of 6 items and the reduced personal accomplishment / professional efficacy subscale consists of 5 items. The items are written in the form of statements about personal feelings or attitudes (e.g. “I feel burned out from my work”). The items are answered in terms of the frequency with which the respondent experiences these feelings on a 6-point, fully anchored scale (ranging from 0 “never” to 6 “every day”) (Maslach, et al., 1996).

For the purpose of this study, the following ten categories which are regarded as core sources of job stress by the literature (Cartwright & Cooper, 2002; De Bruyn & Taylor, 2006), were added as a separate section to the MBI: job and role ambiguity; relationships; job tools and equipment; career advancement prospects; job security; lack of job autonomy; work/home conflict/stress; workload; compensation and benefits; and lack of leadership/management support and guidance. The sources of job stress sub-scale items were measured on a five-point Likert-type scale.

4.2.2.4 Administration of the MBI
The MBI (Maslach, et al., 1996) can be administered to individuals and groups, and requires 10 to 15 minutes for administration. The instructions are stipulated on the response sheet. The participants complete the items by making a cross on the six-point Likert scale. The examiner can either score the form manually or by means of a software program. Supervision is not necessary as the questionnaire is self-explanatory (Maslach, et al., 1996). Each respondent’s test form is scored by using a scoring key that contains directions for scoring each subscale.
The scores for each subscale are considered separately and are not combined into a single, total score, thus, three scores are computed for each respondent (Maslach, et al., 1996). The higher the score on each subscale, the higher level of burnout the individual experiences. High scores on the professional efficacy sub-scale means high sense of accomplishment, whereas high scores on the emotional exhaustion and cynicism/depersonalisation subscales means high levels of exhaustion and negative attitudes.

The section containing the categories on sources of job stress can also be administered to individuals and groups and requires 10 to 15 minutes for administration. The instructions are stipulated on the response sheet. The participants complete the items by making a cross on the five-point Likert scale. The examiner scores the form manually and supervision is not necessary as the items are self-explanatory. The scores for each question are considered as a separate category of job stress and are not combined into a single, total score.

4.2.2.5 Interpretation of the MBI
Each subscale (emotional exhaustion; professional efficacy; cynicism/depersonalisation) is measured separately and reflects the participants’ perception and feelings on these dimensions. As a result, an analysis of responses can be carried out as to what dimensions are perceived to be true for the participants and which are not. The lower the score, the less emotional exhaustion, more professional efficacy and less cynicism/depersonalisation the individual attach to his/her life. Put differently, the more negatively the individual views their life, chances are good that it will have a negative influence on their overall health and well-being (Antonovsky, 1987). In terms of the additional Sources of Job Stress categories, high scores indicate the specific category as a high source of job stress.

4.2.2.6 Validity and reliability of the MBI
Convergent validity of the MBI (Maslach, et al., 1996) was demonstrated in several ways. First, an individual’s MBI scores were correlated with behavioural ratings made independently by a person who knew the individual well, such as a spouse or co-worker. Second, MBI scores were correlated with the presence of certain job characteristics that were expected to contribute to experienced burnout.
Third, MBI scores were correlated with measures of various outcomes that had been hypothesised to be related to burnout. All three sets of correlations provided substantial evidence for the validity of the MBI. Validity was further demonstrated by data that confirmed hypotheses about the relationships between various job characteristics and experienced burnout. It was predicted that higher rates of burnout would occur as the number of recipients (caseload) increased (Maslach, et al., 1996).

The reliability coefficients for the MBI (Maslach et al., 1996) subscales were indicated as the following: 0.90 for emotional exhaustion; 0.79 for depersonalisation and 0.71 for personal accomplishment. Data on test-retest reliability of the MBI were reported for two samples. For a sample of graduate students the two test session were separated by an interval of 2 to 4 weeks. The test-retest reliability coefficients for the subscales were the following: 0.82 for emotional exhaustion; 0.60 for depersonalisation and 0.80 for personal accomplishment. For a sample of teachers the two test sessions were separated by an interval of 1 year. The test-retest reliabilities for the three subscales were 0.60 for emotional exhaustion; 0.54 for depersonalisation and 0.57 for personal accomplishment. Subsequent studies have found the MBI subscales to be stable over time, with correlations in the 0.50 to 0.82 range on time spans of three months to one year (Maslach, et al., 1996).

The validity of the section containing the categories of sources of job stress was ensured by means of the literature review which indicated these as core sources of job stress that emerged from various studies (Cartwright & Cooper, 2002; De Bruyn & Taylor, 2006). Reliability of the categories of sources of job stress was measured by calculating Cronbach’s alpha coefficients. These ranged from 0.75 to 0.79. The MBI section (including the section measuring the sources of job stress categories) was regarded as psychometrically acceptable for the purpose of this study.

4.2.3 The Utrecht work engagement scale (UWES)
The UWES (Schaufeli, et al., 2002) will be discussed in terms of its development, rationale of the questionnaire, description of scales, administration, interpretation, validity and reliability.
4.2.3.1 Development of the UWES

Schaufeli et al., (2002) developed the UWES as a self-report questionnaire to assess work engagement which include the three constructs: vigour, dedication and absorption. Schutte, Toppinen, Kalimo and Schaufeli (2000) define work engagement as an energetic state in which the employee is dedicated to excellent performance at work and is confident of his or her effectiveness. Work engagement is regarded as being distinct from other established constructs in organisational psychology, such as organisational commitment, job satisfaction or job involvement.

Maslach and Leiter (1996) initially assessed work engagement by the opposite pattern of scores on the three MBI dimensions – low scores on exhaustion and cynicism, and high scores on efficacy are indicative for high levels of engagement. Schaufeli, et al., (2002) partly agreed with Maslach and Leiter’s (1996) description, but took a different perspective and defined and operationalised work engagement in its own right. Schaufeli, et al., (2002) consider burnout and work engagement to be opposite concepts that should be measured independently with different instruments. According to Schaufeli, et al’s (2002) framework, burnout is characterised by a combination of exhaustion and cynicism, whereas engagement is characterised by vigour and dedication (Storm & Rothmann, 2003).

4.2.3.2 Rationale of the UWES

Engagement is characterized by energy, involvement and efficacy, which are considered the direct opposites of the three burnout dimensions, namely exhaustion, cynicism and lack of professional efficacy respectively. Rather than a momentary and specific state, engagement refers to a more persistent and pervasive affective-cognitive state that is not focused on any particular object, event, individual or behavior (Schaufeli & Bakker, 2003).

4.2.3.3 Description of the UWES

The UWES (Schaufeli, et al., 2002) is a self report questionnaire which includes 21 items. The UWES is divided into three subscales (vigour, dedication and absorption). The vigour subscale consists of 6 items; the dedication subscale consists of 5 items and the absorption subscale consists of 6 items.
The items are written in the form of statements about personal feelings or attitudes: “I am bursting with energy in my work” (vigour); “My job inspires me” (dedication); “I feel happy when I’m engrossed in my work” (absorption). The items are answered in terms of the frequency with which the respondent experiences these feelings on a 6-point Likert-type scale (ranging from 0 “never” to 6 “every day”) (Storm & Rothmann, 2003).

4.2.3.4 Administration of the UWES
The UWES (Schaufeli, et al., 2002) can be administered to individuals and groups, and requires 10 to 15 minutes for administration. The instructions are stipulated on the response sheet. The participants complete the items by making a cross on the six-point Likert scale. The examiner can either score the form manually or by means of a software program. Supervision is not necessary as the questionnaire is self-explanatory (Storm & Rothmann, 2003). Each respondent’s test form is scored by using a scoring key that contains directions for scoring each subscale. The scores for each subscale are considered separately and are not combined into a single, total score, thus, three scores are computed for each respondent. If desired, for individual feedback, each score can then be coded as low, average or high by using the numerical cut-off points listed on the scoring key (Storm & Rothmann, 2003). The higher the score, the higher the levels of engagement an individual experiences on the job.

4.2.3.5 Interpretation of the UWES
Each subscale (vigour, dedication, absorption) is measured separately and reflects the participants’ perception and feelings on these dimensions. As a result, an analysis of responses can be carried out as to what dimensions are perceived to be true for the participants and which are not. The higher the score, the more vigour, dedication and absorption the individual attach to his/her life.

4.2.3.6 Validity and reliability of the UWES
It is important to use a valid and reliable instrument when work engagement is measured. Schaufeli, et al., (2002) developed the UWES in 2002 and found acceptable reliability for it. Two recent studies using confirmative factor analysis demonstrated the factorial validity of the UWES (Schaufeli et al., 2002).
The three subscales are moderately to strongly related. Also, the fit of the hypothesised three-factor model to the data was superior to a one-factor solution (Maslach et al., 2001; Schaufeli et al., 2002).

Storm and Rothmann (2003) studied the internal consistency, factorial validity, structural equivalence and bias of the UWES in South Africa. Although structural equation modeling supported a three-factor model of work engagement in both studies, the correlations between the three dimensions (i.e. vigour, dedication and absorption) were high, suggesting the possibility that work engagement (as measured by the UWES) is a one dimensional construct. Storm and Rothmann (2003) further make mention of the fact that the UWES has not yet been standardised for all professions. Therefore, it is necessary to validate the UWES for all professions, especially for South Africa, which is a multicultural society (Storm & Rothmann, 2003).

In a study conducted by Storm and Rothmann (2003), the preliminary results show that the psychometric qualities of UWES have sufficient internal consistency. For two different samples, the Cronbach’s alphas for vigour were 0.68 and 0.80 respectively. The Cronbach’s alpha coefficients obtained for dedication was 0.91 for both samples and for absorption, 0.73 and 0.75 respectively. The three scales were found to be moderately to strongly related ($r = 0.63$ and $0.70$ respectively) indicating acceptable levels of internal consistency. Also, the fit to the hypothesized three-factor model to the data was found to be superior to a one-factor solution (Maslach, Schaufeli & Leiter, 2001; Schaufeli et al., 2002; Storm & Rothmann, 2003).

The UWES was regarded as psychometrically acceptable for the purpose of this study.

4.2.4 Career orientations inventory (COI)
The COI (Schein, 1990) will be discussed in terms of its development, rationale of the questionnaire, description of scales, administration, interpretation, validity and reliability.
4.2.4.1 Development of the COI

The COI (Schein, 1990) is a self-report questionnaire aimed at measuring eight career anchors of individuals namely, technical/functional competence, general managerial competence, autonomy, security/stability, entrepreneurial creativity, service/dedication to a cause, pure challenge and lifestyle career anchors.

Van Vuuren and Fourie (2000) pointed out that the COI does not purport to measure career anchors as such, but rather career orientations. De Long (1982) found that the COI measured career attitudes, values and needs of individuals, but did not reflect the individual’s perceptions of his or her talents. According to De Long (1982), the COI measures a central part of the concept of career anchors, namely career orientation. Schein (1990) agrees with the view that the construct career anchors can be measured by means of a combination of the COI and a structured in-depth interview exercise. However, applying the COI as a measurement of career anchors for research purposes is regarded as an acceptable and reliable practice by researchers in the field (Burke, 1983; Custodio, 2004; Erdoğmuş, 2003; Marshall & Bonner, 2003; Tladinyane, 2006; Van Vuuren & Fourie, 2000).

4.2.4.2 Rationale of the COI

De Long (1982) describes the rationale of the COI as being able to assess individuals’ career orientations in a valid and reliable manner. Career orientations as a central part of the construct career anchor may provide insight into the stable and salient values and motivations governing individual career decisions and experience.

4.2.4.3 Description of the COI scales

The COI (Schein, 1990) consists of a set of 40 items, all of which are considered to be of equal value and to which subjects respond in terms of how true the statement is. The scale used is a summated rating in the form of a six point Likert-type scale. Total scores obtained for each of the eight categories of career anchors are summed up and averaged to yield an individual score for each career anchor. The category that yields the highest score is regarded as the individual’s dominant career anchor.
4.2.4.4 Administration of the COI
The COI (Schein, 1990) can be administered to individuals and groups, and requires 10 to 20 minutes for administration. The instructions are stipulated on the response sheet. The participants complete the items by making a cross on the five-point Likert scale. Respondents are also requested to add 4 additional points to the three statements that are most true to them in order to determine their most dominant career anchors. The examiner can either score the form manually or by means of a software program. Supervision is not necessary as the COI is self-explanatory (Schein, 1990).

4.2.4.5 Interpretation of the COI
Each subscale (technical/functional, general management, autonomy, security/stability, entrepreneurial creativity, service/dedication to a cause, pure challenge and lifestyle) is measured separately and reflects the participants’ perception and feelings on these dimensions. As a result, as analysis can be carried out as to what dimensions are perceived to be true for the participants and which are not. The higher the score, the truer the statement is for the respondent (Tladinyane, 2006). Subscales with the highest mean scores are regarded as respondents’ dominant career anchor.

4.2.4.6 Validity and reliability of the COI
Burke (1983), Custodio (2004), De Long (1982) and Wood, Winston and Polkosnik (1985) proposed that the COI provides a pretested instrument with demonstrated high internal validity and reliability. Ramakrishna and Potosky (2003) describe the reliability estimates of the COI as indicating internal consistency and temporal stability. The internal consistency of the COI subscales was estimated by using Cronbach’s alpha coefficients. The reported overall internal consistency estimate (as measured by Cronbach alpha coefficients) was 0.83 and the reported internal consistency estimates for the eight subscales ranged from 0.73 to 0.93 (Ramakrishna & Potosky, 2003).

The reliability of the COI (Schein, 1990) was tested in a study conducted by Ellison and Schreuder (2000).
Internal consistency reliability estimates were found for technical competence (0.59); managerial competence (0.71); autonomy (0.75); security (0.78), entrepreneurship (0.75), service (0.73), challenge (0.70) and lifestyle (0.64). These internal consistency reliabilities as measured by Cronbach’s Alpha coefficient scales are moderately high, with the exception of somewhat lower reliabilities for technical competence and lifestyle integration. A desirable reliability coefficient would usually fall in the range of 0.8 to 0.9. However, in the case of individual testing, reliabilities as low as 0.3 are quite acceptable when instruments are used to gather group data. It was therefore decided that the questionnaire could be regarded as sufficiently reliable for use of purpose of the study, bearing in mind that it was used to predict broad general trends as opposed to individual differences (Tredoux & Durrheim, 2002).

4.2.5 Motivation for choice
The Orientation to Life Questionnaire (OLQ) (Antonovsky, 1987); Maslach et al’s., (1996) Burnout Inventory (MBI); Schaufeli et al’s., (2002) Utrecht Work Engagement Scale (UWES) and Schein’s (1990) Career Orientations Inventory (COI) were chosen for their appropriateness, reliability, validity and because the tests are user friendly.

4.2.6 Ethical considerations
The Employment Equity Act, 55 of 1998, requires all psychological tests and other similar assessments to be valid, reliable, fair and unbiased against any employee or any specific group of employees. In order to comply with legislation, care was taken in the choice and administration of the psychometric battery by evaluating the validity of items (content and face validity); the process followed in data collection (procedural reliability); and the way the data are analysed (appropriate, valid and reliable analysis procedure) (Kriek, 2001).

4.3 ADMINISTRATION OF THE PSYCHOMETRIC BATTERY
Validity and reliability are critical in data collection. The data-collection process entails the gathering of data by the researcher (Barker, 1994). The researcher personally handed out questionnaires to each individual after obtaining an employee list with name, surname, business area, reporting manager and contact details.
In terms of ethical considerations in the administration of the psychometric batteries, employees were ensured that the information obtained would be used for research purposes only and would remain confidential as only the researcher had access to the questionnaires and information obtained. Participants were given the option not having to provide their names on the questionnaire if they were uncomfortable to do so. The questionnaires were scored electronically.

4.4 SCORING OF THE PSYCHOMETRIC BATTERY
The data capturer captured the responses of the 90 participants on the various instruments using the SPSS (Statistical Package for Social Sciences, 2003) programme. Reports were produced for the total sample and then per race and gender. All data were then converted into the SPSS databases (Field, 2000).

4.5 STATISTICAL PROCESSING OF THE DATA
The process of determining whether a relationship exists between employee wellness and career anchors and whether various biographical groups differ significantly regarding the variables studied, can be described as follows:

(a) Firstly, the categorical or frequency data (means and standard deviations) as measured by the OLQ, MBI, UWES and COI was determined for the total sample in order to apply the statistical procedures. Cronbach’s Alpha coefficients were also determined for the OLQ, MBI UWES and COI to determine the reliability of instruments for the purpose of the study.

(b) Secondly, correlation tests were conducted to investigate the relationship between the variables measured by OLQ, MBI, UWES and COI. Pearson-product-moment correlation coefficients were applied.

(c) Thirdly, inferential statistical analyses were performed for significant relationships as determined by the correlation tests to investigate whether age, race, gender and employment groups differ significantly in terms of the constructs measured. Levene’s test for equality of variance, ANOVA and t-tests were performed for this purpose.
4.5.1 Cronbach’s alpha coefficients
Cronbach’s alpha coefficients (α) is a statistic. It has an important use as a measure of the reliability of a psychometric instrument. It was first named as alpha by Cronbach (1951), as he had intended to continue with further instruments. Cronbach’s alpha will generally increase when the correlations between the items increase. For this reason the coefficient is also called the internal consistency or the internal consistency reliability of the test (Cronbach, 1951).

4.5.2 Pearson-product moment correlation coefficient
The Pearson-product moment correlation coefficient is the most common correlation coefficient (Howell, 1995). When the covariance is divided by the standard deviation to make the results the estimate of correlation (the Pearson-product moment coefficient), is obtained. The correlation coefficient must be interpreted cautiously so as not to attribute meaning to it that it does not possess. For example, $r = 0.72$ should not be interpreted to mean that there is 72% of a relationship between time and errors. The correlation coefficient is simply a point on the scale between -1.00 and +1.00 and the closer it is to either of those limits, the stronger is the relationship between the two variables. Pearson-product-moment correlations were employed to investigate the relationship between the OLQ, MBI and UWES subscales and COI subscales.

Tredoux and Durrheim (2002) offer informal interpretations for statistically significant Pearson’s correlations of various sizes:

Value of $r < 0.2$: slight, almost no relationship
Value of $r < 0.2 – 0.4$: Low correlation, definite but small relationship
Value of $r < 0.4 – 0.7$: Moderate correlation; substantial relationship
Value of $r < 0.7 – 0.9$: High correlation, strong relationship
Value of $r < 0.9 – 1.0$: Very high correlation; very dependable relationship

Cohen’s (1988) measurement for practical effect size of correlation coefficients was also applied, where $r \geq 0.20$ (small effect); $r \geq 0.30$ (medium effect) and $r \geq 0.50$ (large effect).
4.5.3 Levene’s test for equality of variance

The purpose of Levene’s (1960) test is to determine the homogeneity of variances. Levene’s (1960) test is used to test if \( k \) samples have equal variances. Equal variances across samples are called homogeneity of variance. Some statistical tests, for example the analysis of variance, assume that variances are equal across groups or samples. The Levene test can be used to verify that assumption. If the Levene’s test is significant (\( p \leq 0.05 \)), the two variances are significantly different. If it is not significant (\( p \geq 0.05 \)) the two variances are not significantly different; that is, the two variances are approximately equal (Levene, 1960).

4.5.4 T-tests

The t-test assesses whether the means of two groups are statistically different from each other. According to Hays (1994), this analysis is appropriate whenever the researcher wants to compare the means of two groups. This leads researchers to a very important conclusion: when looking at the differences between scores for two groups, the difference between their means relative to the spread or variability of their scores have to be judged. The t-test does just this. In the context of this study, t-tests were conducted to determine the differences between the gender, race, and employment groups.

4.5.5 Analysis of variance (ANOVA)

Analysis of variance (ANOVA) is a statistical technique for the testing of differences in the means of several groups (Howell, 1995) and currently enjoys the status of being probably the most used statistical technique in psychological research. The popularity and usefulness of this technique can be attributed to two facts. First of all the analysis of variance, like \( t \), deals with differences between sample means, but unlike \( t \), is has no restriction on the number of means. Second, the analysis of variance allows researchers to deal with two or more variables simultaneously, asking not only about the individual effects of each variable separately but also about the interacting effects of two or more variables (Howell, 1995). In the context of this study, ANOVAS were conducted to determine the differences between the age groups.
4.5.6 Statistical significance

The level of significance is the maximum likelihood with which a researcher would be willing to risk the rejection of the null hypothesis, when, in fact, it should have been accepted (Tredoux & Durheim, 2002). In practice, a level of significance of 0.05 or 0.01 is generally the accepted norm, although other values may be used. If a 0.05 or 5 percent level of significance is chosen to test the hypothesis, there are about 5 chances in 100 that the researcher could reject the hypothesis when it should be accepted; in other words, the researcher is 95 percent confident that the right decision has been made. In such a case, the researcher would reject the null hypothesis at 0.05 level of significance \( p \leq 0.05 \), which means that the decision could be wrong with a probability of 0.05 (Tredoux & Durrheim, 2002).

In the case of exploratory research (such as this study), significance levels may be increased to the 10 % level \( p \leq 0.10 \) (Trochim, 2000). Increasing the significance levels from \( p \leq 0.05 \) to \( p \leq 0.10 \) increases the chance of Type I error and decreases the rigor of the statistical procedure of making a Type II error. Increasing the level increases the power of the statistical procedure because the null hypothesis will be more often rejected and the alternative hypothesis will be more often accepted. Consequently, when alternative hypothesis is true, there is a greater chance of accepting it (Trochim, 2000).

In choosing a level of significance for the present study, the researcher took the following into account:

- In the human sciences, researchers are concerned about missing a significant result or making a Type-II error as they are concerned about falsely concluding a significant result. Hayes (1994) points out that when both types of errors (Type-I and Type-II) are equally important, practical significance levels such as 0.20 (and possibly even 0.30) are more appropriate than the conventionally used 0.05 and 0.01 levels.
- As the total number of statistical tests to be performed on a sample increases, the probability of a Type-I error also increases. One approach to counter this accumulating effect is to set the level of significance smaller for the individual statistical test so as to compensate for the overall Type-I error effect. For example, if the overall practical significance level is 0.30, then the significance level for the individual test might be 0.10, 0.05 or 0.01.
However, deciding on the significance level is never easy and the final choice to a large extent remains arbitrary (Hayes, 1994).

- The sample size in the present study was relatively small, thus influencing the power of the statistical tests to detect significant results (Hayes, 1994). Therefore, in view of these considerations, it was decided to use a significance level of 0.10 (10 %) as the cut-off point for rejecting the null hypothesis. Practical significance levels were also considered.

4.6 FORMULATION OF RESEARCH HYPOTHESES

According to Kerlinger and Lee (2000), there are essentially two criteria for good hypothesis statements, namely:

- Hypotheses are statements about the relations between variables.
- Hypotheses should carry clear implications for the empirical testing of the stated relation.

These criteria mean that hypotheses statements contain two or more variables that are measurable or potentially measurable and that they specify how the variables are related. In the context of this study, the research hypotheses were first tested for the relationships between the variables *employee wellness* (specifically SOC, burnout, sources of job stress and work engagement) and *career anchors* (as measured by the COI) and secondly, for the differences between gender; race; employment and age groups.

The following research hypotheses were formulated to achieve the empirical objectives of the study and to meet the criteria for the formulation of the hypotheses.

H01: There is no significant relationship between the employee wellness variables (SOC, burnout, sources of job stress and work engagement) and career anchor variables.

H1: There is a significant relationship between the employee wellness variables (SOC, burnout, sources of job stress and work engagement) and career anchor variables.
H02: There are no significant differences between the gender; race; employment; and age groups regarding their employee wellness levels (SOC, burnout, sources of job stress and work engagement) and career anchors.

H2: There are significant differences between the genders; race, employment; and age groups regarding their employee wellness levels (SOC, burnout, sources of job stress and work engagement) and career anchors.

The research hypotheses were tested by means of descriptive, correlation and inferential statistics.

4.7 CHAPTER SUMMARY
This chapter discussed the research design and methodology, including the population and sample; choice, administration and scoring of the psychometric battery; data processing and the research hypotheses.

Chapter 5 covers the data analysis, interpretation and integration of the empirical findings.
CHAPTER 5
RESEARCH FINDINGS

In this chapter, steps 7 and 8 of the empirical investigation are discussed. This entails the reporting, analysis and interpretation of the data through descriptive, explanatory and inferential statistics. The empirical findings will be integrated with the literature review.

5.1 DESCRIPTIVE STATISTICS

Descriptive statistics are used when the purpose is simply to describe a set of data (Babbie, 2004). Cronbach’s alpha coefficients, means and standard deviations are employed mainly for this purpose. Descriptive statistics are essential to an understanding of correlation and inferential statistics (Howell, 1999). Item-reliability and Cronbach alpha coefficients were determined for the Orientation to Life Questionnaire (OLQ); Maslach et al.’s., (1996) Burnout Inventory (MBI); the Utrecht Work Engagement Scale (UWES) and the Career Orientations Inventory (COI) in order to establish the construct reliability of the measuring instruments.

5.1.1 Reporting of item-reliability and Cronbach’s alpha coefficients (OLQ; MBI; UWES AND COI)

Reliability refers to the proportion of error variance to the total variance yielded by a measuring instrument, subtracted from 1.00 where the index 1.00 represents perfect reliability (Howell, 1999). Reliability is the relative absence of errors of measurement in a measuring instrument (Tredoux & Durheim, 2002).

Reliability analysis was conducted to prove the dependability of the study and the items used in the study. Reliability analysis was carried out on the following four instrument coefficients:

• Group 1: OLQ
• Group 2: MBI (including Sources of Job Stress)
• Group 3: UWES
• Group 4: COI
Table 5.1 reflects the reliability scores obtained for the OLQ, MBI, UWES and COI.

**TABLE 5.1 RELIABILITY STATISTICS OF THE OLQ, MBI, UWES AND COI**

<table>
<thead>
<tr>
<th>Measuring instrument subscales</th>
<th>Cronbach’s alpha coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total sample (N=90)</td>
</tr>
<tr>
<td><strong>ORIENTATION TO LIFE QUESTIONNAIRE (OLQ)</strong></td>
<td></td>
</tr>
<tr>
<td>Comprehension</td>
<td>0.73</td>
</tr>
<tr>
<td>Manageability</td>
<td>0.67</td>
</tr>
<tr>
<td>Meaningfulness</td>
<td>0.74</td>
</tr>
<tr>
<td><strong>MASLACH’S BURNOUT INVENTORY (MBI)</strong></td>
<td></td>
</tr>
<tr>
<td>Emotional exhaustion</td>
<td>0.91</td>
</tr>
<tr>
<td>Professional efficacy</td>
<td>0.78</td>
</tr>
<tr>
<td>Cynicism/depersonalisation</td>
<td>0.83</td>
</tr>
<tr>
<td><strong>SOURCES OF JOB STRESS</strong></td>
<td></td>
</tr>
<tr>
<td>Job and role ambiguity</td>
<td>0.78</td>
</tr>
<tr>
<td>Relationships</td>
<td>0.77</td>
</tr>
<tr>
<td>Job tools and equipment</td>
<td>0.79</td>
</tr>
<tr>
<td>Career advancement prospects</td>
<td>0.75</td>
</tr>
<tr>
<td>Job security</td>
<td>0.76</td>
</tr>
<tr>
<td>Lack of job autonomy</td>
<td>0.78</td>
</tr>
<tr>
<td>Work/ home conflict/ stress</td>
<td>0.78</td>
</tr>
<tr>
<td>Workload</td>
<td>0.78</td>
</tr>
<tr>
<td>Compensation and benefits</td>
<td>0.76</td>
</tr>
<tr>
<td>Lack of leadership/ management support &amp; guidance</td>
<td>0.77</td>
</tr>
<tr>
<td><strong>UTRECHT WORK ENGAGEMENT SCALE (UWES)</strong></td>
<td></td>
</tr>
<tr>
<td>Vigour</td>
<td>0.78</td>
</tr>
<tr>
<td>Dedication</td>
<td>0.88</td>
</tr>
<tr>
<td>Absorption</td>
<td>0.83</td>
</tr>
<tr>
<td><strong>CAREER ORIENTATIONS INVENTORY (COI)</strong></td>
<td></td>
</tr>
<tr>
<td>Technical/ Functional</td>
<td>0.39</td>
</tr>
<tr>
<td>General Management</td>
<td>0.73</td>
</tr>
<tr>
<td>Autonomy</td>
<td>0.76</td>
</tr>
<tr>
<td>Security/ Stability</td>
<td>0.73</td>
</tr>
<tr>
<td>Entrepreneurial Creativity</td>
<td>0.70</td>
</tr>
<tr>
<td>Service/ Dedication to a cause</td>
<td>0.72</td>
</tr>
<tr>
<td>Pure Challenge</td>
<td>0.71</td>
</tr>
<tr>
<td>Lifestyle</td>
<td>0.64</td>
</tr>
</tbody>
</table>
5.1.2 Interpretation of item-reliability and Cronbach’s alpha coefficients

According to Anastasi (1976), a desirable reliability coefficient would fall in the range of 0.80 to 0.90. Nunnally and Bernstein (1994) use 0.70 as a directive, whilst Bartholomew, Antonia and Marcia (2000) argue that between 0.80 and 0.60 is acceptable. Table 5.1 shows that the reliability coefficients obtained for the OLQ, MBI (including the Sources of Job Stress scale) and UWES range between 0.67 and 0.90 which also indicate that these three instruments are psychometrically acceptable for the purpose of this research. The Cronbach’s alpha coefficients obtained for the COI range between 0.64 and 0.76 (with the exception of the technical/ functional career anchor scale). Previous research conducted by Ellison and Schreuder (2000) and Coetzee et al., (2006) yielded similar results. Since the purpose of this study was not to make individual predictions based on the COI, but rather to investigate broad trends and certain relations between variables, the COI was also considered to be psychometrically acceptable (Tredoux & Durrheim, 2002).

The technical/ functional career anchor subscale was examined in more detail as presented in Table 5.2 below. Observation of Table 5.2 shows that the exclusion of item 25 would only improve the Cronbach’s alpha coefficients from 0.350 to 0.464, which is still low. It was decided to retain all items of the scale for the purpose of this research, as the reliability of the scale would not necessarily be improved by deleting any of its items. The scale calculation was therefore left unchanged for further analysis and to maintain consistency for comparisons with other research.

<table>
<thead>
<tr>
<th>Item number</th>
<th>Cronbach’s alpha coefficients if item deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.33</td>
</tr>
<tr>
<td>9</td>
<td>0.32</td>
</tr>
<tr>
<td>17</td>
<td>0.24</td>
</tr>
<tr>
<td>25</td>
<td>0.46</td>
</tr>
<tr>
<td>33</td>
<td>0.33</td>
</tr>
</tbody>
</table>
5.1.3 Reporting and interpretation of means and standard deviations
This section provides the descriptive information on each of the sub-scales. The scores for each of the sub-scales/dimensions were computed by obtaining a mean across the scores of the individual items that comprise each sub-scale.

5.1.3.1 Means and standard deviations: Orientation to Life Questionnaire (OLQ)
The OLQ scale asks participants to mark the number that expresses their answer on a Likert-type scale where the numbers 1 and 7 are the extreme choices in their answers. The highest scale option (7) indicates strong agreement or association with each scale. Table 5.3 shows that the total sample scored highest on the meaningfulness dimension of OLQ (mean = 5.27; SD = 0.97) and the lowest on comprehension (mean = 4.51; SD = 0.83). The total mean score obtained for the OLQ was 4.92 (SD = 0.68), which is relatively high. This implies that the participants appear to have a relatively high level of confidence with regard to their ability to make sense of their internal and external environment, particularly on an emotional level. They appear to have a relatively high level of confidence in their ability to deal with new challenges and stressful life situations.

However, their comprehensibility is slightly out of balance, which implies that the participants may experience some difficulty on a cognitive level when dealing with stimuli impacting on their sense of well-being. Therefore, they may tend to have a more negative than positive appraisal of stimuli impacting them, or may experience an amount of uncertainty about their life situation which weakens their overall sense of coherence or ability to mitigate life stress. Some elements of their working circumstances may be experienced as unpredictable and, therefore, cause the uncertainty and their apparent lower sense of comprehensibility.

<table>
<thead>
<tr>
<th>TABLE 5.3: OLQ VARIABLES: MEANS SCORES AND STANDARD DEVIATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>Comprehension</td>
</tr>
<tr>
<td>Manageability</td>
</tr>
<tr>
<td>Meaningfulness</td>
</tr>
<tr>
<td>Total Scale</td>
</tr>
</tbody>
</table>
5.1.3.2 Means and standard deviations: Maslach’s Burnout Inventory (MBI)

As shown in Table 5.4, the total mean score for the MBI was 3.22 (SD = 0.80) which is moderate. Overall, the sample scored very high on professional efficacy (mean = 4.88; SD = 0.96) and low on cynicism (mean = 1.97; SD = 1.46). The findings suggest that the overall burnout levels of participants are moderately low. Participants do not appear to currently experience extreme emotional strain, irritability or frustration in their jobs. They also appear to feel relatively positive about how they are currently being treated by others as their sense of cynicism is quite low. Moreover, it appears they are experiencing a high sense of personal accomplishment, implying that they feel competent to deal with work that involves clients.

**TABLE 5.4: MBI VARIABLES: MEAN SCORES AND STANDARD DEVIATIONS**

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional exhaustion</td>
<td>90</td>
<td>.00</td>
<td>6.00</td>
<td>2.49</td>
<td>1.455</td>
</tr>
<tr>
<td>Professional efficacy</td>
<td>90</td>
<td>1.33</td>
<td>6.00</td>
<td>4.88</td>
<td>0.961</td>
</tr>
<tr>
<td>Cynicism/ depersonalisation</td>
<td>90</td>
<td>.00</td>
<td>6.00</td>
<td>1.97</td>
<td>1.464</td>
</tr>
<tr>
<td>Total burnout</td>
<td>90</td>
<td>1.69</td>
<td>5.63</td>
<td>3.22</td>
<td>0.801</td>
</tr>
</tbody>
</table>

The variables that were added to the MBI as categories of job stress (on a 5 point Likert-type scale) for the purpose of this research are shown in Table 5.5.

**TABLE 5.5: SOURCES OF JOB STRESS VARIABLES: MEAN SCORES AND STANDARD DEVIATIONS (N = 90)**

<table>
<thead>
<tr>
<th></th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job and role ambiguity</td>
<td>1</td>
<td>5</td>
<td>2.78</td>
<td>.962</td>
</tr>
<tr>
<td>Relationships</td>
<td>1</td>
<td>5</td>
<td>2.74</td>
<td>1.117</td>
</tr>
<tr>
<td>Job tools and equipment</td>
<td>1</td>
<td>5</td>
<td>2.84</td>
<td>1.198</td>
</tr>
<tr>
<td>Career advancement prospects</td>
<td>1</td>
<td>5</td>
<td>3.08</td>
<td>1.283</td>
</tr>
<tr>
<td>Job security</td>
<td>1</td>
<td>5</td>
<td>3.02</td>
<td>1.332</td>
</tr>
<tr>
<td>Lack of job autonomy</td>
<td>1</td>
<td>5</td>
<td>2.89</td>
<td>1.104</td>
</tr>
<tr>
<td>Work/ home conflict/ stress</td>
<td>1</td>
<td>5</td>
<td>2.81</td>
<td>1.167</td>
</tr>
<tr>
<td>Workload</td>
<td>1</td>
<td>5</td>
<td>3.12</td>
<td>1.214</td>
</tr>
<tr>
<td>Compensation and benefits</td>
<td>1</td>
<td>5</td>
<td>3.35</td>
<td>1.204</td>
</tr>
<tr>
<td>Lack of leadership/ management support &amp; guidance</td>
<td>1</td>
<td>5</td>
<td>3.06</td>
<td>1.326</td>
</tr>
</tbody>
</table>
Table 5.5 shows that the mean scores obtained for the Sources of Job Stress variables range between 3.35 (highest mean score) and 2.74 (lowest mean score). The mean scores for Sources of Job Stress indicate the participants experienced compensation and benefits, as well as workload, as their highest sources of job stress and relationships as their lowest sources of job stress. Research by Maslach (1998) indicated that perceptions of unfairness regarding equity of compensation and benefits and workload are a major cause of burnout experiences.

5.1.3.3 Means and standard deviations: Utrecht Work Engagement Scale (UWES)
Table 5.6 indicates that the mean scores obtained for the UWES range between 4.41 (SD = 1.08) and 4.54 (SD = 0.99). The total mean score obtained for the UWES was 4.47 (SD = 1.00). This score is relatively high. The findings suggest that overall the participants experience high levels of engagement in their jobs. More specifically, the participants generally seem to experience high levels of energy and resilience in the performance of their duties. They appear to be willing to invest effort in their work, they do not become easily fatigued and have high levels of persistence to deal with difficulties. They also appear to demonstrate dedication and enthusiasm when they deal with the challenges provided by their jobs. Further, the participants seem to be totally, and happily, immersed in their work.

**TABLE 5.6: UWES VARIABLES: MEANS AND STANDARD DEVIATIONS**

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vigour</td>
<td>89</td>
<td>1.50</td>
<td>6.00</td>
<td>4.54</td>
<td>0.994</td>
</tr>
<tr>
<td>Dedication</td>
<td>88</td>
<td>.80</td>
<td>6.00</td>
<td>4.46</td>
<td>1.182</td>
</tr>
<tr>
<td>Absorption</td>
<td>88</td>
<td>1.00</td>
<td>6.00</td>
<td>4.41</td>
<td>1.081</td>
</tr>
<tr>
<td>Total Engagement</td>
<td>89</td>
<td>1.24</td>
<td>5.94</td>
<td>4.47</td>
<td>1.000</td>
</tr>
</tbody>
</table>

5.1.3.4 Means and standard deviations: Career Orientations Inventory (COI)
The mean total scores shown in Table 5.7 reflect the true dominant career anchors of the participants. When completing the COI, respondents were requested to rate items on a 6 point Likert-type scale, ranging from 1 (never true for me) to 5 (always true for me). Respondents were also requested to add an additional 4 points to the three statements that seemed most true to them.
Therefore, for the purposes of inferential statistics and to investigate the association between the participants’ dominant career anchors and the other variables relevant to this research, the mean total scores were determined. The means and standard deviations for these total scores are presented in Table 5.7.

**TABLE 5.7: MEAN TOTAL SCORES: COI**

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical/ Functional</td>
<td>89</td>
<td>3</td>
<td>24</td>
<td>16.91</td>
<td>3.795</td>
</tr>
<tr>
<td>General Management</td>
<td>89</td>
<td>3</td>
<td>21</td>
<td>12.99</td>
<td>4.313</td>
</tr>
<tr>
<td>Autonomy</td>
<td>88</td>
<td>4</td>
<td>25</td>
<td>15.68</td>
<td>4.233</td>
</tr>
<tr>
<td>Security/ Stability</td>
<td>88</td>
<td>3</td>
<td>24</td>
<td>17.24</td>
<td>4.513</td>
</tr>
<tr>
<td>Entrepreneurial Creativity</td>
<td>88</td>
<td>4</td>
<td>30</td>
<td>18.73</td>
<td>4.861</td>
</tr>
<tr>
<td>Service/Dedication to a cause</td>
<td>89</td>
<td>3</td>
<td>25</td>
<td>16.76</td>
<td>4.330</td>
</tr>
<tr>
<td>Pure Challenge</td>
<td>88</td>
<td>4</td>
<td>24</td>
<td>16.99</td>
<td>3.783</td>
</tr>
<tr>
<td>Lifestyle</td>
<td>87</td>
<td>7</td>
<td>25</td>
<td>18.69</td>
<td>3.623</td>
</tr>
</tbody>
</table>

Observation of the mean total scores obtained for the COI in Table 5.7 reveal that the entrepreneurial creativity scale obtained the highest overall scores for the sample (m = 18.73; SD = 4.86), followed by the lifestyle scale (m = 18.69; SD = 3.62) and the security/ stability scale (m = 17.24; SD = 4.51). On the other hand, the autonomy (m = 15.68; SD = 4.23) and general management (m = 12.99; SD = 4.31) scales obtained the lowest mean scores.

![Mean Total Scores: COI (N = 90)](image_url)
The findings suggest that participants’ predominant career values and motivations are based on a need to express their talents through opportunities to create new products or services and a need to be exposed to constant new challenges that provide them with a sense of freedom, ownership and power. In addition, they also seem to have an apparent need for a steady, stable form of employment that provides them with benefit packages that include medical and pension benefits. This perspective places a different responsibility on organisations that, whilst they cannot offer security to their staff, and still require high-quality, self-directed, performance-driven individuals to do the work, organisations must provide working environments that assist employees to resolve work-life issues (Van den Berg, 2002).

5.2 CORRELATIONAL STATISTICS

To investigate the relationship between the variables in this study, the descriptive statistics had to be transformed into explanatory (correlational and inferential) statistics to decide whether to accept or reject the null hypothesis (Tredoux & Durrheim, 2002).

The interrelationships between the variables were computed using Pearson’s product-moment correlations. Pearson’s product-moment correlations allowed the researcher to identify the direction and strength of the relationships between each of the variables, both on a total level and between the various dimensions of each psychometric construct.

<table>
<thead>
<tr>
<th></th>
<th>UWES</th>
<th>MBI</th>
<th>OLQ</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UWES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>1.000</td>
<td>- .283***</td>
<td>.620****</td>
</tr>
<tr>
<td>p-value</td>
<td></td>
<td>.007</td>
<td>.000</td>
</tr>
<tr>
<td><strong>MBI</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>- .283***</td>
<td>1.000</td>
<td>- .424****</td>
</tr>
<tr>
<td>p-value</td>
<td></td>
<td>.007</td>
<td>.000</td>
</tr>
<tr>
<td><strong>OLQ</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>.620****</td>
<td>- .424****</td>
<td>1.000</td>
</tr>
<tr>
<td>p-value</td>
<td></td>
<td>.000</td>
<td>.000</td>
</tr>
</tbody>
</table>

**** p ≤ 0.001 \( r \geq 0.20 \) (small practical effect)
*** p ≤ 0.01 \( r \geq 0.30 \) (medium practical effect)
** p ≤ 0.05 \( r \geq 0.50 \) (large practical effect)
* p ≤ 0.10
Table 5.8 shows overall a significant negative relationship between the MBI variables and UWES variables ($r = -0.283; p = 0.01$), which is a small practical effect. These findings suggest that participants that obtained significantly higher scores on the MBI obtained significantly lower scores on the UWES variables. An overall positive significant relationship is indicated for the OLQ and UWES ($r = 0.62; p = 0.00$) which is a large practical effect ($r \geq 0.50$). These findings suggest that participants that score significantly high on the OLQ also obtained significantly higher mean scores on the UWES variables.

A significant overall negative relationship is indicated for the MBI and OLQ ($r = -0.424; p = 0.00$), which is medium in practical effect size ($r \geq 0.30$). These findings imply that participants that obtained significantly higher scores on the OLQ obtained also significantly lower overall mean scores on the MBI variables.

### 5.2.1 Reporting of Pearson-product moment correlation coefficients (MBI, OLQ AND UWES)

The total mean scores obtained for the MBI, OLQ and UWES were used to calculate the correlation coefficients for the MBI, OLQ and UWES variables. As shown in Table 5.9 (a), the inter-item correlations of all three measuring instruments range from $0.20 \leq r \leq 0.90$ which confirms the psychometric acceptable validity of the three questionnaires. However, the only exception is the lack of inter-item correlation between the MBI emotional exhaustion and professional efficacy sub-scales.

### 5.2.1.1 Relationship between UWES and MBI variables

A significant overall negative relationship is indicated between vigour and emotional exhaustion ($r = -0.38; p \leq 0.001$) as well as vigour and cynicism ($r = -0.58; p \leq 0.001$), which range from medium to large practical effect size. These findings imply that participants that obtained significantly higher scores on the vigour sub-scale obtained significantly lower overall mean scores on the exhaustion and cynicism/depersonalisation sub-scales. A significant positive relationship is indicated for vigour and professional efficacy ($r = 0.60; p \leq 0.001$), which is large in practical effect size ($r \geq 0.50$). These findings imply that participants that obtained significantly higher scores on the vigour sub-scale obtained significantly higher scores on the professional efficacy sub-scale.
Practical significant negative relationships are indicated between dedication and emotional exhaustion \( (r = -0.30; \text{medium effect}; p \leq 0.001) \) as well as dedication and the cynicism/ depersonalisation sub-scales \( (r = -0.65; \text{large effect}; p \leq 0.001) \). A significant positive relationship is indicated between dedication and professional efficacy \( (r = 0.59; \text{large effect}; p \leq 0.001) \).

Practical significant negative relationships are indicated between absorption and emotional exhaustion \( (r = -0.27; \text{small effect}; p \leq 0.01) \) as well as absorption and the cynicism/ depersonalisation sub-scales \( (r = -0.51; \text{large effect}; p \leq 0.001) \). A significant positive relationship is indicated between absorption and professional efficacy \( (r = 0.50; \text{large effect}; p \leq 0.001) \).

Practical significant positive relationships are indicated between professional efficacy and vigour \( (r = 0.60; \text{large effect}; p \leq 0.001) \); dedication \( (r = 0.59; \text{large effect}; p \leq 0.001) \) and absorption \( (r = 0.50; \text{large effect}; p \leq 0.001) \).

These findings overall suggest that participants who scored significantly low on the MBI emotional exhaustion and cynicism sub-scales, overall scored higher on the three UWES sub-scales. This suggests that participants that experience low levels of emotional exhaustion and cynicism are able to demonstrate higher levels of work engagement.

5.2.1.2 Relationship between UWES and OLQ variables

A practical significant overall positive relationship is indicated between vigour and comprehension \( (r = 0.45; \text{medium effect}; p \leq 0.001) \); manageability \( (r = 0.49; \text{medium effect}; p \leq 0.001) \) and meaningfulness \( (r = 0.46; \text{medium effect}; p \leq 0.001) \). These findings imply that participants that obtained significantly high scores on the vigour dimension obtained significantly overall high scores on the comprehension, manageability and meaningfulness sub-scales.

Similarly, a practical significant positive relationship is indicated between dedication and comprehension \( (r = 0.43; \text{medium effect}; p \leq 0.001) \); manageability \( (r = 0.53; \text{large effect}; p \leq 0.001) \) and meaningfulness \( (r = 0.60; \text{large effect}; p \leq 0.001) \). These findings imply that participants that obtained significantly high scores on the UWES dedication sub-scale obtained significantly high scores on the OLQ sub-scales.
A practical significant positive relationship is also indicated between absorption and comprehension (r = 0.39; medium effect; p ≤ 0.001); manageability (r = 0.49; medium effect; p ≤ 0.001) and meaningfulness (r = 0.52; large effect; p ≤ 0.001). These findings imply that participants that obtained significantly high scores on the UWES absorption sub-scale obtained significantly high scores on the OLQ sub-scales.

5.2.1.3 Relationship between MBI and OLQ variables

Practical significant negative relationships are indicated between emotional exhaustion and comprehension (r = -0.41; medium effect; p ≤ 0.001); manageability (r = -0.46; medium effect; p ≤ 0.001) and meaningfulness (r = -0.32; medium effect; p ≤ 0.001). These findings imply that participants that obtained significantly high scores on the MBI emotional exhaustion sub-scale obtained significantly low scores on the OLQ sub-scales.

Similarly, practical significant negative relationships are indicated between cynicism/depersonalisation and comprehension (r = -0.49; medium effect; p ≤ 0.001); manageability (r = -0.39; medium effect; p ≤ 0.001) and meaningfulness (r = -0.41; medium effect; p ≤ 0.001). These findings imply that participants that obtained significantly high scores on the MBI cynicism/depersonalisation sub-scale obtained significantly low scores on the OLQ sub-scales.

On the other hand, practical significant positive relationships are indicated between professional efficacy and comprehension (r = 0.30; medium effect; p ≤ 0.001); manageability (r = 0.31; medium effect; p ≤ 0.001) and meaningfulness (r = 0.32; medium effect; p ≤ 0.001). These findings imply that participants that obtained significantly high scores on the MBI professional efficacy sub-scale obtained significantly high scores on the OLQ sub-scales.
<table>
<thead>
<tr>
<th></th>
<th>UWES</th>
<th>MBI</th>
<th>OLQ</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Vigour</td>
<td>Dedication</td>
<td>Absorption</td>
</tr>
<tr>
<td>UWES</td>
<td>Pearson Correlation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vigour</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>p - value</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dedication</td>
<td>Pearson Correlation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>p - value</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Absorption</td>
<td>Pearson Correlation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>p - value</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.01</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional</td>
<td>Pearson Correlation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>p - value</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.46</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional</td>
<td>Pearson Correlation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>p - value</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.02</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cynicism/</td>
<td>Pearson Correlation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>p - value</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comprehension</td>
<td>Pearson Correlation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>p - value</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manageability</td>
<td>Pearson Correlation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>p - value</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meaningfulness</td>
<td>Pearson Correlation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>p - value</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**** p ≤ 0.001  r ≥ 0.20 (small practical effect)
*** p ≤ 0.01  r ≥ 0.30 (medium practical effect)
** p ≤ 0.05  r ≥ 0.50 (large practical effect)
* p ≤ 0.10
The core findings of Table 5.9 (a) are summarised in Table 5.9 (b).

Table 5.9 (b) SUMMARY OF PEARSON-PRODUCT MOMENT CORRELATION COEFFICIENTS (OLQ; MBI AND UWES)

<table>
<thead>
<tr>
<th>UWES</th>
<th>MBI</th>
<th>OLQ</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EE</td>
<td>PE</td>
</tr>
<tr>
<td>Vigour</td>
<td>Significant negative relationship</td>
<td>Significant positive relationship</td>
</tr>
<tr>
<td>Dedication</td>
<td>Significant negative relationship</td>
<td>Significant positive relationship</td>
</tr>
<tr>
<td>Absorption</td>
<td>Significant negative relationship</td>
<td>Significant positive relationship</td>
</tr>
<tr>
<td>MBI</td>
<td>Emotional exhaustion (EE)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Professional efficacy (PE)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cynicism/ depersonalisation (C/D)</td>
<td></td>
</tr>
</tbody>
</table>

5.2.2 Interpretation of Pearson-product moment correlation coefficients (MBI; OLQ AND UWES)

5.2.2.1 Relationship between UWES and MBI variables

The findings imply that participants who obtained significant high scores on the professional efficacy sub-scale also obtained significant high scores on the three UWES sub-scales. It appears that participants who experience high levels of personal efficacy also experience high levels of work engagement.
Put differently, participants who experience a sense of effectiveness and competence to deal with people in their work and who have positive evaluations of their work accomplishments, tend to become more willing to tirelessly invest effort in their work and persist towards success irrespective of difficulties. They also appear to become inspired and absorbed by the challenge offered by their work because they tend to take pride in their efforts.

The findings indicate a significantly high negative association between respondent’s levels of burnout and engagement. This indicates that the more a respondent experiences burnout the less they become engaged with their work. This is supported by Maslach and Leiter’s (1997, p. 23) definition of burnout as: “an erosion of engagement with the job”. Burnout implies a rather long temporal process since it is based on the fact that the person has been working for a while and is experiencing a chronic misfit between self and work (Rothmann, 2003). The greater the gap, or mismatch, between the person and the job, the greater the likelihood of burnout, conversely the greater the match, the greater the likelihood of engagement with work.

5.2.2.2 Relationship between UWES and OLQ variables

The findings suggest that participants who have a strong sense of coherence, that is, participants who perceive internal and external stimuli on a cognitive level, experience life’s events as new and manageable challenges. They feel life makes sense on an emotional and cognitive level, and consequently are more motivated and, generally, are more willing to invest the necessary energy and effort to deal with perceived difficulties. They generally feel inspired by new challenges and derive a sense of pride from their efforts. They also tend to become totally immersed in their work thanks to their vigour and dedication to their work. A strong positive association is indicated between SOC and engagement. This suggests that the higher the engagement score of a respondent is, and the higher the OLQ scores of a respondent, the lower their burnout score is likely to be.
5.2.2.3 Relationship between MBI and OLQ variables

On a practical level, the findings suggest that participants who make sense of internal and external stimuli on a cognitive level experience events in life as new, manageable challenges and who feel that life makes sense on an emotional level, tend to have lower levels of burnout. Generally, participants appear to experience lower levels of emotional exhaustion (or feel less overwhelmed or drained by their work and life events) and therefore have a lesser tendency to develop negative, cynical attitudes towards, or feelings about, others.

On the other hand, participants who demonstrate a strong overall sense of coherence seem to have the tendency to evaluate themselves more positively in terms of their personal accomplishments (with clients in particular). That is, they may tend to have more positive thoughts about their professional performance and competence. Decades of research on cognitive and behavioural therapy have left no doubt that one’s appraisal of a situation plays a key role in one’s well-being (Beck, 1997; Clark, 1999; Wells-Federman, Stuart-Shor & Webster, 2001). Everyone appraises situations in their own distinct way, and those appraisals affect the perceived intensity of a stressor.

5.2.3 Reporting of Pearson-product moment correlation coefficients (Sources of Job Stress and UWES)

Table 5.10 provides an overview of the Pearson-product moment correlation coefficients obtained for the Sources of Job Stress and UWES variables. Due to the exploratory nature of this study, a p-value of \( p \leq 0.10 \) was the level chosen for interpreting the significance levels.

Observation of Table 5.10 shows only significant negative associations between the overall UWES scale and the UWES sub-scales (vigour, dedication and absorption) and Sources of Job Stress variables.

A significant negative relationship exists between the overall UWES variable and different Sources of Job Stress variables, namely, job and role ambiguity \( (r = -.329; p \leq 0.02) \); job security \( (r = -.191; p \leq 0.10) \) and lack of job autonomy \( (r = -.272; p \leq 0.02) \). Practical effect sizes range from a small to a medium practical effect size.
This implies that participants that scored significantly high on the job and role ambiguity, job security and lack of job autonomy scales, scored significantly low on the overall UWES scale.

A significant negative relationship also exists between the vigour dimension and different Sources of Job Stress variables, namely, job and role ambiguity ($r = -.259; p \leq 0.02$), job security ($r = -.217; p \leq 0.05$) and lack of job autonomy ($r = -.245; p \leq 0.05$). Practical effect sizes are all small. This implies that participants that scored significantly high on the job and role ambiguity, job security and lack of job autonomy scales, scored significantly lower on the vigour dimension.

A significant negative relationship also exists between the dedication dimension and different Sources of Job Stress variables, namely, job and role ambiguity ($r = -.356; p \leq 0.001$) with a medium practical effect, and lack of job autonomy ($r = -.255; p \leq 0.02$) with a small practical effect size. This implies that participants that scored significantly high on the job and role ambiguity and lack of job autonomy scales, scored significantly lower on the dedication dimension.

Another significant negative relationship also exists between the absorption dimension and different Sources of Job Stress variables, namely, job and role ambiguity ($r = -.296; p \leq 0.01$) with a small practical effect size, job tools and equipment ($r = -.179; p \leq 0.10$) and lack of job autonomy ($r = -.258; p \leq 0.02$) with a small practical effect size. This implies that participants that scored significantly high on the job and role ambiguity, job tools and equipment and lack of job autonomy scales, scored significantly lower on the absorption dimension.
### TABLE 5.10  PEARSON-PRODUCT MOMENT CORRELATIONS: SOURCES OF JOB STRESS AND UWES (N = 90)

<table>
<thead>
<tr>
<th></th>
<th>UWES Total</th>
<th></th>
<th>UWES Vigour</th>
<th></th>
<th>UWES Dedication</th>
<th></th>
<th>UWES Absorption</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pearson</td>
<td>p-value</td>
<td>Pearson</td>
<td>p-value</td>
<td>Pearson</td>
<td>p-value</td>
<td>Pearson</td>
<td>p-value</td>
</tr>
<tr>
<td>Job and role ambiguity</td>
<td>-.329***</td>
<td>.002</td>
<td>-.259***</td>
<td>.015</td>
<td>-.356***</td>
<td>.001</td>
<td>-.296***</td>
<td>.005</td>
</tr>
<tr>
<td>Relationships</td>
<td>-.131</td>
<td>.221</td>
<td>-.112</td>
<td>.297</td>
<td>-.197</td>
<td>.066</td>
<td>-.077</td>
<td>.478</td>
</tr>
<tr>
<td>Work tools and equipment</td>
<td>-.091</td>
<td>.394</td>
<td>-.010</td>
<td>.926</td>
<td>-.073</td>
<td>.497</td>
<td>-.179*</td>
<td>.095</td>
</tr>
<tr>
<td>Career advancement prospects</td>
<td>-.147</td>
<td>.170</td>
<td>-.169</td>
<td>.113</td>
<td>-.112</td>
<td>.299</td>
<td>-.111</td>
<td>.301</td>
</tr>
<tr>
<td>Job security</td>
<td>-.191*</td>
<td>.074</td>
<td>-.217*</td>
<td>.042</td>
<td>-.146</td>
<td>.174</td>
<td>-.154</td>
<td>.151</td>
</tr>
<tr>
<td>Lack of job autonomy</td>
<td>-.272*</td>
<td>.011</td>
<td>-.245*</td>
<td>.023</td>
<td>-.255*</td>
<td>.018</td>
<td>-.258**</td>
<td>.017</td>
</tr>
<tr>
<td>Work/home conflict/stress</td>
<td>-.150</td>
<td>.164</td>
<td>-.127</td>
<td>.237</td>
<td>-.137</td>
<td>.204</td>
<td>-.140</td>
<td>.194</td>
</tr>
<tr>
<td>Workload</td>
<td>.025</td>
<td>.817</td>
<td>-.019</td>
<td>.861</td>
<td>.043</td>
<td>.692</td>
<td>.058</td>
<td>.593</td>
</tr>
<tr>
<td>Compensation and benefits</td>
<td>-.080</td>
<td>.463</td>
<td>-.062</td>
<td>.568</td>
<td>-.026</td>
<td>.815</td>
<td>-.108</td>
<td>.322</td>
</tr>
<tr>
<td>Lack of leadership/management</td>
<td>-.088</td>
<td>.413</td>
<td>-.041</td>
<td>.706</td>
<td>-.056</td>
<td>.608</td>
<td>-.129</td>
<td>.235</td>
</tr>
<tr>
<td>support &amp; guidance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**** p ≤ 0.01  
*** p ≤ 0.02  
** p ≤ 0.05  
* p ≤ 0.10

r ≥ 0.20 (small practical effect)  
r ≥ 0.30 (medium practical effect)  
r ≥ 0.50 (large practical effect)

### 5.2.4 Interpretation of Pearson-product moment correlation coefficients (Sources of Job Stress and UWES)

The findings suggest that job and role ambiguity as well as lack of job autonomy are significant sources of job stress and seem to have a significant influence on participants’ work-related state of mind. Job and role ambiguity and experiencing a lack of job autonomy appear to reduce energy levels and willingness to invest effort in one’s work. Furthermore, it seems to make participants seem less inspired or enthusiastic about their jobs and, subsequently, results in them being less absorbed in their job. A lack of job tools and equipment also appear to lower participants’ sense of enjoyment of their work. Individuals who have chosen non-traditional career paths, such as the career paths taken by contractors, tend to develop strong professional identities (Peiperl & Baruch, 1997).
They are, therefore, highly committed to continuously seeking new growth opportunities (Bedeian, Kemery & Pizzolatto, 1991). If the organisation cannot provide growth opportunities and the roles of contractors are ambiguous and do not allow for autonomy, individuals will experience less engagement in their work and that will lead to job stress.

Self-reliance or autonomy is a characteristic, which is often regarded as typifying maturity (Schreuder & Theron, 1997). It can be described as a sense of relative independence of the physical and social environment, a democratic orientation, feelings of connectedness with others, freshness of appreciation, and feeling at ease with complexity and ambiguity. A lack of job autonomy, however, will lead to lower engagement levels.

5.2.5 Reporting of Pearson-product moment correlation coefficients (Sources of Job Stress and MBI)

Observation of Table 5.11 shows significant positive relationships with small to medium practical effect size between the MBI total variable and almost all of the Sources of Job Stress variables, except for job tools and equipment ($r = .137; p = 1.96$). This implies that participants that scored significantly high on the Sources of Job Stress scales, scored significantly high on the overall MBI scale.

With the exception of relationships ($r = .145; p = 1.73$), lack of job autonomy ($r = .151; p = 1.63$) and lack of leadership/management support and guidance ($r = .144; p = 1.77$), significant positive associations are observed between the exhaustion dimension and Sources of Job Stress variables. Practical effect sizes range between small to medium effect size. This implies that participants that scored significantly high on the exhaustion sub-scale scored significantly high on most of the Sources of Job Stress variables.

A significant positive relationship is observed between the cynicism dimension and Sources of Job Stress variables. More specifically, job and role ambiguity ($r = 0.361; p \leq 0.01$), relationships ($r = 0.281; p \leq 0.01$), career advancement prospects ($r = 0.236; p \leq 0.05$), job security ($r = 0.308; p \leq 0.01$), lack of job autonomy ($r = 0.379; p = 0.000$) and lack of leadership/management support and guidance ($r = 0.205; p \leq 0.05$). Practical effect sizes range between small to medium effect.
This implies that participants that scored significantly high on the cynicism dimension scored significantly high on most of the Sources of Job Stress variables.

TABLE 5.11 PEARSON-PRODUCT MOMENT CORRELATIONS: SOURCES OF JOB STRESS AND MBI (N = 90)

<table>
<thead>
<tr>
<th></th>
<th>MBI Total</th>
<th></th>
<th>Professional efficacy</th>
<th></th>
<th>Cynicism/ depersonalisation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pearson</td>
<td>p-value</td>
<td>Pearson</td>
<td>p-value</td>
<td>Pearson</td>
</tr>
<tr>
<td></td>
<td>Correlation</td>
<td></td>
<td>Correlation</td>
<td></td>
<td>Correlation</td>
</tr>
<tr>
<td>Job and role ambiguity</td>
<td>.331***</td>
<td>.002</td>
<td>.316***</td>
<td>.003</td>
<td>-.108</td>
</tr>
<tr>
<td>Relationships</td>
<td>.207</td>
<td>.051</td>
<td>.145</td>
<td>.173</td>
<td>-.070</td>
</tr>
<tr>
<td>Job tools and equipment</td>
<td>.137</td>
<td>.196</td>
<td>.239*</td>
<td>.023</td>
<td>.053</td>
</tr>
<tr>
<td>Career advancement prospects</td>
<td>.292</td>
<td>.005</td>
<td>.245**</td>
<td>.020</td>
<td>.047</td>
</tr>
<tr>
<td>Job security</td>
<td>.337***</td>
<td>.001</td>
<td>.244*</td>
<td>.021</td>
<td>.025</td>
</tr>
<tr>
<td>Lack of job autonomy</td>
<td>.244*</td>
<td>.023</td>
<td>.151</td>
<td>.163</td>
<td>-.104</td>
</tr>
<tr>
<td>Work/home conflict/stress</td>
<td>.228</td>
<td>.032</td>
<td>.298**</td>
<td>.005</td>
<td>-.047</td>
</tr>
<tr>
<td>Workload</td>
<td>.374***</td>
<td>.000</td>
<td>.397**</td>
<td>.000</td>
<td>.165</td>
</tr>
<tr>
<td>Compensation and benefits</td>
<td>.261***</td>
<td>.014</td>
<td>.325**</td>
<td>.002</td>
<td>-.020</td>
</tr>
<tr>
<td>Lack of leadership/ management support &amp; guidance</td>
<td>.258***</td>
<td>.015</td>
<td>.144</td>
<td>.177</td>
<td>.163</td>
</tr>
</tbody>
</table>

**** \( p \leq 0.01 \) \( r \geq 0.20 \) (small effect)

*** \( p \leq 0.02 \) \( r \geq 0.30 \) (medium effect)

** \( p \leq 0.05 \) \( r \geq 0.50 \) (large effect)

* \( p \leq 0.10 \)

5.2.6 Interpretation of Pearson-product moment correlation coefficients (Sources of Job Stress and MBI)

The findings confirm that Sources of Job Stress, such as those indicated in Table 5.11 are factors increasing the burnout levels of employees.

In this study, participants regarded almost all Sources of Job Stress variables as sources of high stress. Rothmann et al., (2003) also found that job demands and lack of organisational support mostly contributed to job stress. Stress owing to a lack of organisational support was attributed to inadequate salary, lack of opportunities for advancement, poorly motivated workers and fellow workers not doing their jobs.
Combined with stressful job demands, stresses related to a lack of organisational support (which includes the most severe stressors), were found to result in a perception of a lack of reciprocity, which in turn appears to contribute to burnout (Schaufeli & Enzmann, 1998).

Burnout is a persistent, negative, work-related state of mind characterised by an array of physical, psychological and attitudinal symptoms. Burnout is generally accompanied by distress, a sense of reduced effectiveness, decreased motivation and the development of dysfunctional personal and societal attitudes and behaviours at work (Rothmann, et al., 2005). The findings of this study suggest that job and role ambiguity; the lack of career advancement prospects, job insecurity, lack of job autonomy, work/home conflict/stress, a heavy work load, inadequate compensation and benefits and the lack of leadership/management support and guidance may lead to decreased motivation, distress and a sense of reduced effectiveness (burnout).

5.2.7 Reporting of Pearson-product moment correlation coefficients (Sources of Job Stress and OLQ)

Observation of Table 5.12 shows significant negative relationships with mostly small to medium practical effect size between the OLQ total variable, SOC and almost all the Sources of Job Stress variables, except for work/home conflict/stress ($r = -.107; p = 3.19$), workload ($r = -.023; p = 8.31$) and lack of leadership/management support and guidance ($r = -.164; p = 1.24$). This implies that participants that scored significantly high on the Sources of Job Stress scales, scored significantly lower on the overall SOC variable.
TABEL 5.12 PEARSON-PRODUCT MOMENT CORRELATIONS: SOURCES OF JOB STRESS AND OLQ (N = 90)

<table>
<thead>
<tr>
<th></th>
<th>OLQ Total</th>
<th>Comprehension</th>
<th>Manageability</th>
<th>Meaningfulness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pearson Correlation</td>
<td>p-value</td>
<td>Pearson Correlation</td>
<td>p-value</td>
</tr>
<tr>
<td>Job and role ambiguity</td>
<td>-.347***</td>
<td>.001</td>
<td>-.372***</td>
<td>.000</td>
</tr>
<tr>
<td>Relationships</td>
<td>-.223*</td>
<td>.034</td>
<td>-.082</td>
<td>.443</td>
</tr>
<tr>
<td>Job tools and equipment</td>
<td>-.175*</td>
<td>.099</td>
<td>-.106</td>
<td>.320</td>
</tr>
<tr>
<td>Career advancement prospects</td>
<td>-.207**</td>
<td>.050</td>
<td>-.210**</td>
<td>.047</td>
</tr>
<tr>
<td>Job security</td>
<td>-.248***</td>
<td>.018</td>
<td>-.250***</td>
<td>.018</td>
</tr>
<tr>
<td>Lack of job autonomy</td>
<td>-.265***</td>
<td>.013</td>
<td>-.309***</td>
<td>.004</td>
</tr>
<tr>
<td>Work/home conflict/stress</td>
<td>-.107</td>
<td>.319</td>
<td>-.177*</td>
<td>.097</td>
</tr>
<tr>
<td>Workload</td>
<td>-.023</td>
<td>.831</td>
<td>-.103</td>
<td>.337</td>
</tr>
<tr>
<td>Compensation and benefits</td>
<td>-.193*</td>
<td>.072</td>
<td>-.253**</td>
<td>.018</td>
</tr>
<tr>
<td>Lack of leadership/management</td>
<td>-.164</td>
<td>.124</td>
<td>-.209*</td>
<td>.050</td>
</tr>
</tbody>
</table>

****  p ≤ 0.01  
***   p ≤ 0.02  
**    p ≤ 0.05  
*     p ≤ 0.10  

A significant negative relationship exists between the comprehension dimension and all Sources of Job Stress variables, except for relationships (r = .082; p = 4.43), Job tools and equipment (r = .106; p = 3.20) and workload (r = .103; p = 3.37). Practical effect sizes ranged between small to medium effect. This implies that participants that scored significantly high on the comprehension dimension, scored significantly low on most of the Sources of Job Stress dimensions.

A significant negative relationship exists between the manageability dimension and Sources of Job Stress variables, namely job and role ambiguity (r = -.203; p ≤ 0.10), relationships (r = -.207; p ≤ 0.05) and job tools and equipment (r = -.203; p ≤ 0.10) with small practical effect sizes.
This implies that participants that scored significantly high on the manageability dimension, scored significantly low on the job and role ambiguity, relationships and job tools and equipment variables.

A significant negative relationship exists between the meaningfulness dimension and Sources of Job Stress variables, namely job and role ambiguity ($r = -.213; p \leq 0.05$), relationships ($r = -.274; p \leq 0.01$) and lack of job autonomy ($r = -.233; p \leq 0.05$) with small practical effect sizes. This implies that participants that scored significantly high on the meaningfulness dimension, scored significantly low on the job and role ambiguity, relationships and lack of job autonomy variables.

5.2.8 Interpretation of Pearson-product moment correlation coefficients (Sources of Job Stress and OLQ)

The findings suggest that with the exception of work/home conflict/stress, workload and lack of leadership/management support and guidance, all the other Sources of Job Stress variables shown in Table 5.12 may lower individuals’ general resistance resources upon which they can draw in order to deal with the demands of life. It further suggests that the Sources of Job Stress variables, and in particular job and role ambiguity, that are significantly negatively associated with participants’ overall levels of SOC, may result in them viewing their world as less organised and meaningful and they may experience feelings of having insufficient resources to meet life’s demands.

Furthermore, sufficient tools and equipment and positive, supportive relationships appear to be important resources that enable participants to meet the demands posed by their internal and external environment. A lack of these may lead to them feel less able to deal with the challenges of their lives and jobs. Career advancement prospects, job security, job autonomy, reduced work/home conflict/stress and positive perception of compensation and benefits seem to be important sources of experiencing life as organised, structured and predictable. An absence of these job sources may lead to reduced confidence in dealing with personal and job related challenges. Based on the holistic model of work wellness (Nelson & Simmons, 2003), burnout and work engagement could be regarded as an outcome of job stress and moderating or mediating individual difference variables (sense of coherence).
This model incorporates a broad range of stressors and individual difference variables that may be salient for cognitive appraisal and coping. Lazarus (1991) and Spielberger, Vagg and Wasala (2003) conceptualise stress as a complex process that consists of three major components, namely:

(a) sources of stress that are encountered in the work environment;
(b) perception and appraisal of a particular stressor by an employee, and
(c) the emotional reactions that are evoked when a stressor is appraised as threatening.

The model of occupational stress focuses on the perceived severity and frequency of occurrence of two major categories of stressor events, namely, job pressures and lack of support (Spielberger, et al., 2003). The model recognises the importance of individual differences in personality traits in determining how workplace stressors are perceived and appraised.

Job/role clarity, supportive relationships and job autonomy also appear to be important sources that help participants to experience their jobs and lives as worthy of investment and engagement for meaningful and appropriate actions. This trend is closely linked to the concept “flow”, which has become an important term in the field of intrinsic motivation. It is a description of an experience that is rewarding in and of itself (Csikszentmihalyi, 1997). Flow is not the result of striving towards a goal or a promise of reward at the end of the activity, but it is enhanced when clear goals are established, feedback is received from the task, concentration is high and control of the activity is anticipated and derived (Csikszentmihalyi, 1997). Two aspects are important in the experience of flow: Firstly, the degree to which the activity is challenging and, secondly, the degree to which the individual has the skills to perform the task. The nature of the work performed by contractors is more conducive to the experience of flow than for permanent staff because permanent staff members are more restricted in terms of freedom (Havran, Visser & Crous, 2003). The findings of this study also indicate that participants (predominantly contractors) feel highly engaged in their work and have a high sense of personal accomplishment.
The correlation coefficients obtained for the Sources of Job Stress and OLQ variables suggest that the participants that experience high levels of job stress, will experience low levels of SOC. Rothmann, et al., (2003) found that job stress impacts on sense of coherence, but that a strong sense of coherence moderates the effect of job stress. Employees with a strong sense of coherence experience less stress because stimuli from the environment are perceived as making cognitive sense, as being under the control of both the individual and legitimate others and as motivationally relevant and meaningful.

It seems that the participants in this study feel unable to make cognitive sense of the stimuli they are confronted with, hence their lower levels of comprehension on the SOC scale. This might be because they perceive information presented to them as disordered, random, accidental and unpredictable (Antonovsky, 1987). It seems that participants experience job role ambiguity, dissatisfying relationships, a lack of career advancement prospects, job insecurity and a lack of job autonomy. These factors lead to job stress, which in turn has a negative effect on participants’ overall orientation to life.

5.2.9 Reporting of Pearson-product moment correlation coefficients (Sources of Job Stress and COI)

Observation of Table 5.13 shows significant positive relationships with mostly small to medium practical effect size between the following COI variables and Sources of Job Stress variables: relationships and lifestyle ($r = 0.192; p \leq 0.10$); job security and security/stability ($r = 0.327; p \leq 0.01$); lack of job autonomy and autonomy ($r = 0.188; p \leq 0.10$); lack of job autonomy and entrepreneurial creativity ($r = 0.209; p \leq 0.10$) and lack of job autonomy and lifestyle ($r = 0.263; p \leq 0.05$); compensation and benefits and pure challenge ($r = 0.211; p \leq 0.05$) and lack of leadership/management support and guidance and entrepreneurial creativity ($r = 0.191; p \leq 0.10$) and lack of leadership/management support and guidance and pure challenge ($r = .214; p \leq 0.05$). This implies that participants that scored significantly high on these Sources of Job Stress variables, scored significantly high on the indicated COI variables.
5.2.10 Interpretation of Pearson-product moment correlation coefficients (Sources of Job Stress and COI)

The findings suggest that participants that desire stable, predictable work and steady employment may experience higher stress if their sense of job security is threatened or if they feel uncertain about their jobs. Similarly, participants who enjoy or prefer constant new challenges, and opportunities to create new products or services may place high value on job autonomy and leadership/management support and guidance. A lack of these may lead to higher stress levels.

Furthermore, the findings suggest that participants that prefer jobs where they have to face tougher challenges or more difficult problems that allow them to test their own abilities may regard lack of leadership/management support and guidance as high sources of job stress.

Lack of job autonomy and relationship issues also appear to be a major significant source of job stress for participants that value flexible work arrangements that allow them to integrate their personal, family and career needs. The dominant career anchors in this study are entrepreneurial creativity, lifestyle and security/stability. It seems that the stress experiences of participants may be indicative of a need for job security, more autonomy and more leadership/management support and guidance. Research by Martins and Coetzee (2007) found in this regard that a lack of job autonomy and leadership/management support and guidance lead to lower levels of employee satisfaction.
<table>
<thead>
<tr>
<th>Job and role ambiguity</th>
<th>Technical/ Functional</th>
<th>General Management</th>
<th>Autonomy</th>
<th>Security/ Stability</th>
<th>Entrepreneurial Creativity</th>
<th>Service/ Dedication to a cause</th>
<th>Pure Challenge</th>
<th>Lifestyle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>0.003</td>
<td>-0.006</td>
<td>-0.002</td>
<td>0.014</td>
<td>0.022</td>
<td>0.143</td>
<td>0.003</td>
<td>0.138</td>
</tr>
<tr>
<td>p – value</td>
<td>0.98</td>
<td>0.957</td>
<td>0.987</td>
<td>0.9</td>
<td>0.837</td>
<td>0.184</td>
<td>0.98</td>
<td>0.207</td>
</tr>
<tr>
<td>Relationships</td>
<td>Pearson Correlation</td>
<td>-0.001</td>
<td>-0.037</td>
<td>0.142</td>
<td>0.107</td>
<td>0.062</td>
<td>0.001</td>
<td>0.015</td>
</tr>
<tr>
<td>p – value</td>
<td>0.989</td>
<td>0.732</td>
<td>0.188</td>
<td>0.322</td>
<td>0.567</td>
<td>0.99</td>
<td>0.891</td>
<td>0.074</td>
</tr>
<tr>
<td>Job tools and equipment</td>
<td>Pearson Correlation</td>
<td>0.043</td>
<td>-0.038</td>
<td>-0.145</td>
<td>0.109</td>
<td>-0.036</td>
<td>0.058</td>
<td>0.015</td>
</tr>
<tr>
<td>p – value</td>
<td>0.687</td>
<td>0.723</td>
<td>0.178</td>
<td>0.312</td>
<td>0.736</td>
<td>0.588</td>
<td>0.89</td>
<td>0.105</td>
</tr>
<tr>
<td>Career advancement prospects</td>
<td>Pearson Correlation</td>
<td>0.096</td>
<td>0.116</td>
<td>-0.027</td>
<td>0.147</td>
<td>0.144</td>
<td>0.001</td>
<td>0.139</td>
</tr>
<tr>
<td>p – value</td>
<td>0.372</td>
<td>0.278</td>
<td>0.799</td>
<td>0.172</td>
<td>0.182</td>
<td>0.99</td>
<td>0.197</td>
<td>0.592</td>
</tr>
<tr>
<td>Job security</td>
<td>Pearson Correlation</td>
<td>-0.051</td>
<td>-0.008</td>
<td>-0.067</td>
<td>.327***</td>
<td>-0.039</td>
<td>-0.09</td>
<td>-0.039</td>
</tr>
<tr>
<td>p – value</td>
<td>0.633</td>
<td>0.943</td>
<td>0.534</td>
<td>0.002</td>
<td>0.719</td>
<td>0.403</td>
<td>0.719</td>
<td>0.758</td>
</tr>
<tr>
<td>Lack of job autonomy</td>
<td>Pearson Correlation</td>
<td>0.089</td>
<td>0.107</td>
<td>0.188</td>
<td>0.14</td>
<td>0.209</td>
<td>0.177</td>
<td>0.144</td>
</tr>
<tr>
<td>p – value</td>
<td>0.413</td>
<td>0.325</td>
<td>0.085</td>
<td>0.201</td>
<td>0.055</td>
<td>0.103</td>
<td>0.188</td>
<td>0.016</td>
</tr>
<tr>
<td>Work/home conflict/stress</td>
<td>Pearson Correlation</td>
<td>0.125</td>
<td>0.159</td>
<td>0.107</td>
<td>-0.033</td>
<td>-0.004</td>
<td>0.05</td>
<td>0.151</td>
</tr>
<tr>
<td>p – value</td>
<td>0.245</td>
<td>0.14</td>
<td>0.323</td>
<td>0.762</td>
<td>0.972</td>
<td>0.642</td>
<td>0.163</td>
<td>0.142</td>
</tr>
<tr>
<td>Workload</td>
<td>Pearson Correlation</td>
<td>0</td>
<td>0.022</td>
<td>0.063</td>
<td>-0.02</td>
<td>-0.08</td>
<td>-0.025</td>
<td>-0.021</td>
</tr>
<tr>
<td>p – value</td>
<td>0.996</td>
<td>0.84</td>
<td>0.564</td>
<td>0.852</td>
<td>0.462</td>
<td>0.817</td>
<td>0.85</td>
<td>0.131</td>
</tr>
<tr>
<td>Compensation and benefits</td>
<td>Pearson Correlation</td>
<td>0.08</td>
<td>0.13</td>
<td>-0.001</td>
<td>0.108</td>
<td>0.103</td>
<td>0.047</td>
<td>0.211</td>
</tr>
<tr>
<td>p – value</td>
<td>0.462</td>
<td>0.231</td>
<td>0.992</td>
<td>0.323</td>
<td>0.346</td>
<td>0.667</td>
<td>0.051</td>
<td>0.754</td>
</tr>
<tr>
<td>Lack of leadership/ management support &amp; guidance</td>
<td>Pearson Correlation</td>
<td>-0.031</td>
<td>0.046</td>
<td>0.027</td>
<td>-0.055</td>
<td>0.191</td>
<td>0.151</td>
<td>0.214</td>
</tr>
<tr>
<td>p-value</td>
<td>0.771</td>
<td>0.678</td>
<td>0.803</td>
<td>0.613</td>
<td>0.076</td>
<td>0.16</td>
<td>0.047</td>
<td>0.518</td>
</tr>
</tbody>
</table>

****  p ≤ 0.01 r ≥ 0.20 (small effect);
***  p ≤ 0.02 r ≥ 0.50 (large effect);
**   p ≤ 0.05 r ≥ 0.30 (medium effect);
*    p ≤ 0.10
5.2.11 Reporting of Pearson-product moment correlation coefficients (OLQ and COI)

Table 5.14 provides an overview of the Pearson-product moment correlation coefficients obtained for the OLQ and COI. Due to the exploratory nature of this study, a p-value of $p \leq 0.10$ was the chosen level for interpreting the significance levels.

Observation of Table 5.14 shows a significant positive relationship between the OLQ variable meaningfulness and the COI variable general management ($r = 0.234; p \leq 0.05$; small practical effect size). A significant positive relationship is also observed between the OLQ variable meaningfulness and the COI variable autonomy ($r = 0.197; p \leq 0.10$; small practical effect size). This implies that participants that scored significantly high on the general management and autonomy scales also scored significantly high on the OLQ meaningfulness scale.

Significant negative relationships are observed between the OLQ meaningfulness variable and COI security/stability career anchor ($r = -0.188; p \leq 0.10$; small practical effect size) and the OLQ Total score ($r = -0.187; p \leq 0.10$). This implies that participants who scored high on the security/stability career anchor scored significantly lower on the OLQ meaningfulness scale and OLQ total score.

**TABLE 5.14 PEARSON-PRODUCT MOMENT CORRELATIONS: OLQ AND COI (N = 89)**

<table>
<thead>
<tr>
<th>COI</th>
<th>OLQ Total</th>
<th>OLQ Comprehension</th>
<th>OLQ Manageability</th>
<th>OLQ Meaningfulness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical/Functional</td>
<td>-0.065</td>
<td>-0.065</td>
<td>-0.066</td>
<td>-0.28</td>
</tr>
<tr>
<td></td>
<td>.543</td>
<td>.542</td>
<td>.537</td>
<td>.796</td>
</tr>
<tr>
<td>General Management</td>
<td>.169</td>
<td>.106</td>
<td>.081</td>
<td>0.234</td>
</tr>
<tr>
<td></td>
<td>.112</td>
<td>.322</td>
<td>.451</td>
<td>.027**</td>
</tr>
<tr>
<td>Autonomy</td>
<td>.158</td>
<td>.152</td>
<td>.029</td>
<td>.197</td>
</tr>
<tr>
<td></td>
<td>.143</td>
<td>.158</td>
<td>.789</td>
<td>.065*</td>
</tr>
<tr>
<td>Security/Stability</td>
<td>-.187</td>
<td>-.110</td>
<td>-.165</td>
<td>-0.188</td>
</tr>
<tr>
<td></td>
<td>.081*</td>
<td>.308</td>
<td>.125</td>
<td>.080*</td>
</tr>
<tr>
<td>Entrepreneurial Creativity</td>
<td>.116</td>
<td>.154</td>
<td>.048</td>
<td>.056</td>
</tr>
<tr>
<td></td>
<td>.280</td>
<td>.153</td>
<td>.654</td>
<td>.607</td>
</tr>
<tr>
<td>Service/Dedication to a cause</td>
<td>.002</td>
<td>-.038</td>
<td>-.033</td>
<td>.068</td>
</tr>
<tr>
<td></td>
<td>.987</td>
<td>.726</td>
<td>.761</td>
<td>.526</td>
</tr>
<tr>
<td>Pure Challenge</td>
<td>-.009</td>
<td>-.035</td>
<td>-.041</td>
<td>.056</td>
</tr>
<tr>
<td></td>
<td>.935</td>
<td>.747</td>
<td>.708</td>
<td>.602</td>
</tr>
<tr>
<td>Lifestyle</td>
<td>-.073</td>
<td>-.045</td>
<td>-.131</td>
<td>-.003</td>
</tr>
<tr>
<td></td>
<td>.503</td>
<td>.677</td>
<td>.226</td>
<td>.978</td>
</tr>
</tbody>
</table>

** * p ≤ 0.10  r ≥ 20 (small practical effect)  
**  * p ≤ 0.05  r ≥ 30 (medium practical effect)  
**   * p ≤ 0.05  r ≥ 50 (large practical effect)
5.2.12 Interpretation of Pearson-product moment correlation coefficients (OLQ and COI)

The findings suggest that participants who prefer challenging, varied work at a high level of responsibility or in a leadership position, find their lives significantly more meaningful and a source of motivation. These affective experiences seem also to be true for participants who value job roles that allow them to function independently and autonomously from others. On the other hand, participants who value steady, stable, predictable employment seem to experience their lives currently as less ordered and structured.

5.2.13 Reporting of Pearson-product moment correlation coefficients (MBI and COI)

TABLE 5.15 PEARSON-PRODUCT MOMENT CORRELATIONS: MBI AND COI (N = 89)

<table>
<thead>
<tr>
<th>COI</th>
<th>MBI Total</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pearson</td>
<td>p-value</td>
<td>Pearson</td>
<td>p-value</td>
<td>Pearson</td>
<td>p-value</td>
<td>Pearson</td>
</tr>
<tr>
<td></td>
<td>Correlation</td>
<td></td>
<td>Correlation</td>
<td></td>
<td>Correlation</td>
<td></td>
<td>Correlation</td>
</tr>
<tr>
<td>Technical/ Functional</td>
<td>-.183</td>
<td>.085*</td>
<td>-.129</td>
<td>.227</td>
<td>-.115</td>
<td>.284</td>
<td>-.101</td>
</tr>
<tr>
<td>General Management</td>
<td>-.047</td>
<td>.662</td>
<td>-.042</td>
<td>.697</td>
<td>.071</td>
<td>.506</td>
<td>-.075</td>
</tr>
<tr>
<td>Autonomy</td>
<td>-.016</td>
<td>.886</td>
<td>-.083</td>
<td>.444</td>
<td>.094</td>
<td>.384</td>
<td>-.017</td>
</tr>
<tr>
<td>Security/ Stability</td>
<td>.107</td>
<td>.322</td>
<td>.046</td>
<td>.669</td>
<td>-.032</td>
<td>.771</td>
<td>.146</td>
</tr>
<tr>
<td>Entrepreneurial Creativity</td>
<td>-.064</td>
<td>.553</td>
<td>-.001</td>
<td>.992</td>
<td>.077</td>
<td>.477</td>
<td>-.171</td>
</tr>
<tr>
<td>Service/ Dedication to a cause</td>
<td>-.075</td>
<td>.488</td>
<td>-.086</td>
<td>.424</td>
<td>.016</td>
<td>.880</td>
<td>-.054</td>
</tr>
<tr>
<td>Pure Challenge</td>
<td>-.006</td>
<td>.955</td>
<td>-.031</td>
<td>.776</td>
<td>.127</td>
<td>.237</td>
<td>-.061</td>
</tr>
<tr>
<td>Lifestyle</td>
<td>.143</td>
<td>.186</td>
<td>.118</td>
<td>.275</td>
<td>-.001</td>
<td>.993</td>
<td>.127</td>
</tr>
</tbody>
</table>

* p ≤ 0.10

Table 5.15 provides an overview of the Pearson-product moment correlation coefficients obtained for the MBI and COI. Due to the exploratory nature of this study, a p-value of p ≤ 0.10 was the chosen level for interpreting the significance levels.
Observation of Table 5.15 shows a significant negative relationship between the MBI total variable and the COI variable technical/ functional \((r = -0.183; p \leq 0.10)\). This implies that participants that scored significantly high on the technical/ functional scale, scored significantly low on the overall MBI variable. No significant practical effect size was observed.

5.2.14 Interpretation of Pearson-product moment correlation coefficients (MBI and COI)

Marshall and Bonner (2003) claim that career anchors can enhance or lower an individual’s level of career resilience in the context of unstable career conditions (for example, job overload which may lead to burnout). It seems that participants who value challenging work that allows for the application of their expertise and opportunities for self-development in their field of expertise may experience lower levels of burnout. They appear to have higher feelings of personal efficacy and more positive evaluation of their jobs. The findings of this research also indicate that participants overall have a high sense of personal efficacy, low cynicism and high levels of engagement. Research by Coetzee and Schreuder (2008) also found that people with a technical/ functional career orientation tend to experience high levels of job and career satisfaction.

5.2.15 Reporting of Pearson-product moment correlation coefficients (UWES and COI)

Table 5.16 provides an overview of the Pearson-product moment correlation coefficients obtained for the UWES and COI variables. Due to the exploratory nature of this study, a p-value of \(p \leq 0.10\) was the chosen level for interpreting the significance levels.

Observation of Table 5.16 shows a significant negative relationship between the UWES total variable \((r = -0.21; p \leq 0.10)\); vigour \((r = -0.27; p \leq 0.01)\) and absorption \((r = -0.18; p \leq 0.10)\) and the COI variable security/ stability. This implies that participants that scored significantly high on the security/ stability scale, scored significantly low on the overall UWES variable and the vigour and absorption sub-scales. A small practical effect size was observed.

A significant positive relationship is observed between the UWES total variable \((r = 0.18; p \leq 0.10)\) and the COI variable entrepreneurial creativity.
This implies that participants that scored significantly high on the entrepreneurial creativity scale, scored significantly high on the overall UWES variable. A small practical effect size was observed.

A significant positive relationship is observed between the vigour dimension and autonomy \((r = 0.196; p \leq 0.10)\) as well as the pure challenge \((r = 0.194; p \leq 0.10)\) variables. A small practical effect was observed. This implies that participants that scored significantly high on the autonomy and pure challenge scales, scored significantly high on the vigour dimension. However, a significant negative relationship was observed between the vigour dimension and security/stability variable \((r = -.286; p \leq 0.01; \text{ small practical effect size})\). This implies that participants that scored significantly high on the security/stability scale, scored significantly low on the vigour dimension.

A significant positive relationship was observed between the dedication dimension and entrepreneurial creativity variable \((r = 0.194; p \leq 0.10; \text{ small practical effect size})\). This implies that participants that scored significantly high on the entrepreneurial creativity scale, scored significantly high on the dedication dimension.

Observation of Table 5.16 shows a significant negative relationship between the absorption dimension and the technical/functional \((r = -.180; p \leq 0.10)\) as well as the security/stability \((r = -.183; p \leq 0.10)\) COI scales. This implies that participants that scored significantly high on the technical/functional and security/stability COI scales, scored significantly low on the absorption dimension. A small practical effect size was observed.
### TABLE 5.16 PEARSON-PRODUCT MOMENT CORRELATIONS: UWES AND COI (N = 89)

<table>
<thead>
<tr>
<th>COI</th>
<th>UWES Total</th>
<th></th>
<th>UWES Vigour</th>
<th></th>
<th>UWES Dedication</th>
<th></th>
<th>UWES Absorption</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pearson Correlation</td>
<td>p-value</td>
<td>Pearson Correlation</td>
<td>p-value</td>
<td>Pearson Correlation</td>
<td>p-value</td>
<td>Pearson Correlation</td>
<td>p-value</td>
</tr>
<tr>
<td>Technical/Functional</td>
<td>-.046</td>
<td>.672</td>
<td>.002</td>
<td>.988</td>
<td>.055</td>
<td>.615</td>
<td>-.180</td>
<td>.095*</td>
</tr>
<tr>
<td>General Management</td>
<td>.114</td>
<td>.289</td>
<td>.090</td>
<td>.406</td>
<td>.095</td>
<td>.379</td>
<td>.145</td>
<td>.179</td>
</tr>
<tr>
<td>Autonomy</td>
<td>.148</td>
<td>.171</td>
<td>.196</td>
<td>.066*</td>
<td>.080</td>
<td>.465</td>
<td>.141</td>
<td>.195</td>
</tr>
<tr>
<td>Security/Stability</td>
<td>-.206*</td>
<td>.056</td>
<td>-.286*</td>
<td>.007</td>
<td>-.111</td>
<td>.308</td>
<td>-.183*</td>
<td>.091</td>
</tr>
<tr>
<td>Entrepreneurial Creativity</td>
<td>.181</td>
<td>.093*</td>
<td>.186</td>
<td>.085</td>
<td>.194</td>
<td>.073*</td>
<td>.120</td>
<td>.270</td>
</tr>
<tr>
<td>Service/Dedication to a cause</td>
<td>-.035</td>
<td>.746</td>
<td>.024</td>
<td>.823</td>
<td>-.033</td>
<td>.759</td>
<td>-.103</td>
<td>.341</td>
</tr>
<tr>
<td>Pure Challenge</td>
<td>.158</td>
<td>.143</td>
<td>.194</td>
<td>.072*</td>
<td>.170</td>
<td>.118</td>
<td>.082</td>
<td>.453</td>
</tr>
<tr>
<td>Lifestyle</td>
<td>-.150</td>
<td>.168</td>
<td>-.109</td>
<td>.316</td>
<td>-.143</td>
<td>.191</td>
<td>-.167</td>
<td>.127</td>
</tr>
</tbody>
</table>

** p ≤ 0.01 r ≥ 20 (small practical effect)
* p ≤ 0.10 r ≥ 30 (medium practical effect)
r ≥ 50 (large practical effect)

### 5.2.16 Interpretation of Pearson-product moment correlation coefficients (UWES and COI)

The findings suggest that participants who value or prefer steady employment opportunities with benefit packages feel less engaged in their work. More specifically, they appear to experience lower levels of energy and mental resilience and seem to be less willing to invest effort in their work. Moreover, they appear to feel less absorbed or immersed in their work. This may be due to higher anxiety states or concerns regarding their psychological need to have greater certainty regarding future jobs.

Participants who value their autonomy and independence prefer to be engaged in challenging work and jobs that provide constant new challenges and opportunities to create new product services. The findings suggest that participants with these preferences also have high levels of energy and mental resilience. They further appear to be willing to invest effort in their work. Participants with a preference for the entrepreneurial creativity career anchor also appear to feel positively challenged by their jobs and seem to have a high sense of pride and enthusiasm around their jobs.
This is a typical characteristic of contract workers as found by Havran et al., (2003). Contractors tend to give their services for a certain period of time or until a deadline has been met. They are professionals or entrepreneurs who choose where they want to work and use their skills to gain monetary reward (Carroll, 1998).

Employees who prefer entrepreneurial creativity as a career anchor will always consider the possibility of creating their own business (Schein, 1990). The type of work these individuals are engaged in, are often risky and present constant challenges. However, the high desire for challenging work might be the reason for compensation and reward as a source of job stress. Furthermore, individuals with an entrepreneurial creativity career anchor are rewarded by ownership, freedom and power and often display high levels of SOC (Schein, 1990). As mentioned before, individuals who display a strong SOC tend to show high levels of work engagement (Antonovsky, 1987; Rothmann, 2003). In a study conducted by Tladinyane (2006), the lifestyle career anchor showed a link with a normative commitment scale implying that individuals may be committed to organisations that provide benefits that contribute to their need for a flexible lifestyle; one that integrates their personal and family needs with their career.

5.3 INFERENTIAL STATISTICS

This section seeks to examine if some of the biographical groups (gender; race; employment and age groups) differ on their mean scores with regard to the overall construct, variables and the subscales of each construct.

Inferential statistics are concerned with using samples to infer something about populations (Tredoux & Durrheim, 2002). Firstly Levene’s test of equality of error variances was conducted to test for homogeneity across the gender; race; employment and age groups. Secondly, in order to establish whether there were any significant differences between the mean scores of males and females, blacks and whites, employment and age groups, respectively, t-tests and ANOVA’s were performed.
5.3.1 Reporting of differences in mean scores for gender groups (UWES, MBI and OLQ)

Levene’s test for equality of variances showed that homogeneity of sample mean scores could be assumed at $p \geq 0.05$. Levene’s test for equality tests the null hypothesis that variances are equal. A p-value lower than 0.05 usually indicates that there is a good chance that variances differ. Therefore, the lack of significant results for this test actually indicates the likelihood of equal variance.

The t-test results and mean scores presented in Tables 5.17 and 5.18 show that female and male groups differ significantly regarding their total mean scores for the UWES and OLQ. More specifically, the female participants obtained significantly higher total mean scores on the UWES as well as significantly higher mean scores on the variables dedication and absorption than the male participants. The female participants also obtained significantly higher total mean scores than the males on the OLQ as well as the OLQ sub-scale manageability. With regard to the MBI variables, the male participants seem to have significantly higher mean scores on cynicism/ depersonalisation than their female counterparts.

The results suggest that female participants experience significantly higher levels of engagement (specifically dedication and absorption) in their current jobs than the male participants. The female participants also appear to experience greater a sense of coherence in terms of the manageability variable.
TABLE 5.17  T-TEST FOR GENDER: UWES, MBI AND OLQ (N = 90)

<table>
<thead>
<tr>
<th></th>
<th>Levene’s Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>p-value</td>
</tr>
<tr>
<td>UWES Total</td>
<td>3.605</td>
<td>.061</td>
</tr>
<tr>
<td>Vigour</td>
<td>1.835</td>
<td>.179</td>
</tr>
<tr>
<td>Dedication</td>
<td>2.419</td>
<td>.124</td>
</tr>
<tr>
<td>Absorption</td>
<td>2.679</td>
<td>.105</td>
</tr>
<tr>
<td>MBI Total</td>
<td>2.053</td>
<td>.155</td>
</tr>
<tr>
<td>Emotional exhaustion</td>
<td>.343</td>
<td>.559</td>
</tr>
<tr>
<td>Professional efficacy</td>
<td>.457</td>
<td>.501</td>
</tr>
<tr>
<td>Cynicism/ depersonalisation</td>
<td>3.041</td>
<td>.085</td>
</tr>
<tr>
<td>OLQ Total</td>
<td>.129</td>
<td>.720</td>
</tr>
<tr>
<td>Comprehension</td>
<td>1.063</td>
<td>.305</td>
</tr>
<tr>
<td>Manageability</td>
<td>.818</td>
<td>.368</td>
</tr>
<tr>
<td>Meaningfulness</td>
<td>.270</td>
<td>.604</td>
</tr>
</tbody>
</table>

**** p ≤ 0.01
*** p ≤ 0.05
** p ≤ 0.10
*  p ≤ 0.20

TABLE 5.18  MEAN SCORES FOR SIGNIFICANT MEAN DIFFERENCES FOR GENDER: UWES, MBI AND OLQ (N = 90)

<table>
<thead>
<tr>
<th></th>
<th>Females</th>
<th>Males</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Standard Deviation</td>
</tr>
<tr>
<td>UWES Total</td>
<td>4.63</td>
<td>.89</td>
</tr>
<tr>
<td>Vigour</td>
<td>4.62</td>
<td>.92</td>
</tr>
<tr>
<td>Dedication</td>
<td>4.67</td>
<td>1.06</td>
</tr>
<tr>
<td>Absorption</td>
<td>4.61</td>
<td>.96</td>
</tr>
<tr>
<td>MBI Total</td>
<td>3.15</td>
<td>.75</td>
</tr>
<tr>
<td>Exhaustion</td>
<td>2.36</td>
<td>1.41</td>
</tr>
<tr>
<td>Professional efficacy</td>
<td>4.96</td>
<td>.88</td>
</tr>
<tr>
<td>Cynicism</td>
<td>1.79</td>
<td>1.36</td>
</tr>
<tr>
<td>OLQ Total</td>
<td>5.02</td>
<td>.65</td>
</tr>
<tr>
<td>Comprehension</td>
<td>4.60</td>
<td>.87</td>
</tr>
<tr>
<td>Manageability</td>
<td>5.20</td>
<td>.73</td>
</tr>
<tr>
<td>Meaningfulness</td>
<td>5.35</td>
<td>.98</td>
</tr>
</tbody>
</table>
5.3.2 Interpretation of differences in mean scores for gender groups
(UWES, MBI and OLQ)

The results suggest that the female participants feel more engaged in their work than
the male participants. This implies that the females seem to be more satisfied in their
jobs, are more committed and seem to experience more fulfillment than their male
counterparts. More specifically, in terms of dedication and absorption, the females
seem to derive a higher sense of significance from their work, feeling more
enthusiastic and proud about their jobs as well as feeling more inspired and
challenged by it than the male participants. Similar findings were reported by
Schaufeli and Bakker (2003). Females seem to be generally more immersed in their
work and at times might even experience difficulties detaching themselves from it.
On the other hand, the males tend to feel more detached and cynical about their
work.

5.3.3 Reporting of differences in mean scores for gender groups (Sources
of Job Stress)

The t-test results and mean scores presented in Tables 5.19 (a) and 5.19 (b) show
that female and male participants do not differ significantly regarding their total mean
scores for the Sources of Job Stress variables, except in terms of the lack of
leadership/ management support and guidance variable (p ≤ 0.10). However, males
did score higher on each of the Sources of Job Stress variables than the females,
except on the workload variable.
TABLE 5.19 (a) T-TEST FOR GENDER: SOURCES OF JOB STRESS (N = 90)

<table>
<thead>
<tr>
<th></th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>p-value</td>
</tr>
<tr>
<td>Job and role ambiguity</td>
<td>.023</td>
<td>.880</td>
</tr>
<tr>
<td>Relationships</td>
<td>.002</td>
<td>.961</td>
</tr>
<tr>
<td>Job tools and equipment</td>
<td>2.398</td>
<td>.125</td>
</tr>
<tr>
<td>Career advancement prospects</td>
<td>4.933</td>
<td>.029</td>
</tr>
<tr>
<td>Job security</td>
<td>.905</td>
<td>.344</td>
</tr>
<tr>
<td>Lack of job autonomy</td>
<td>.480</td>
<td>.490</td>
</tr>
<tr>
<td>Work/home conflict/stress</td>
<td>.306</td>
<td>.582</td>
</tr>
<tr>
<td>Workload</td>
<td>.132</td>
<td>.717</td>
</tr>
<tr>
<td>Compensation and benefits</td>
<td>.370</td>
<td>.545</td>
</tr>
<tr>
<td>Lack of leadership/ management support &amp; guidance</td>
<td>5.848</td>
<td>.018</td>
</tr>
</tbody>
</table>

* p ≤ 0.10

More specifically, the male participants obtained the highest mean scores on compensation and benefits (m = 3.59), lack of leadership/ management support and guidance (m = 3.41) and career advancement prospects (m = 3.21) variables. Females also obtained high mean scores on compensation and benefits (m = 3.24) and career advancement prospects (m = 3.02) variables. However, females' second highest mean score was on workload (m = 3.17).

TABLE 5.19 (b) MEAN SCORES FOR SIGNIFICANT MEAN DIFFERENCES FOR GENDER: SOURCES OF JOB STRESS (N = 90)

<table>
<thead>
<tr>
<th></th>
<th>Females</th>
<th></th>
<th>Males</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Standard Deviation</td>
<td>Mean</td>
<td>Standard Deviation</td>
</tr>
<tr>
<td>Job and role ambiguity</td>
<td>2.73</td>
<td>.95</td>
<td>2.86</td>
<td>.99</td>
</tr>
<tr>
<td>Relationships</td>
<td>2.69</td>
<td>1.10</td>
<td>2.86</td>
<td>1.16</td>
</tr>
<tr>
<td>Job tools and equipment</td>
<td>2.75</td>
<td>1.11</td>
<td>3.03</td>
<td>1.38</td>
</tr>
<tr>
<td>Career advancement prospects</td>
<td>3.02</td>
<td>1.18</td>
<td>3.21</td>
<td>1.50</td>
</tr>
<tr>
<td>Job security</td>
<td>3.00</td>
<td>1.38</td>
<td>3.07</td>
<td>1.25</td>
</tr>
<tr>
<td>Lack of job autonomy</td>
<td>2.76</td>
<td>1.06</td>
<td>3.14</td>
<td>1.16</td>
</tr>
<tr>
<td>Work/home conflict/stress</td>
<td>2.70</td>
<td>1.17</td>
<td>3.03</td>
<td>1.15</td>
</tr>
<tr>
<td>Workload</td>
<td>3.17</td>
<td>1.21</td>
<td>3.03</td>
<td>1.24</td>
</tr>
<tr>
<td>Compensation and benefits</td>
<td>3.24</td>
<td>1.19</td>
<td>3.59</td>
<td>1.21</td>
</tr>
<tr>
<td>Lack of leadership/ management support &amp; guidance</td>
<td>2.88</td>
<td>1.18</td>
<td>3.41</td>
<td>1.55</td>
</tr>
</tbody>
</table>
5.3.4 Interpretation of differences in mean scores for gender groups (Sources of Job Stress)

The findings suggest that male participants have a greater need for leadership/management support and guidance than their female counterparts. This finding is contrary to research conducted by Martins and Coetzee (2007), which indicates that women have a greater need for leadership/management guidance and support than their male counterparts.

Eddlestone, Baldrige and Veiga (2004) found compensation to be one of the most powerful influences on men’s perceptions of career success and that it appears to benefit men’s careers more than women’s. Martins and Coetzee (2007) found that people below 35 years of age tend to be more dissatisfied with their compensation than their older counterparts. Research data reported by Keaveny and Inderrieden (2000) further suggest that when a job is more interesting, has greater job security and better benefits and opportunities for advancement than elsewhere in the industry, employees are more satisfied with a given level of compensation.

5.3.5 Reporting of differences in mean scores for gender groups (COI)

The t-test results and mean scores presented in Tables 5.20 and 5.21 show that female and male groups differed significantly regarding their total mean scores for the COI. More specifically, the male participants obtained significantly higher total mean scores than the females on the lifestyle (m = 3.81; \( p \leq 0.01 \)); service/dedication to a cause (m = 3.54; \( p \leq 0.05 \)), entrepreneurial creativity (m = 3.42; \( p \leq 0.02 \)) and general management (m = 2.93; \( p \leq 0.10 \)) career anchors.

<table>
<thead>
<tr>
<th>TABLE 5.20</th>
<th>T-TEST FOR GENDER: COI (N = 90)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Levene’s Test for Equality of Variances</td>
</tr>
<tr>
<td></td>
<td>F</td>
</tr>
<tr>
<td>General Management</td>
<td>0.00</td>
</tr>
<tr>
<td>Autonomy</td>
<td>0.09</td>
</tr>
<tr>
<td>Security/ Stability</td>
<td>2.65</td>
</tr>
<tr>
<td>Entrepreneurial Creativity</td>
<td>1.06</td>
</tr>
<tr>
<td>Service/ Dedication to a cause</td>
<td>6.41</td>
</tr>
<tr>
<td>Pure Challenge</td>
<td>9.13</td>
</tr>
<tr>
<td>Lifestyle</td>
<td>2.61</td>
</tr>
</tbody>
</table>

**** \( p \leq 0.01 \)  
*** \( p \leq 0.02 \)  
** \( p \leq 0.05 \)  
* \( p \leq 0.10 \)
TABLE 5.21 MEAN SCORES FOR SIGNIFICANT MEAN DIFFERENCES FOR GENDER: COI (N = 90)

<table>
<thead>
<tr>
<th></th>
<th>Females Mean</th>
<th>Females Standard Deviation</th>
<th>Males Mean</th>
<th>Males Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical/ Functional</td>
<td>3.45</td>
<td>.57</td>
<td>3.68</td>
<td>.54</td>
</tr>
<tr>
<td>General Management</td>
<td>2.63</td>
<td>.83</td>
<td>2.93</td>
<td>.78</td>
</tr>
<tr>
<td>Autonomy</td>
<td>3.15</td>
<td>.74</td>
<td>3.37</td>
<td>.95</td>
</tr>
<tr>
<td>Security/ Stability</td>
<td>3.65</td>
<td>.75</td>
<td>3.21</td>
<td>.84</td>
</tr>
<tr>
<td>Entrepreneurial Creativity</td>
<td>2.97</td>
<td>.73</td>
<td>3.42</td>
<td>.96</td>
</tr>
<tr>
<td>Service/ Dedication to a cause</td>
<td>3.38</td>
<td>.66</td>
<td>3.54</td>
<td>.95</td>
</tr>
<tr>
<td>Pure Challenge</td>
<td>3.34</td>
<td>.62</td>
<td>3.75</td>
<td>.76</td>
</tr>
<tr>
<td>Lifestyle</td>
<td>3.75</td>
<td>.75</td>
<td>3.81</td>
<td>.67</td>
</tr>
</tbody>
</table>

5.3.6 Interpretation of differences in mean scores for gender groups (COI)

In a study conducted by Coetzee and Schreuder (2008) no differences were found between males and females as far as the lifestyle anchor was concerned. However, findings by Coetzee et al., (2006) showed that females tend to be more committed to organisations that respect personal and family concerns, whereas males tend to be more committed to organisations that provide them with the autonomy that enables them to work independently. It is interesting to observe that the results of the current study indicate that, as far as the lifestyle career anchor is concerned, male participants scored significantly higher than their female counterparts.

Male participants also scored higher on the entrepreneurial creativity anchor. Similar findings were reported by Ellison and Schreuder (2000). The male participants also showed a significantly higher preference than the females for the general management career anchor.

Coetzee, Schreuder and Bergh (2008) found that people with a preference for the entrepreneurial creativity career anchor tend to have lower job/ career satisfaction than those with a preference for the security/ stability career anchor. On the other hand, people with a preference for the lifestyle and security/ stability career anchors tend to have higher levels of life satisfaction and happiness.
Women also seem to be more concerned about finding jobs that offer steady and stable employment, simply because women are trying to balance their family and work life against expanded occupational roles and responsibilities (Coetzee & Schreuder, 2008). On the other hand, the expanded roles and responsibility may also lead to increasing experience of work/home conflict/stress (Schreuder & Coetzee, 2006).

Kniveton (2004) reports findings which indicate that although females have high awareness of and concern for their family responsibilities, they view this as something they have to cope with, rather than as something influencing perceptions of their careers. This implies that, although companies should be aware of females’ family concerns and responsibilities and their need for stability, benefit packages and flexible work arrangements, care should be taken not to let traditional gender stereotyping influence employees’ career development opportunities.

5.3.7 Reporting and interpretation of differences in mean scores for race groups (UWES; MBI; OLQ AND COI)

The t-test results for differences in mean scores indicate that again equal variance can be assumed based on Levene’s test. The t-test results shown in Table 5.22 indicate that there are no significant differences between the black and white participants on the UWES, MBI, OLQ and COI variables.

The results suggest that black and white participants do not differ significantly regarding their SOC, burnout and engagement levels.

Furthermore, blacks and whites appear to have similar career anchor preferences. With regards to the career anchor variables, a study conducted by Coetzee and Schreuder (2008) showed a significant difference between the various race/language groups on the entrepreneurial creativity anchor. However, an interesting observation is that the English-speaking Coloureds, Indians and White (English- and Afrikaans-speaking) participants show higher mean scores on the entrepreneurial creativity career anchor, whereas the African participants achieved higher mean scores on the general management, lifestyle, security/stability and technical/functional career anchors.
In a study conducted by Tladinyane (2006), differences of statistical significance were found between the blacks and whites regarding all the career anchors, except the security/ stability career anchor.

**TABLE 5.22  SIGNIFICANT DIFFERENCES IN MEAN SCORES FOR RACE GROUPS: UWES; MBI; OLQ and COI (N = 90)**

<table>
<thead>
<tr>
<th></th>
<th>Levene’s Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>p-value</td>
</tr>
<tr>
<td><strong>UWES Total</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vigour</td>
<td>3.897</td>
<td>.052</td>
</tr>
<tr>
<td>Dedication</td>
<td>3.898</td>
<td>.052</td>
</tr>
<tr>
<td>Absorption</td>
<td>1.421</td>
<td>.236</td>
</tr>
<tr>
<td><strong>MBI Total</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exhaustion</td>
<td>2.527</td>
<td>.116</td>
</tr>
<tr>
<td>Professional efficacy</td>
<td>1.838</td>
<td>.179</td>
</tr>
<tr>
<td>Cynicism</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>.182</td>
<td>.671</td>
</tr>
<tr>
<td><strong>OLQ Total</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comprehension</td>
<td>.588</td>
<td>.445</td>
</tr>
<tr>
<td>Manageability</td>
<td>.129</td>
<td>.721</td>
</tr>
<tr>
<td>Meaningfulness</td>
<td>.006</td>
<td>.937</td>
</tr>
<tr>
<td><strong>COI Total</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Management</td>
<td>.332</td>
<td>.566</td>
</tr>
<tr>
<td>Autonomy</td>
<td>1.875</td>
<td>.174</td>
</tr>
<tr>
<td>Security/ Stability</td>
<td>.016</td>
<td>.898</td>
</tr>
<tr>
<td>Entrepreneurial Creativity</td>
<td>1.648</td>
<td>.203</td>
</tr>
<tr>
<td>Service/ Dedication to a cause</td>
<td>.005</td>
<td>.946</td>
</tr>
<tr>
<td>Pure Challenge</td>
<td>.567</td>
<td>.453</td>
</tr>
<tr>
<td>Lifestyle</td>
<td>.395</td>
<td>.531</td>
</tr>
</tbody>
</table>
5.3.8 Reporting of differences in mean scores for race groups (Sources of Job Stress)

The t-test results and mean scores presented in Tables 5.23 show that race groups differ significantly regarding their total mean scores on the following Sources of Job Stress variables: job and role ambiguity (p ≤ 0.10), career advancement (p ≤ 0.05), work/home conflict/stress (p ≤ 0.10), workload (p ≤ 0.05), compensation and benefits (p ≤ 0.01), and lack of leadership (p ≤ 0.01).

**TABLE 5.23 T-TEST FOR RACE GROUPS: SOURCES OF JOB STRESS**

<table>
<thead>
<tr>
<th>Source of Stress</th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>p-value</td>
</tr>
<tr>
<td>Job and role ambiguity</td>
<td>.283</td>
<td>.596</td>
</tr>
<tr>
<td>Relationships</td>
<td>1.764</td>
<td>.188</td>
</tr>
<tr>
<td>Job tools and equipment</td>
<td>.013</td>
<td>.911</td>
</tr>
<tr>
<td>Career advancement prospects</td>
<td>.032</td>
<td>.858</td>
</tr>
<tr>
<td>Job security</td>
<td>.255</td>
<td>.615</td>
</tr>
<tr>
<td>Lack of job autonomy</td>
<td>.634</td>
<td>.428</td>
</tr>
<tr>
<td>Work/home conflict/stress</td>
<td>5.917</td>
<td>.017</td>
</tr>
<tr>
<td>Workload</td>
<td>.218</td>
<td>.642</td>
</tr>
<tr>
<td>Compensation and benefits</td>
<td>.005</td>
<td>.945</td>
</tr>
<tr>
<td>Lack of leadership/ management support &amp; guidance</td>
<td>.043</td>
<td>.836</td>
</tr>
</tbody>
</table>

*** p ≤ 0.01  
** p ≤ 0.05  
* p ≤ 0.10

Table 5.24 shows that blacks obtained significantly higher scores on compensation and benefits (m = 3.76), lack of leadership/management support and guidance (m = 3.53) and career advancement prospects (m = 3.88) job stresses than whites. Whites obtained significantly higher mean scores than blacks on workload (m = 3.37); job/role ambiguity (m = 2.94) and work/home conflict/stress (m = 3.00).
TABLE 5.24 MEAN SCORES FOR SIGNIFICANT MEAN DIFFERENCES FOR RACE: SOURCES OF JOB STRESS (N = 90)

<table>
<thead>
<tr>
<th></th>
<th>Mean for Blacks</th>
<th>Standard Deviation</th>
<th>Mean for Whites</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job and role ambiguity</td>
<td>2.56</td>
<td>.82</td>
<td>2.94</td>
<td>1.04</td>
</tr>
<tr>
<td>Relationships</td>
<td>2.72</td>
<td>1.02</td>
<td>2.76</td>
<td>1.19</td>
</tr>
<tr>
<td>Job tools and equipment</td>
<td>2.77</td>
<td>1.20</td>
<td>2.90</td>
<td>1.20</td>
</tr>
<tr>
<td>Career advancement prospects</td>
<td>3.38</td>
<td>1.27</td>
<td>2.84</td>
<td>1.25</td>
</tr>
<tr>
<td>Job security</td>
<td>3.21</td>
<td>1.32</td>
<td>2.88</td>
<td>1.34</td>
</tr>
<tr>
<td>Lack of job autonomy</td>
<td>3.05</td>
<td>1.05</td>
<td>2.76</td>
<td>1.13</td>
</tr>
<tr>
<td>Work/home conflict/stress</td>
<td>2.55</td>
<td>1.29</td>
<td>3.00</td>
<td>1.04</td>
</tr>
<tr>
<td>Workload</td>
<td>2.79</td>
<td>1.23</td>
<td>3.37</td>
<td>1.15</td>
</tr>
<tr>
<td>Compensation and benefits</td>
<td>3.76</td>
<td>1.14</td>
<td>3.06</td>
<td>1.17</td>
</tr>
<tr>
<td>Lack of leadership/ management support &amp; guidance</td>
<td>3.53</td>
<td>1.27</td>
<td>2.71</td>
<td>1.27</td>
</tr>
</tbody>
</table>

5.3.9 Interpretation of differences in mean scores for race groups (Sources of Job Stress)

The results suggest that black participants appear to experience more stress in terms of their career advancement prospects. Career advancement in the context of this study is described as the number of upward moves (promotions) during an individual’s career life (Hall, 1976).

White participants appear to experience significantly more stress in terms of workload and lack of job and role clarity. When a person is expected to do more than the time available permits him or her to do, such a person is more likely to experience strain. Working long hours, meeting deadlines, responding to time pressures, and having many separate, essentially unrelated tasks to perform also causes strain (Cartwright & Cooper, 2002). In a study conducted by Naudé and Rothmann (2003) no significant differences were found in terms of experienced strain for the different language groups, which is contrary to the findings of Pienaar and Rothmann (2003) where significantly higher levels of lack of resources and stressors inherent to the police service were found for the English and Afrikaans groups.
5.3.10 Reporting of differences in mean scores for employment groups (UWES; MBI and OLQ)

T-tests were performed to investigate whether the two employment groups (contract and permanent staff respectively) differ significantly regarding their mean scores. Table 5.25(a) shows that with the exception of the MBI total score – all other variances can be assumed equal for the purposes of significance test as seen from the results of Levene’s test for equal variances. The t-test results and mean scores presented in Tables 5.25(a) show that employment groups differ significantly regarding their total mean scores on the following variables: UWES (Total), \( p \leq 0.10 \); UWES (absorption), \( p \leq 0.01 \); OLQ (Total), \( p \leq 0.05 \); OLQ (comprehension), \( p \leq 0.05 \) and OLQ (meaningfulness), \( p \leq 0.10 \).

<table>
<thead>
<tr>
<th>TABLE 5.25(a) T-TEST EMPLOYMENT GROUPS: UWES; MBI AND OLQ (N = 90)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Levene’s Test for Equality of Variances</strong></td>
</tr>
<tr>
<td><strong>F</strong></td>
</tr>
<tr>
<td>UWES Total</td>
</tr>
<tr>
<td>Vigour</td>
</tr>
<tr>
<td>Dedication</td>
</tr>
<tr>
<td>Absorption</td>
</tr>
<tr>
<td>MBI Total</td>
</tr>
<tr>
<td>Exhaustion</td>
</tr>
<tr>
<td>Professional efficacy</td>
</tr>
<tr>
<td>Cynicism</td>
</tr>
<tr>
<td>OLQ Total</td>
</tr>
<tr>
<td>Comprehension</td>
</tr>
<tr>
<td>Manageability</td>
</tr>
<tr>
<td>Meaningfulness</td>
</tr>
</tbody>
</table>

*** \( p \leq 0.01 \)  * \( p \leq 0.10 \)  ** \( p \leq 0.05 \)

The results presented in Table 5.26(b) show that the permanent group obtained significantly higher mean scores on almost all the variables, except exhaustion and cynicism.
Contractors obtained significantly higher mean scores for exhaustion (m = 2.55) and cynicism (m = 1.95). The permanent group obtained the highest mean scores on meaningfulness (m = 5.49), manageability (m = 5.23) and professional efficacy (m = 5.03).

### TABLE 5.25(b) MEAN SCORES FOR SIGNIFICANT MEAN DIFFERENCES FOR EMPLOYMENT GROUPS: UWES; MBI AND OLQ (N = 90)

<table>
<thead>
<tr>
<th></th>
<th>Mean scores for employment groups: UWES; MBI and OLQ</th>
<th>Contract</th>
<th>Permanent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Standard Deviation</td>
<td>Mean</td>
</tr>
<tr>
<td>UWES Total</td>
<td>4.34</td>
<td>.87</td>
<td>4.72</td>
</tr>
<tr>
<td>Vigour</td>
<td>4.45</td>
<td>.80</td>
<td>4.72</td>
</tr>
<tr>
<td>Dedication</td>
<td>4.36</td>
<td>1.09</td>
<td>4.69</td>
</tr>
<tr>
<td>Absorption</td>
<td>4.19</td>
<td>.99</td>
<td>4.76</td>
</tr>
<tr>
<td>MBI Total</td>
<td>3.19</td>
<td>.87</td>
<td>3.19</td>
</tr>
<tr>
<td>Exhaustion</td>
<td>2.55</td>
<td>1.53</td>
<td>2.32</td>
</tr>
<tr>
<td>Professional efficacy</td>
<td>4.76</td>
<td>1.01</td>
<td>5.03</td>
</tr>
<tr>
<td>Cynicism</td>
<td>1.95</td>
<td>1.42</td>
<td>1.88</td>
</tr>
<tr>
<td>OLQ Total</td>
<td>4.80</td>
<td>.60</td>
<td>5.11</td>
</tr>
<tr>
<td>Comprehension</td>
<td>4.37</td>
<td>.80</td>
<td>4.73</td>
</tr>
<tr>
<td>Manageability</td>
<td>4.99</td>
<td>.73</td>
<td>5.23</td>
</tr>
<tr>
<td>Meaningfulness</td>
<td>5.13</td>
<td>1.03</td>
<td>5.49</td>
</tr>
</tbody>
</table>

5.3.11 Interpretation of significant differences in mean scores for employment groups (UWES; MBI AND OLQ)

The results suggest that contractors scored significantly lower on absorption than permanent staff. Contract employees appear to have lower levels of energy, involvement and efficacy toward their jobs as a result of the uncertain nature of the job (Maslach & Leiter, 1997). Contractors also scored significantly lower on comprehension and meaningfulness and have an overall lower sense of coherence than the permanent staff. This can be attributed to the fact that the contract environment is often disordered, random, accidental and unpredictable which make it difficult for individuals to make cognitive sense of the stimuli with which they are confronted (Antonovsky, 1987).
5.3.12 Reporting of differences in mean scores for employment groups (Sources of Job Stress)

The t-test results and mean scores presented in Tables 5.26(a) show that the employment groups differ significantly regarding their total mean scores on the job security variable ($p \leq 0.05$).

**TABLE 5.26(a) T-TEST FOR EMPLOYMENT GROUPS: SOURCES OF JOB STRESS (N = 90)**

<table>
<thead>
<tr>
<th>Source of Job Stress</th>
<th>Levene’s Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>p-value</td>
</tr>
<tr>
<td>Job and role ambiguity</td>
<td>.012</td>
<td>.912</td>
</tr>
<tr>
<td>Relationships</td>
<td>.130</td>
<td>.719</td>
</tr>
<tr>
<td>Job tools and equipment</td>
<td>.675</td>
<td>.413</td>
</tr>
<tr>
<td>Career advancement prospects</td>
<td>.039</td>
<td>.843</td>
</tr>
<tr>
<td>Job security</td>
<td>.615</td>
<td>.435</td>
</tr>
<tr>
<td>Lack of job autonomy</td>
<td>1.577</td>
<td>.213</td>
</tr>
<tr>
<td>Work/home conflict/stress</td>
<td>.073</td>
<td>.787</td>
</tr>
<tr>
<td>Workload</td>
<td>4.480</td>
<td>.037</td>
</tr>
<tr>
<td>Compensation and benefits</td>
<td>.004</td>
<td>.951</td>
</tr>
<tr>
<td>Lack of leadership/ management support &amp; guidance</td>
<td>2.117</td>
<td>.149</td>
</tr>
</tbody>
</table>

* $p \leq 0.05$

The results presented in Table 5.26(b) show that both the permanent group and contract group obtained the highest mean scores on compensation and benefits ($m = 3.26$ and $m = 3.43$ respectively). The contract group obtained significantly higher mean scores on job security ($m = 3.26$) as a source of job stress.
TABLE 5.26(b) MEAN SCORES FOR SIGNIFICANT MEAN DIFFERENCES FOR EMPLOYMENT GROUPS: SOURCES OF JOB STRESS (N = 90)

<table>
<thead>
<tr>
<th>Source of Job Stress</th>
<th>Contract Mean</th>
<th>Contract Standard Deviation</th>
<th>Permanent Mean</th>
<th>Permanent Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job and role ambiguity</td>
<td>2.86</td>
<td>.99</td>
<td>2.66</td>
<td>.94</td>
</tr>
<tr>
<td>Relationships</td>
<td>2.68</td>
<td>1.13</td>
<td>2.79</td>
<td>1.10</td>
</tr>
<tr>
<td>Job tools and equipment</td>
<td>2.98</td>
<td>1.13</td>
<td>2.62</td>
<td>1.23</td>
</tr>
<tr>
<td>Career advancement prospects</td>
<td>3.18</td>
<td>1.26</td>
<td>3.00</td>
<td>1.30</td>
</tr>
<tr>
<td>Job security</td>
<td>3.26</td>
<td>1.23</td>
<td>2.67</td>
<td>1.38</td>
</tr>
<tr>
<td>Lack of job autonomy</td>
<td>3.04</td>
<td>1.08</td>
<td>2.68</td>
<td>1.13</td>
</tr>
<tr>
<td>Work/home conflict/stress</td>
<td>2.82</td>
<td>1.20</td>
<td>2.79</td>
<td>1.15</td>
</tr>
<tr>
<td>Workload</td>
<td>3.06</td>
<td>1.09</td>
<td>3.21</td>
<td>1.38</td>
</tr>
<tr>
<td>Compensation and benefits</td>
<td>3.43</td>
<td>1.22</td>
<td>3.26</td>
<td>1.20</td>
</tr>
<tr>
<td>Lack of leadership/ management support &amp; guidance</td>
<td>3.02</td>
<td>1.27</td>
<td>3.08</td>
<td>1.42</td>
</tr>
</tbody>
</table>

5.3.13 Interpretation of differences in mean scores for employment groups (Sources of Job Stress)

The results suggest that both the permanent group and contract group view compensation and benefits as the highest source of job stress. As mentioned earlier, the financial rewards that work brings are obviously important because these determine the type of lifestyle that an individual can lead. In addition, compensation and benefits often influence individuals’ feelings of self worth and perception of their value to the organisation (Cartwright & Cooper, 2002). The contract group furthermore appears to experience higher stress due to job insecurity. Job insecurity results from the nature of contract work, where employees give their services for a certain period of time or until a deadline has been met and continuous employment once the contract/period has expired is not guaranteed (Havran, et al., 2003).

5.3.14 Reporting of differences in mean scores for employment groups (COI)

The t-test results and mean scores presented in Tables 5.27(a) show that employment groups differ significantly regarding their total mean scores on only the autonomy variable (p ≤ 0.05).
Job control (autonomy) is of particular importance to contractors (Havran, et al., 2003) as they are characterised as professional individuals or entrepreneurs that choose where they want to work and use their skills to gain monetary reward (Carroll, 1998). Contractors value the flexibility that the job offers them (Hippel, 1997); they tend to enjoy a challenge and are capable of managing each new assignment given to them (Goodwin, 1998). The findings of this research also indicate that the participants experience high levels of personal efficacy and engagement.

TABLE 5.27(b) MEAN SCORES FOR SIGNIFICANT MEAN DIFFERENCES FOR EMPLOYMENT GROUPS: COI

<table>
<thead>
<tr>
<th>Mean scores for employment groups: COI</th>
<th>Contract</th>
<th>Permanent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Standard Deviation</td>
</tr>
<tr>
<td>Technical/ Functional</td>
<td>3.51</td>
<td>0.54</td>
</tr>
<tr>
<td>General Management</td>
<td>2.68</td>
<td>0.79</td>
</tr>
<tr>
<td>Autonomy</td>
<td>3.05</td>
<td>0.84</td>
</tr>
<tr>
<td>Security/ Stability</td>
<td>3.57</td>
<td>0.77</td>
</tr>
<tr>
<td>Entrepreneurial Creativity</td>
<td>3.17</td>
<td>0.87</td>
</tr>
<tr>
<td>Service/ Dedication to a cause</td>
<td>3.51</td>
<td>0.76</td>
</tr>
<tr>
<td>Pure Challenge</td>
<td>3.44</td>
<td>0.66</td>
</tr>
<tr>
<td>Lifestyle</td>
<td>3.67</td>
<td>0.77</td>
</tr>
</tbody>
</table>
5.3.15 Interpretation of differences in mean scores for employment groups (COI)

The results suggest that the contractors have a significantly lower preference for the autonomy career anchor than the permanent staff members and a higher preference for the lifestyle and security/stability career anchor. This is a very interesting outcome, as normally people with an autonomy/independence anchor prefer clearly delineated, time-bounded kinds of work within his/her area of expertise (Schein, 1996). According to Ellison and Schreuder (2000), contract or project work is acceptable and often desirable for contract workers as it allows them the freedom to live flexible lifestyles. Permanent staff members often value security and upward progression in defining career success (Havran, et al., 2003). Permanent staff who experience work optimally (as determined by flow) will be inclined to obtain high scores on the “getting ahead” and “getting secure” career success orientations.

As indicated previously, the contractors who participated in this study scored the highest on the lifestyle, security/stability and technical/functional career anchors. Especially with regards to the technical/functional career anchor, people with this preference are always prepared to find a way to use their skills to improve this competence (Schein, 1990). Participants from the contractor group may be confronted with the reality of knowledge and skills becoming rapidly obsolete, as continued training and education are not guaranteed by organisations (Schein, 1996). Contractors in general and individuals with the technical/functional career anchor preference tend to display the same characteristics, as contractors are also defined as individuals with specific skills who are paid for the results they produce. Furthermore, contractors need to manage their own skills levels, as most companies are not prepared to train contractors (Havran, et al., 2003). However, Schein (1996) advises that continuous training and updating of skills should be emphasised in an effort to prevent obsolescence of the technical/functional career anchor individual. Both the individual and the organisation should take responsibility in this regard, clarifying each role.
5.3.16 Reporting of differences in mean scores for age groups (UWES, MBI and OLQ)

In the case of the age groups, an analysis of variance (ANOVA) test was carried out to investigate whether the three age groups (25 years and younger; between 26 and 40 years; and older than 40 years) significantly differed regarding their mean scores obtained on the UWES and MBI. Table 5.28(a) shows that the age groups did not differ significantly on their mean scores obtained on the OLQ.

The ANOVA results and mean scores presented in Tables 5.28(a) show that the age groups differ significantly regarding their total mean scores on the UWES Total, (p ≤ 0.10); UWES (dedication) (p ≤ 0.10); UWES (absorption) (p ≤ 0.05) and MBI (professional efficacy) (p ≤ 0.05).

TABLE 5.28(a) SIGNIFICANT DIFFERENCES IN MEAN SCORES FOR AGE GROUPS: UWES, MBI AND OLQ (N = 90)

<table>
<thead>
<tr>
<th></th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>UWES Total</td>
<td>2.410</td>
<td>.096*</td>
</tr>
<tr>
<td>Vigour</td>
<td>1.014</td>
<td>.367</td>
</tr>
<tr>
<td>Dedication</td>
<td>2.401</td>
<td>.097*</td>
</tr>
<tr>
<td>Absorption</td>
<td>3.408</td>
<td>.038**</td>
</tr>
<tr>
<td>MBI Total</td>
<td>.138</td>
<td>.872</td>
</tr>
<tr>
<td>Exhaustion</td>
<td>.300</td>
<td>.741</td>
</tr>
<tr>
<td>Professional efficacy</td>
<td>3.091</td>
<td>.050**</td>
</tr>
<tr>
<td>Cynicism</td>
<td>.053</td>
<td>.948</td>
</tr>
<tr>
<td>OLQ Total</td>
<td>1.387</td>
<td>.255</td>
</tr>
<tr>
<td>Comprehension</td>
<td>1.729</td>
<td>.183</td>
</tr>
<tr>
<td>Manageability</td>
<td>2.144</td>
<td>.123</td>
</tr>
<tr>
<td>Meaningfulness</td>
<td>.305</td>
<td>.738</td>
</tr>
</tbody>
</table>

** p ≤ 0.05  
*  p ≤ 0.10
TABLE 5.28(b) MEAN SCORES FOR SIGNIFICANT MEAN DIFFERENCES FOR AGE GROUPS:
UWES, MBI and OLQ (N = 90)

<table>
<thead>
<tr>
<th></th>
<th>Mean scores for age groups: UWES, MBI and OLQ</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>25 and younger</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
</tr>
<tr>
<td>UWES Total</td>
<td>3.99</td>
</tr>
<tr>
<td>Vigour</td>
<td>4.23</td>
</tr>
<tr>
<td>Dedication</td>
<td>3.90</td>
</tr>
<tr>
<td>Absorption</td>
<td>3.83</td>
</tr>
<tr>
<td>MBI Total</td>
<td>3.13</td>
</tr>
<tr>
<td>Exhaustion</td>
<td>2.69</td>
</tr>
<tr>
<td>Professional efficacy</td>
<td>4.39</td>
</tr>
<tr>
<td>Cynicism</td>
<td>2.04</td>
</tr>
<tr>
<td>OLQ Total</td>
<td>4.68</td>
</tr>
<tr>
<td>Comprehension</td>
<td>4.20</td>
</tr>
<tr>
<td>Manageability</td>
<td>4.86</td>
</tr>
<tr>
<td>Meaningfulness</td>
<td>5.10</td>
</tr>
</tbody>
</table>

5.3.17 Interpretation of differences in mean scores for age groups (UWES, MBI and OLQ)

Schaufeli and Bakker (2003) found that:

1. burnout and engagement are negatively related;
2. burnout is mainly predicted by job demands but also by lack of job resources, whereas engagement is exclusively predicted by available job resources;
3. burnout is related to health problems as well as to turnover intention, whereas engagement is related only to the latter;
4. burnout mediates the relationship between job demands and health problems, whereas engagement mediates the relationship between job resources and turnover intention.

The fact that burnout and engagement exhibit different patterns of possible causes and consequences implies that different intervention strategies should be used when burnout is to be reduced or engagement is to be enhanced.
In terms of professional efficacy there seems to be a trend that the older participants are, the higher they score on this variable. This can be attributed to older participants being more experienced than younger participants and having the ability to meet clients’ needs and to satisfy essential elements of job performance (Schaufeli, 2003).

Greenhaus et al., (2000) see establishment and achievement as two overriding early career issues that have to be dealt with by the individual as well as the organisation. For the individual, establishment generally involves learning, testing competence, fitting in, seeking approval, coping with emotional dependence and insecurity. Achievement generally involves contributing, increasing competence, moving up, seeking authority, finding emotional independence and self-confidence. In a study conducted by Pienaar and Rothmann (2003) rank (tenure) and coping played a major factor in the way that individuals deal with daily challenges.

5.3.18 Reporting of differences in mean scores for age groups (COI and Sources of Job Stress)

The ANOVA results and mean scores presented in Table 5.29(a) show that there are no significant differences in age groups regarding their total mean scores on the COI and Sources of Job Stress variables.

| TABLE 5.29(a) ANOVA FOR AGE GROUPS: COI AND SOURCES OF JOB STRESS (N = 90) |
|-----------------|-------|-----|
| COI             | F     | Sig.|
| Technical/ Functional | 0.62  | .540|
| General Management  | 1.38  | .257|
| Autonomy          | 0.40  | .671|
| Security/ Stability| 0.50  | .607|
| Entrepreneurial Creativity | 0.54  | .586|
| Service/ Dedication to a cause | 1.05  | .355|
| Pure Challenge    | 1.09  | .342|
| Lifestyle         | 0.24  | .787|
| SOURCES OF JOB STRESS | F     | Sig.|
| Job and role ambiguity | .26   | .768|
| Relationships     | .09   | .918|
| Job tools and equipment | 1.17  | .316|
| Career advancement prospects | 2.16  | .122|
| Job security      | .14   | .871|
| Lack of job autonomy | .14   | .872|
| Work/home conflict/stress  | .25   | .779|
| Workload          | .96   | .388|
| Compensation and benefits | .79   | .458|
| Lack of leadership/ management support & guidance | 1.15  | .321|
The results presented in Table 5.29(b) show that all age groups obtained the highest significant mean score on the lifestyle variable and the lowest mean score on the general management variable. Furthermore, the age groups 25 years and younger and 26 – 40 years appear to experience the most stress in terms of the compensation and benefit variable. The age groups older than 40 years experienced the most stress in terms of the workload variable.

### TABLE 5.29(b) MEAN SCORES: COI AND SOURCES OF JOB STRESS

<table>
<thead>
<tr>
<th>COI</th>
<th>Mean scores for age groups: COI and Sources of Job Stress</th>
<th>25 and younger</th>
<th>26 - 40 years</th>
<th>Older than 40 years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Standard Deviation</td>
<td>Mean</td>
<td>Standard Deviation</td>
</tr>
<tr>
<td>Technical/ Functional</td>
<td>3.61</td>
<td>.71</td>
<td>3.47</td>
<td>.53</td>
</tr>
<tr>
<td>General Management</td>
<td>2.61</td>
<td>.61</td>
<td>2.83</td>
<td>.81</td>
</tr>
<tr>
<td>Autonomy</td>
<td>3.07</td>
<td>1.00</td>
<td>3.27</td>
<td>.73</td>
</tr>
<tr>
<td>Security/ Stability</td>
<td>3.36</td>
<td>.78</td>
<td>3.51</td>
<td>.83</td>
</tr>
<tr>
<td>Entrepreneurial Creativity</td>
<td>3.30</td>
<td>.95</td>
<td>3.06</td>
<td>.80</td>
</tr>
<tr>
<td>Service/ Dedication to a cause</td>
<td>3.67</td>
<td>.85</td>
<td>3.37</td>
<td>.72</td>
</tr>
<tr>
<td>Pure Challenge</td>
<td>3.28</td>
<td>.69</td>
<td>3.49</td>
<td>.70</td>
</tr>
<tr>
<td>Lifestyle</td>
<td>3.70</td>
<td>.79</td>
<td>3.81</td>
<td>.69</td>
</tr>
<tr>
<td>Sources of job stress</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job and role ambiguity</td>
<td>2.88</td>
<td>.60</td>
<td>2.72</td>
<td>.96</td>
</tr>
<tr>
<td>Relationships</td>
<td>2.65</td>
<td>1.37</td>
<td>2.76</td>
<td>1.06</td>
</tr>
<tr>
<td>Job tools and equipment</td>
<td>3.24</td>
<td>1.15</td>
<td>2.78</td>
<td>1.21</td>
</tr>
<tr>
<td>Career advancement prospects</td>
<td>3.29</td>
<td>1.31</td>
<td>3.17</td>
<td>1.31</td>
</tr>
<tr>
<td>Job security</td>
<td>3.18</td>
<td>1.13</td>
<td>2.98</td>
<td>1.46</td>
</tr>
<tr>
<td>Lack of job autonomy</td>
<td>3.00</td>
<td>1.06</td>
<td>2.87</td>
<td>1.14</td>
</tr>
<tr>
<td>Work/home conflict/stress</td>
<td>2.81</td>
<td>1.11</td>
<td>2.76</td>
<td>1.20</td>
</tr>
<tr>
<td>Workload</td>
<td>2.75</td>
<td>.86</td>
<td>3.22</td>
<td>1.27</td>
</tr>
<tr>
<td>Compensation and benefits</td>
<td>3.38</td>
<td>.96</td>
<td>3.44</td>
<td>1.30</td>
</tr>
<tr>
<td>Lack of leadership/ management support &amp; guidance</td>
<td>2.69</td>
<td>1.35</td>
<td>3.21</td>
<td>1.35</td>
</tr>
</tbody>
</table>

#### 5.3.19 Interpretation of differences in mean scores for age groups (COI and Sources of Job Stress)

In terms of the Sources of Job Stress variables, it appears from the findings that older individuals experience more stress due to the added responsibility that comes with family and work demands, and that younger individuals might experience more stress in terms of pay and benefits, as they have only limited responsibility and tenure.
Similar findings have been reported by Martins and Coetzee (2007). However, individuals in different age groups show no significant differences in terms of Sources of Job Stress variables.

The results suggest that there are no significant differences between the age groups on the COI and Sources of Job Stress. In terms of the COI mean scores for the various age groups, research has shown that younger individuals do not have a clear career anchor as the individuals have not had enough life experience to develop priorities that determine how to make those choices (Schein, 2006). Furthermore, a more definite career only emerges typically at the ages 29-35 (the establishment phase) as careerists are not as receptive to diverse possibilities as in the earlier stage (Derr, 1980).

5.4 INTEGRATION OF RESEARCH FINDINGS
The empirical objective of the study was firstly to investigate, analyse and evaluate whether there is a relationship between the employee wellness variables (specifically, sense of coherence; burnout; sources of job stress and work engagement) and the career anchors variables. The second objective was to determine whether gender, race, employment and age groups differ with regard to the employee wellness variables and career anchor variables.

Overall, the sample was predominantly represented by white, female contractors between 26 – 40 years (early adulthood life stage/ establishment career phase). These biographical characteristics of the sample were taken into consideration in the interpretation of the findings.

5.4.1 Employee wellness
Figures 5.2 to 5.4 provide an overview of the key relationships observed between the employee wellness variables related to the UWES (work engagement) and OLQ (SOC); the UWES and MBI (burnout) and MBI, OLQ and SOJ.
Figure 5.2  Summary of key associations between the UWES and OLQ

Figure 5.2 shows the key, significant associations observed between the UWES and OLQ. The results suggest that the more a participant seem to experience work engagement, the more likely that the participant will experience high levels of SOC. Psychological strengths create tendencies contrary to those that produce burnout or are favourable to work engagement. These strengths include amongst others a sense of coherence (Antonovsky, 1987).

Figure 5.3  Summary of key associations between the UWES and MBI

The key significant associations between the UWES and MBI employee wellness variables are depicted in Figure 5.3. The results suggest that the more a participant seems to experience work engagement, the more likely that the participant will experience low levels of burnout. However, the results indicated a significant, negative correlation between engagement and the emotional exhaustion and cynicism/ depersonalisation sub-scales of the MBI.
According to Maslach (1998), a strong relationship from exhaustion to depersonalisation or cynicism is consistently found in burnout research. Furthermore, a work situation with chronic, overwhelming demands that contribute to exhaustion or cynicism is likely to erode an individual's sense of accomplishment or effectiveness.

The findings suggest that participants who experience high levels of professional efficacy, have higher levels of vigour and feel more dedicated and immersed in their jobs. Based on the work of Ryan and Deci (2000), feelings of competence will not enhance engagement unless accompanied by a sense of autonomy or, in attributional terms, by an internal perceived locus of control. Therefore, people must not only experience competence or efficacy, they must also experience their behaviour as self-determined for engagement to be evident. This requires immediate contextual support for autonomy and competence or abiding inner resources that are typically the result of prior developmental supports for perceived autonomy and competence. According to Roberts and Davenport (2002), there are three areas that could be targeted to increase employees' work engagement, namely career development, identification with the organisation and a rewarding work environment.

**Figure 5.4  Summary of key associations between the MBI and OLQ**
Figure 5.4 shows the key, significant associations between the MBI and OLQ. The results suggest that the more a participant seem to experience burnout, the more likely that the participant will experience low levels of OLQ. However, the results indicated a significant, positive correlation between the OLQ and the professional efficacy sub-scale of the MBI.

Table 5.30 summarises the overall employee wellness profile of the sample.

The results show that on a total level, engagement (dedication and absorption) and SOC (manageability) differed significantly for males and females. However, there appears to be no difference between gender groups on burnout. On a practical level, the findings suggest that participants that experience high levels of engagement in their work also experienced significantly lower levels of burnout. Moreover, participants who demonstrate a strong sense of coherence seemingly also experience significantly higher levels of work engagement and lower levels of burnout. It appears thus from the findings that a well developed sense of coherence and high levels of work engagement may act as coping resources that mediate the effect of stressful working circumstances. These findings are supported by Rothmann, et al., (2003).

According to Schaufeli (2003), both male and female seem to experience low levels of emotional exhaustion and cynicism/ depersonalisation and high levels of professional efficacy. Females tend to show higher levels of manageability and seem to perceive the resources at their disposal to be adequate to meet the demands posed by their life situations (Antonovsky, 1987). High levels of manageability are also positively linked to coping, as individuals have the sense that having support from inner resources or those of others (friends, colleagues, God, a union or even religious structures) enable them to cope better (Antonovsky, 1987).
### TABLE 5.30  SUMMARY OF THE OVERALL EMPLOYEE WELLNESS PROFILE OF THE SAMPLE

<table>
<thead>
<tr>
<th>Employee wellness variable</th>
<th>UWES:</th>
<th>MBI:</th>
<th>OLQ:</th>
<th>Sources of job stress:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Highest Total Mean Score</td>
<td>Lowest Total Mean Score</td>
<td>Significant differences in mean scores</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gender</td>
<td>Race</td>
<td>Employment Group</td>
<td>Age</td>
</tr>
<tr>
<td>Vigour</td>
<td>4.56</td>
<td>4.69</td>
<td>No significant difference</td>
<td>No significant difference</td>
</tr>
<tr>
<td>Dedication</td>
<td>4.67***</td>
<td>Male (4.02)</td>
<td>Female (4.67)***</td>
<td>No significant differences</td>
</tr>
<tr>
<td>Absorption</td>
<td>4.76****</td>
<td>3.97****</td>
<td>4.39</td>
<td>4.19****</td>
</tr>
<tr>
<td>Professional efficacy</td>
<td>4.96</td>
<td>4.88</td>
<td>5.03</td>
<td>5.16**</td>
</tr>
<tr>
<td>Cynicism/ depersonalisation</td>
<td>1.79*</td>
<td>2.05</td>
<td>1.88</td>
<td>1.87</td>
</tr>
<tr>
<td>Comprehension</td>
<td>4.34</td>
<td>4.49</td>
<td>4.37**</td>
<td>4.20</td>
</tr>
<tr>
<td>Manageability</td>
<td>Male (4.81)**</td>
<td>Female (5.20)</td>
<td>No significant difference</td>
<td></td>
</tr>
<tr>
<td>Meaningfulness</td>
<td>5.35</td>
<td>5.32</td>
<td>5.49*</td>
<td>5.31</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sources of job stress:</th>
<th>No significant differences</th>
<th>Black (2.56)**</th>
<th>White (2.94)</th>
<th>No significant differences</th>
<th>No significant differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job and role ambiguity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationships</td>
<td>2.69</td>
<td>2.66</td>
<td>No significant differences</td>
<td>No significant differences</td>
<td></td>
</tr>
<tr>
<td>Job tools and equipment</td>
<td>2.62</td>
<td></td>
<td>No significant differences</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Career advancement prospects</td>
<td></td>
<td></td>
<td>Black (3.38)**</td>
<td>White (3.64)</td>
<td></td>
</tr>
<tr>
<td>Job security</td>
<td></td>
<td></td>
<td>No significant difference</td>
<td>Contract (3.28)**</td>
<td>Permanent (2.67)</td>
</tr>
<tr>
<td>Work/home conflict/stress</td>
<td>2.55</td>
<td></td>
<td>Black (2.55)*</td>
<td>White (3.00)</td>
<td>No significant differences</td>
</tr>
<tr>
<td>Workload</td>
<td></td>
<td></td>
<td>Black (2.79)**</td>
<td>White (3.37)</td>
<td></td>
</tr>
<tr>
<td>Compensation and benefits</td>
<td>3.76</td>
<td>3.43</td>
<td>3.59</td>
<td>Black (3.76)***</td>
<td>White (3.06)</td>
</tr>
<tr>
<td>Lack of leadership/management support &amp; guidance</td>
<td>Male (3.41)*</td>
<td>Female (2.88)</td>
<td>Black (3.53)***</td>
<td>White (2.71)</td>
<td></td>
</tr>
</tbody>
</table>
Figure 5.5 Summary of the overall work engagement profile of the sample

NOTE: NO SIGNIFICANT RACE DIFFERENCES
Figure 5.6 Summary of the overall burnout profile of the sample
Figure 5.7  Summary of the overall SOC profile of the sample

NOTE: NO SIGNIFICANT RACE OR AGE DIFFERENCES
Figure 5.8  Summary of the overall Sources of Job Stress profile of the sample
Similarly, blacks and whites do not appear to differ significantly regarding their SOC, experiences of burnout, engagement and career anchors. The only significant differences observed between blacks and whites are on Sources of Job Stress variables: career advancement prospects; workload; compensation and benefits; and lack of leadership/management support and guidance. Black participants appear to have significantly higher need for career advancement than their white counterparts. These findings could probably be attributed to the Employment Equity opportunities that are currently being provided to predominantly Africans and women, both of whom are now moving into more senior positions and into management. These participants may therefore be more concerned with sharpening and developing their skills and abilities in positions that carry higher responsibility (Coetzee & Schreuder, 2008).

Moreover, compensation and benefits seem to be significantly more important to the black participants, as the financial rewards that work brings determine the type of lifestyle that an individual can lead. Similar findings have been reported by Martins and Coetzee (2007). In addition, compensation and benefits often influence individual’s feelings of self worth and perception of their value to the organisation (Cartwright & Cooper, 2002). If employees feel that they invest too much in the relationship with the organisation they work for, compared to the (im)material benefits they receive from that organisation, they are likely to experience burnout. Whereas a negative social-exchange relationship – or lack of reciprocity – is likely to play a role in the emergence of burnout, other social psychological processes such as social comparison and emotional contagion seem to play a role in perpetuating burnout in work groups (Schaufeli, 2003).

Black participants also appear to experience a significantly higher need for leadership/management support and guidance than their white counterparts. Similar findings have been reported by Martins and Coetzee (2007). Most jobs demand a great deal of contact with other people at work. Poor or unsupportive relationships with colleagues and/or superiors, isolation (a perceived lack of adequate relationships) and unfair treatment can all be a potential source of stress (Cartwright & Cooper, 2002).
The multi-cultural, multigenerational workforce and shift to nontraditional family structures give rise to diverse employee needs. A different working relationship, which emphasises individual responsibility and a broader range of skills, is becoming increasingly evident (Baruch, 2004; Millward & Brewerton, 2001; Thite, 2001). The characteristics of the contemporary working relationship are less security; individuals managing their own careers; performance-related pay; a flexible employment scenario; little trust between employee and employer; and performance being substantially rewarded.

 Significant differences were observed between the engagement (absorption) and SOC (comprehension) levels of the permanent and contract staff who participated in this study. Overall, the findings suggest that participants with a strong sense of coherence feel more engaged in their work. It is possible that employees with a weak sense of coherence will develop burnout, while those who have developed a strong sense of coherence will show work engagement. Studies (Antonovsky, 1987; 1993; Rothmann, 2003) have confirmed that a person’s sense of coherence is an important component of his/her health and well-being. Each person’s sense of coherence requires certain inherent prerequisites for coping successfully, which are represented by the concepts of comprehensibility, manageability and meaningfulness (Antonovsky, 1987).

 The employment groups differed only regarding their preference for the autonomy career anchor. Permanent staff scored significantly higher on the autonomy career anchor than their contractor counterparts. This trend can be ascribed to the nature of contract work, as described previously by Havran et al., (2003). Furthermore, contractors also experienced significantly higher levels of stress in terms of job and role ambiguity; job tools and equipment; career advancement prospects; job security; work/home conflict/stress; workload; and compensation and benefits. More specifically, it appears that job and role ambiguity may lead to feelings of being over extended and depleted of one’s emotional and physical resources and may lead to participants becoming more negative toward or detached from aspects of their jobs. Similarly, a lack of job tools and equipment may also lead to emotional exhaustion.
Furthermore, issues regarding perceived lack of career advancement prospects and job security may also lead to emotional exhaustion and greater cynicism toward one’s job. Experiencing a lack of job autonomy and lack of leadership/management support and guidance seems to result in more negative, callous or detached responses to the job. Work-home conflict, workload and compensation and benefits also appear to lead to emotional exhaustion. Work-home conflict can be defined as a form of inter-role conflict in which the role pressures from the work and family domains are mutually incompatible in some respect (Greenhaus & Beutell, 1985:77). Difficulties in combining work and family roles may arise from strain-based conflict (the spillover of strain from one domain to the other). Research indicates that work role stressors, like role conflict and role ambiguity can cause strain symptoms such as tension, anxiety, fatigue, depression, apathy and irritability (Aryee, 1993; Greenhaus & Beutell, 1985). Work stressors which are identified as strain based are the following: role overload, role conflict and ambiguity (role ambiguity showed a positive correlation with burnout in both male and female partners), lack of career progress, repetitive tasks, changing work environment, long hours (indirectly cause strain), boring tasks, lack of work challenge, a new job or poor job-person fit (Aryee, 1993; Greenhaus & Beteull, 1985; Greenhaus, et al., 1989; Marshall & Barnett, 1993).

A significant correlation was found between role conflict and emotional exhaustion, as work-home conflict was found to be significantly related to both emotional exhaustion and job satisfaction (Boles et al., 1997). While the significant contributors to burnout in male partners were only work-related (job ambiguity and lack of career success), burnout in female partners was both work and non-work related (role ambiguity, work schedule inflexibility, job/parent conflict, lack of career progress (Aryee, 1993).

It is important for employees to be engaged in their work and not be subjected to job overload (burnout), as satisfaction and commitment (important elements of engagement) are important aspects of SOC (employee wellness) (Adams et al., 1997). SOC combined with job stressors are related to exhaustion, cynicism and professional efficacy (Rothmann, et al., 2003).
The findings confirm the results of Basson and Rothmann (2002) and Wissing, De Waal and de Beer (1992). Sense of coherence, job demands and a lack of organisational support were strongly related to exhaustion, while cynicism was strongly related to exhaustion. Maslach and Leiter (1997) also found that a work situation with overwhelming demands, contributes to exhaustion. In addition, it seems that exhaustion and cynicism erode an individual’s sense of professional efficacy.

The increasing practice of downsizing the workforce by termination and lay-offs in favour of hiring contingent workers, that is, part-time, contract and seasonal workers, means that workers are hired by virtue of their existing capabilities, are not offered training by the organisation and do not become committed to a particular organisation (Hulin & Glomb, 1999; Ilgen & Pulakos, 1999). The organisation sees contingent workers as supplementing the skills of the core workforce. The circumstances under which these contract workers must operate do not offer job security and may explain the significant lower mean score for contract workers on job security as a source of job stress. Contract workers experience a lot more uncertainty than permanent employees and often do not have the same benefits (Havran, et al., 2003).

There is a marked difference between age groups’ levels of engagement (absorption) and their burnout (professional efficacy). Individuals between the ages of 26 – 40 showed the highest absorption levels and individuals older than 40 years, showed the highest professional efficacy levels. Research shows that at mid-life, many individuals are at the height of their powers and feel that they are in the prime of their lives (Kets de Vries, 1999). Psychological benefits during this period are more wisdom, more autonomy, being less driven by instinctual drives, coming to terms with limitations, having social concerns, and a broader life perspective. Individuals younger than 25 years scored lower on the absorption and professional efficacy dimensions than their older counterparts. This might be due to the fact that young adults have not yet developed a strong occupational identity (Ostroff, Shin & Feinberg, 2002).
However, no significant differences were observed between the age groups in terms of the SOC, career anchors and Sources of Job Stress variables.

Highest total mean scores on the vigour sub-scale were obtained by the race and age groups, however no significant differences on the vigour sub-scale were observed for any of the biographical profile groups. The results indicate that the race and age groups seem to have high levels of vigour in the work they perform daily. The results show a significant difference on the dedication sub-scale between males and females. Females obtained the highest total mean score on the dedication sub-scale. Permanent staff members obtained a high total mean score on the absorption sub-scale, whilst contract staff members, gender, race and age groups obtained the lowest total mean score on the absorption sub-scale. This can be due to the fact that permanent staff members experience more security and stability in their work and can therefore project all their energy and effort into their work.

In terms of the variables, all biographical groups obtained the highest total mean score on the professional efficacy sub-scale and the lowest total mean score on the cynicism/ depersonalisation sub-scale. This suggests that participants do not seem to experience a negative, callous or detached response to various aspects of the job and/ or cynical and insensitive attitudes towards work, colleagues, and/ or clients. Moreover, they seem to experience high levels of competency in their work. With regards to significant differences obtained between the biographical profile groups, the age group obtained significant differences on the professional efficacy sub-scale. More specifically, participants older than 40 years of age showed a much higher level of professional efficacy than their younger counterparts. This may be an indication of the maturity and experience shown by older employees who have been employed for a longer period. Males and females also showed a significant difference on the cynicism sub-scale. Males appear to experience much higher levels of cynicism than females, meaning that males appear to experience more callous or detached response to various aspects of the job and/ or cynical and insensitive attitudes towards work, colleagues, and/ or clients than their female counterparts.
The findings further suggest that participants who scored significantly low on emotional exhaustion and cynicism/ depersonalisation scored significantly high on the three OLQ sub-scales. On the other hand, participants who scored significantly high on the MBI professional efficacy sub-scale also scored significantly high on the three OLQ sub-scales. These results imply that overall participants with a strong sense of coherence, and who have strong sense of personal accomplishment, may be less inclined to have experiences of burnout, specifically emotional exhaustion or cynicism. Various research findings showed that sense of coherence is related to the three dimensions of burnout (Basson & Rothmann, 2002; Gilbar, 1998; Levert, Lucas & Ortlepp, 2000). A strong sense of coherence is also related to general well-being (Feldt, 1997) and emotional stability (Mlonzi & Strümpfer, 1998). This means that individuals with high levels of burnout could be expected to demonstrate weaker levels of sense of coherence. According to Antonovsky (1987), a person with a strong sense of coherence selects the particular coping strategy that seems most appropriate to deal with the stressor being confronted.

All biographical profile groups obtained the highest total mean score on the meaningfulness sub-scale and the lowest total mean score on the comprehension sub-scale. This implies that participants seemingly feel that life is making sense on an emotional and not just a cognitive level; however, the participants do not necessarily seem to perceive stimuli from the internal and external environment as information that is ordered, structured and consistent (Antonovsky, 1987). This might be due to the consulting environment that individuals are working in, which is not always ordered, structured and consistent. Males and females differ significantly in terms of the manageableability they experience. Females seem to experience much higher levels of manageableability than males.

Contract and permanent staff also appear to differ significantly with regards to the comprehension and meaningfulness they experience on a day-to-day basis. The permanent employees who participated in this study appear to experience much higher levels of comprehension and meaningfulness than contract employees. This might once again be ascribed to the nature and uncertainty of the work done by contractors and the lack of security/ stability they experience (Havran, et al., 2003).
The biographical profile groups obtained the highest total mean score on the compensation and benefits sub-scale, except for males and females who scores the lowest total mean score on this sub-scale. With regards to the race group, significant differences were observed on almost all of the Sources of Job Stress variables, especially compensation and benefits; lack of leadership/management support and guidance and career advancement prospects. Males and females differed significantly only on the lack of leadership/management support and guidance sub-scale, as indicated, males scored much higher than females. In terms of the employment group, a significant difference was observed only on the job security sub-scale, which indicated that contractors scored much higher than their permanent staff counterparts.

Feelings of having a lack of job security may also negatively influence participants’ work-related state of mind. Lack of job security seems to affect energy levels and willingness to invest effort in work. Permanent staff makes up the core staff of the organisation and are regarded as vital for the continued existence of the organisation. They also tend to be highly committed to the organisation and strongly identify with it (Handy, 1989). In turn, they are highly valued. Contractors’ services however, are only valued for as long as their skills are up to date and useful and companies are not prepared to train contractors (Havran, et al., 2003). This trend might make contractors feel less valued and therefore less engaged. Organisations generally do not offer contractors any security or stability, as they give their services for only a certain period of time or until a deadline has been met (Hamlyn, 1999).
### TABLE 5.31 SUMMARY OF THE OVERALL CAREER ANCHORS PROFILE OF THE SAMPLE

<table>
<thead>
<tr>
<th>Career anchors variable</th>
<th>Highest Total Mean Score</th>
<th>Lowest Total Mean Score</th>
<th>Significant differences in mean scores</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female</td>
<td>Male</td>
<td>No significant differences</td>
</tr>
<tr>
<td>Technical/ Functional</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Management</td>
<td>2.63*</td>
<td>3.45</td>
<td>2.68</td>
</tr>
<tr>
<td>Autonomy</td>
<td>3.15</td>
<td>3.37</td>
<td></td>
</tr>
<tr>
<td>Security/ Stability</td>
<td>3.65</td>
<td>3.21</td>
<td></td>
</tr>
<tr>
<td>Entrepreneurial</td>
<td>2.97</td>
<td>3.42*</td>
<td></td>
</tr>
<tr>
<td>Creativity</td>
<td>3.38</td>
<td>3.54**</td>
<td></td>
</tr>
<tr>
<td>Service/ Dedication to a cause</td>
<td>3.44</td>
<td>3.53</td>
<td></td>
</tr>
<tr>
<td>Pure Challenge</td>
<td>3.34</td>
<td>3.75</td>
<td></td>
</tr>
<tr>
<td>Lifestyle</td>
<td>3.81****</td>
<td>3.75</td>
<td>3.81****</td>
</tr>
</tbody>
</table>

p ≤ 0.01 ****  
p ≤ 0.02 ***  
p ≤ 0.05 **  
p ≤ 0.1 *

#### 5.4.2 Career anchors

In terms of career anchors, differences were observed between the male and female participants on the general management; entrepreneurial creativity; service/dedication to a cause; and lifestyle career anchors. A study conducted by Tladinyane (2006) yielded similar results where males also showed higher preference than females on these specific career anchors.
In the current study, male participants scored higher on the entrepreneurial creativity anchor than females, which implies that the men who participated in this study have a preference for opportunities to establish new business, new organisations and/or develop new products and services. Similar findings were reported by Ellison and Schreuder, (2000). Individuals with a preference toward entrepreneurial creativity career anchor tend to be restless and continually require new creative challenges (Schein, 2006).

Another interesting observation from the findings of this study is that, with regards to the service/dedication to a cause anchor, males also scored significantly higher than females. Male participants appear to want work that permits them to influence their employing organisation in the direction of their values and want fair pay for their contributions and portable benefits (Schein, 2006).

The findings of this study further show that the male participants have a significant higher preference for the general management career anchor than the female participants. It appears that the males prefer work environments that reward goal achievement, freedom to pursue their creativity, opportunities to move into challenging positions of authority and influence and appropriate pay for performance. The female contractors, on the other hand, scored very high on the security/stability career anchor. Therefore, it appears that female contractors prefer more stable, predictable work environments that reward loyalty and steady performance and provide benefit packages that emphasise insurance and retirement programmes, as well as the assurance of steady employment. Similar results were reported by Coetzee and Schreuder (2008).

Tladinyane’s (2006) study also indicated the security/stability career anchor as a predominant need, suggesting that individuals who value stable, predictable work and benefit packages that emphasise insurance and retirement programmes will continue to stay with an organisation because they need to. In addition, the security/stability career anchor was associated with the importance of valuing loyalty, implying that individuals may tend to stay at an organisation because they feel they ought to, not because they necessarily want to.
The predominant profile group (white females in contract positions between the age of 26-40 years) show the highest preference for the lifestyle career anchor, which means that the desire to follow a career that allow them to integrate their personal lifestyle needs with those of their families and the organisation by means of flexible work arrangements and options are very important to most of the participants in this study. Therefore, it is important that organisations acknowledge the focus on individual responsibility and make allowances for the balancing of work and self (Havran, et al., 2003). Furthermore, in a study conducted by Schreuder and Coetzee (2006), the lifestyle career anchor was found to be related to commitment to organisations that give individuals benefits that contribute to their need for a flexible lifestyle; one that integrates their personal and family needs with their career. Individuals may feel they ought to remain with the organisation because of the lifestyle it offers them.

The race and age groups showed no significant differences in terms of their preference for a specific career anchor. In terms of employment groups, permanent staff showed a higher need for autonomy than the predominant profile group. This preference of permanent staff is an indication that they need to do things their own way at their own pace to meet their own standards. Furthermore, they cannot stand to be bound by others’ rules, procedures and standards. Most people want some level of autonomy, but for a person with this anchor, autonomy is the overriding concern (Schein, 1990). On the other hand, contractors value a career that is integrated with their total lifestyle. They want flexibility more than anything else and look more for organisational culture than a specific programme; culture which reflects respect for personal and family concerns and allows flexibility when family needs change (Schein, 2006).
5.4.3 The relationship between employee wellness and career anchors

Table 5.32 is a summary of the key significant associations between the employee wellness variables (sense of coherence; burnout; sources of job stress and work engagement) and the career anchor variables measured. The direction and strength of the association between the OLQ, Sources of Job Stress, UWES and COI variables are shown. There were no key significant associations observed between the MBI and career anchor variables and therefore these results have been left out. The various key significant differences between gender; race, employment, and age groups with regard to their mean scores on various variables are also shown.

Overall, the findings of this research indicate that the participants have a strong sense of engagement, personal accomplishment and SOC, with a predominant preference for the entrepreneurial creativity career anchor. Positive associations exist between vigour and the autonomy, entrepreneurial creativity and pure challenge career anchors. However, there is a negative association between vigour and the security/stability career anchor.
Furthermore, a positive association exists between dedication and the entrepreneurial creativity career anchor. Negative associations are found between absorption and the technical functional and security/ stability career anchors.

Table 5.32 further indicates that positive associations exist between meaningfulness and the general management, autonomy and security/ stability career anchors. With regards to the associations between the sources of job stress and career anchors, only positive associations exist between the sources of job stress variables (relationships, job security, lack of job autonomy, compensation and benefits as well as lack of leadership/ management support) and the career anchor variables (autonomy, security/ stability, entrepreneurial creativity, pure challenge and lifestyle).

**TABLE 5.32 SUMMARY OF THE SIGNIFICANT ASSOCIATIONS BETWEEN EMPLOYEE WELLNESS AND CAREER ANCHOR VARIABLES**

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>COI</th>
</tr>
</thead>
<tbody>
<tr>
<td>UWES</td>
<td>C1</td>
</tr>
<tr>
<td>U1</td>
<td>+ / *</td>
</tr>
<tr>
<td>U2</td>
<td></td>
</tr>
<tr>
<td>U3</td>
<td>- / *</td>
</tr>
<tr>
<td>OLQ</td>
<td></td>
</tr>
<tr>
<td>O3</td>
<td>+ / **</td>
</tr>
<tr>
<td>SOJ</td>
<td></td>
</tr>
<tr>
<td>S2</td>
<td></td>
</tr>
<tr>
<td>S5</td>
<td></td>
</tr>
<tr>
<td>S6</td>
<td>+ / *</td>
</tr>
<tr>
<td>S9</td>
<td></td>
</tr>
<tr>
<td>S10</td>
<td></td>
</tr>
</tbody>
</table>

*p ≤ 0.001 ****  
*p ≤ 0.01 ****  
*p ≤ 0.02 ***  
*p ≤ 0.05 **  
*p ≤ 0.1 *  
+ = positive association  
- = negative association
Description of abbreviations:

<table>
<thead>
<tr>
<th>U1</th>
<th>Vigour</th>
<th>U2</th>
<th>Dedication</th>
</tr>
</thead>
<tbody>
<tr>
<td>U3</td>
<td>Absorption</td>
<td>C3</td>
<td>Meaningfulness</td>
</tr>
<tr>
<td>S2</td>
<td>Relationships</td>
<td>S5</td>
<td>Job security</td>
</tr>
<tr>
<td>S6</td>
<td>Lack of job autonomy</td>
<td>S9</td>
<td>Compensation and benefits</td>
</tr>
<tr>
<td>S10</td>
<td>Lack of leadership/management support</td>
<td>C1</td>
<td>Technical/Functional</td>
</tr>
<tr>
<td>C2</td>
<td>General Management</td>
<td>C3</td>
<td>Autonomy</td>
</tr>
<tr>
<td>C4</td>
<td>Security/ Stability</td>
<td>C5</td>
<td>Entrepreneurial creativity</td>
</tr>
<tr>
<td>C7</td>
<td>Pure Challenge</td>
<td>C8</td>
<td>Lifestyle</td>
</tr>
</tbody>
</table>

Table 5.33 provides a summary of decisions made based on the research hypothesis.

**TABLE 5.33 SUMMARY OF DECISIONS ON RESEARCH HYPOTHESES**

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Decisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>H01</td>
<td>There is no significant relationship between the employee wellness variables (SOC, burnout, sources of job stress and work engagement) and career anchor variables.</td>
</tr>
<tr>
<td>H1</td>
<td>There is a significant relationship between the employee wellness variables (SOC, burnout, sources of job stress and work engagement) and career anchor variables.</td>
</tr>
<tr>
<td>H02</td>
<td>There are no significant differences between the age, race, gender and employment groups regarding their employee wellness levels (SOC, burnout, sources of job stress and work engagement) and career anchors.</td>
</tr>
<tr>
<td>H2</td>
<td>There are significant differences between the age, race, gender and employment groups regarding their employee wellness levels (SOC, burnout, sources of job stress and work engagement) and career anchors.</td>
</tr>
</tbody>
</table>

In summary, the null hypotheses are rejected and alternative hypotheses accepted. Steps 1 – 8 of the empirical investigation have now been concluded and the empirical questions as to whether there is a relationship between employee wellness and career anchors in a sample of participants employed in the South African work context, and whether there is a difference between gender, race, employment and age groups, employee wellness and career anchors have been answered.
5.5 CHAPTER SUMMARY

This chapter reported on and interpreted the findings from the empirical investigation regarding the employee wellness variables (sense of coherence; burnout; sources of job stress and work engagement) and career anchor variables. The empirical findings have also been integrated to reflect the key observations regarding the relationship between the variables.

Chapter 6 discusses the conclusions and limitations of the study and makes recommendations for practice and future research.
CHAPTER 6
CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

This chapter covers the conclusions of the study, discusses its limitations, and makes recommendations for employee wellness and career decision making practices and further research.

6.1 CONCLUSIONS
The following conclusions were drawn regarding the literature review and the empirical investigation.

6.1.1 Conclusions regarding the literature review
The general aim of this study was to investigate, analyse and evaluate whether a relationship exists between employee wellness and career anchors. Addressing and achieving the specific objectives of the research achieved the general aim.

Conclusions will be drawn about each of the specific objectives regarding the relationship between employee wellness and career anchors.

6.1.1.1 The first objective: Conceptualising employee wellness (in particular sense of coherence, burnout, sources of job stress and work engagement) and career anchors and explaining their relationship theoretically

The first objective, namely, to conceptualise employee wellness (in particular, sense of coherence, burnout, sources of job stress and work engagement) and career anchors and to explain the relationship between these concepts from a theoretical perspective, was achieved in chapter 2 (employee wellness) and chapter 3 (career anchors).

The following conclusions are made:
Employee wellness is conceptualised as a psychological state that refers to individuals’ life experiences such as life satisfaction and happiness, and job-related experiences such as job satisfaction, job attachment and satisfaction with pay or co-workers (Danna & Griffin, 1999, p.364). Career anchors are conceptualised as a descriptive and predicative tool that serves to guide, constrain, stabilise and integrate the person’s career (Schein, 1978). The career anchor is regarded as being “inside the person, functioning as a set of driving and constraining forces on career decisions and choices” (Schreuder & Coetzee, 2006, p.220). Furthermore, the determination of a career anchor is a process of self-discovery. Becoming aware of one’s career anchor can have a major impact on career decisions and personal life. These decisions will be more valid if employees have a clear understanding and awareness of their self-perceived talents, motives and values, that is, their career anchor.

In the context of this study, employee wellness is regarded as an outcome of the career choices individuals make by means of their career anchors. Experiences of wellness are influenced by individuals’ sense of coherence; level of burnout and engagement. Moreover, various sources of job stress may influence employees’ state of mind and wellness. Schreuder and Coetzee (2006) state that individuals are influenced and motivated by both intrinsic and extrinsic factors in the career decision making process. However, when there is a lack of motivation (whether it be intrinsic or extrinsic motivation), employees may feel dissatisfied which could lead to stress, lower work engagement, inability to cope and in some instances even burn out if individuals feel overloaded (Feldman & Weitz, 1988). In this regard, if there is a mismatch between the underlying career motives and values of an employee’s career anchor and the external conditions experienced in the organisation or form of employment, individuals may experience reduced engagement, lower sense of coherence and higher levels of burnout.

Feldman and Bolino (2000) found that individuals’ career anchors also have an impact on individuals’ career-decision making and their psychological attachment to an occupation.
Career anchors organise individuals’ experiences, identity, long-term contributions, and establish criteria for success by which individuals can measure themselves. Individuals (even within a homogeneous group) view their careers differently and have different motivations and needs regarding their particular career choices (Ellison & Schreuder, 2000; Schein, 1978). Fulfillment of these needs may increase levels of job satisfaction, life satisfaction, well-being and work engagement. In this regard, Slabbert (1987) found a relationship between career anchors and jobs/occupations. If there is a fit between employees’ dominant career anchors and their job perception, they experience a higher quality of working life and job satisfaction than when there is no congruence between career anchors and job perception (Ellison & Schreuder, 2000; Schreuder & Flowers 1991; 1992). Career anchors are also regarded as relatively good predictors of job involvement for most professional people (Boshoff, Bennett & Kellerman, 1994).

A work situation with chronic, overwhelming demands that contribute to burnout is likely to erode an individual’s sense of accomplishment or effectiveness which in turn influences their job satisfaction (Maslach & Leiter, 1997). Also, it is difficult to gain a sense of self-efficacy when feeling exhausted or when distancing oneself mentally from a job. In some situations the lack of efficacy seems to arise more clearly from a lack of relevant resources, while burnout appears from the presence of work overload and social conflict (Maslach & Leiter, 1997). Schaufeli and Enzmann (1998) are of the opinion that job stressors are the main contributors to employees’ experiences of burnout. An individual’s sense of coherence may either alleviate or aggravate his or her reactions towards a stressor (Antonovsky, 1991). Although sense of coherence is defined as a relatively stable dispositional orientation, it is possible that job stress during major organisational change will impact on employees’ sense of coherence. However, a strong sense of coherence might help employees to understand stressors, and to regard them as manageable and meaningful. Therefore, a sense of coherence might moderate the effects of job stressors on exhaustion (Antonovsky, 1987). Exhaustion is expected to mediate the relationship between sense of coherence and cynicism. Also, sense of coherence is expected to contribute to employees’ perceptions of professional efficacy (Antonovsky, 1987).
The second objective: Conceptualising the implications of the theoretical relationship between the employee wellness variables (sense of coherence, burnout, sources of job stress and work engagement) and career anchor variables for employee wellness and career decision making practices

The second objective, namely to conceptualise the implications of the theoretical relationship between the employee wellness variables (sense of coherence, burnout, sources of job stress and work engagement) and career anchors for industrial and organisational practices, specifically employee wellness and career decision making practices was achieved in chapter 2 and chapter 3.

In particular, the following conclusions are made:

Work often generates ambivalent feelings. On the one hand, work requires effort and is associated with lack of freedom and negative feelings. On the other hand, work gives energy, enables development and generates positive feelings. Accordingly, it seems that work could lead to illness as well as health (Schaufeli & Bakker, 2001; Turner, Barling & Zacharatos, 2002). In employee counselling, work is used to promote psychological well-being, for example, occupational therapy for psychiatric patients. In addition, studies by Kirchler (1985) and Warr (1983) regarding the effects of unemployment showed that a lack of meaningful and challenging work has detrimental effects, such as depression, alcoholism, psychological complaints and even suicide.

The implications of career anchors for career decision making practices cannot be overlooked since identifying one’s career anchor through a self-diagnostic process strengthens the individual’s ability to make more informed career choices. A measure of career anchors enables the organisation to find a match between the needs of the organisation and those of the individual in order to structure the job accordingly (Döckel, 2003). Each career anchor has underlying values and motives around rewards, incentives and the nature of work.
A match between career values, motives, career self-concept and external employment conditions lead to high levels of job satisfaction, life satisfaction and overall well-being (Schaufeli & Bakker, 2001).

Employees have to cope with many demands often with limited resources and lack of control. Tracking and addressing their effectiveness in coping with new demands and stimulating their growth in areas that could possibly impact on individual well-being, performance and subsequently organisational efficiency and effectiveness are therefore crucial (Rothmann, 2003). Understanding the link between individuals' employee wellness (in particular their sense of coherence, burnout, sources of job stress and work engagement) and career anchors will enable career counsellors and industrial psychologists to design more appropriate career counselling tools, as well as organisational development interventions aimed at enhancing employee and organisational wellness so as to retain talent and reduce staff turnover.

6.1.2 Conclusions regarding the empirical study
The study was designed to perform four major research tasks, namely:

(1) to investigate the relationship dynamics between employee wellness (in particular sense of coherence, burnout, sources of job stress and work engagement) and career anchors as manifested in a sample of participants employed in the South African work context;

(2) to determine whether gender, race, employment and age groups differ regarding their employee wellness (in particular, sense of coherence, burnout, sources of job stress and work engagement) as manifested in the sample;

(3) to determine whether the gender, race, employment and age groups differ regarding their career anchors as manifested in the sample; and

(4) to formulate recommendations for the discipline Industrial and Organisational Psychology, particularly with regard to employee wellness and career decision making practices.
Based on the findings, hypothesis H01 and H02 were rejected. Hypothesis H1 and H2 were accepted. Findings for each of the research objectives and the hypotheses that deserve discussion will be presented as conclusions.

6.1.2.1 The first objective: Investigate the relationship dynamics between employee wellness (in particular sense of coherence, burnout, sources of job stress and work engagement) and career anchors as manifested in a sample of participants employed in the South African work context

The following conclusion was reached in this regard:

**Conclusion:** Individuals’ employee wellness (sense of coherence; burnout; sources of job stress and work engagement) appears to be significantly related to their career anchors

A noteworthy finding is that the participants indicated the entrepreneurial creativity anchor as their dominant career anchor, followed by lifestyle and security/stability career anchors. The participants therefore show a dominant preference for creating new products and services with the need to create, requiring constant new challenges. This is typically provided in a dynamic, consulting environment, in which the current participants of the study function. The high preference for the lifestyle career anchor is also of particular importance, since the findings show that all the participants and various biographical groups shared an apparently similar orientation towards this career anchor, namely, that of choosing careers that balance their professional and private lives. Being a needs-based career anchor, this finding suggests that the participants may have a preference for work environments that take into consideration their personal lifestyle needs and family concerns along with their career concerns, and concerns for self-development. Individuals attracted to the lifestyle career anchor typically value company benefits that allow for flexible working arrangements and options (Custodio 2004; Schein 1996).
The preference for the security/stability career anchor suggests that the participants prefer to be paid in steady, predictable increments based on length of service and benefit packages which emphasise insurance and retirement programmes. Individuals with a security/stability anchor generally desire gaining rewards in the form of recognition for loyalty and steady performance as well as assurance of further stability and steady employment (Schein, 1990). Contractors typically do not receive these benefits and this might lead to lower levels of engagement in their work, as the current study has shown. On the other hand, the permanent workers who participated in this study showed higher levels of engagement, possibly due to added benefits that these individuals receive. The results can be linked further to the different sources of job stress experienced by participants as contractors also scored significantly higher on the sources of job stress variables than permanent staff members. The results further indicated that the participants appeared to experience lower levels of engagement due to work factors, such as lack of job resources; lack of social support; lack of skill variety; lack of autonomy; lack of feedback and therefore lower intrinsic motivation and self-efficacy, and not necessarily because of burnout factors (Rothmann, et al., 2005).

Overall, participants' employee wellness (specifically SOC, burnout, sources of job stress and work engagement) appears to be significantly related to their career anchors (in particular the entrepreneurial creativity, lifestyle and the security/stability career anchors). Considering that the sample was predominantly represented by female contractors between the ages of 26 and 40 years, the following conclusions can be made: female contractors in the establishment phase of their career who participated in this study showed a higher preference for occupations that provide them with power and freedom in key roles, the opportunity to harmonise personal life with career requirements as well as job and material security (Schein, 1990).

Moreover, the security/stability and entrepreneurial creativity anchors are significantly associated with all engagement variables (vigour, dedication and absorption), the OLQ variable (meaningfulness) and sources of job stress variables (job security, lack of job autonomy and lack of leadership/management support and guidance).
Research shows that security/stability-anchored people are usually willing to give responsibility for their career management to their employers (Schein, 2006). However, the contract environment forces individuals to take responsibility for their own career management (Havran, et al., 2003) and this could cause individuals stress as they might feel that leadership/management does not give them the support and guidance they need. Furthermore, entrepreneurially anchored people typically pursue their careers relentlessly and believe that they have both the talent and extraordinarily high levels of motivation to succeed in their jobs (Schein, 2006). This explains the high levels of vigour, dedication and absorption observed of participants in this study.

Further, the predominant sources of job stress experienced by female contractors appear to be compensation and benefits, workload and career advancement prospects, whilst males predominantly experience stress with regard to compensation and benefits, lack of leadership/management support and guidance and career advancement prospects. Permanent staff experience stress with regards to compensation and benefits, lack of leadership/management support/ guidance as well as workload.

Since juggling different work demands and potentially a portfolio of jobs can easily lead to a lifestyle of long hours and workaholism, it is important to appreciate the importance of sustaining a personal and family life outside work (Cooper, 2005). With regards to compensation and benefits, entrepreneurs want to accumulate wealth, not so much for its own sake but as a way of showing the world what they have accomplished (Schein, 2006). More and more employees no longer regard their employment as secure, with many more engaged in short-term contract or part-time work. However, the future of flexible working does not have to be a “doom and gloom” scenario; it can prove to be a liberating experience, giving choice and control to the individual – but individuals have to arm themselves with the right skills and attitudes, and engage in a constant programme of personal development to ensure career advancement prospects.
However, the overall wellness profile of participants indicates that contractors seem engaged, with a high sense of professional efficacy, attaching meaningfulness to their jobs in general and experiencing moderate levels of job stress. The conclusion that can be drawn is that the autonomy and opportunity for entrepreneurial creativity provided by contract work may provide deeper insight into the overall positive wellness profile.

6.1.2.2 The second objective: Determine the differences between employee wellness (in particular sense of coherence, burnout, sources of job stress and work engagement) of the gender, race, employment and age groups as manifested in the sample

The following conclusion was reached in this regard:

Conclusion: Gender, race, employment and age groups tend to differ in terms of their employee wellness profile

Overall, the findings suggested that gender, race, employment and age groups differed significantly regarding their employee wellness levels. In this regard, the following conclusions can be drawn:

Female contractors between the ages of 26 and 40 years had high levels of engagement and meaningfulness, while males had high levels of cynicism/depersonalisation. Race groups showed no significant differences, except for the sources of job stress variables. Blacks experienced compensation and benefits and lack of leadership/management support and guidance as sources of job stress, while whites experienced job stress in terms of workload and work/home conflict/stress. Furthermore, permanent staff experienced higher levels of engagement and SOC than their contractor counterparts and age groups showed high levels of engagement and especially professional efficacy.
As suggested by the findings, gender and age groups differed significantly regarding their engagement (dedication and absorption) levels.

It was found that the females and participants between the ages of 26 and 40 years derived a sense of significance from their work, as they indicated feeling enthusiastic and proud about their job and feeling inspired and challenged by it. Furthermore, these participants seemed to be totally and happily immersed in their work and even at times had difficulties detaching themselves from it. Permanent staff members are also more happily immersed in their work than their contractor counterparts, as significant differences between the permanent and contract staff was also observed regarding engagement (absorption).

With regard to the burnout variables, males and females differed significantly regarding their cynicism/ depersonalisation levels. More specifically, males showed much higher levels of cynicism/ depersonalisation, which means they experienced negative, callous or even detached responses to various aspects of the job and/or cynical and insensitive attitudes towards work, colleagues and/or clients. Furthermore, the age group older than 40 years, experienced high levels of professional efficacy that refers to a feeling of being able to meet clients’ needs and to satisfy essential elements of job performance (Schaufeli, 2003).

The race and age groups do not appear to differ significantly regarding their sense of coherence. However, significant differences were observed between males and females regarding manageability and permanent and contract staff regarding comprehension and meaningfulness. Females showed much higher levels of manageability. Furthermore, permanent staff members experienced higher levels of comprehension and meaningfulness than their contractor counterparts. The preference for the entrepreneurial creativity career anchor may offer an explanation in this regard. People with a desire for entrepreneurial creativity prefer ownership and freedom of power in order to manage their working environment successfully.

No significant differences were observed between the various age groups and their sources of job stress. However, significant differences are shown for the other
biographical groups, especially the race group, which shows significant differences on almost all of the sources of job stress variables.

It can be concluded that employees evaluate their work environment in terms of the severity and frequency of occurrence of specific job demands and pressure and the level of support provided by supervisors, co-workers and organisational policies and procedures. Failing to take the frequency of occurrence of a particular stressor into account may contribute to overestimating the effect of highly stressful situations that rarely occur, while underestimating the effect of moderately stressful events that are frequently experienced (Spielberger, et al., 2003).

6.1.2.3 The third objective: Determine the differences between the career anchors of the gender, race, employment and age groups as manifested in the sample

The following conclusion was reached in this regard:

Conclusion: Race and age groups do not tend to differ in terms of their career anchor profile; however, gender and employment groups tend to differ in terms of their career anchor profile

Race and age groups do not appear to differ regarding their career anchor preference. However, permanent and contract staff appear to differ significantly on the following career anchors: permanent staff members seem to prefer higher levels of autonomy in their work than their contractor counterparts as well as a greater preference for the lifestyle career anchor. Contractors on the other hand, seem to prefer stable, steady employment and an opportunity to serve and help others by using their talents. Contractors also seem to display a higher need for entrepreneurial creativity than permanent staff members. With regard to males and females, the following conclusions can be drawn: Males and females appear to differ significantly regarding the general management, entrepreneurial creativity, service/dedication to a cause and lifestyle career anchors. Males appear to have a higher preference for occupations that offer high levels of responsibility; challenging,
varied and integrative work; opportunities to influence their employing organisations and flexible working arrangements (Schein, 1990).

On the other hand, females and permanent staff appear to prefer flexibility in terms of less travelling, part-time work, day-care options and working from home. They further prefer stable, predictable work and are more concerned about the context of the work than the nature of work itself. A study conducted by Coetzee and Schreuder (2008) yielded similar results, where the male group also achieved significantly higher mean scores than the female group on the general management and entrepreneurial creativity career anchors. The total sample showed preference for the lifestyle career anchor and obtained the lowest total mean score on the general management career anchor. However, permanent staff and males did show a higher preference for the lifestyle anchor than female contractors. This implies that males and permanent staff seem to have a great desire to integrate the needs of family and career and require from organisations to show an attitude that respects personal and family concerns and that makes renegotiation of the psychological contract possible (Schein, 1990).

6.1.3 Conclusions regarding the central hypothesis

The central hypothesis of this study stated that employees’ sense of coherence, levels of burnout, sources of job stress and work engagement (as aspects of general wellness) are significantly associated with their career anchors and that people from different gender, race, employment and age groups will differ significantly in terms of their life orientation (sense of coherence), levels of burnout, sources of job stress and work engagement as well as their career anchors. Since the empirical study provided statistically significant evidence to support the central hypothesis, it is therefore accepted.

6.1.4 Conclusions about contributions to the field of Industrial and Organisational Psychology

The findings of the literature survey and the empirical results contributed in the following manner to the field of Industrial and Organisational Psychology, and in particular to employee wellness and career decision making practices.
The literature review shed new light on how individuals' employee wellness is related to their career anchors. In particular, the relationships between SOC, experiences of burnout, sources of job stress and work engagement add valuable knowledge which can be used to influence employee wellness practices. The relationship between the employee wellness variables and career anchor variables also provide new knowledge in terms of the experiences and needs of employees regarding careers and working environments. In particular, considering the predominant biographical profile of the sample, organisations should consider the need of particularly female contract workers for job security and steady employment, whilst allowing flexible work arrangements in the establishment career phase and while offering challenging assignments. Organisations need to review policies and practices regarding benefits for working females in retaining talented and committed contract staff. Similar observations were made by Havran, et al., (2003).

The notion of career anchors provides organisations with a valuable framework to help them offer employees opportunities and conditions that are congruent with their career orientations, career values and motives. Exploring employees’ career anchors can also help organisations to determine the most appropriate career interventions for rewarding and retaining talented staff (Erdoğan, 2003). Knowledge of employees' career anchors helps management to better understand what gives their employees internal career satisfaction and also helps them design appropriate reward, recognition and promotion systems (Erdoğan, 2003). In addition, given the increasing instability of employment opportunities and the practice of outsourcing of staff, many employees may be faced with the prospect of applying for their own or alternative jobs within a changing organisation (Kniveton, 2004).

In this regard, the idea of career anchors provides a practical means of career guidance by helping individuals become aware of the range of their own career anchors and the alternative career paths they could pursue. The wellness constructs discussed, such as sense of coherence, burnout, sources of job stress and work engagement are linked to career anchors through career satisfaction or
dissatisfaction which has a direct influence on the individual's motives, values, skills and competencies and general state of well-being. If there is no fit between employees' career anchors and their job environment, anxiety, stress, job dissatisfaction and turnover may well be the result (Feldman & Bolino, 1996; Jiang & Klein, 2000). The findings of the current study confirm that employee wellness and career anchors are further influenced by variables, such as race, gender, age, personal attributes, marital status and educational levels (Coetzee & Schreuder, 2008; Gilbreath & Benson, 2004; Rothmann & Ekkerd, 2007; Schreuder & Coetzee, 2006).

Although the findings contributed new knowledge on the relationship dynamics between employee wellness and career anchors, as well as the differences between males and females; blacks and whites; permanent and contract staff; and age groups regarding these variables, the usefulness of this study is restricted to the demographic confines of the sample population. This implies that findings cannot be generalised to broader populations and occupation groups.

The findings also suggested that there has been a significant shift of values and motivations in the workplace toward work-life balance. In today's economy this should be regarded as a positive sign as a different employment relationship is being established in the sense that organisations owe their workers less and less. The work-family relationship increases employees' demand and organisations should retain their best employees by adjusting personnel policies and offering support to employees in the form of childcare, flexitime and part-time work (Marshall & Bonner, 2003; Schein, 2006; Schreuder & Coetzee, 2006). Moreover, with the increase of outsourced individuals, organisations should start considering the unique needs of talented permanent and contracted staff in their policies and procedures.

6.2 LIMITATIONS OF THE STUDY
The literature review was limited to Antonovsky's (1987) Orientation to Life Questionnaire; Maslach et al's., (1996) Burnout Inventory (MBI); Schaufeli and Bakker's (2003) Utrecht Work Engagement Scale (UWES) and Schein's (1990)
Career Orientations Inventory (COI). Other models and paradigmatic perspectives were not considered due to the scientific confines of this study. The main limitation of the study was arguably the relatively small sample size that was used. The results of the study therefore represent a small sample in a particular organisation. The biographical mix of the sample might have had an effect on the observed results; hence it is recommended that a truly representative study be conducted in future. In future studies of the relationship between employee wellness and career anchors, researchers should ensure that they obtain larger samples across various occupational groups and industries. Moreover, additional measures of the employee wellness construct and career orientation construct could be considered.

Limited research has been conducted on the relationship between employee wellness constructs, such as SOC, burnout, sources of job stress and work engagement and individuals’ career anchors. The focus of previous studies was largely on the relationship between stress and coping (Cartwright & Cooper, 2002; Storm & Rothmann, 2003), as well as burnout and engagement (Rothmann, 2003; Schaufeli, 2003). This made it difficult to refer to previous studies during the interpretations. Despite the above limitations, it can be concluded that the study shows promise for investigation into the associations between variables that influences employee wellness and how these relate to their career anchors, particularly with regard to the career motives, values and needs of female contractor workers as indicated by the findings of this study. Considering the increase in boundaryless careers, job instability, outsourcing and more women entering the world of work the findings, as such, stimulate future research initiatives.

6.3 RECOMMENDATIONS
Based on the findings, conclusions and limitations of this study, the following recommendations for Industrial and Organisational Psychology and further research are made.
6.3.1 Recommendations regarding employee wellness and career decision making practices

The main aim of the study was to determine the relationship between employee wellness (specifically sense of coherence; burnout; sources of job stress and engagement) and career anchors. The sample was predominantly represented by female, white contractors between the ages of 26 and 40 years. The group of participants works in the consulting division of a financial organisation. As pointed out and highlighted during the research and findings obtained, there are individual differences that were observed between the males and females; blacks and whites; permanent and contract staff as well as the different age groups.

Although the findings seem to be, on the overall, positive, it is still important to look at specific interventions and ways to strengthen employees’ sense of coherence, lower their levels of burnout, assist them in handling daily job stresses, and to sustain/ increase their work engagement. However, these interventions must be viable and both managers and the organisation as a whole must always bear in mind that individuals are different and have unique values, motives and drives. The challenge would thus be to create interventions that are linked to the career needs of both the permanent and contract staff who participated in this study as indicated by their dominant career anchor preferences.

The following interventions are proposed to address participants’ sense of coherence; burnout; sources of job stress, work engagement and career anchor needs.

6.3.1.1 Sense of coherence

Antonovksy (1987) stated that the primary development of the dynamics of a sense of coherence takes place in the first decade of one’s adult life. Participants between the ages of 26 and 40 years still fall into this range and therefore it is vital that organisations provide individuals with the appropriate skills, training and development, without which, sense of coherence would be of no avail (Strümpfer, 1990).
However, these individuals experience certain challenges, such as a possible quarter-life crisis and are confronted by questions such as what career to focus on. This phase is usually followed by a phase of settling down, during which the individual becomes engaged in the world; in other words, individuals have to fulfill goals and aspirations and develop competence, self-reliance and autonomy.

However, when environments provide and people seek out interesting, meaningful and challenging tasks, individuals in these situations are likely to have what Brim (1992) has called manageable difficulties and Csikszentmihalyi (1997) has described as optimal states. That is, when demands match or slightly exceed resources, individuals experience positive emotional states and they perceive themselves as growing, engaged and productive (Waterman, 1993). From the wellness perspective, a healthy work force means the presence of positive feelings, higher SOC levels and reduced experiences of burnout in the worker that should result in happier and more productive workers.

6.3.1.2 Burnout
Participants in this study seem to experience low levels of emotional exhaustion and cynicism/ depersonalisation and high levels of professional efficacy. The organisation should maintain this low level of burnout by making sure that individuals are busy with meaningful work, have greater autonomy and support, and by enhancing individual factors that will contribute to resilience through proper training and development.

6.3.1.3 Sources of job stress
Proponents of the stress perspective argue that worker performance and quality of life are hindered by too much strain (too much challenge/ workload) or boredom (too little challenge). When demands exceed or fall below the resources, individuals experience undesirable states (strain/ overload or boredom) that hinder the quality and quantity of performance as well as their wellness. From the stress perspective, a healthy work force means the absence of strain or boredom (Edwards, et al., 1998). Participants are currently experiencing too much challenge/ workload, which should be reduced to sustain their current low levels of burnout.
Participants also appear to experience a certain level of strain due to a lack of career advancement prospects. It is suggested that the organisation focus on creating alternative career paths or opportunities (even for contract workers) in order for individuals to experience a greater sense of security/stability, as individuals may tend to be overly concerned about the duration of their employment with the organisation, which potentially may cause strain (and subsequently influence the general well-being and job satisfaction of employees).

Furthermore, participants seem to feel that the financial rewards that the work brings are inadequate. This is a very important issue to address as it may influence individual’s feelings of self worth and perception of their value to the organisation (Cartwright & Cooper, 2002). Managers and leaders should also find appropriate ways of communicating and supporting employees as they currently experience stress due to a lack of management/leadership support and guidance.

Frequent and immediate recognition for good work is also important to create positive emotions that reinforce success (Keyes & Haidt, 2006). When individuals hear from others how they have succeeded, it appears to open their mind and broaden their thinking about how they can do more. An important element of recognition appears to be the understanding of how each person prefers to be recognized, to make it objective and real by basing it on performance and do it frequently. The career anchor framework could provide valuable insight and guidance in this regard.

6.3.1.4 Work engagement
Participants in this study show high levels of work engagement and low levels of burnout. The organisation can further improve or strengthen employees’ engagement levels through the assessment and evaluation of employees; job redesign and work changes, leadership, training and career development (Schaufeli & Salanova, in press).
When managers pay attention and respond to the unique career and job support needs of their staff (permanent or contracted), the daily experiences of their staff may lead to higher frequency of joy, interest and caring among their employees. Over time, this serves to build a bond between the individual employee and other employees in the organisation, resulting in higher job performance. Research shows that employees become more cognitively and emotionally engaged when their basic needs are met (Kahn, 1990). The positive emotions that result when basic needs are met in the workplace serve to broaden the employees’ attention, cognition and action in areas related to the welfare of the business.

6.3.1.5 Career anchors

Most employees have an inherent need to contribute to an organisation or larger entity. In most situations, their needs and that of the organisation can be fulfilled simultaneously. Basic needs in the workplace start with clarity of expectations and basic materials and equipment being provided. To some extent, these needs, when met, reflect the credibility of the organisation to the employee (Keyes & Haidt, 2006). The findings of this research show that these principles apply to both permanent and contracted staff members.

It is also important for employees to feel that they contribute to the organisation, irrespective of their gender, race, employment status or age group. Perhaps the most important basic element of this contribution is person-environment fit. Do the individual employees have an opportunity to do what they do best or desire to express (based on their career motives and values) in their current roles? Numerous studies have documented the utility of selection of the right people for particular jobs (Fredrickson, 1998; Hunter & Schmidt, 1983; Huselid, 1995; Schmidt, Hunter, McKenzi & Muldrow; 1979; Schmidt & Rader, 1999). It is important that what the employee is asked to do is something he or she inherently enjoys and that the proper support and guidance is given to employees to successfully complete the tasks assigned to them. Participants in this study appear to prefer to work in a challenging environment that offers them freedom to work independently and creatively.
Furthermore, participants appear to value work-life balance (lifestyle) that allows them to fulfill different roles (especially for females) both inside and outside of the work environment. Due to the nature of the contract environment, which is unpredictable and often unstable, participants seem also to have a high need for security/stability. It is therefore suggested that the organisation find ways to accommodate the contractors’ needs and make them feel as valued as their permanent counterparts.

6.3.2 Recommendations for Industrial Psychologists working in the field of employee wellness and career development

Concerns for the health and wellness of workers is becoming an increasingly important issue. Organisations have long been involved in health issues in terms of occupational health and safety, providing disability and insurance packages and employee assistance programmes (Conrad, 1988). A substantial portion of employees’ compensation packages include healthcare coverage (Brostoff, 1997). However, beyond this historical involvement, an increasing number of organisations have implemented programmes aimed at improving the safety of the workplace and a variety of health promotion programmes. These initiatives or interventions include combinations of educational, organisational and environmental activities aimed at facilitating the health of employees and their families through lifestyle and behaviour changes (Conrad, 1988).

The foregoing interventions and programmes appear to be advantageous to both contracted and permanent individuals as well as the organisation. Individuals are increasingly taking part in these programmes and making important lifestyle changes, such as healthy diet, exercise, weight loss and learning stress reduction techniques (Conrad, 1988). The benefits of such programmes include improved employee health and fitness, decreased medical and disability costs, reduced absenteeism and turnover, improved employee mental alertness, morale and job satisfaction, increased production and enhanced the organisational image.
Many companies conduct workplace surveys to assess factors such as levels of engagement and understanding. Some tools also seek to measure levels of physical and psychological health amongst employee groups. It is supposed that these conventional assessments provide insight into employee well-being. However, these assumptions can be ill-founded and it is better to measure well-being directly to suit the specific needs of gender, race, employment and age groups (Conrad, 1988).

Alleviating workplace stressors is another important consideration for industrial psychologists in the workplace. Organisation directed strategies to prevent or limit stress are often measurably successful (Cartwright, 1994). Eliminating or reducing stressors that are intrinsic to the job may involve ergonomic solutions, task/workplace redesign, and alleviation of work overload/underload by recruitment, skills training, appropriate selection decisions and more delegation. Clearly defined roles and negotiating roles can help reduce role-related stress. Improvements in personal relationships and office communication can be achieved through interpersonal skills training and rearrangement of physical layout. Career development-related stressors can be alleviated by regular appraisals, retraining opportunities, sabbaticals and career counseling (Danna & Griffin, 1999).

In this study, participants were shown to experience specific stressors related to compensation and benefits, workload, career advancement prospects and lack of leadership/management support and guidance. Competitive pay helps to keep people, but organisations need to offer a wider range of incentives if they really want to hold on to good staff (Danna & Griffin, 1999). Wages are obviously a significant factor in keeping staff and it pays to stay competitive. Organisations should ensure that they do not pay too little below or above the market rate, because if organisations do not pay enough, employees are likely to feel undervalued and leave. It is rare for people to leave a job in which they feel valued, however, even if they are offered more money elsewhere. So, wages aside, other incentives should also be offered to show employees that they are valued. Alternative benefits can include share schemes, pension contributions, gym and healthcare scheme memberships, season-ticket loans, discounts with other businesses and target-linked bonuses (Danna & Griffin, 1999).
Non-financial incentives include the chance to work flexibly, access to training for career development, providing supportive line managers and giving feedback and can be just as important as cash-based motivators. Organisations should talk to their staff to find out what they would value (Danna & Griffin, 1999). Once a scheme has been put in place, it should be monitored and feedback should be invited from staff about improvements. Organisations should also keep an eye on their staff turnover rate as well and use performance monitoring systems (such as staff appraisals) to establish whether there are links between additional incentives and improved performance (Danna & Griffin, 1999).

Training and development programmes that promote strategies to identify and maintain balance between personal well-being and work will strengthen the relationship between organisations and individuals in meeting their respective work and career values. Jobs characterised by varied challenges, flexibility and freedom to pursue interesting assignments will increase general well-being, job satisfaction and career satisfaction (Elizur & Koslowsky, 2001).

More females are also entering the workplace and flexibility around work has become important to them. As employees need to look after children and family responsibilities, organisations need to accommodate these challenges by providing flexible working hours, crèches at work and the choice of working at home if practical for the job. Offering assistance to employees symbolises concern for employees and positively influences attachment to the organisation (Elizur & Koslowsky, 2001).

6.3.3 Recommendations for further research

These recommendations are intended for populations working with individuals in organisational settings, such as Industrial Psychologists and human resource practitioners. Further research should examine the fit between employee wellness and career anchors for a variety of occupations and confirm the generalisability of these findings to a broader spectrum of occupational groups across various industries.
Although the constructs employee wellness (in particular SOC, burnout, sources of job stress and work engagement) and career anchors assess different attitudinal constructs, this relationship requires further investigation before significant conclusions can be drawn. Further different methodologies, both quantitative and qualitative methods such as the use of interviews and a broad battery of psychometric instruments could enhance an understanding of the relationship between individuals’ employee wellness and their career anchors.

6.4 INTEGRATION OF THE RESEARCH

The literature review indicated that employee wellness does have a significant relationship with individuals’ SOC, burnout, sources of job stress and work engagement, as well as their career anchors.

The empirical study explored the relationship between employee wellness and career anchors. It is imperative that organisations understand the nature of career anchors and the relationship to experiences of sense of coherence, burnout, sources of job stress and work engagement that impact employees’ general well-being. Such knowledge and understanding will not only benefit the organisation, but also add value to the organisation by helping it to establish staff policies and practices aimed at retaining its valued members and thereby increasing productivity.

Industrial psychologists are in the best position to help organisations understand the relationship between employee wellness (specifically SOC, burnout, sources of job stress and work engagement) and career anchors through the involvement of all the parties (employee, employer and the Industrial Psychologist).

The findings of the study have provided new insight into how individuals’ employee wellness (and in particular those of the female contracted employee) relates to their career anchors. It is therefore advised that the insights obtained from the findings be utilised to enhance employee wellness and career decision making practices in the South African work context.
While some constructs in the organisational behavior sciences are relatively abstract and disconnected from reality, health and wellness as well as career values, motives and orientations are clearly linked to the everyday work and life experiences of all organisational members (Danna & Griffin, 1999). Thus, this is an obvious area where the concerns and agendas for managers, executives, career and human resource practitioners and employee wellness practitioners are closely aligned with those of scholars and researchers. That is, the basic questions associated with health and wellness and career needs and motives that a manager might raise should be of clear interest and relevance to researchers. Likewise, the questions and hypotheses that might be developed from a research programme are likely to be of clear and immediate interest to those in organisations. Clearly, then, the concepts of health, wellness and the career needs of employees in the workplace should be elevated to the same degree of importance as the more commonly studied concepts of leadership, motivation and attitudes (Danna & Griffin, 1999). Hopefully, the overview and framework developed here can serve as a catalyst for just such a transition.

6.5 CHAPTER SUMMARY

This chapter discussed the conclusions and limitations of the study and made recommendations for practice and further research. Herewith the study is concluded.
REFERENCES


Antonovsky, A (1993). The structure and properties of the sense of coherence scale. *Social Science and Medicine, 36*(6), 725-733.


capital: an accounting perspective. *Journal of Human Resource Costing and
Accounting, 10*(1), 48-64.


local government: the moderating effect of sense of coherence. *South African

work wellness in an electricity supply organisation. *South African Journal of
Business Management, 36*(1), 55-63.

Ryan, R.M. & Deci, E.L. (2000). Self determination theory ... the facilitation of

as a model of successful aging. *International Society for the Study of
Behavioural Development*. Berne: Switzerland.

Sapolsky, R.M. (2004). *Why zebras don't get ulcers: an updated guide to stress,
stress-related diseases and coping*. (3rd Ed.). New York: Henry Holt and
company.


