THE RELATIONSHIP BETWEEN THE TRANSFORMATIONAL LEADERSHIP STYLE OF OFFICERS AND THE LEVELS OF THEIR FOLLOWERS' WORK ENGAGEMENT IN THE SOUTH AFRICAN ARMY

by

JAMES EDWARD DIBLEY

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DECLARATION

I, James Edward Dibley, hereby declare that this dissertation, “The relationship between the transformational leadership style of officers and the levels of their followers’ work engagement in the South African Army,” is my own work, and that all the sources I have used and quoted have been indicated and acknowledged by means of complete references.

____________________________
JAMES EDWARD DIBLEY
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DATE
SUMMARY

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SUPERVISOR: PROF A.M. VIVIERS
DEPARTMENT: INDUSTRIAL AND ORGANISATIONAL PSYCHOLOGY
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The main purpose of the study was to determine whether there is a significant relationship between the transformational leadership styles of officers and their followers’ levels of work engagement. The instruments used in the study were the Multifactor Leadership Questionnaire (MLQ) (Form 5X) and the Utrecht Work Engagement Scale (UWES). Followers (n=311) were identified in various units of the South African Army and provided with the instruments. The work engagement instrument was then completed by each follower, while the MLQ was completed by the follower for his or her specific leader, who in this instance, were all officers in the South African Army. Descriptive statistics were obtained and correlations completed for the data, which indicated a significant correlation between the transformational leadership of officers and their followers’ work engagement.

KEY TERMS
Transformational leadership, transactional leadership, work engagement, burnout, vigour, dedication, absorption
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>ii</td>
</tr>
<tr>
<td>DECLARATION</td>
<td>iii</td>
</tr>
<tr>
<td>SUMMARY</td>
<td>iv</td>
</tr>
<tr>
<td>TABLE OF CONTENTS</td>
<td>v</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>xii</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>xiii</td>
</tr>
</tbody>
</table>

## CHAPTER 1: SCIENTIFIC OVERVIEW OF THE RESEARCH

1.1 BACKGROUND TO AND RATIONALE FOR THE RESEARCH. ................................. 1

1.2 PROBLEM STATEMENT ............................................................................. 4

1.3 AIMS OF THE RESEARCH ......................................................................... 5

1.3.1 General aim of the research .......................................................... 5

1.3.2 Specific aims of the research ........................................................ 5

1.3.2.1 Literature review ........................................................................ 5

1.3.2.2 Empirical study .......................................................................... 6

1.3.2.3 Additional aim ........................................................................... 6

1.4 THE PARADIGM PERSPECTIVE OF THE RESEARCH ..................................... 6

1.5 RESEARCH DESIGN .................................................................................. 8

1.5.1 The research variables ................................................................. 8

1.5.2 Type of research ............................................................................. 8

1.5.3 Unit of analysis .............................................................................. 8

1.5.4 Methods to ensure reliability and validity ...................................... 9

1.5.4.1 Validity ..................................................................................... 9
CHAPTER 2: TRANSFORMATIONAL LEADERSHIP

2.1 LEADERSHIP ................................................................. 16

2.2 DEFINING LEADERSHIP .................................................. 18
CHAPTER 4: EMPIRICAL STUDY

4.1 AIM OF THE EMPIRICAL STUDY ........................................... 66
4.2 POPULATION AND SAMPLE ............................................. 66
4.3 THE MEASUREMENT OF THE BIOGRAPHICAL INFORMATION ............................................. 67
4.4 THE INDEPENDENT (PREDICTOR) VARIABLE MEASURE (MLQ) (FORM 5X) ............................................. 68
  4.4.1 The description and aim of the instrument ................................ 68
  4.4.1.1 Transformational leadership factors .................................... 70
  4.4.1.2 Transactional leadership factors ......................................... 71
  4.4.1.3 The nonleadership factor .................................................. 71
  4.4.1.4 Outcomes ................................................................. 71
  4.4.1.5 Norms of the MLQ (Form 5X) ........................................... 72
4.4.2 Instrument administration ................................................. 73
4.4.3 The reliability and validity of the instrument .......................... 74
4.4.4 Justification for the selection of the instrument ....................... 78
CHAPTER 4: THE DEPENDENT (CRITERION) VARIABLE MEASURE

4.5 THE DEPENDENT (CRITERION) VARIABLE MEASURE (UWES-17) ................................................................. 78
4.5.1 Description and aim of the instrument ......................... 78
4.5.1.1 Vigour ..................................................................... 79
4.5.1.2 Dedication ................................................................. 79
4.5.1.3 Absorption ............................................................... 79
4.5.1.4 Norms for the UWES-17 ....................................... 80
4.5.2 Instrument administration ......................................... 80
4.5.3 The reliability and validity of the instrument .............. 80
4.5.4 Justification for the selection of the instrument .......... 82
4.6 DATA-GATHERING PROCESS .................................. 83
4.7 DATA PROCESSING ..................................................... 83
4.7.1 Descriptive statistics .................................................. 84
4.7.2 Data correlation ........................................................ 84
4.7.3 Statistical significance ............................................. 85
4.8 RESEARCH HYPOTHESIS ......................................... 85
4.9 COMMENT ................................................................. 86
4.10 CHAPTER SUMMARY ................................................ 86

CHAPTER 5: THE RESULTS

5.1 DESCRIPTIVE STATISTICS ........................................ 87
5.1.1 Biographical information .......................................... 87
5.1.2 Sampling adequacy .................................................. 90
5.1.3 Descriptive statistics for the independent (predictor) variable (MLQ Form 5X) .................................................. 91
6.2.1 Limitations of the literature review ........................................ 111
6.2.2 Limitations of the empirical study ......................................... 112
6.3 RECOMMENDATIONS ......................................................... 112
6.4 COMMENT ........................................................................ 116
6.5 CHAPTER SUMMARY ........................................................... 116

REFERENCES ........................................................................... 117
<table>
<thead>
<tr>
<th>LIST OF FIGURES</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1.1:</td>
<td>10</td>
</tr>
<tr>
<td>Flow diagram of</td>
<td></td>
</tr>
<tr>
<td>the research</td>
<td></td>
</tr>
<tr>
<td>methodology</td>
<td></td>
</tr>
<tr>
<td>Figure 2.1:</td>
<td>21</td>
</tr>
<tr>
<td>Representation</td>
<td></td>
</tr>
<tr>
<td>of the</td>
<td></td>
</tr>
<tr>
<td>development</td>
<td></td>
</tr>
<tr>
<td>of leadership</td>
<td></td>
</tr>
<tr>
<td>theories</td>
<td></td>
</tr>
<tr>
<td>Table</td>
<td>Description</td>
</tr>
<tr>
<td>-------</td>
<td>-------------</td>
</tr>
<tr>
<td>2.1</td>
<td>Scope of leadership process</td>
</tr>
<tr>
<td>4.1</td>
<td>MLQ (Form 5x) factor structure</td>
</tr>
<tr>
<td>4.2</td>
<td>Norm table for the MLQ (Form 5X)</td>
</tr>
<tr>
<td>4.3</td>
<td>Means, standard deviation (SD), reliabilities (α) and standard errors of measurement</td>
</tr>
<tr>
<td></td>
<td>completed by 2080 associates (MLQ Form 5X)</td>
</tr>
<tr>
<td>4.4</td>
<td>Six-month test-retest reliabilities for rater and self-rating forms</td>
</tr>
<tr>
<td>4.5</td>
<td>Comparison of overall fit measures between several factor models</td>
</tr>
<tr>
<td>4.6</td>
<td>Norm scores for the UWES-17</td>
</tr>
<tr>
<td>4.7</td>
<td>The cronbach alpha for the UWES-17 scales</td>
</tr>
<tr>
<td>4.8</td>
<td>Countries included in the international database</td>
</tr>
<tr>
<td>5.1</td>
<td>Age of sample (N=311)</td>
</tr>
<tr>
<td>5.2</td>
<td>Gender and race of sample (N=311)</td>
</tr>
<tr>
<td>5.3</td>
<td>Years of service (N=311)</td>
</tr>
<tr>
<td>5.4</td>
<td>Rank levels (N=311)</td>
</tr>
<tr>
<td>5.5</td>
<td>Participating units (N=311)</td>
</tr>
<tr>
<td>5.6</td>
<td>Sampling adequacy leadership MLQ (Form 5X)</td>
</tr>
<tr>
<td>5.7</td>
<td>Sampling adequacy work engagement UWES-17</td>
</tr>
<tr>
<td>5.8</td>
<td>Means, standard deviation, minimum and maximum for the MLQ (Form 5X) (N=311)</td>
</tr>
<tr>
<td>5.9</td>
<td>Means, standard deviation, minimum and maximum for the UWES-17 (N=311)</td>
</tr>
<tr>
<td>5.10</td>
<td>Cronbach alpha for the MLQ (Form 5X) (N=311)</td>
</tr>
<tr>
<td>5.11</td>
<td>Cronbach alpha for the UWES-17 (N=311)</td>
</tr>
</tbody>
</table>
Table 5.12: Intercorrelations between the biographical variables and the MLQ (Form 5X) (N=311) ................................. 97
Table 5.13: Intercorrelations between the biographical data and the UWES-17 (N=311) ........................................ 98
Table 5.14: Intercorrelations for the MLQ (Form 5X) (N=311) ...... 99
Table 5.15: Intercorrelations of the dependent variable (UWES-17) (N=311) ............................................................... 100
Table 5.16: Intercorrelations for the dimensions of the MLQ (Form 5X) and UWES-17 (N=311) ................................. 102
CHAPTER 1

SCIENTIFIC OVERVIEW OF THE RESEARCH

Organisational effectiveness is closely linked to the role of the leader and the way in which this leadership role impacts on the work engagement of the people in an organisation. The levels of interaction and the relationships between employees and leaders can probably be linked to productivity, commitment, satisfaction and in this instance, engagement. The main concern here is to understand the influence that people, especially officer leaders, have on their followers. This so-called “influence” is normally attributed to some or other leadership style demonstrated or applied by the leader. This study focused on South African (SA) Army officers’ transformational leadership attributes and the way in which these attributes may result in higher levels of work engagement. This chapter focuses on the background to and reasons for the research and provides an overview of the problems and aims of the research, the paradigm perspective and the research design. The research methodology includes the literature review, the empirical study and the conclusions, limitations and recommendations. The chapter concludes with the proposed chapter layout and a chapter summary.

1.1 BACKGROUND TO AND RATIONALE FOR THE RESEARCH

The ever-increasing complexity of organisations and systems coupled with diversity in the workplace, provides a complex context for the practice of leadership. Leadership as a concept has been subjected to research and development for many years and to actually attempt a clear definition, posed a real challenge in this study. Avery (2004) alludes to the additional importance of understanding the nature of society and the changes that occur in the workplace. This rate of change requires humankind to constantly adapt, which leads to uncertainty and increased complexity, further adding to the leadership challenge. Kouzes and Posner (2007), intimate that the ultimate challenge for leadership is the ability to transform leader behaviour into the organisational outputs of job satisfaction, commitment and collaboration. To meet this challenge, leaders need to be visionary, wise and able to learn and adapt. Leaders with
vision as opposed to those who use control, have different effects on the leader-follower relationship. This effect on performance is at best an association that requires more research and development (Avery, 2004).

In the context of this study, the focus was on transformational leadership and how transformational leaders may have influenced their followers’ levels of work engagement. According to Bass and Avolio (1994), transformational leaders are characterised by behaviours that include, idealised influence, individualised consideration, inspirational motivation and intellectual stimulation. Avolio and Yammarino (2002) report that there has been increasing support for the Full Range Leadership (FRL) model because research that has been conducted indicates a more focused workforce by appealing to the individual's self-concept and the demonstration of higher levels of competence and ability. Transformational leadership is also present at all levels of the organisation and adds to the attainment of goals, by being flexible in respect of new demands and changes and by creating a bond between followers and their leaders (Bass, 1998).

During numerous leadership training seminars, members of the organisation frequently refer to their leaders, at all levels, in a most disparaging manner. When the underlying causes were examined, it was found that leaders seem to be firmly entrenched in the old transactional styles. According to Bass (1980), the transformational leadership movement, purports to have the answers for people who are disenchanted and negative and maintains that the transformational leader attempts to develop a relationship, with his or her followers, of a higher order that somehow appeals to the moral values of the followers and provides a framework within which followers can function.

In the South African (SA) Army, leadership has been identified as one of the crucial issues to ensure the future success of the organisation, especially within the current mandate, which includes maintaining the territorial integrity of the country, assisting with the development of the country’s citizens and participating in operations other than war. The competitive advantage for the army is described as “dynamic leadership that will
ensure focus, teamwork and desired outcomes in a complex environment” (Department of Defence, 2006, p. 6).

The SA Army leadership doctrine supports this approach by referring to the organisation’s need to have/develop leaders of character who will be role models for their followers, who set the example and strive to exert an influence on their followers’ morale and cohesion, and ultimately inspire their followers to achieve extraordinary outcomes (SA Army Leadership, Command and Management Manual, 2000).

The SA Army has made extensive use of the FRL programme to provide insight into leadership behaviour that has proven to be effective and active. Over time, the value of the programme may have become eroded and many detractors have appeared. The primary aim of this study was to provide insight into the possible linkage between the FRL programme, leadership styles and one of the outcomes of leadership, namely work engagement. The tangible results of the possible effectiveness of the FRL programme could possibly support future leadership intervention programmes.

Work engagement is described in the literature as the opposite or antithesis of burnout, with engagement linked to worker well-being and affected by circumstances in the workplace. The development of a well-balanced work environment is characterised by the correct workload, responsibility and autonomy, recognition, support, justice and meaningfulness that promotes work engagement. If these elements are counteracted by leader behaviour and influence in the workplace, the opposite of work engagement, namely burnout may occur, with possible negative results in the workplace (Hallberg, 2005).

Work engagement is further defined as “a positive fulfilling work-related state of mind that is characterised by vigour, dedication and absorption” (Schaufeli & Bakker, 2003, p.4). Vigour refers to a high state of mental resilience and high energy levels, dedication referred to significance, pride and challenges and absorption to concentration and being engrossed in one’s work.
Schaufeli and Bakker (2003) extend this argument by stating that, by implication, work engagement is characterised by high levels of energy and a strong identification with one’s work. By linking this construct to the definition of transformational leadership, the argument is put forward that there may be a relationship between transformational leadership and work engagement. The researcher was unable to find any studies investigating the possible linkages between work engagement and transformational leadership.

It is critical for the military to have people in its ranks who are engaged and who form part of the organisation for the right reasons. In this study, engagement as a construct was measured, providing insights into the effect of leadership activity on the organisation. Members therefore require their leaders to behave actively and effectively in order to raise the engagement of followers by doing the right things correctly.

1.2 PROBLEM STATEMENT

The focus of the study was to determine whether leadership and transformational leadership in particular influence levels of worker engagement. The question was thus whether transformational leadership actually makes a difference to the work engagement of followers.

Extensive research has been conducted on the behavioural aspects of transformational leadership and possible effects thereof on followers and organisations. Yukl (2002) argues that transformation leadership provides a further understanding of the influence people have on others and provides greater insight into the leader-follower interaction.

Each of the constructs has been extensively researched (Antonakis & House, 2002; Bass, 1998; Schaufeli & Bakker, 2003), but the possible linkage between work engagement and transformational leadership has not received much attention as indicated by the apparent lack of documented research on the topic.

A review of the current literature on transformational leadership and work engagement resulted in the formulation of the following possible research questions:
• What is transformational leadership and what are its components?

• What is work engagement and what are its dimensions?

• Can leaders with high transformational leadership attributes influence followers to become more engaged in the workplace?

• Do followers with high engagement levels attribute this to their leaders’ transformational?

• What recommendations can be made on the basis of the results?

1.3 AIMS OF THE RESEARCH

The general and specific aims formulated for the research are indicated below.

1.3.1 General aim of the research

The general aim of the research was to determine whether there is a relationship between the followers’ perception of their leaders’ transformational leadership style and the followers’ own levels of work engagement.

1.3.2 Specific aims of the research

The following specific aims were formulated for the literature review and the empirical study:

1.3.2.1 Literature review

• To conceptualise the construct of transformational leadership from a theoretical perspective

• To conceptualise the construct of work engagement from a theoretical perspective

• To conceptualise a theoretical relationship between transformational leadership and work engagement
1.3.2.2 Empirical study

To determine the possible relationship between transformational leadership style and work engagement in a sample of SA Army career officers and their followers

1.3.2.3 Additional aim

To make recommendations for industrial and organisational psychologists, about the optimum behaviour of transformational leaders in creating work engagement

1.4 THE PARADIGM PERSPECTIVE OF THE RESEARCH

Morgan (1980) attempts to understand paradigms by employing Kuhn’s (1962) approach. Paradigms are essentially a complete view of reality or a way of seeing things. They are also a way of social organisation of science relating to particular scientific achievements and a particular set of tools and texts used in problem solving. The use of paradigms in this context signifies an implicit or explicit view of reality. In essence, this means that research should be aimed at uncovering the underlying core assumptions that may define or characterise this view of the world.

Terre Blanche and Durrheim (2002) refer to three paradigms, namely the positivist, interpretive and constructionist paradigms. The positivist paradigm aims to determine the existence of definitive social facts, while the interpretive paradigm seeks to identify the internal reality of subjective experience. The constructionist paradigm represents a more recent approach and focuses on determining a socially constructed reality. These paradigms are essentially ways of looking at and making sense of the world in the following three dimensions of research, namely ontology, epistemology and methodology. Ontology describes the nature of the reality being studied, epistemology refers to the nature of the relationship between the researcher and what is known, and methodology relates to the way the study can be conducted to determine what is known (Terre Blanche & Durrheim, 2002).

This study employed the positivist paradigm in the humanistic paradigm which Berliner and Gage (1992) describe as a psychological perspective that emphasises the study of
the whole person. Unlike the behaviourists, the humanistic psychologists believe that humans are not solely the product of their environment. Instead, humanistic psychologists study the human meanings, understandings and experiences involved in growing, teaching, and learning (Aanstoos, 2003).

The theoretical paradigm of the study was therefore primarily functionalist (Terre Blanche & Durrheim, 2002) with links to a positivist reliance on the concept of external reality. Leadership theory was based largely on interpreting reality as a stable relationship between numbers of variables (ontological dimension), on confirming or rejecting a hypothesis relating to this relationship (teleological dimension), and finally, on objective data including instruments (epistemological dimension).

Corsini (2002) defines humanistic theories as perceptions about human behaviour that emphasise optimistic and idealistic human values and potential. People therefore have free will and both the right to and potential for self-determination based on purpose and values. At the heart of the paradigm lies the claim that humanistic psychology is concerned with openness to human experience (Hiles, 2000). Carpuzzi and Gross (2003) add to this discourse by explaining that humanism focuses on human capacity and potential. Humanistic existentialism provides the dimension of ontology, the awareness of experience and responsibility.

According to Aanstoos (2003), humanistic psychology focuses on the development of the self within a self-actualisation framework, which is also intent on developing the positive side of psychology. This approach is relevant to the leadership and engagement constructs proposed in this study. Individuals who are self-actualised are usually deeply involved in causes beyond themselves – hence they are focused on their self-developed potential which becomes an open engagement with the world and others.

Organisational psychology, as a field within industrial and organisational psychology, was considered in this study because it is primarily concerned with groups and individuals and endeavours to improve worker adjustment, job satisfaction, productivity and efficiency in the organisation (Theron, 2002).
1.5 RESEARCH DESIGN

Mouton and Marais (1990, p. 32), define research design as “the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure”. Tredoux (2002, p. 312) provides a further exposition on research design by viewing it as “a plan for a piece of research that is constructed to maximise the validity of its findings, subject to the costs and practical difficulties of doing so”.

In this study research design was interpreted as being synonymous with rational decision making during the research process. The researcher therefore endeavoured to reduce the number of variables that could have influenced the study. In order to understand the study, it is therefore imperative to determine the research variables.

1.5.1 The research variables

The variables in this study were transformational leadership and work engagement. The dependent variable was work engagement and the independent variable transformational leadership.

1.5.2 Type of research

The study was exploratory, descriptive, basic and quantitative. It was descriptive, because it attempted to describe phenomena by measuring a relationship using correlations to validate the findings (Durheim, 2002). A basic research approach was used to advance fundamental knowledge of the working of the world. In addition, a quantitative approach was employed because the data were numbered and statistical analysis was conducted. This was deemed to be the most appropriate type of analysis for an exploratory research method. Structured questionnaires were used as the main form of data collection.

1.5.3 Unit of analysis

According to Durrheim (2002) various objects, such as individuals, groups, organisations and social artefacts, can be the subject of an investigation. The object of
this study was individuals (army officers) in the organisation and the way in which the
application of leadership by officers (individual) possibly relates to the work engagement
of their followers. A further consideration was to determine what information about the
unit of analyses was required. The information required related to properties which
included conditions (objective descriptions of individuals), orientations (such as
attitudes) and actions (such as leadership behaviour).

The main component analysed was based on conditions, attitudes and actions focused
on the variables of work engagement and transformational leadership.

1.5.4 Methods to ensure reliability and validity

The research design for this study focused on ensuring that validity (the soundness of
research conclusions) and reliability (the degree to which results are repeatable), were
achieved (Durrheim & Wassenaar, 2002).

1.5.4.1 Validity

Research should be internally and externally valid. In this study measurement validity
was achieved by ensuring that the instruments that were used were validated and the
study properly operationalised (Mouton, 2001). Internal validity was ensured by relating
validity to the generation of valid findings of engagement and transformational
leadership. These constructs were therefore appropriately measured and the data that
were collected were reliable. The analysis was statistically acceptable and the
conclusions supported by the data. External validity was ensured by generalising the
findings to the rest of the population, which in this instance was the SA Army (Mouton &

1.5.4.2 Reliability

According to Terre Blanche and Durrheim (2002), reliability is the degree to which
results are repeatable. Reliability in this study was ensured by using instruments that
were found to be reliable and tested repeatedly in various settings. In addition, reliability
was ensured by removing as many extraneous variables as possible. A representative sample was selected, thereby ensuring reliability.

1.6 RESEARCH METHODOLOGY

The study was conducted in two phases. Figure 1.1 provides an overview of the various phases applied in the study:

![Flow diagram of the research methodology](image)

**Figure 1.1: Flow diagram of the research methodology**

1.6.1 Phase 1: the literature review

This phase focused on the steps involved in conceptualising leadership and work engagement, followed by the integration of transformational leadership and work engagement.
1.6.1.1 Step 1: conceptualising transformational leadership

A conceptualisation was conducted of what constitutes transformational leadership.

1.6.1.2 Step 2: conceptualising work engagement

A critical conceptualisation was done of the relevance and applicability of work engagement as a construct that added value to the workplace and was influenced by the type of leader the follower had been exposed to.

1.6.1.3 Step 3: integration of transformational leadership and work engagement

Once the two constructs had been reviewed, an integrative process was followed to ensure that both constructs were correctly linked and explained.

1.6.2 Phase 2: the empirical study

This phase focused on the steps involved in describing the population and sample, the selection of measuring instruments, the data collection and processing, the formulation of the hypothesis and the reporting and interpretation of the results.

1.6.2.1 Step 1: description of the population and sample

The population for this study consisted of all career officers in selected SA Army formations. The sample was based on a probability simple random sample (Terre Blanche & Durrheim, 2002) which consisted of a list of the various formations in the SA Army. Three formations were chosen for the survey using random sampling. Time and expense limited the sample selection to three formations. Terre Blanche and Durrheim (2002) provide a rule of thumb on the sample ratio and sample size. Populations of around 10 000 would require about 10% and 1% for populations around 150 000. The population size in this case was about 3000 officers which translated into an approximate sample size of about 10% or n=300. To ensure n=300, as previously indicated, a random selection was conducted, which resulted in the identification of three formations namely armour, artillery and air defence artillery. All the available officers in each of the various formations (taking into account operational deployments)
were encouraged to participate in the study, and were included in the sample on the basis of the name lists provided by the formations. Followers (both uniformed members and civilians) of each officer were identified on the basis of the reporting relationship to the officer and were included in the study subject to their availability. The size of the organisation prohibited the use of a more structured sampling methodology and application.

1.6.2.2 Step 2: selection of the measuring instruments

The selection of one of the instruments for this study, the Multifactor Leadership Questionnaire (MLQ) (Form 5X) was based on the actual instrument applied by the SA Army to determine leadership styles. This instrument was found to be reliable and valid for this purpose and was therefore considered for the study. The Utrecht Work Engagement Survey (UWES-17) was considered because the factors measured in the survey were used to explain the possible outcome of transformational leadership influence.

a The MLQ (Form 5X)

Bass and Avolio (1997) developed the MLQ (Form 5X) as part of a need to measure both transactional and transformational leadership. The MLQ (Form 5X) initially generated 142 items of leadership behaviour. Items were then scored in the transactional and transformational constructs. Factor analysis was conducted leading to the clustering of the items into transactional, transformational and nonleadership behaviours. The MLQ (Form 5X)’s reliability scores, using the Spearman-Brown, measured at >0.90. Test-retest reliability of >0.45 was also measured (Bass & Avolio, 1997). The MLQ (Form 5X) is a well researched, valid and reliable instrument and provides an excellent leadership profile, well suited to this specific study.

b The UWES-17

Schaufeli and Bakker (2003) developed a definition of engagement that included the concepts of vigour, absorption and dedication. In the positivist approach, a work engagement survey was designed by Schaufeli and Bakker (2003) to measure each
concept. Reliability was satisfactory because of the many research projects conducted using the instrument. The UWES-17 also has acceptable internal reliability with Cronbach alpha scores at >0.70. Test-retest reliability indicated stability over time owing to the fact that two longitudinal studies were conducted, which resulted in high stability coefficients (Schaufeli & Bakker, 2003). The UWES-17 was used in this study because it provides a reliable and valid indication of engagement in the workplace.

1.6.2.3 Step 3: data collection

Quantitative data were collected from officers and followers (uniform and civilian) in the respective SA Army units. Each officer completed a MLQ (Form 5X) (leader booklet), which was used to rate the leader’s own perception of his or her leadership style and frequency. The followers of the leaders then each completed a work engagement questionnaire relating to their own work engagement levels, followed by the MLQ (Form 5X) which rated the officer the follower was assessing. This was done only after the issues of confidentiality, permission and participation were finalised with the participants.

1.6.2.4 Step 4: data processing

Based on the sample, the data were coded into a format making use of Microsoft Excel. The data were then checked for accuracy and analysed using the Statistical Program for the Social Sciences (SPSS) to determine relationships or correlations between the constructs (Bryman & Cramer, 1997).

Statistical procedures that were relevant to this study included descriptive statistics such as frequencies, the mean, standard deviation, and correlation coefficients and inferential statistics, which included multivariate analysis of variance (MANOVA) (Kachigan, 1991).

1.6.2.5 Step 5: formulation of the hypothesis

Hypothesis: There is a relationship between the transformational leadership style of officers and their followers’ high levels of work engagement.
1.6.2.6 Step 6: reporting and interpreting the results

Reporting was done by using tables and figures which provided the statistical data relevant to this study. These results were then interpreted.

1.6.3 Phase 3: conclusions, limitations and recommendations

1.6.3.1. Step 1: conclusion

Conclusions were drawn about the results of the study and their integration with the theory.

1.6.3.2. Step 2: limitations

The limitations of the study were determined and discussed.

1.6.3.3. Step 3: recommendations

On completion of the study, recommendations were made in terms of transformational leadership as it pertains to the development of leadership research.

1.7 CHAPTER LAYOUT

Chapters 2 and 3 will deal with the literature survey on leadership and work engagement. Chapter 2 will provide a conceptualised overview of leadership, its origins and transformational concepts using the full range of leadership (FRL) model. Chapter 3 will focus on conceptualising work engagement and the integration of the two concepts. Chapter 4 will examine the research methodology, the research participants, data collection, the procedures followed and methods of data analysis and interpretation, while chapter 5 will contain the research results. Chapter 6 will discuss the conclusions, limitations and recommendations of the study.

1.8 CHAPTER SUMMARY

In this chapter, the scientific orientation to the research was discussed. The orientation included the background to and rationale for the study, the paradigm perspective, the research problem, the aims, the research design and methods that were employed. The
chapter concluded with the chapter layout. In chapter 2, leadership and more specifically, transformational leadership will be examined.
CHAPTER 2

TRANSFORMATIONAL LEADERSHIP

This chapter looks at the complex subject of leadership, and will include with an overview of leadership and various leadership definitions. This will be followed by a discussion of various leadership theories and approaches focusing on transactional and transformational leadership. In conclusion, transformational leadership research will be examined.

2.1 LEADERSHIP

“One of the most universal cravings of our time is a hunger for compelling and creative leadership” (Burns, 1978, p. 1)

Burns wrote this statement over 30 years ago. It is interesting to note that the statement is still as relevant today as it was to him all those years ago. Leadership continues to be one of the most hotly debated topics on success in organisations.

Leaders have been prophets, priests, chiefs and kings. Leadership has been apparent over centuries and has also been recorded in the Bible, the Upinishads, and in the Greek classics. Bass (1990) records the efforts of leadership from the early recordings of civilisation and includes elements such as the universality of leadership as ingrained in the animal kingdom, and in humans, with parenthood as an example of leadership.

Additional references to leadership and its effects on followers are contained in the works of Plato (387-360/2004). Here the debate is about justice, and Plato was firmly aware of the relationship between leaders and their followers. The ruler of the state ensures that everything he does is for the good of those for whom he practices his leadership art. Hence the primary reason for being a leader should not revolve around money or honour but focus on doing well for the people.

Aristotle (335-322/2004) spent time explaining that the state exists to ensure the good life, which is achieved by a common community dedicated to virtue and justice. In his
opinion the collective, or the multitude, would then possess more virtue and wisdom than those in leadership roles. Thus, in effect he extols an approach that includes a few wise and virtuous leaders ruling together with the people.

The leadership question continues with the thoughts by Rousseau (1762-2004), who focused on the social contract. He argued that the social contract is formed to ward off the use of force, and that its aim is to find some form of collaborative effort that will protect the property and person of all within the society. According to Rousseau (1762-2004), this can only be achieved by forming a social contract whereby individuals give up their own natural liberty to this community in which notions of justice and morality can be developed while protecting the civil liberty. Leaders should encourage debate on civil liberties and through this debate enable the people to practise power in the governance of the state, because they (the people) determine the general will.

Nietzsche (1844-1900) approached leadership from a more sinister perspective by advocating that leaders have an instinct for freedom and the will to power. Leaders are less interested in doing good and being considerate and eventually become idealised or, in Nietzsche's language deified. He calls for new types of leaders to lead the people from this tyranny.

De Pizan (1404-1405) referred to attributes of leaders that include being humble, kind, gracious, merciful and charitable. The essence of her thinking was that leaders should celebrate the achievements of their followers more than the leaders’ own achievements.

While the preceding relates to leaders and leadership over time, a more contemporary Bennis (2003), asks the question, why are leaders then needed? This is relevant when considering the origins of leadership and the apparent need for leaders and leadership. He answers this question by stating why leaders are important. They are responsible for the organisation's success, they are part of the organisation and they also provide direction and guidance. Burns (1978) also posited that leadership is essentially a power relationship between the leader and the follower and that this process is linked to a collective purpose that focuses on ensuring the satisfaction of human needs and
expectations. Yukl (2002) sees leader influence as a process based more on emotion than reason whereby leaders are able to inspire and motivate their followers.

Lawler (2005) seeks the essence of leadership, and further states that once the essence has been identified, this elusive subject can be measured, together with strengths and developmental needs which would then add to the level of influence held by the leader in various situations.

The previous paragraphs are some indication of how leadership knowledge and understanding have developed over many years, and how leadership has occupied the time of many great thinkers and philosophers. This background is vital to this study because it provides the building blocks for new developments in understanding leadership.

2.2 DEFINING LEADERSHIP

“For a half-century, the study of leadership has centred on autocratic versus democratic approaches; on questions about the locus of decision-making-directive versus participative; on questions about the focus-task versus relationships; or on questions about behaviour-initiation versus consideration” (Bass, 1985, p. 3).

The question posed by many authors such as Bass (1990), Bennis (2003), Conger and Benjamin (1999) and Yukl (2002) relates to what exactly constitutes the phenomenon known as leadership in all its forms. It is therefore necessary to promote an understanding of leadership, and to this end, Bass (1990) discusses definitions of leadership that may depend on the institution in which leadership is practised. Leadership can thus be defined as being part of a group process, being linked to individual personality, a function of influence, a form of persuasion, a power relationship and many combinations of these approaches.

Burns (1978) provides comprehensive ideas about leadership and the influence leaders have on followers. He alludes to the leader-follower relationship and describes the relationship in this regard as one in which the leader influences his or her followers to do what is required, because the leader appeals to the values and needs of the follower
and the leader. This interaction is linked to two approaches, the first transactional leadership and the second transforming leadership. Transactional leadership in its purest form is an exchange of valued things between the leader and follower to achieve a stated outcome. Transforming leadership focuses on the way people engage with one another at a higher level, which raises both the leader and the follower to higher levels of motivation. This type of leadership ultimately becomes moral in the sense that both the leader and the follower experience increased levels of human conduct and ethics. This reference to Burns (1978), includes the origins of transformational leadership in order to add, in this study, to the understanding of what leadership is.

According to Bass (1990, p. 11), “there are almost as many different definitions of leadership as there are persons who have attempted to define the concept.” Bass (1990) indicates that definitions of leadership are linked to group processes, to personality, to compliance, to exercising influence and as an act or behaviour. Leadership has also been associated with persuasion, being a power relation and forming part of goal achievement. Another leadership approach is a combination of the above to create a more comprehensive leadership meaning. Northouse (1997, p. 3) integrates these various approaches and provides a further definition of leadership: “Leadership is a process whereby an individual influences a group of individuals to achieve a common goal.” The word “process” is significant for this study because this means that it is not a trait or a characteristic inherent in the leader, but a process linked to a transaction between a leader and his or her followers.

In Table 2.1, Yukl (2002, p. 7) adds to the leadership definition by providing the scope of the leadership process as it relates to the leader's influence over various aspects of the relationship between leader and follower.
TABLE 2.1: SCOPE OF THE LEADERSHIP PROCESS

| The interpretation of external events by members |
| The choice of objectives and strategies to pursue |
| The motivation of members to achieve the objectives |
| The mutual trust and cooperation of members |
| The organisation of work activities |
| The development of member skills and confidence |
| The learning and sharing of new knowledge by members |
| The enlistment of support and cooperation from outsiders |

Hence, in essence leadership is about an interaction between two or more people that results in some kind of action or interaction leading to an output to satisfy a set agreement or criteria (Bass, 1990; Charlton, 1993; Kouzes & Posner, 2007). This study, in conjunction with Northouse’s (1997) definition, worked on a definition provided by Bass (1990), which encompasses the concept of an interaction and a restructuring of the situation and the expectations and perceptions of the members within the interaction, which results in personal changes to those being led, together with motivational or competency adaptation. In relation to this concept, the transformational leader, according to Bass (1985), transforms his or her followers, by creating visions of the future that are linked to goal attainment, and then communicating ways to achieve those goals, which by implication could lead to engagement in the workplace.

Leadership in this study is based on an interaction between members. The situation influences this interaction and is premised on the expectations and perceptions of those
involved in the process. Various other influences are included in this interaction, which include, visioning, goal attainment and communication.

2.3 OVERVIEW OF LEADERSHIP APPROACHES

Robbins (2001) proposed key approaches to leadership theories which include trait, behavioural, contingency and neocharismatic leadership theories. Theory forms the basis for understanding the development of leadership as researchers attempt to structure the construct.

The next section covers various aspects of leadership theory that have been influential in shaping current thinking on leadership. After reviewing the literature, various theories emerged that are indicated in Figure 2.1. The researcher designed this figure in order to present an overview of these theories, which may provide a more descriptive overview of the content.

Figure 2.1: Representation of the development of leadership theories
2.3.1 Trait theory

According to Northhouse (1997), the first systematic study of leadership began by focusing on traits exhibited by leaders, with the emphasis on those elements that cause or lead people to become great leaders. Traits are those qualities that are already within the leader, and this causes a difference between the leader and the follower (Bass, 1990). The inherent approach to trait theory is contained in the so called “great man” theory which focused on those internal qualities and characteristics inherent in great world leaders (Howell & Costley, 2006). The initial thinking about leadership was that people are born with these qualities and that only “great” people actually have them. Further research by Hughes, Ginnett and Curphy (1993) indicated that the trait approach reflects the extraordinary personal traits a person possesses and that the situation does not play a role in this interaction.

Yukl (2002) adds to the debate by indicating the importance of traits in an individuals’ personal willingness to assume leadership responsibilities, influence people, develop leadership skills and accept feedback. Certain traits such as socialised power orientation together with a high level of cognitive moral development use this influence to build commitment, and these leaders endeavour to develop followers by providing information, using consultation and delegation. It is therefore safe to say that leaders need certain personal traits conducive to the leadership interaction resulting in some form of influence and attainment of goals. Robbins (2001) concurs by citing the following six traits that could differentiate leaders from nonleaders: ambition and energy, the desire to lead, honesty and integrity, self-confidence, intelligence and job-related knowledge.

Trait theory is therefore about the qualities in a leader that are either inherited or based on some personal attribute that can be developed over time. Trait theory, however, did not satisfy the leadership debate, which subsequently led to the development of behavioural leadership theory.
2.3.2 Behavioural theory

The next progression in the leadership quest was to investigate what leaders do to be influential. Robbins (2001) explains the difference between traits and behaviour in the context of whether leadership is innate or an elusive concept that can be taught or trained. Various studies were conducted to determine the effect of different behaviour on the outcome and effectiveness of leadership.

2.3.2.1 Ohio State University studies

According to Northouse (1997), the aim of this particular study was to determine how people act when actually leading a group. The analysis focused on obtaining feedback from followers on how leaders behave by using the Leadership Behaviour Description Questionnaire (LBDQ). The results of this questionnaire grouped leadership behaviour into two general types of behaviour, namely initiating structure and consideration. Behaviours linked to initiating structure are in essence task behaviours such as structuring work contexts, developing role responsibilities and scheduling work activities. Consideration behaviours or relationship behaviours include building respect, trust and liking between the leader and his or her followers. Schein (1985) adds to this approach by indicating that leadership functions can be grouped into task functions (such as, providing information, giving opinions and initiating) and group functions (supporting, harmonising and setting standards).

Robbins (2001) indicated that research conducted on these two definitions found that leaders who scored high on both types tended to achieve better follower performance and satisfaction. There were, however, other factors that indicated that high-task oriented leaders resulted in followers who were more aggrieved, were absent more often and had a higher turnover with lower job satisfaction. The result of this research was the inclusion of other situational factors in the leader/follower relationship.

2.3.2.2 University of Michigan studies

In essence, the research conducted in Michigan had similar objectives. The result of this research was two dimensions of leadership, namely employee orientation and
production orientation. The employee orientation includes an emphasis on interpersonal relationships, showing an interest in the needs of one’s followers and accepting individual differences between the followers. Production-oriented leaders focus on the technical or task aspects of the work and the fact that the group members are a means to an end (Robbins, 2001). Yukl (2002) provides insight into an additional type of behaviour, namely participative leadership, which was also identified in this study. This type of leader is supportive, provides guidance and keeps the group oriented towards problem solving. The leader remains involved and still makes the decisions.

2.3.2.3 The managerial grid

Blake and Mouton (1964) developed a model that describes the task and relations orientations as one of the best ways to achieve effective leadership. The model is based on an approach in which managers and leaders vary from 1 to 9 in their concern for production and concern for people. The following five styles were identified on the grid:

(1) authority-obedience (9:1)

(2) “country club” management (1:9)

(3) impoverished management (1:1)

(4) “organisation man” management (5:5)

(5) team management (9:9)

Behavioural theory provided more insight into the leadership construct by adding to leadership theory the idea of task versus people relations. This development did not, however, satisfy all the questions concerning relationships between leadership behaviour and the performance of groups. What seemed to be missing was the extent that the role of the situation plays in this interaction between leader and his or her followers.
2.3.3 Contingency theory

Behavioural theory did not consider the situation in which the interaction between leader and follower occurs. Situational factors therefore have to be considered to determine the level of success or failure of leadership behaviour. To this end, several approaches were developed that attempted to determine or isolate the situational variables that influence the effectiveness of the interaction between leader and follower. The following models were considered: the Fiedler model, Hersey and Blanchard’s situational theory, the leader-member exchange theory and the path-goal theory.

2.3.3.1 The Fiedler model

According to Robbins (2001), this was the first real contingency model for leadership that is based on the degree of congruence between the leader’s style of interacting with his or her followers and the extent to which the situation gives control and influence to the leader. To determine the basic leadership style, a questionnaire, the Least Preferred Co-worker Questionnaire (LPC), was developed. The outcome of the questionnaire is to determine whether a person is either task or relationship oriented (Bass, 1990).

Fiedler (1967) states that once this individual leadership style has been assessed by the LPC, it is necessary to match the leader to the situation. He further identifies three factors which determine how favourable the leadership environment is.

- **Leader-member relations** refer to the extent of confidence, trust and respect members have for the leader.

- **The task structure** refers to the extent which job descriptions are structured or unstructured.

- **Position power** concerns how much influence the leader has over the variables that make possible the exercise of power, such as recruitment, dismissals, promotions and salary increases.
The Fiedler (1967) model thus proposes a match between the LPC and the contingency variables to achieve maximum leadership effectiveness. Fiedler (1967) found that task orientation works best when situations are extremely favourable or unfavourable to the leader, whereas relations orientation works best in a situation that is moderately favourable to the leader or where the leader has moderate control. After many studies relating to the reliability and validity of the LPC, its validity is still disputed (Bass, 1990).

2.3.3.2 **Hersey and Blanchard’s situational theory**

Ivancevich and Matteson (2002) provide insights into Hersey and Blanchard’s situational leadership as being a contingency theory premised on the correct selection of the style appropriate to the follower’s readiness, based on a specific situation. To be effective, a leader needs to adapt his other style according to the situation on hand. Linking this to previous studies, this approach consists of both directive and supportive dimensions, which are then appropriately applied to a specific situation. In applying the correct style, the leader must first assess the followers’ competence and ability to perform a specific task. Based on this assumption the leader adapts the leadership style to be either supportive or directive. The Ohio State studies (Ivancevich & Matteson, 2002) provided a basis for the development of the following four leadership styles:

1. **Telling.** Here a leader defines the roles needed to do the task and then informs his or her followers as to the what, where, when and how to do the task.
2. **Selling.** The leader provides structured instructions together with support.
3. **Participating.** The leader and the follower share in the decision making process of how to complete the task at hand.
4. **Delegating.** In this style, the leader provides little support, guidance or direction to the follower during the execution of the task.

The leader determines the follower’s readiness level and subsequently selects one of the styles (Ivancevich & Matteson, 2002).
The model was subjected to too much criticism, and in response, the original model was revised to change the focus around task behaviour and relationship behaviour. Task behaviour is the extent to which leaders are likely to organise and define the roles of their followers, whereas relationship behaviour is the degree to which leaders develop and maintain personal relationships with their followers by providing support and communication (Hersey, Blanchard & Johnson, 2001).

2.3.3.3 The leader-member exchange theory

Robbins (2001) explains the basis of this theory by stating that leaders tend to favour certain followers over others and these form the “in” group. Time pressures result in leaders favouring followers, trusting them more and giving them more attention and allowing them more privileges. The “out” group forms the balance. When first interacting with followers these leaders place followers in the “in” or “out” group. What constitutes the basis for the selection is unclear but the relationship is reasonably stable over time.

2.3.3.4 Path goal theory

The essence of this theory is about how leaders motivate their followers to accomplish set and agreed goals. House (1971) explains the relationship between the leader’s style and the characteristics of the subordinates and the work setting. Expectancy is the underlying assumption of this theory which suggests that subordinates are motivated if they realise they are able to achieve outcomes, are able to perform their work, and that the rewards for doing their work are worthwhile.

The challenge is thus to use a leadership style that will best meet the subordinates’ motivational. According to House (1971, p. 324), leaders do so by “increasing personal payoffs to subordinates for work-goal attainment, and making the path to these pay-offs easier to travel by clarifying it, reducing roadblocks and pitfalls, and increasing the opportunities for personal satisfaction en route.”

According to Bass (1990), leaders influence their followers in several ways by clarifying the subordinates’ role, making rewards dependent on the followers’ performance, providing support for the follower, alleviating boredom, coaching, providing direction and
fostering expectations. House according to Robbins (2001) highlighted the following four leadership behaviours:

(1) *The directive leader* tells followers what is expected, develops schedules, and provides guidelines.

(2) *The supportive leader* is friendly and shows concern for his or her followers.

(3) *The participative leader* consults and uses suggestions before making decisions.

(4) *The achievement-oriented leader* sets challenging goals and expects followers to perform at their highest level.

This approach is based on the premise that the leader is able to display all the behaviours as and when required and according to the situation. This is in contrast to what Fiedler proposed.

The preceding theories relate to the transactional approaches to leadership and attempt to promote an understanding of how this interaction occurs in a specific situation. To further understand this construct, other approaches have been developed and researched.

### 2.3.4 The neocharismatic theories

Robbins (2001) proposes what he terms the neocharismatic theories of leadership, in which the focus is on the leader’s ability to demonstrate or act out behaviour that is emotionally appealing and symbolic. A further focus of this theory is that leaders are then able to achieve high levels of follower commitment and more importantly, it manages to reduce the theory levels of leadership to a more practical level. It is essential to study these neocharismatic theories because each plays a role in understanding leadership:

- charismatic leadership theory.
- transactional leadership theory.
Charismatic leadership theory emerged from the work of Weber (cited in Miller, 2007) where the term was borrowed from the New Testament of the Bible. Weber describes charismatic leaders as people who manifest with special powers, especially in times of stress. Thus the approach adopted by such leaders is based on their ability to convince others that their talents are special in some way.

Robbins (2001) identifies charismatic leadership theory as an extension of attribution theory. Here followers, when observing certain behaviour, attribute this to heroic or extraordinary leadership abilities. Such leaders are imbued with superhuman qualities that put them in a different category to other leaders. The influence a leader has over others is contained in the attributed power of having these special qualities. These leaders usually appear in times of crisis or great need. However, it is important to note that there is divided opinion on the basis of this leader’s influence. Other authors as indicated by Hughes et al. (1993), contend that the leader’s influence is because of his or her extraordinary qualities and not the situation.

Charisma can be identified at various levels as a social category, a social relationship and a form of social organisation. Firstly, charisma is seen as a social category in which the leader is deemed to have special powers and abilities. Secondly, charisma is a social relationship in which the followers submit to the charismatic leader as a result of these powers and abilities, and finally as an organisational form. Organisational form allows for energy to be liberated from the old order to establish the new order (Roberts & Bradley, 1995).

Hughes et al. (1993) provide insight into characteristics that charismatic leaders may have that are essential to the relationship. These are vision, rhetorical skills, image and trust building and personalised leadership. Vision is about being future oriented, and about charting new courses, because of the ability of charismatic leaders to perceive fundamental discrepancies between what is currently the situation and what it should
be. To have vision *per se* is not enough, the leader needs to convey the vision to the followers. Leaders should be able to communicate in such a way that the vision is shared and supported. Charismatic leaders make use of metaphors, analogies and stories and these are particularly effective when linked to cultural symbols. Leaders also make use of emotional expression and use eye contact, posture, gestures and tone to communicate (Bass, 1990). Trust and image building are achieved by self-confidence, personal example and sacrifice. These leaders have insight and ability and are normally more experienced and knowledgeable than their followers. Lastly, personalised leadership refers to the nature of the power relationship which is based solely on referent power together with a strong emotional relationship between leader and follower (Yukl, 1999).

Kouzes and Posner (2007) indicate the significance of being able to use emotion in the context of charismatic leadership. By being more animated and making use of emotive words and gestures, a leader is able to communicate at a level that leaves a lasting impression and memory of the content of his or her messages.

Sonnenfield (1995) emphasises the importance of being able to turn these extraordinary qualities into a social relationship between leader and follower. Howell and Frost's (1995) research into charismatic leadership determined that people who work for a charismatic leader have high task performance, task adjustment and adjustment to the leader and the group. At its most potent, charisma therefore forms a social bond grounded in the interplay between the attributes of the leader and the needs and aspirations of the followers (Bass 1990).

Charismatic leadership should not be negated in a study on leadership and as such is included as a vital part of the process of promoting understanding of this complex phenomenon as it relates to the construct of transformational leadership.
2.3.4.2 Transactional leadership

The past has produced a plethora of leadership theories and models that have at best been based on interactions between task and relationships. Bass (1985) argues that there must be more to the simple task and relationship orientation in the leadership dynamic. It would therefore be prudent to introduce the concept of motivation into the discussion. Motivational response is linked to the intensity of the stimulus. If the stimulus is too strong, the individual may attempt to withdraw from the situation. The leader may need to reduce the inhibitions of his or her followers thereby creating the opportunity for creativity, risk taking and adopting a broader view.

According to Maslow (as cited in Bass, 1985), the theory of work motivation is based on a hierarchy of needs. The theory is that once the lower-level needs of safety and security have been fulfilled, the higher-order needs such as affiliation and recognition become important. Bass (1985) indicates that other motivational concepts also distort simple exchanges. Instead of followers achieving what is expected by relating to the promises the leader has made, many counteractions may occur such as denial and counterdependent actions. Subordinate motivation to work cannot solely be attributed to simply swapping desired outcomes from a leader to a follower for satisfactory services.

It is also maintained that one of the problems with transactional leadership is that it usually fails to raise or increase subordinate performance beyond the expected levels of performance. Leaders in the transactional relationship may contribute to follower performance by clarifying what is required, explaining how to achieve or meet those requirements, providing the criteria, giving feedback and allocating rewards (Bass, 1990). Bennis and Schein (1966) refer to MacGregor’s theory of motivation which is based on two concepts theory X and Y. Theory X indicates a responsibility by leaders to organise all elements of the enterprise, to direct people, control them and modify behaviour to suit the organisation, and that without this leadership intervention, people would be passive and resistant to organisational needs. By implication, the average follower is lazy, lacks ambition, is self-centred and indifferent to the needs of the
organisation. This belief about people requires the leader in this situation to act in a transactional manner to ensure that objectives and goals are met.

Leadership is inseparable from the followers’ needs and goals. This relationship is contingent on the pursuit of a common purpose. Transactional leadership happens when one person takes the initiative in making contact with someone else in order to exchange something of value. Each of the parties recognises the purpose and the fact that it can be advanced by maintaining the transaction (Burns, 1978). Ivancevich and Matteson (2002) refer to transactional leadership in the same way as being an exchange. The leader helps the follower to identify what must be done to accomplish the results. In this process, the leader accounts for the follower’s self-concept and esteem needs.

Yukl’s (1999) approach is closely intertwined with the thinking by Burns (1978), who views transactional and transformational leadership as different forms of exchange at different levels and with different outcomes. This transactional relationship is apparent in the way Burns (1978, p. 3) explains the interaction. Transactional leaders “approach followers with an eye to exchanging one thing for another: jobs for votes, or subsidies for campaign contributions. Such transactions comprise the bulk of the relationships among leaders and followers, especially in groups, legislatures and parties.”

The transactional dimensions of leadership, as determined by Bass and Avolio (1996) are encapsulated in the following styles or approaches:

- **Laissez faire.** In this style, the leader abdicates and avoids responsibilities with a “don’t care” attitude.

- **Management by exception passive.** This involves the setting of standards and reluctant intervention by the leader if the standards are not met.

- **Management by exception active.** This style involves the active monitoring for deviations from set standards and taking immediate corrective action.
• **Constructive transaction/ contingent reward.** This approach provides for various kinds of rewards in exchange for mutually agreed-upon goal accomplishment. The reward is therefore contingent on the achievement of set and agreed-on objectives and goals.

Transactional leadership can be fairly effective as a method of influencing followers but does not result in any real change. Instead it perpetuates the status quo (Hughes et al., 1993).

2.3.4.3 **Transformational Leadership**

Transformational leadership is inherently the same as transactional leadership but for Burns (1978), the transformational leader recognises the contracted service but seeks to go further by arousing and satisfying higher needs and attempting to engage the whole person. This approach is vital in this study as it forms the basis for determining the influence of transformational leadership on work engagement.

According to Burns (1978, p.4.): “The transforming leader looks for potential motives in followers, seeks to satisfy higher needs, and engages the full person of the follower. The result of transforming leadership is a relationship of mutual stimulation and elevation that converts followers into leaders and may convert leaders into moral agents.”

Leadership is a complex concept that requires an understanding of how people relate to others in different contexts and situations. Burns (1978) developed and introduced a method that includes both transformational and transactional leadership styles, which relates to the different ways leaders and followers interact. The transformational leader interacts “with others in such a way that leaders and followers raise one another to higher levels of motivation and morality” (Burns 1978, p. 20). Bass and Avolio (1994) maintain that transformational leadership requires more than mere compliance of the follower or the establishment of agreements - it involves a shift of beliefs, values and attitudes. Hence this type of leader will inspire and motivate followers to more than originally intended and even more than originally thought possible.
In the context of this study it is necessary to look at various situations in which transformational leadership can be more effective in its outcome. This relates directly to the other construct of this study, namely work engagement. Bass (1985) proposes that transformational leadership as a preferred style will depend on the historical, social and economic environment, the organisation the leader is currently involved with and the personality and values of the leader. He maintains that transformational leaders will emerge in times of distress and rapid changes. A further consideration is the organisation and the situation facing the leader, which could include turbulent market forces, the need for new solutions and being able to develop subordinates. These times require leaders to be intellectually stimulating by re-examining priorities, exploring new ideas, scanning for innovative opportunities and maximising human capacity in the organisation. The personality and values of the leader are key aspects to be considered in the leader role. Leaders need to be confident, determined and driven; they should encourage others to seek new solutions and remain the master of their own fate. According to Bass (1985), the role of childhood and adolescence should not be ignored, because behaviour in these times may already be an indication of transformational leadership-type behaviours.

According to Bass and Avolio (1996), transformational leadership occurs when leaders

- manage to stimulate their followers to view their work from differing perspectives
- are able to create an awareness of the vision and mission of the team and organisation
- develop followers to gain higher levels of potential and ability
- motivate followers to go beyond their own interests towards those that will benefit the group

Bass (1999) goes on to say that transformational leaders produce in their followers a high sense of

- the collective identity of self
• the consistency between self-concept and their actions on behalf of the leader
• self-esteem and a greater sense of self-worth
• the similarity between their self-concept and their perception of the leader
• collective efficacy
• the sense of meaningfulness in their work and lives.

Bryman and Cramer (1997), state that transformational leaders raise their followers' inclination to try harder in at least three ways. Firstly, these leaders are able to convey the importance of certain goals and how they should be achieved. Secondly, they influence followers to go beyond their self-interest for the good of the organisation; and lastly, they stimulate and satisfy their followers’ needs such as self-esteem and self-actualisation.

Walumbwa, Wang, Lawler and Shi (2004) provide further impetus to the relationship between leader and follower by revealing that transformational leadership is positively related to work outcomes. Transformational leaders are able to exceed their own self-interest for the sake of the group. Such leaders are therefore able to extract more input from their followers, afford them the opportunity to think critically and look for new ways of doing their work. Being able to do things in new ways, leads to motivate employees becoming more involved in their work, which results in higher levels of satisfaction and commitment. Miller (2007) argues that there is mutuality in the relationship between transformational leaders and their followers. This mutuality is brought about by the way the leader is able to create a relationship that allows for learning and development by both leader and follower. The internalisation of the leader’s vision by the follower leads to a possible alignment of personal values with those of the organisation and subsequent commitment to organisational goals and the achievement of personal goals.

According to Bass (1985), a transformational leader is someone who increases the commitment of followers. This commitment transcends self-interest and develops into behaviour that is beneficial to the organisation as a whole. Conger and Benjamin
(1999), elaborate on this by suggesting that transformational leaders are able to motivate their subordinates to levels of performance that may exceed their expectation and those of their leaders.

Bass (1985) further contends that engaging the whole person implies that a leader can influence followers to move from a lower level of need to a higher level, according to Maslow’s hierarchy of needs. In Maslow’s hierarchy, Bass (1985) argues that transformational leaders, have more opportunities at the higher levels of the hierarchy with people who are concerned about growth and self-actualisation, because transformational leaders are able to influence people to go beyond self-interest for the good of the group.

According to Bass (1985) transformational leadership comprises four factors namely individualised consideration, intellectual stimulation, inspirational motivation and idealised influence (charisma).

a Individualised consideration

Consideration for others has been found to be an essential element of leadership, especially between leaders and subordinates. This consideration is paramount when it comes to the level of satisfaction in the leader and relates to his or her subordinates’ productivity (Bass,1985).

Inconsiderate leader behaviour is typified by the way in which relationships are conducted. Inconsiderate leaders criticise their subordinates in public, treat them without considering their feelings, threaten their security and refuse to accept suggestions or to explain in any way the reason for their actions (Bass,1985).

Consideration can be applied in a group or individually. This type of consideration should not be seen as “being soft” on subordinates or peers. The forms that it may assume include appreciation for a job well done, while constructively pointing out areas for improvement. The manner of showing consideration is vital. The relationship between leader and follower is important. Superiors may criticise their subordinates,
advise them on improvements, invite visits to senior meetings and briefings, expose followers to more senior levels, and develop plans to improve follower performance (Bass, 1985).

According to Bass and Avolio (1994), leaders who practice this style of leadership pay special attention to the needs of their followers in terms of the need for achievement and growth. This is achieved by acting as a mentor and coach. Potential is unlocked through development and by focusing on the requirements of the individual. Interaction is encouraged and leaders should walk around to create more personalised relationships.

If leaders are aware that development and learning are the result of job experience, the best way to learn and develop is on the job. This is only possible if the leader applies individual consideration by caring for people, and rotating assignments in order to develop capabilities and transform potential. Delegation, when properly planned and applied, allow individuals to develop and enhance their skills. However, there is a downside to anything. If the concept of consideration is applied in a transactional manner then delegation occurs to satisfy the leader’s own personal agenda. A lack of empathy will make it impossible for transactional leaders to participate fully to achieve the higher-order transformational leadership role (Bass & Avolio, 1996).

Critical to developing subordinates is the understanding that people are at different levels of development, hence delegation and mentoring form an essential part of this concept. For each individual, a development plan must be developed in collaboration with the follower, to ensure that each member is considered fairly and with empathy. Once trust has been attained, the relationship will develop and new heights will be reached in the leadership interaction (Donohue & Wong, 1994).

b Intellectual stimulation

Transformational leaders evoke a response in their subordinates that transcends the normal and stimulates people to go beyond what they deemed possible. A leader’s intellectual stimulation relates to the stimulation of his or her followers relating to problem awareness and problem solving, focusing thought and releasing imagination.
The impact is on beliefs and values, rather than on action or behaviour change. Some indications of this can be explained as: “He enabled me to think about old problems in new ways” or “He provides me with new ways of looking at things which used to be a puzzle for me” (Bass, 1985, p. 100).

The importance of intellectual stimulation comes to the fore when the leader is confronted with ill-structured problem as opposed to well-structured problems. The intellectually stimulating leader will not be content to accept partial solutions, accept the status quo or continue as before. This leader will continually seek new ways, to change for the better and to take maximum advantages of opportunities. This leader will attempt to stimulate thought processes to develop new ideas and to encourage alternative means of solving problems and being innovative at all levels of the organisation (Bass, 1985).

The intellectually stimulating leader leads by reframing situations, challenging the assumptions underlying the problem or situation, approaching old situations in new ways by encouraging creativity and limiting the criticism of mistakes. This is all linked to encouraging followers to try out new ideas without being subjected to criticism from the leader (Bass & Avolio, 1994).

c Inspirational motivation

The leader who seeks to motivate will inspire such behaviour by communicating high expectations. The normal standard is thus not acceptable, and by using symbols to focus effort and expressing crucial purposes in a simple way, this leader will develop in his or her followers a higher level of intrinsic motivation (De Vries, 1998).

A leader who is inspiring will convince his or her followers that they have the ability to achieve levels beyond the possible. He or she will clarify the future state, provide a vision of the future and should therefore elevate the expectations of his or her followers.

The concept of vision, a key component of transformational leadership, can be developed as part of being a transformational leader. Vision is simply a picture, target or
goal of the future that is realistic, credible and better than the present. The power of vision is one of the strongest incentives for change and improvement. The development of vision helps the leader to focus his or her followers and to obtain their attention. The vision provides foci for the organisation (Charlton, 1993).

According to Bass and Avolio (1994), motivational leaders act in such a way that it serves to motivate and inspire those around them. This is achieved by providing meaning and challenge in the work environment, which develops team spirit and leads to enthusiasm and optimism. The crux of this motivation lies in the leader’s ability to arouse in his or her followers the willingness to believe in the future and commit to the goals to actually achieve the vision. Communication plays a crucial role in the motivational process, further adding to the transformational dimension.

d  Idealised Influence (Charisma)

In essence this is used to describe people, who by being who they are, project power in themselves and have an enormous influence on their followers. The inspirational and idealised leader creates undivided loyalty and devotion without any consideration of own self-interest. He or she has confidence in the vision, takes full responsibility for his or her actions and exudes purpose and trust (Bass, 1985).

Mr Nelson Mandela, for instance, commands respect without resorting to any other means. Idealised leaders are able to offer quality judgements and insights and remain calm and focused on the elements that are truly at the root of the issue. Their character and inner strength “command space” in a meeting or room. The essence of this style of leadership is that people want to follow this leader and seem to enjoy being led by them (Levicki, 1998). One of the lasting elements relating to this influence is that people often refer to this person in the present tense, even if such a person has died or left the company or organisation many years ago.
2.4 TRANSFORMATIONAL LEADERSHIP RESEARCH

Bass (1985) presented a model of transactional and transformational leadership as being conceptually independent of each other. Research conducted has shown that management by exception scores are truly independent of transformational scores. Bass (1985) also demonstrated the complex relationship between transactional and transformational leadership. What has been found is that although transactional leaders do not display transformational leadership behaviours, a significant percentage of transformational leaders display both transformational and transactional leadership behaviours.

Avolio, Waldman and Yammarino (1991) state that transformational leadership is an effective means of maintaining or achieving acceptable standards of performance by followers. Transactional leadership provides goal clarity and expected performance, but is only able to explain a small portion of what leads to effective leadership. Research has shown (Avolio et al., 1991) that transformational approaches to leadership are found more at the top of organisations, which then cascades down in the organisation, implying a selection or development of transformational leaders.

According to Howell and Hall-Merenda (1999) different performance effects by followers were observed depending on whether the leadership that was practised was transactional or transformational.

Champoux (2000) also reported positive relationships between organisational performance and transformational leadership. Linked to performance, Burke, Stagl, Klein, Goodwin, Salas and Halpin (2006) found that transformational behaviours had a significant effect on the performance of teams compared to transactional behaviours.

Studies have also reported significant relationships between transformational leadership and the amount of effort followers are prepared to exhibit, satisfaction with the leader, job performance and effectiveness (Purvanova, Bono & Dziewczynski, 2006). Dvir, Eden, Avolio and Shamir (2002) empirically tested the effect the leader has on the follower and found that transformational leadership has a direct effect on follower's
motivation, morality and empowerment. Bono and Judge (2003) also confirmed this and found that transformational leadership is positively associated with follower job attitudes and job performance.

Barling, Weber and Kelloway (1996) reported the effect of transformational leadership on followers' organisational commitment. Other studies have also indicated the positive relationship between transformational leadership and work-related outcomes such as satisfaction, commitment and performance (Bycio, Hackett & Allen, 1995; Koh, Steers & Terborg, 1995).

Other studies have indicated the positive association between transformational leadership and task performance (Howell & Avolio, 1993; Howell & Frost, 1995; Rickards, Chen & Moger, 2001).

Bass and Avolio (1989) researched the potential biases in leadership measures and focused on how prototypes, leniency and general satisfaction relate to ratings and rankings of transformational and transactional leadership constructs. Transformational leaders were seen as being closer to the ideal image of a leader compared with transactional leaders.

The extra role performance of the follower was also studied as being effected by transformational leadership. Shamir, House and Arthur’s (1993) motivational approach to transformational leadership provided insights into the effect of linking the followers' work to a higher purpose (organisational goals and their own personal values), resulted in a direct influence on the perception of the job and task. In essence transformational leaders would create more meaning in the task environment. Kark, Shamir and Chen (2003) found that transformational leadership was positively related to both followers' dependence and their empowerment and that personal identification with the leader mediated the relationship between leader and follower.

In their study, Purvanova et al. (2006) reported linkages between transformational leadership and followers' perceptions of their jobs. Followers, who reported to leaders displaying transformational leadership approaches, rated their own jobs as more
challenging, meaningful and significant. This finding also linked job perceptions to performance beyond expectations, as suggested by Bass (1985). Of particular significance to this study is the finding that managers who score high on transformational leadership appear to be more successful at influencing followers’ enthusiasm for their jobs.

Kane and Tremble (2000) studied the transformational leadership effects in the US Army. They found that transformational behaviours tended to augment the effects of transactional leadership on motivation and commitment. Mester, Visser, Roodt and Kellerman (2003), also studied this concept and determined the relationship between leadership style and organisational commitment, job involvement and organisational citizen behaviour. They reported that the most prominent relationship was between transactional leadership and commitment, and that transformational leadership did not correlate significantly with job involvement and job satisfaction.

According to Yukl (1999), ambiguity is apparent in transformational behaviours. He maintains that the theoretical rationale for differentiating between behaviours is not clearly explained. The overlapping content and high intercorrelations found are areas for concern. Further criticisms of the effect of transformational leadership are based on the apparent lack of the identification of underlying influence processes. The self-concept theory provides a sound base for describing idealised influence, but more investigation is required (Yukl, 2002).

Yukl (2002) is also somewhat critical of the measures used to identify transformational leadership and maintains that these questionnaires lead to extremely high intercorrelations between behaviours and that it is not possible to determine their separate effects. A meta-analysis of 39 studies using the MLQ (Form 5X) found that in most instances three transformational behaviours (idealised influence, individualised consideration and intellectual consideration) were related to leadership effectiveness. This is significant for this study because it serves to support the fact that the MLQ (Form 5X) will be able to provide evidence of transformational behaviours that may influence work engagement.
Field experiments conducted by Dvir et al. (1999) in the Israeli Defence Force provided some indication of the effect of transformational leadership on motivation for the direct reports of the leaders (noncommissioned officers). However, the results for squad members were weak and inconsistent. Further studies by Singer and Singer (2001) conducted on police officers in New Zealand provided insights into situational constraints that affected leader behaviour.

Carless (1998) tested the proposition by Bass (1985) that transformational leadership can be defined as distinct constructs. The results attained indicate that the measures result in a single higher-order construct of transformational leadership but that little evidence exists that the MLQ (Form 5X) measures distinct transformational leadership behaviours. This study attempted to determine the relationship between transformational leadership as a construct and the work engagement of followers. The finding that distinct constructs are not distinguishable should be considered in further research.

In a meta-analytical study of transformational and transactional leadership, Judge and Piccolo (2004) found support for the validity of transformational leadership which seems to generalise across many situations. However, they also reported that transactional leadership and transformational leadership so closely related that separating their unique effects is exacerbated.

Van Eeden, Cilliers and Van Deventer (2008) conceptualised leadership on the basis of the full range of leadership in terms of the behaviours associated with various leadership styles and found that this was empirically supported. Transformational leadership was defined in the interpersonal relationship environment, with the emphasis on social ethics. They found that leaders applying transformational leadership styles were more effective in influencing others and taking the lead. These leaders were also open to suggestion, involved others in decision making, were assertive and expressed themselves. These leaders were also caring and supportive of others.

Bass (1985) holds that transformational leaders are more effective than transactional leaders, regardless of how “effectiveness” is defined. Transformational leadership
provides a distinct methodology for leader effectiveness which goes beyond the transactional. In the context of this study, the effectiveness of transformational leadership forms the basis of the researcher’s approach to determining whether there is a relationship between transformational leadership and work engagement. Details of the empirical study are provided in Chapter 4.

2.5 COMMENT

In concluding this chapter, the following theoretical aim, as indicated in Section 1.3.2.1, has been satisfied:

- To conceptualise the construct of transformational leadership from a theoretical perspective

2.6 CHAPTER SUMMARY

Leadership is an intangible construct defined in many different ways. The arguments for and against transformational and transactional leadership are legion. However, leadership is essentially a relationship in which one person influences the behaviour or actions of another. This is a two-way reciprocal process. Many variables influence the relationship, which further confounds the measurement and determination of what actually works in the leadership equation.

Various leadership styles exist in which leadership can be either situational contingency, transactional and/or transformational (Robbins, 2001).

This chapter discussed and described leadership from early times, looked at various theories of leadership that have developed over time, and finally focused on transformational leadership. The chapter concluded with a discussion of current research on transformational leadership.

Work engagement will be discussed in chapter 3.
This chapter explains the meaning of work engagement, and explains burnout as the antithesis of work engagement. Work engagement will also be related to salutogenesis, fortigenesis, job resources, and ultimately, leadership. The chapter concludes with an integration of the discussion.

3.1 BURNOUT

It is essential for this study to commence with a definition of burnout and its origins and subsequent development, in order to grasp the meaning of the construct, because work engagement is often described as the opposite of burnout. Research and development on the burnout phenomenon by various researchers (Kahn, 1992; Leiter & Maslach, 2005; Maslach, 1982; Rothman, 2003) has led to a better understanding of where burnout originates, how it develops and ultimately how to deal with people suffering from it.

3.1.1 The origin of burnout

The term “burnout” was introduced by Herbert Freudenberger in 1974 (Rothmann, 2003). He used this term to describe symptoms of emotional depletion and loss of motivation and commitment of people who were volunteers in a care setting. The relationship people develop with their work and work environment is complex. When the relationship between work and the work environment becomes troubled, many difficulties arise as a result of the breakdown. Maslach, Schaufeli and Leiter (2001) provide further insight into the development of the term “burnout.” Initially, the term fired the imagination of many people and this popularised the term. At that time, it was seen as “pop psychology” because the term had been initiated from “grass-roots” level and from people’s experiences. On the basis of this development, job burnout is conceptualised “as a psychological syndrome in response to chronic interpersonal stressors on the job” (Maslach et al., 2001, p. 399). A further definition of burnout
provided by Maslach and Jackson (cited in Rothmann, 2003, p. 18) is indicated as “a syndrome of emotional exhaustion, depersonalisation and reduced personal accomplishment that can occur among individuals who do ‘people work’ of some kind”. According to Rothmann (2003), even though the definition refers to people doing “people” work, it is acknowledged that people in any job may suffer from burnout. Further research has indicated that burnout results from a crisis in the relationship with work in general and not merely with one’s relationship with people at work. This definition widens the scope of burnout because more possible causes may be attributed to burnout.

Work on burnout, as indicated by Maslach et al., (2001) focused on the various relationships that exist in the workplace. These relationships, which were specifically between co-workers and family members, seemed to be a source of emotional stress and reward. Burnout empirical research led to burnout being viewed as a form of job stress with links to job satisfaction, commitment and turnover.

3.1.2 The dimensions of burnout

According to Leiter and Maslach (1988), burnout and its syndromes, in the helping professions are contained in three dimensions, namely a feeling of overwhelming exhaustion; a feeling of cynicism and detachment from the job; and a sense of ineffectiveness and lack of accomplishment. Labels for the various dimensions in jobs other than the helping professions are exhaustion, cynicism and low personal efficacy (Rothmann, 2003).

According to Leiter and Maslach (2005), exhaustion is viewed as lost energy. It is a feeling of being constantly overwhelmed, stressed and exhausted. Sleep is hard to come by and even after taking a break, the relationship with work is still as bad as ever, extremely demanding and constant. It is also the central quality of burnout and one of the most visible symptoms of burnout. It reflects the stress dimension of burnout but does not provide insight into how the relationship at work actually occurs. Maslach et al., (2001) explain exhaustion as the central issue of burnout. Exhaustion is the main manifestation of burnout and normally the most widely reported and analysed. It also
reflects the stress dimension of burnout but does not capture the relationship people have with their work. Its outcome results emotional distance from work in order to cope with the overload.

Cynicism and detachment (depersonalisation) relate to lost enthusiasm for the job. The passion disappears and is replaced by a form of negative cynicism. All aspects of the job create irritations, relationships are a burden and all positive qualities brought to the workplace seem to go stale and be without passion (Leiter & Maslach, 1988). Effort on the job is limited to the barest minimum in order to just get by. People attempt to put distance between themselves and recipients by ignoring those qualities that make people unique. This adds to depersonalisation (Leiter & Maslach, 2005).

Inefficacy or feelings of ineffectiveness and lack of accomplishment are linked to loss of confidence. It is hard to find reasons to keep going and the more this becomes apparent the more doubts appear about self-worth (Leiter & Maslach, 2005). According to Maslach et al. (2001) this apparent lack of efficacy seems to appear as a result of a lack of resources whereas exhaustion and cynicism are caused by work overload and social conflict.

Of significance to this study is the understanding of how burnout relates to outcomes. This is relevant because outcomes are identifiable activities in the workplace attributed to employees in this environment. If work engagement is seen as the opposite of burnout, by implication outcomes of engaged employees may also be as relevant. According to Maslach et al. (2001), job performance and health are outcomes of burnout. Job performance includes withdrawal, absenteeism, the stated intention to leave the current job and actual turnover of personnel. Individuals suffering from burnout and who stay on the job are less productive and effective, resulting in decreased satisfaction and commitment. Another outcome is that people in such a situation may negatively affect colleagues, disrupt work and job tasks. Burnout’s link with mental health is more complex. It is thought that burnout causes mental dysfunction which may lead to anxiety, depression and self-esteem problems.
3.1.3 The occurrence of burnout

Maslach et al. (2001) indicate that burnout may be the result of work overload, where the amount of work allocated to employees cannot be completed in the available timeframe. This aspect of burnout is closely linked to exhaustion. A further occurrence is role conflict and role ambiguity. Role conflict occurs when there are conflicting demands at work, whereas role ambiguity manifests when there is a lack of sufficient information to do the job.

A further interesting factor is the situational context in which burnout occurs. This context relates to where the actual work takes place. Work occurs in a larger framework that includes hierarchies, rules and regulations and procedures and policies. It is therefore necessary to consider the organisational and management environment in which work is done (Maslach et al., 2001).

This study focuses on a military environment that is firmly embedded in rules and procedures, and where specific behaviour is required from certain levels in the organisation. This extremely rigid approach to the work culture may affect the incidence of burnout which, in turn, may influence the effective reporting of work engagement. It is not the focus of this study to determine the factors that may or may not have an effect on the levels of work engagement other than the applied transformational leadership style of officers.

3.1.4 Individual factors

According to Maslach et al. (2001), employees do not only react to the workplace but also bring special talents and abilities to work. These talents and abilities depend on how old they are, their level of education, their experience and work attitude. Research has shown that people between the ages of 30 and 40 are more susceptible to burnout. It has also been indicated that people with higher levels of education report higher levels of burnout. As indicated earlier, interpreting the results of this study may require some circumspection because other variables such as status and occupation may confound the results. A further implication is that well-educated people may have more
responsibility and higher stress levels as a result. Golembiewski and Munsenrider (1988) indicate that there is support for the premise that gender (females) may be more susceptible to burnout than males. The dual roles of females (mothers) add stressors to the work situation, women tend to work more in the care professions and thus have direct contact with clients. Women also tend to invest emotionally in the workplace.

Personality traits may also be responsible for higher incidences of burnout. Employees who display low levels of hardiness seem to experience burnout more often because they are seen to lack control of events and are not especially open to change. External locus of control, as opposed to internal locus of control, seems to exacerbate burnout since people sense being subjected to other forces outside and beyond control of the self (Maslach et al., 2001). Strümpfer (1995) provides insights into the concepts of sense of coherence, which supports the theory of salutogenesis (the origin of health), and the concept of fortogenesis or strength, the fortitude to endure both mentally and physically. The concepts contained in psychofortology, (Strümpfer 1995) (the science of psychological well-being) include locus of control, the belief that an individual's behaviour has a direct impact on the events that follow; self-efficacy, the individual's belief that he or she can successfully adopt the behaviour required for the task; hardiness, a personality style consisting of commitment, control and challenge; potency, the individual's confidence in the self to overcome, based on past experiences; and learned resourcefulness, which involves well-learnt behaviours and skills that individuals use to control or regulate behaviour (Coetzee & Cilliers, 2001). Jenaro, Flores and Arias (2007) provide insights into coping strategies that enable individuals to deal with burnout. Being able to deal with burnout leads to positive outcomes because satisfied employees are workers with lower absenteeism and higher productivity.

The job attitude that people display forms part of the expectation that they have about work. Having high expectations about achieving success, linked to the actual achievement of that success has an inherent risk for the individual. High expectations may lead to high commitments, resulting in long hours and eventual exhaustion and cynicism when the expected input is not rewarded in any way (Maslach et al., 2001). Kahn (1981) explains this expectation from the perspective of people working to achieve
certain outcomes, normally under the direction of some individual and where the organisation makes the commitment to pay the individual. This expectation is then contingent on the amount of effort the person puts into the job at hand.

3.2 BURNOUT AND WORK ENGAGEMENT

The focus in the past has mostly been on detecting illness and not necessarily on health and wellbeing. Strümpfer (1995) affirms this approach by indicating that the orientation was normally towards the abnormal, with the focus on why people become ill. This then forms the basis for the treatment of the condition. Lately a more positive approach to psychology has manifested namely “positive psychology”. According to Seligman and Csikszentmihalyi, 2000, p, 5): “The field of positive psychology at the subjective level is about valued subjective experiences; well-being, contentment, and satisfaction (in the past); hope and optimism (for the future) and flow and happiness (in the present)”. At the individual level, it is about positive individual traits: the capacity for love and vocation, courage, interpersonal skills, aesthetic sensibility, perseverance, forgiveness, originality, future mindedness, and spirituality. Various other researchers have also added to the concept of positive psychology (Strümpfer, 2005; Wissing & Van Eeden, 2002)

According to Rothmann (2003), burnout, stress, violations of the psychological contract, job insecurity and downsizing are some of the most popular topics for study. It is also interesting to note that industrial and organisational psychology (as opposed to other fields of psychology) seem to focus on more positive concepts such as intrinsic motivation, job satisfaction, commitment and citizenship behaviour.

The world of work is undoubtedly a stressful environment because organisations are exposed to advancements, competition and the world economy (Bosman, Rothmann & Buitendach, 2005). Richardson, Burke and Martinussen (2006) provided insights into how Norwegian police experience stress on the job by means of research indicating how job demands seem to add to the burnout dimension of cynicism. According to Maslach et al. (2001), further findings indicate that changes to the psychological contract seem to have the most impact on employees. People are expected to give
more in terms of time, effort, skills and flexibility, whereas they seem to receive fewer career opportunities, lifetime employment and job security. Even though this paints a sombre picture of the workplace, an individual’s occupation is still a source of socialisation, where growth and development may take place. In addition, the development of self-worth and positive experiences (self-efficacy) occurs. Individual identity is created and people are connected to each other. This leads to health and well-being in the working population (Bosman et al., 2005).

Owing to the increased focus of psychology on the optimal functioning of the individual and on human strength and even though work engagement is related to burnout it is still viewed as the antithesis of burnout (Mostert & Rothmann, 2006). Burnout is defined as an erosion of engagement with the job (Maslach & Leiter, 1997), while engagement is defined as a positive, fulfilling, work-related state of mind (Schaufeli & Bakker, 2003).

Storm and Rothmann (2003) provide further insight into the psychological movement from a pathogenic orientation towards a more fortigenic paradigm. This implies a swing from the psychology of the sick and dysfunctional to an approach that leans towards challenges and opportunities in the workplace. The fortigenic approach focuses on the source of strengths and how this paradigm relates to burnout. When viewing burnout research from a more positive perspective, it is not surprising to see the shift towards its opposite, that is, work engagement.

Owing to the increased focus on positive psychology, it seems that the opposite of burnout needs to be discussed and researched to cover the full spectrum of the experience at work. This would then include the entire spectrum of work related experiences that would involve movement from the negative (burnout) towards the positive (work engagement) (Mostert & Rothmann, 2006).

Schaufeli, Bakker and Salanova (2006) explain the increased attention focused on “positive psychology” in the context of engagement. The traditional focus of psychology on disease and disability or pathology has been countered by a newer trend towards optimal functioning. One of these positive states is termed work engagement. Engaged
employees tend to be energetic and demonstrate a positive connection to the workplace and seem to have higher coping mechanisms to deal with the challenges at work.

3.3 WORK ENGAGEMENT

Work engagement is a relatively recent term and construct. Kahn (1990) proposed that people make use of varying degrees of themselves, either physically, cognitively and emotionally while doing their work. The focus was on determining the moments when people apply themselves to work and when they remove themselves from specific task behaviours in the workplace. It is necessary to determine the possible reasons why people express themselves and then become defensive. This movement between being committed and then withdrawing has resulted in research on how people perceive themselves, their work and the actual relationship between the two. Kahn (1990) was interested in the core of what it means to be psychologically present in a particular moment or situation in the organisation. This approach was solely theoretical without operationalisation of the construct (Schaufeli, Salanova, González-Romá & Bakker, 2002b).

Kahn (1990), labelled the terms he uses to describe this interaction at as personal engagement and personal disengagement. He sees personal engagement as “the harnessing of organization members’ selves to their work roles”; and engagement as “people employ and express themselves physically, cognitively and emotionally during role performances” (Kahn, 1990, p. 694). The significant part of this work, as it relates to this study, is contained in the way that individual, interpersonal, group and intergroup factors influence the work experience. Leadership is about influence and relies heavily on the interpersonal aspects of the relationship between the leader and follower. As Olivier and Rothmann (2007) put it, it is important for managers or leaders to cultivate work engagement because work is the expression of the self in the workplace.

Schaufeli et al. (2002b), regarded work engagement as being characterised by energy, involvement and efficacy which, in turn, are considered the direct opposites of the three burnout dimensions of exhaustion, cynicism and lack of professional efficacy. Engaged people are seen as energetic, having an effective connection with the workplace and
are able to deal effectively with the demands of work. Burnout is measured using the Maslach burnout inventory (MBI) (Maslach & Jackson, 1981). Low scores on exhaustion and cynicism, as measured by the MBI, indicate engagement and high scores on efficacy would also indicate engagement. Studying engagement was difficult in this regard since both concepts, burnout and engagement, are considered opposite poles of a continuum measured by one instrument, the MBI. With this as a basis, it was proposed that engagement and burnout are two separate constructs and should be measured as such. Two work dimensions of work-related wellbeing were identified, namely activation, ranging from exhaustion to vigour, and identification, ranging from cynicism to dedication (Maslach & Jackson, 1981).

Burnout is characterised by a combination of exhaustion (low activation) and cynicism (low identification), while engagement is characterised by vigour (high activation) and dedication (high identification). Engagement is considered to be a more persistent and pervasive affective-cognitive state that is not focused on any specific object, event, individual or behaviour (Schaufeli et al., 2002b; Schaufeli, et al., 2006). This has crucial implications for this study because the researcher attempted to determine a possible relationship between the practice and application of leadership and its possible outcome on the levels of followers’ work engagement.

Work engagement can be defined as “a positive, fulfilling, work-related state of mind that is characterized by vigour, dedication and absorption” (Schaufeli et al., 2002b p. 74). Vigour as a dimension of engagement is characterised by someone who demonstrates high levels of energy and mental resilience at work. There is also a determined investment in the actual work, together with high levels of persistence even when faced with difficulties. Dedication refers to high levels of involvement in the work being done and experiencing high levels of significance, enthusiasm, inspiration, pride and challenge. Absorption is characterised by significant levels of concentration and being happily engrossed in the work. In this dimension, time passes quickly and detachment from the work is difficult (Schaufeli, Martinez, Pinto, Salanova & Bakker, 2002a; Schaufeli et al., 2006).
Pech and Slade (2006) provide insight into a further factor that merits consideration. This is known as disengagement and relates to people being distracted, rapidly reaching task overload and demonstrating a slow tempo of work. Those affected are incapable of making sound decisions, are away from work and constantly show a lack of interest in the workplace. They further indicate that potential sources or causes of disengagement relate to three dimensions: firstly, the psychological dimension which includes the lack of meaningfulness, identification, trust, stress and anxiety; secondly, the organisational, including restructuring, inadequate conditions, bureaucracy, resources, work complexity and poor leadership; and finally, the other factors being substance abuse, laziness and interpersonal issues. Disengagement also refers to emotions that may result in occupational disillusionment and a devaluation and mechanical execution of one’s work (Bosman et al., 2005).

The benefits of experiencing work engagement as a “persistent, positive affective motivational state of fulfilment” (Maslach et al., 2001, p. 417) led the researcher to seek reasons that may cause the state to occur and be sustained. Employee well-being, as an outcome of work engagement, is beneficial for various reasons. This includes having a positive experience at work and also relates to good health and a positive work outcome, while assisting people to derive positive outcomes from stressful work environments.

Work engagement is also linked to organisational commitment and should affect employee performance (Sonnentag, 2003). Kahn (1990) also indicated that these feelings would also fluctuate in the daily feelings of engagement in one person and between people over time. This fluctuation could in all probability be affected by some external or even internal influence.

These fluctuations of work engagement mean that it would be prudent to look at what engagement means to people and how this, in turn, is linked to organisational commitment. Roberts and Davenport (2002) provide insights into this meaning. Engaged employees report that their jobs make use of their skills and abilities; their work is challenging and stimulating; and work provides a sense of personal
accomplishment. This high level of engagement then in turn leads to outcomes that are important to organisations. Engaged people are less likely to leave the organisation, which reduces turnover. Lower turnover has a positive effect on the costs the company would incur in respect of the high turnover of employees. A meta-analysis of 71 studies on engagement and organisational commitment resulted in a correlation of 0.496, which indicates a fairly strong correlation between these two constructs (Brown, 1996). Hallberg and Schaufeli (2006) attempted to determine whether work engagement can be differentiated from job involvement and organisational commitment. The purpose of the study was to reduce the confusion surrounding each of the constructs, because each is used interchangeably to describe similar processes. The literature deals with all three of the constructs namely work engagement, job involvement and organisational commitment, all of which refer to a positive attachment to work and contain theoretical references to one another, hence the possible overlapping between the constructs. However, Hallberg and Schaufeli (2006) established that job involvement, work engagement and organisational commitment are indeed three distinct empirical constructs.

3.3.1 Possible antecedents of work engagement

In this study it is necessary to attempt to identify various factors that could influence work engagement. According to Mostert and Rothmann (2006), some of the factors that may influence work engagement include background variables such as age, gender and race, job stress and personality traits. Stress relates to the disruption of the equilibrium of the cognitive, emotional and environmental system by external factors. If the stress is severe, physical and psychological strain may cause behaviour that is inappropriate in the workplace. Stress is linked to specific job demands, the level of support of supervisors and various organisational procedures and policies. Rothmann, Steyn and Mostert (2005) describe two groups of organisational stressors, namely job demands and job resources. Job demands refer to those parts of the job that require physical or mental effort (deadlines, shift work, overtime, excessive paper work and the handling of crisis situations), while job resources refer to those factors that may be functional in achieving work goals and the reduction of job demands (the correct equipment and
effective supervision [leadership], a reasonable salary, recognition and enough personnel to do the job). It is therefore interesting to note that job demands and job resources contribute to stress, which in turn affects work engagement.

Job resources are defined as “those physical, psychological, social, or organizational aspects of the job that not only potentially reduce the negative effects of job demands and help to achieve work goals but may also stimulate personal growth, learning and development – and positive state of work engagement” (Hakanen, Perhoniemi & Toppinen-Tanner, 2008, p. 79). Bakker, Hakanen, Demerouti and Xanthopoulou (2007b) add to this definition by indicating that these aspects of the job reduce job demands together with the accompanying physiological and psychological cost, assist in the achievement of work goals and stimulate personal growth, learning and ultimately development. Resources are therefore required to deal with job demands. These resources may be found at various levels of the organisation (salary and career opportunities), where work is organised (role clarity and participation in decision making), the task (performance feedback and task variety) and interpersonal and social relations (supervisor and co-worker support). It has also been found that job resources are indeed cause for work engagement (Jackson, Rothmann, Van de Vijver, 2006). Other job resources such as job control, supervisor support, access to information and an effective organisational climate were positively linked to work engagement.

Personality and work engagement have not received much attention but it is thought that work engagement could be linked to personality. A study by Mostert and Rothmann (2006) indicated that two personality traits, emotional stability and low conscientiousness contributed to burnout (the antithesis of work engagement). The study found that people who are emotionally stable are able to face stressful situations and thus score higher on well-being and engagement. It was also reported that traits such as emotional stability, conscientiousness and extroversion promoted a tendency towards work engagement.

The role of background variables such as age, race and gender also seem to contribute to work engagement (Mostert & Rothmann, 2006). Significant differences between age
groups relating to work engagement, have been found. Younger police members experienced lower levels of engagement than older individuals. Gender differences also impact on work engagement, with women having less access to resources to protect themselves from the effects of stress. Race also seems to impact on the effect of work engagement, with black people reporting lower levels of well-being and engagement than white people.

Demerouti, Bakker, Nachreiner and Schaufeli (2001) developed the Job demand-resources (JDR) model and confirmed that job demands (physical demands, time pressure and shift work) are associated with exhaustion (disengagement), whereas job resources (feedback, participation in decision making and supervisory support) are associated with engagement. Schaufeli and Bakker (2002), extended the JDR model to include engagement in a model known as the comprehensive burnout and engagement model (COBE). This model was confirmed, with job demands being associated with exhaustion while job resources were linked with work engagement. Bakker, Demerouti, Hakanen, and Xanthopoulou (2007a) and Bakker and Demerouti (2008) add to the resources approach by indicating that social support from colleagues and supervisors, performance feedback and autonomy increase the chance of increased work engagement.

Hakanen, et al. (2008) provide evidence of job resources being a precursor to work engagement. They indicate that having control over the job and experiencing organisation-based self-esteem are among the best predictors of the dimensions of work engagement, namely vigour, dedication and absorption. Task resources (time and method control) use efficacy to predict work engagement.

Job resources as described by Llorens, Salanova, Bakker and Schaufeli (2007) can be linked to the Job Characteristics Theory (JCT) that every job has potential motivational elements inherent in the job linked to five core characteristics, namely skill variety, task identity, task significance, autonomy and feedback. These resources are in turn linked to positive outcomes such as work performance, job satisfaction and low absenteeism (Saks, 2006). These resources are identified by those objects, personal characteristics
and energies valued by the individual. As explained previously, control over the job and feelings of efficacy are then considered to be resources and employees tend to conserve these resources because this gives them control in the workplace. Bakker, Demerouti and Schaufeli (2005) determined that job resources (performance feedback, social support from colleagues and supervisory coaching) are among the main predictors of work engagement. This study looks to transformational leadership as a possible impetus for high levels of work engagement. All the items mentioned in the core characteristics and job resources may be controlled by leaders in the organisation, which may then lead to motivational drives in followers resulting in high or more pronounced work engagement.

3.3.2 The mismatch between the individual and the working environment

To determine possible causes or precursors for work engagement may require a further look at burnout. Maslach and Leiter (2008) explain the mismatch between the individual and the working environment. This is significant for this study because leadership is an inherent part of the work environment and many of these elements can be influenced by leadership behaviour. These six domains of the workplace are work overload, control, rewards, community, fairness and values.

(1) Work overload occurs when the job demands exceed the ability of the person to cope with the content. People have too much work and too little time to do it.

(2) Not having control over one’s work occurs when organisations have rigid policies and procedures with focused monitoring. The individual is then prevented from actually controlling what he or she does.

(3) Rewards are perceived as insufficient for the work being done. These rewards may be external (salary and benefits) or internal (pride in doing something well).

(4) Community breakdown occurs when there is a loss of community between the people in the organisation. Continuous and destructive conflict between people is usually the main cause.
(5) When the system is perceived as unfair because of a lack of proper procedures relating to fairness, fairness becomes an issue that may lead to unhappy and unproductive people in an organisation.

(6) Values are mismatched when personal and organisational values are diametrically opposed to each other.

When there is a gap, or in this case, a mismatch between the person and the job, a fertile area exists for the likelihood of burnout. Conversely the greater the match between the person and the job the greater the chances are for work engagement.

Much research has been conducted on determining the causes of or precursors to burnout, with work engagement starting to emerge as the opposite of burnout. Most of the research on engagement has been focused on the individual’s ability to deal with the workplace by researching factors such as sense of coherence, levels of self-efficacy, locus of control, optimism and satisfaction with life (Rothmann, 2003). Corrective or wellness interventions focus on relieving stressors in the workplace by redesigning jobs, developing flexible work schedules and setting goals, developing participative management, increasing social support and team building. These are all functions that a transformational leader could and should perform to develop direct reports or followers. Followers are not removed from all the stressors of the workplace, thus affording the opportunity to influence people and groups. This study is therefore focused on researching the possible relationship between leadership and work engagement.

3.4 RESEARCH CONDUCTED ON WORK ENGAGEMENT

Researchers such as Schaufeli and Bakker (2003) were not altogether satisfied with the use of the Maslach burnout inventory (MBI) as being the only instrument that could measure this new construct, aptly termed “work engagement” since work engagement was identified on the MBI as being the opposite or antithesis of burnout. They then decided that measuring two different constructs with one instrument was not entirely satisfactory and subsequently developed the Utrecht Work Engagement Scale (UWES).
The development of the dimensions of vigour, dedication and absorption were seen as opposites to exhaustion and cynicism (González-Romá, Schaufeli, Bakker & Lloret, 2006). Work engagement is thus characterised by high levels of energy and a strong identification with the workplace and the work done. Since the introduction of the UWES in 1999, a number of validity studies have been completed using the UWES.

González-Romá et al. (2006) obtained results that seemed to support the approach that the conceptual opposite of burnout is work engagement. The findings indicated that burnout and engagement dimensions can be seen as opposites along a distinct bipolar dimension referred to as energy and identification.

Validity studies have indicated that the three aspects of burnout, as measured by the MBI, are negatively related to the three aspects of work engagement. What was different in the studies was that the pattern of the relationship differed from what was expected. Vigour and exhaustion were not as strongly related as expected, whereas professional efficacy was most strongly related to all three aspects of engagement Schaufeli et al. (2002b). This result was also obtained by Demerouti, Bakker, Janssen and Schaufeli (2001) (cited in Schaufeli & Bakker, 2003) using discriminant analysis. In this study, the three engagement scales (vigour, dedication and absorption) plus lack of professional efficacy loaded on one discriminant factor.

A two-sample confirmatory factor analytic approach was conducted by Schaufeli, et al. (2002b) to study the factorial structure of the UWES to measure work engagement. The factor analysis confirmed the three-factor structure of engagement (vigour, dedication and absorption) with correlations of $r>0.60$ in both samples.

Sonnentag (2003) showed that the level of work engagement is positively associated with the extent to which employees recovered from the trials and challenges of the previous working day. Adding to this is the work of Schaufeli et al. (2002b), which determined that work engagement is not a momentary and specific state, but a more persistent and pervasive affective cognitive state that is not focused on any specific object, event, individual or behaviour. Linked to this is the understanding that work engagement is generally affected by personal characteristics, the workplace (Kahn,
1990), and the characteristics of the work, including job status and job demands (Mauno, Kinnunen & Ruokolainen, 2007).

Basikin (2007) applied the UWES to teachers and obtained satisfactory reliability data of alpha = 0.91 overall, with alphas = 0.76, 0.83 and 0.79 respectively for vigour, dedication and absorption scales. Naudé and Rothmann (2004) validated the UWES in a sample of medical technicians in the Gauteng Province of South Africa to determine the construct equivalence and bias for different language groups. Naudé and Rothmann’s (2004) research is significant for this study because language is a significant variable when applying research instruments in the South African context. They found that a two-factor model of work engagement, namely vigour/dedication and absorption was identified and that the exploratory factor analysis confirmed the construct equivalence of the work engagement construct for white and black employees. Naudé and Rothmann’s (2004) research found no evidence of either uniform or nonuniform bias for the items on the UWES. This also confirms the findings of Storm and Rothmann (2003) who reported no uniform or nonuniform bias in a sample of South African Police.

It is interesting to note is that the results of the study by Naudé and Rothmann (2004) pointed to a two-factor structure, namely vigour/dedication and absorption, with the internal consistency scale for absorption not being entirely acceptable. This raises the question whether work engagement is primarily characterised by vigour (high energy at work) and dedication (strong identification with work). It is thus possible that absorption has a more limited role to play in the measurement of work engagement. For the purposes of this study, all three dimensions of the UWES, namely vigour, absorption and dedication were measured.

Schaufeli et al. (2006) added to the development of the UWES with further insights into the development of the UWES to measure work engagement. They confirmed the factorial validity of the UWES in 27 different studies, and confirmed the three-scale scores as having sound internal consistency and test-retest reliability. It was also ascertained that the test could be used to study positive organisational behaviour. A
further study on university students from Spain also confirmed the validity and reliability of the UWES (Schaufeli et al., 2002a).

Hallberg and Schaufeli (2006) determined that the internal consistency of another variant of the UWES (Swedish) was satisfactory but that the dimensionality was somewhat unclear.

Work engagement as a construct appears to have psychometric properties that are sufficient for research purposes. These include the following:

• The three subscales of vigour, dedication and absorption are internally consistent and stable over time.

• The three-factor structure of the UWES is confirmed.

• Engagement as measured by means of the UWES is negatively related to burnout.

• The relationship between engagement and age is weak.

• Men show slightly higher engagement scores than women. Although this is statistically significant, the differences are negligible.

• Small differences in occupational groups exist, but again the statistical difference is negligible (Schaufeli & Bakker, 2003).
3.5 INTEGRATION

According to Howell and Costley, (2006, p. 4), “Leadership is a process used by an individual to influence group members toward the achievement of group goals in which the group members view the influence as legitimate”. Work engagement is a “positive, fulfilling, work related state of mind, characterised by vigour, dedication and absorption” (Langelaan, Bakker, Van Doornen & Schaufeli, 2006, p. 522).

These two definitions of the constructs serve to illustrate the approach in this study, where an attempt was made to determine whether there is a relationship between the constructs. The focus of the discussion in the literature review was to emphasise the influence of leadership and work engagement on the individual in the workplace. Chapter 2 and 3 centred around this discussion.

Chapter 2 focused on leadership as a construct and described the development of leadership from early times to the more current approach of transformational leadership. The approach adopted in the chapter was to develop a leadership framework of how leadership influences the motivation and development of followers, specifically in the transformational leadership environment.

Work engagement as a relatively new concept relating to the way employees engage in the workplace, focuses on the three dimensions of vigour, dedication and absorption. Work engagement was initially developed as a direct result of being viewed as the antithesis of burnout. Work engagement also developed from work emanating from research into positive psychology that has developed in the recent past. Research has shown that work engagement results from job resources that include, the concept of job feedback, coaching and supervisory support. Throughout this chapter, work engagement is posited as a construct that is positive, focused on efficacy, leads to valued pay-offs in the workplace and is a general indicator of organisational well-being.

The SA Army has at its core its leadership development programmes encountered at all levels of the organisation. By implication, one may surmise that if the organisation develops transformational leaders at all levels of the organisation, then a possible
outcome could be higher levels of work engagement. To this end, the constructs were discussed to provide insight into the outcomes of leadership and the possible causes of work engagement.

Transformational leadership focuses on developing the follower, providing motivation and inspiration, challenging the intellect and being a role model with well-defined values and morals. By applying this approach, leaders in an organisation probably have an impact on followers that result in people developing, thinking, having hope and being able to identify with their leader. These outcomes of leadership in all probability result in employees who are enthusiastic about the workplace, exhibit behaviours conducive to productivity and are generally more engaged at work. With work engagement hypothesised as being the opposite of burnout it stands to reason that positive, supportive and caring leadership would constitute the elements of job resources that have been shown to lead to higher levels of work engagement possibly resulting in enthusiasm, commitment and job satisfaction.

Leadership is a complex phenomenon influenced by many variables such as the leader’s personality, the situation and the relationship with the follower. Hence to make a statement such as “leadership is the direct cause for work engagement” would be foolish. At best the two constructs (leadership and work engagement) as discussed, provide some insight into the outcomes and inputs of each, which in turn allows one a glimpse into the possibility that work engagement may be influenced by a leader exhibiting a positive influence in the guise of effective and active transformational leadership.

In both chapters there was no indication of a direct link between the constructs because no studies have been found to provide any clues to a possible link between leadership influence and work engagement. At best, inferences can be made that transformational leadership should result in work engagement, based on the descriptions and outcomes of each construct as discussed. Thus, the aim of this study was therefore to investigate the possible relationship between transformational leadership, as practiced by SA Army Officers, and the work engagement levels of their subordinates.
The influence of leadership on work engagement needs to be validated, researched and investigated to determine whether there is in fact a possible relationship between these constructs.

3.6 COMMENT

In concluding the literature review, the theoretical aims as formulated in Section 1.3.2.1 have been met, namely

• to conceptualise the construct of work engagement from a theoretical perspective

• to conceptualise a theoretical relationship between transformational leadership and work engagement

3.7 CHAPTER SUMMARY

In this chapter, work engagement as an essential part of the workplace was discussed. In the discussion, burnout was explained in order to provide a starting point for the development of the construct. The development of work engagement as a separate construct from burnout, led to the development of instruments that could measure work engagement, namely the UWES. The validity and reliability of the dimensions included in the instrument were provided to ensure that these dimensions (vigour, dedication and absorption) could be applied in this study. Possible causes were discussed to provide a framework that could provide links to transformational leadership and thus a relationship between transformational leadership and work engagement. The chapter concluded with an integration of the literature review for the research. The empirical study is introduced and presented in chapter 4.
CHAPTER 4

THE EMPIRICAL STUDY

This chapter starts with the empirical study. The research procedure, population and sample are explained. Measures for the dependent and independent variables are discussed and the steps in data gathering and the processing thereof presented.

4.1 AIM OF THE EMPIRICAL STUDY

As indicated in section 1.3.2 the aim of the empirical study was to determine a possible relationship between the transformational leadership behaviours of officers in the SA Army and their followers’ levels of work engagement.

4.2 POPULATION AND SAMPLE

The research for this study was conducted in the SA Army of the South African National Defence Force (SANDF). The SA Army is the largest service in the SANDF and is currently undergoing major changes to its force design on the basis of future projections in the African battle space. SA Army units are located throughout the country. All of these units fall under the command of various formations, which are located in Pretoria. Each unit is basically structured with more or less the same configuration in an extremely hierarchical arrangement. Each unit has, among others, a commanding officer, a second-in-command and a regimental sergeant major. Depending on the type and task of each unit, it has three companies, each with its own controlling staff consisting of officers and noncommissioned officers. The bulk or remainder of the unit thus comprises troops.

Owing to the size of the organisation, it was not practical or possible to access the whole SA Army for this study. The sample was based on a probability simple random sample (Terre Blanche & Durrheim, 2002), which consisted of a list of all the various formations in the SA Army. Three formations were randomly chosen for the survey after ensuring that all each had an equal chance of being selected. The selected formations were the Armour, Artillery and Air Defence Artillery. Time and expense limited the
sample selection to these three formations. All the available officers in each of the various formations (taking into account operational deployments) were encouraged to participate in the study, and were included in the sample on the basis of the list of names provided by the formations. The followers (both uniformed members and civilians) of each officer were identified according to the reporting relationship to the officer and were included in the study, subject to their availability. The size of the organisation prohibited a more structured sampling methodology and application.

All the participants were chosen from the various units involved in the study, and in most cases consisted of most of the members who were currently available in the unit. The participants were grouped in a specified venue conducive to completing the questionnaires.

Participants were briefed about the aim and purpose of the study, and the confidentiality guidelines. Each participant signed a consent form before completing the MLQ (Form 5X) and the UWES-17.

The research process was immensely simplified by the appointment of a liaison officer, by each of the formations, who assisted the researcher by ensuring that the sample was present and willing to complete the questionnaires.

The sample size for this research study consisted of n=311 members. However, the sample size fluctuated because of incomplete completion of the applied measures. The rate of return was 100 per cent owing the nature of the organisation and the controlled way in which the data were collected from the sample.

4.3 THE MEASUREMENT OF THE BIOGRAPHICAL INFORMATION

The researcher collected the following biographical information for the sample:

- age
- race
- gender
• years of service

• rank

The biographical data collected from the sample provided information on the composition of the sample and the means to analyse the data. A complete breakdown of the biographical data is presented in chapter 5.

4.4 THE INDEPENDENT (PREDICTOR) VARIABLE MEASURE

The measuring instrument used for the independent variable was the Multifactor Leadership Questionnaire (MLQ) (Form 5X) (Bass & Avolio, 1997)

4.4.1 The description and aim of the instrument

The MLQ (Form 5X) is a leadership questionnaire aimed at measuring leadership, specifically transactional and transformational leadership. The MLQ (Form 5X) consists of 45 items that identify and measure key leadership and effectiveness behaviours (Bass & Avolio, 1997). Table 4.1 below provides an overview of the total factor structure per leadership component as indicated on the MLQ (Form 5X). Indicated next to each of the factors are abbreviations that will be used in chapter 5 in the discussion of the results.
TABLE 4.1: MLQ (FORM 5X) FACTOR STRUCTURE (adapted from Bass & Avolio, 1997)

<table>
<thead>
<tr>
<th>SCALE</th>
<th>NUMBER OF ITEMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transformational leadership</td>
<td></td>
</tr>
<tr>
<td>Idealised influence (attributed) (IIA)</td>
<td>4</td>
</tr>
<tr>
<td>Idealised influence (behaviour) (IIB)</td>
<td>4</td>
</tr>
<tr>
<td>Inspirational motivation (IM)</td>
<td>4</td>
</tr>
<tr>
<td>Intellectual stimulation (IS)</td>
<td>4</td>
</tr>
<tr>
<td>Individualised consideration (IC)</td>
<td>4</td>
</tr>
<tr>
<td>Transactional leadership</td>
<td></td>
</tr>
<tr>
<td>Constructive transaction (CT)</td>
<td>4</td>
</tr>
<tr>
<td>Corrective transactions</td>
<td></td>
</tr>
<tr>
<td>Management by exception (active) (MBE-A)</td>
<td>4</td>
</tr>
<tr>
<td>Management by exception (passive) (MBE-P)</td>
<td>4</td>
</tr>
<tr>
<td>Nontransactional leadership</td>
<td></td>
</tr>
<tr>
<td>Laissez-faire (LF)</td>
<td>4</td>
</tr>
<tr>
<td>Outcome factors</td>
<td></td>
</tr>
<tr>
<td>Satisfaction with the leader (SAT)</td>
<td>2</td>
</tr>
<tr>
<td>Individual, group and organisational effectiveness (EFF)</td>
<td>4</td>
</tr>
<tr>
<td>Extra effort by associates (EE)</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>45</td>
</tr>
</tbody>
</table>

In the above table each of the nine leadership components identified with specific leadership styles is measured by four intercorrelated items that are as low in correlation...
as possible with the items of the other eight components. According to Bass and Avolio (1997), this instrument has been used to measure leadership all over the world in various contexts and settings. The instrument makes extensive use of reports in a 360 degree approach to provide an accurate picture of leadership behaviour. The form has been used by males and females to rate male and female leaders across all ages and culture groups. Of significance is the fact that the MLQ (Form 5X) is equally effective when supervisors, colleagues, peers or followers rate the leader. Moreover, the way raters are contacted and selected impacts on the MLQ (Form 5X), so care should be taken to ensure that the raters are identified by an independent authority. This study made extensive use of this approach to minimise variations in the rating of the leader.

The MLQ (Form 5X) has undergone numerous improvements and revisions and items have been edited for clarity over time. It contains thirty-six leadership items and nine outcome items as indicated in Table 4.1.

Bass and Avolio (1997) provide the following overview of the various factors that relate to the MLQ (Form 5X).

4.4.1.1 Transformational leadership factors

Factors 1 and 2: idealised influence – attributes and behaviours. These factors are generally defined with respect to reaction to the leader and the leader’s behaviour. People want to identify with the leader. A sample attributional item would be: “The leader reassures others that obstacles will be overcome.” A sample behavioural item would be: “The leader emphasises the importance of having a collective sense of mission.”

Factor 3: inspirational motivation. This factor may or may not overlap with idealised influence. This leader provides symbols and metaphors and appeals to the emotion to create awareness of goals. A sample item would be: “The leader articulates a compelling vision of the future.”
Factor 4: intellectual stimulation. This is used to challenge old ways and assumptions of how things should be done and accomplished. A sample item would be: “The leader gets other to look at problems from many different angles.”

Factor 5: individualised consideration. Followers are treated differently but with equal consideration of their developmental needs to provide learning opportunities. A sample item would be: “The leader spends time teaching and coaching.”

4.1.0.0 Transactional leadership factors

Factor 6: constructive transaction. This interaction between the leader and the follower stresses the exchange, such as providing appropriate rewards for accomplishing certain agreed-upon goals. A sample item would be: “The leader makes clear what one can expect to receive when performance goals are achieved.”

Factor 7: management by exception (active and passive). The active version of this behaviour is a leader who actively monitors to ensure mistakes are not made and allows the status quo to exist without being addressed. The passive leader only intervenes when something goes wrong. A sample active item would be: “The leader directs attention toward failure to meet standards.” A sample passive item would be: “The leader takes no action until complaints are received.”

4.4.1.2 The nonleadership factor

Factor 9: laissez-faire. This factor indicates the absence of leadership and the avoidance of intervention. There are normally no agreements or transactions with followers. A sample item would be: “The leader avoids getting involved when important issues arise.”

4.4.1.3 Outcomes

Extra Effort. This reflects the extent to which followers exert effort beyond the ordinary as a consequence of the leadership. A sample item would be: “The leader heightens other’s desire to succeed.”
Effectiveness. This is reflected in the following four areas: meeting the job-related needs of followers; representing the needs of followers to higher-level leaders; contributing to organisational effectiveness; and performance by the leader’s workgroup. A sample item would be: “The leader is effective in meeting organisational requirements.”

Satisfaction. This relates to how satisfied followers are with the leader’s style and method, and how satisfied they generally are with the leader. A sample item would be: “The leader uses methods of leadership that are satisfying.”

4.4.1.4 Norms of the MLQ (Form 5X)

The norms for the MLQ (Form 5X), as determined by Bass and Avolio (1999), are provided in table 4.2. The scoring of the MLQ (Form 5X) is based on observed frequency of behaviour on a scale ranging from 0 to 4. All the transformational factors are seen to be effective when scoring results in a >3 value.

The norms are an indication of how effective and active the various leadership behaviours are. If the leader is rated as having a score of >3 on inspirational motivation then this would be interpreted as demonstrating an effective style of leadership. If the leader was scoring >3 on management-by-exception active, this would then be considered not effective as the outcomes of this style would have a negative effect on the followers. The ideal score for this style would, according to the norm table 4.2, have to be <1.5 to be truly effective.
### TABLE 4.2: NORM TABLE FOR THE MLQ (FORM 5X) (N=2080) (adapted from Bass & Avolio, 1999)

<table>
<thead>
<tr>
<th>Description</th>
<th>Key Descriptors</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Idealised influence (attributes)</td>
<td>Proud</td>
<td>&gt;3</td>
</tr>
<tr>
<td></td>
<td>Faith</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Respect</td>
<td></td>
</tr>
<tr>
<td>Idealise influence (behaviour)</td>
<td>Sense of mission</td>
<td>&gt;3</td>
</tr>
<tr>
<td></td>
<td>Trust</td>
<td></td>
</tr>
<tr>
<td>Inspirational motivation</td>
<td>Sets high standards</td>
<td>&gt;3</td>
</tr>
<tr>
<td></td>
<td>Present vision</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Communicates high expectations</td>
<td></td>
</tr>
<tr>
<td>Intellectual stimulation</td>
<td>Challenges assumptions</td>
<td>&gt;3</td>
</tr>
<tr>
<td>Individualised consideration</td>
<td>Personal Attention</td>
<td>&gt;3</td>
</tr>
<tr>
<td></td>
<td>Learning Opportunities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Treat as individual</td>
<td></td>
</tr>
<tr>
<td>Constructive transaction</td>
<td>Sets agreements</td>
<td>&gt;2</td>
</tr>
<tr>
<td>Management by exception active</td>
<td>Attention to failures</td>
<td>&lt;1.5</td>
</tr>
<tr>
<td></td>
<td>Focus on mistakes</td>
<td></td>
</tr>
<tr>
<td>Management by exception passive</td>
<td>Avoids change</td>
<td>&lt;1</td>
</tr>
<tr>
<td></td>
<td>Waits for mistakes to occur</td>
<td></td>
</tr>
<tr>
<td>Laissez-faire</td>
<td>Avoids, absent, indifferent</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Extra effort</td>
<td>No norm provided</td>
<td></td>
</tr>
<tr>
<td>Effectiveness</td>
<td>No norm provided</td>
<td></td>
</tr>
<tr>
<td>Satisfaction</td>
<td>No norm provided</td>
<td></td>
</tr>
</tbody>
</table>

#### 4.4.2 Instrument administration

The MLQ (Form 5X) is a paper-and-pencil questionnaire comprising of 45 items that are answered using a five-point scale for rating the frequency of observed leader behaviour and ranges from 0 (not at all) to 4 (frequently if not always) (Bass & Avolio, 1997).

The MLQ (Form 5X) was distributed to each participant and explained in terms of the scale to be used. Emphasis was placed on the focus of the study, namely that the rater should rate his or her direct leader who, in this study was a SA Army officer. The instrument took between 20 to 30 minutes to complete. The raters recorded their
observations on an answer sheet included with the questionnaire. On completion of the questionnaires each was numbered and stored for processing.

4.4.3 The reliability and validity of the instrument

The MLQ (Form 5X) was introduced in 1991 for research and further development. Table 4.3 below refers to the means, standard deviation, coefficient alpha reliability coefficients and standard errors of measurement for the MLQ (Form 5X), based on nine research studies in which \( n = 2,080 \). These cases provided a validation set of samples. As indicated in Table 4.3 the Spearman Brown estimated reliability formula yielded a range of 0.81 through to 0.96 (Bass & Avolio, 1997).
### Table 4.3: Means, Standard Deviation (SD), Reliabilities (a), and Standard Errors of Measurement for Ratings Completed by 2080 Associates (MLQ Form 5X) (adapted from Bass & Avolio, 1997)

<table>
<thead>
<tr>
<th>Factor</th>
<th>Mean</th>
<th>SD</th>
<th>Spearman-Brown Estimated Reliability</th>
<th>SEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attributed charisma (AC)</td>
<td>2.56</td>
<td>0.90</td>
<td>0.90</td>
<td>0.37</td>
</tr>
<tr>
<td>Idealised influence (II)</td>
<td>2.64</td>
<td>0.91</td>
<td>0.91</td>
<td>0.39</td>
</tr>
<tr>
<td>Inspirational motivation (IM)</td>
<td>2.64</td>
<td>0.94</td>
<td>0.94</td>
<td>0.42</td>
</tr>
<tr>
<td>Intellectual stimulation (IS)</td>
<td>2.51</td>
<td>0.93</td>
<td>0.93</td>
<td>0.37</td>
</tr>
<tr>
<td>Individualised consideration (IC)</td>
<td>2.66</td>
<td>0.93</td>
<td>0.93</td>
<td>0.26</td>
</tr>
<tr>
<td>Contingent reward (CR)</td>
<td>2.20</td>
<td>0.91</td>
<td>0.91</td>
<td>0.33</td>
</tr>
<tr>
<td>Management by exception active (MBE-A)</td>
<td>1.75</td>
<td>0.81</td>
<td>0.81</td>
<td>0.48</td>
</tr>
<tr>
<td>Management by exception passive (MBE-P)</td>
<td>1.11</td>
<td>0.87</td>
<td>0.87</td>
<td>0.42</td>
</tr>
<tr>
<td>Laissez-faire (LF)</td>
<td>0.89</td>
<td>0.88</td>
<td>0.88</td>
<td>0.41</td>
</tr>
<tr>
<td>Extra effort (EE)</td>
<td>2.60</td>
<td>0.94</td>
<td>0.94</td>
<td>0.30</td>
</tr>
<tr>
<td>Effectiveness (EFF)</td>
<td>2.62</td>
<td>0.94</td>
<td>0.94</td>
<td>0.30</td>
</tr>
<tr>
<td>Satisfaction (SAT)</td>
<td>2.57</td>
<td>0.96</td>
<td>0.96</td>
<td>0.24</td>
</tr>
</tbody>
</table>

Table 4.4 below provides data of test-retest reliabilities for the rater and self-rating forms. The results are somewhat lower than those indicated in Table 4.3 but this could be because the leaders interpreted items about themselves with respect to multiple followers, while multiple followers rated a single leader. Owing to lower internal consistencies, self-ratings are not suggested for research purposes (Bass & Avolio, 1997).
TABLE 4.4: SIX-MONTH TEST-RETEST RELIABILITIES FOR RATER AND SELF-RATING FORMS (adapted from Bass & Avolio, 1997)

<table>
<thead>
<tr>
<th>Leadership factor</th>
<th>Reliability</th>
<th>Rater form</th>
<th>Self-rating form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Idealised influence (II)</td>
<td></td>
<td>0.79</td>
<td>0.60</td>
</tr>
<tr>
<td>Inspirational motivation (IM)</td>
<td></td>
<td>0.66</td>
<td>0.45</td>
</tr>
<tr>
<td>Intellectual stimulation (IS)</td>
<td></td>
<td>0.66</td>
<td>0.61</td>
</tr>
<tr>
<td>Individualised consideration (IC)</td>
<td></td>
<td>0.77</td>
<td>0.70</td>
</tr>
<tr>
<td>Contingent reward (CR)</td>
<td></td>
<td>0.53</td>
<td>0.44</td>
</tr>
<tr>
<td>Management by exception (MBE)</td>
<td></td>
<td>0.61</td>
<td>0.74</td>
</tr>
<tr>
<td>Laissez-faire (LF)</td>
<td></td>
<td>0.82</td>
<td>0.73</td>
</tr>
<tr>
<td>Extra effort (EE)</td>
<td></td>
<td>0.62</td>
<td>0.44</td>
</tr>
<tr>
<td>Effectiveness (EFF)</td>
<td></td>
<td>0.73</td>
<td>0.56</td>
</tr>
<tr>
<td>Satisfaction (SAT)</td>
<td></td>
<td>0.85</td>
<td>0.59</td>
</tr>
</tbody>
</table>

Further indications of leadership measurement are the context or sector in which the leadership behaviour was observed and then rated. Bass and Avolio (1997) state that they have found that indications of charismatic leadership (idealised influence) were observed more among combat officers than in combat support services. Each of the items can be measured in a specific context. Management by exception will be elevated in firms in which the cost of errors is high, for example, in the financial sector.

The MLQ (Form 5X) has been translated into 18 different languages and its application in different businesses, health, military and educations environments has resulted in more similarities than differences.

Confirmatory factor analysis was used on the MLQ (Form 5X) because there is more than 10 years of research with the MLQ (Form 5X) and this methodology is a more rigorous test of the underlying factor structure. Reliabilities for each leadership factor
and outcome scale ranged from 0.74 to 0.94 in the validation sample and 0.73 to 0.93 in the cross-validation sample. Intercorrelations between the five transformational scales were generally high and positive and averaged out at 0.83 (Bass & Avolio, 1997).

**TABLE 4.5: COMPARISON OF OVERALL FIT MEASURES BETWEEN SEVERAL FACTOR MODELS** (adapted from Bass & Avolio, 1997)

<table>
<thead>
<tr>
<th>Model</th>
<th>One-factor model</th>
<th>Two-factor model</th>
<th>Three-factor model</th>
<th>Five-Factor model</th>
<th>Nine-factor model (full model)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-square/df</td>
<td>5674/594</td>
<td>5260/593</td>
<td>3529/591</td>
<td>3341/584</td>
<td>2394/558</td>
</tr>
<tr>
<td>GFI</td>
<td>0.75</td>
<td>0.77</td>
<td>0.86</td>
<td>0.86</td>
<td>0.91</td>
</tr>
<tr>
<td>AGFI</td>
<td>0.72</td>
<td>0.74</td>
<td>0.84</td>
<td>0.84</td>
<td>0.89</td>
</tr>
<tr>
<td>RMSR</td>
<td>0.07</td>
<td>0.08</td>
<td>0.05</td>
<td>0.06</td>
<td>0.04</td>
</tr>
</tbody>
</table>

Table 4.5 shows the comparison of various measures of fit as well as the Chi-square test results in the various factor models. It is evident that all the measures improved with the progression of the models. Howell (1999, p.373) explains the goodness-of-fit index as one “where there is a good fit between the data (observed frequencies) and the theory (expected frequencies)”. The goodness-of-fit Index of 0.91 for the full model exceeded the 0.90 criterion cut-off as recommended in the literature. All the indicators shown in Table 4.5 on each of the constructs were significant, which is indicative of the internal consistency being satisfactory (Bass & Avolio, 1997).

Carless (1998) further tested the proposition that transformational leadership can be defined by distinct constructs which include charisma, intellectual stimulation and individualised consideration. The findings indicated that transformational leadership can be viewed as a single factor and not three separate factors because the correlations are highly correlated. In this study, however, Bass and Avolio’s (1997) findings were
deemed to provide sufficient justification for the use of the instrument for research purposes.

4.4.4 Justification for the selection of the instrument

The MLQ (Form 5X) as an instrument has been used in a variety of research situations to study nontransactional, transactional and transformational leadership styles. The instrument contains three other factors, namely effectiveness and satisfaction with the leader and extra effort (Bass & Avolio, 1997).

The instrument was subjected to intense scrutiny by its designers in that confirmatory factor analysis was applied, resulting in the selection of 45 items used in the MLQ (Form 5X). By accessing a wider range of leadership behaviour, there is a greater chance of tapping into leadership behaviour and styles that are demonstrated across organisations, contexts and cultures (Avolio, Bass & Jung, 1999).

Owing to its validity and reliability, this instrument has been widely used in the SA Army to measure and assess leadership development. It is in this context that this instrument was selected for this study.

4.5 DEPENDENT (CRITERION) VARIABLE MEASURE (UWES-17)

The measuring instrument used for the dependent variable was the UWES-17 as developed by Schaufeli and Bakker (2003).

4.5.1 Description and aim of the instrument

The instrument was developed by Schaufeli and Bakker (2003) as a direct result of the need to measure outcomes that initially seemed to be the direct opposites of burnout. Included in this development was the need to adhere to new developments in psychology, namely “positive psychology” which focuses on the study of human strength and optimal functioning. Whereas burnt-out people are exhausted and cynical, engaged people are vigorous and enthusiastic about their work. The initial measure of engagement was viewed as the positive antithesis of burnout, but the developers of the UWES-17 determined that engagement can be operationalised in its own right (Naudé
& Rothmann, 2004). The UWES-17 that was subsequently developed distinguishes three specific dimensions, namely vigour, absorption and dedication and is scored on a seven-point frequency scale, ranging from 0 (never) to 6 (every day) (Schaufeli & Bakker, 2003).

4.5.1.1 Vigour

Vigour is assessed by six items that refer to high levels of energy and resilience, the willingness to make the effort, avoiding fatigue and demonstrating persistence when faced with difficulties. The items include the following: At work, I feel bursting with energy; At my job I feel strong and vigorous; When I get up in the morning, I feel like going to work; I can continue working for very long periods at a time; At my job, I am resilient, mentally. The measure indicates that those who score high on vigour display energy, zest and stamina (Schaufeli & Bakker, 2003).

4.5.1.2 Dedication

Dedication is assessed by five items relating to gaining significance in the workplace and feeling enthusiastic, proud and inspired. The items include the following: I find the work that I do full of meaning and purpose; I am enthusiastic about my job; My job inspires me; I am proud of the work that I do; To me, my job is challenging. Those respondents who score high on dedication experience strong feelings of identification with the work because it is meaningful, inspiring and challenging. Those who score low on this dimension experience the opposite of challenging, meaningful and inspiring (Schaufeli & Bakker, 2003).

4.5.1.3 Absorption

Absorption is measured by six items relating to an individual being happily immersed in the work and finding it difficult to detach so that time seems to fly by and everything around is forgotten. The items include the following: Time flies when I am working; When I am working, I forget everything else around me; I feel happy when I am working intensely; I am immersed in my work; I get carried away when I am working; It is difficult
to detach myself from my job. Those who score high on absorption are engaged, committed and immersed and time seems to pass rapidly (Schaufeli & Bakker, 2003).

4.5.1.4 Norms for the UWES-17

Table 4.6 provides the norms for the UWES-17. The categories are classified from very low to very high, and are also provided for each of the factors. For example, the very high engagement scores for dedication would be $\geq 5.80$.

**TABLE 4.6: NORM SCORES FOR THE UWES-17 (N=2,313) (adapted from Schaufeli & Bakker, 2003)**

<table>
<thead>
<tr>
<th>Categories</th>
<th>Vigour</th>
<th>Dedication</th>
<th>Absorption</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Low</td>
<td>$\leq 2.17$</td>
<td>$\leq 1.60$</td>
<td>$\leq 1.60$</td>
<td>$\leq 1.93$</td>
</tr>
<tr>
<td>Low</td>
<td>2.18 - 3.20</td>
<td>1.61 – 3.00</td>
<td>1.61 – 2.75</td>
<td>1.94 – 3.06</td>
</tr>
<tr>
<td>Average</td>
<td>3.21 – 4.80</td>
<td>3.01 – 4.90</td>
<td>2.76 – 4.40</td>
<td>3.07 – 4.66</td>
</tr>
<tr>
<td>High</td>
<td>4.81 – 5.60</td>
<td>4.91 – 5.79</td>
<td>4.41 – 5.35</td>
<td>4.67 - 5.53</td>
</tr>
<tr>
<td>Very High</td>
<td>$\geq 5.61$</td>
<td>$\geq 5.80$</td>
<td>$\geq 5.36$</td>
<td>$\geq 5.54$</td>
</tr>
<tr>
<td>M</td>
<td>3.99</td>
<td>3.81</td>
<td>3.56</td>
<td>3.82</td>
</tr>
<tr>
<td>SD</td>
<td>1.08</td>
<td>1.31</td>
<td>1.10</td>
<td>1.10</td>
</tr>
<tr>
<td>SE</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>Range</td>
<td>0.00 – 6.00</td>
<td>0.00 – 6.00</td>
<td>0.00 – 6.00</td>
<td>0.00 – 6.00</td>
</tr>
</tbody>
</table>

4.5.2 Instrument administration

For the purposes of this research, the instrument was administered in a paper-and-pencil format. Each member was given a copy of the instrument and asked to complete the survey. Each participant was requested to provide his or her biographical details in the first part of the survey. No time limit was set for the completion of the survey. Once they had been completed, the surveys were numbered and checked for completeness.
4.5.3 The reliability and validity of the instrument

Factorial analysis of the UWES-17 indicated that the three-factor structure, as initially hypothesised, was superior to the one-factor model (Schaufeli & Bakker, 2003). However, research completed on the UWES-17 by Naudé and Rothmann (2004) pointed to a two-factor structure, namely vigour/dedication and absorption, with the internal consistency scale for absorption not being entirely acceptable. This raises the question whether work engagement is primarily characterised by vigour (high energy at work) and dedication (strong identification with work). It is thus possible that absorption has a more limited role to play in the measurement of work engagement.

Intercorrelations seem to indicate the three-dimensional structure and the fact that the factors are closely related. Correlations usually exceed 0.65.

The internal consistencies of the three scales contained in the UWES-17 are acceptable. In all instances, the Cronbach alpha is equal to or exceeds the value of 0.70 (Cronbach, 1951). The usual range for Cronbach alpha, range between 0.80 and 0.90 (Schaufeli & Bakker, 2003). Table 4.7 provides details of the internal consistencies for the UWES-17 used in the study. The median (Md) and range are also indicated.

**TABLE 4.7: THE CRONBACH ALPHA FOR THE UWES-17 SCALES** (Schaufeli & Bakker, 2003)

<table>
<thead>
<tr>
<th>UWES-17 (N=2,323)</th>
<th>Cronbach Alpha</th>
<th>Md</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vigour</td>
<td>0.83</td>
<td>0.86</td>
<td>0.81 – 0.90</td>
</tr>
<tr>
<td>Dedication</td>
<td>0.92</td>
<td>0.92</td>
<td>0.88 – 0.95</td>
</tr>
<tr>
<td>Absorption</td>
<td>0.82</td>
<td>0.80</td>
<td>0.70 – 0.88</td>
</tr>
</tbody>
</table>

Various validity studies have been conducted in an attempt to determine the possible causes and consequences of work engagement. Work engagement has been researched in terms of burnout, workaholism, consequences of work engagement,
causes, as a mediator in the motivation process and as a collective phenomenon. The validity studies have indicated that work engagement is negatively related to burnout, and can also be discriminated from workaholism. Of particular importance to this study was the finding that job resources acting as motivators seem to cause work engagement. Engaged employees exhibit positive attitudes to their jobs, have better mental health and seem to perform better than less engaged individuals. Engagement was also found to cross over to others, leading to collective engagement in groups. In essence, this means that employees who are engaged have a positive influence on others in the work environment (Schaufeli & Bakker, 2003).

4.5.4 Justification for the selection of the instrument

Leadership is defined as having some sort of influence over followers in various situations. This influence was contextualised in the study to be work engagement. The instrument measures what is hypothesised to be the outcome of effective and active transformational leadership. The instrument is valid and reliable and has been subjected to rigorous research. Table 4.8 indicates that the instrument has been used in South Africa (20.2% of the total sample) and also has been proven to be unbiased in its approach, which was of immense significance in the research (Naudé & Rothmann, 2004).

**TABLE 4.8: COUNTRIES INCLUDED IN THE INTERNATIONAL DATABASE** (Schaufeli & Bakker, 2003)

<table>
<thead>
<tr>
<th>Country</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>473</td>
<td>3.7</td>
</tr>
<tr>
<td>Canada</td>
<td>267</td>
<td>2.1</td>
</tr>
<tr>
<td>Finland</td>
<td>3,651</td>
<td>28.9</td>
</tr>
<tr>
<td>France</td>
<td>221</td>
<td>1.7</td>
</tr>
<tr>
<td>Germany</td>
<td>821</td>
<td>6.5</td>
</tr>
<tr>
<td>Greece</td>
<td>470</td>
<td>3.7</td>
</tr>
<tr>
<td>Norway</td>
<td>2,349</td>
<td>18.6</td>
</tr>
</tbody>
</table>
4.6 DATA-GATHERING PROCESS

In order for any research to be conducted in the SA Army, initial permission has to be obtained from the Counter Intelligence Division of the SANDF, followed by authorisation from each of the general officers commanding the various formations that have been selected for the study.

Each of the formations provided a contact officer through which all liaison took place. This ensured that the participants assembled at one venue, at each of the units, at a preset time for the research to be conducted. At each of the venues, a standard briefing was presented to the members participating in the research project. The briefing included matters such as voluntary participation, informed consent, confidentiality and the purpose and aim of the study. This was followed by a complete explanation of each of the instruments, namely the MLQ (Form 5X) and the UWES-17. The participants then completed the questionnaires and returned them to the researcher.

4.7 DATA PROCESSING

The collected data were processed by transferring them to Microsoft Excel spreadsheets. Descriptive statistics were conducted to describe the data collected (Keller & Warrack, 2000). The data were further processed by means of statistical analysis to test the research hypothesis and the possible relationships between the research variables. The research package SPSS (SPSS ver 15.0.0, 2006) was used to process the data in this study (Bryman & Cramer, 1997). To provide more detail on the statistical analysis a further exposition is provided below.
4.7.1 Descriptive statistics

The purpose of descriptive statistics is to arrange, summarise and present data in such a way to make the data meaningful and to extract and use the data meaningfully (Keller & Warrack, 2000).

Descriptive statistics were used in this study to report on the data gathered. Included in these statistics were the mean and standard deviations. The mean is the average of all the values in each data set. The standard deviation is an estimate of the average distance each score is from the mean (Durrheim, 2002).

4.7.2 Data correlations

The correlation coefficient (r) represents the strength of the correlation between two variables by means of a number ranging from -1 to +1. $r = 1$ indicates a perfect positive relationship, while $r = -1$ indicates a perfect negative correlation. A strong correlation coefficient would be $r = .90$, while a weak correlation would be $r = .20$. A strong correlation between two variables means that they are related but not necessarily that one variable influences the other. Other variables could explain the phenomenon equally well (Durrheim, 2002). Even though there are many kinds of correlation coefficients, the most common measurement of correlation is the Pearson’s product-moment correlation which was used to determine the correlations between the many variables used in this study (Kachigan, 1991).

The SPSS package used to process the data made use of Wilks’s lambda which is a test statistic used in a multivariate analysis of variance (MANOVA). This is used to test whether there are differences between the means of identified groups of subjects on a combination of dependent variables. In the multivariate setting, this test performs the same role as the F-test in a one-way analysis of variance (ANOVA) (Bartlett, Simonite, Westcott & Taylor, 2000). Kachigan (1991) refers to multivariate statistical analysis as a methodology or statistical analysis concerned with the simultaneous investigation or two or more variable characteristics measured over a set of objectives.
The process applied in this study relates to discriminant analysis in which the objective was to find the optimal combination of variable that would best predict or discriminate subjects of different group membership (Bernstein, 1988; Tredoux & Pretorius, 2002). Discriminante analysis provides insight into which variables are related to the criterion variable and also predicts values on the criterion variable, when the predictor variables are provided (Kagichan, 1991).

4.7.3 Statistical significance

In order to test for significance, it is necessary to report both the effect size and the statistical ($p$) value. The significance test includes the size of the effect being multiplied by the size of the study. The larger the size of the total number of observations ($N$), then the larger the value of the significance test ($t$, $F$, $x^2$) will be and hence the smaller the $p$ value. A correlation is said to be significant at $p \leq 0.05$ levels, where it is being reported that the probability of error is 5 out of 100 or 5% (Rosenthal & Rosnow, 2008).

It is imperative to note that errors of accepting or rejecting the null hypothesis were considered in this research. Research tends to accept that when $p \leq 0.05$, then acceptable levels of significance have been achieved. Care should be taken not to make Type I (risk of false $H_0$ rejection) or Type II (risk of false $H_0$ acceptance) errors. To reduce the risk of these errors, the size of the study should be considered when determining significance (Rosenthal & Rosnow, 2008).

For this study $p$-values of $p \leq 0.05$ and $\leq 0.01$ were emphasised and presented as being statistically significant (Kachigan, 1991).

4.8 RESEARCH HYPOTHESIS

A research hypothesis was formulated as part of the study indicating a possible relationship between transformational leadership and work engagement. The following hypothesis was set:
Hypothesis: There is a relationship between the transformational leadership style of officers and their followers’ high levels of work engagement.

4.9 COMMENT

In concluding this chapter, the empirical process was described and explained together with the framework in which the empirical aims of the research, section 1.3.2, will be tested.

4.10 CHAPTER SUMMARY

This chapter focused on explaining the population and sample. The measuring instruments were discussed in the context of the dependent and independent variables. The data-gathering procedure was presented and the chapter concluded with the research hypothesis. Chapter 5 will discuss and report on the research findings.
CHAPTER 5

THE RESULTS

This chapter deals with the results of the empirical study. The results are interpreted and integrated, and the chapter concludes with a summary.

5.1 DESCRIPTIVE STATISTICS

Descriptive statistics are used to describe the collected data by investigating the distribution of scores obtained for all the variables, and then to determine whether there is any relationship between the variable scores. The aim is to obtain a picture of the data collected during the research (Durrheim, 2002). Descriptive statistics were obtained for the sample and the dependent (criterion) and independent (predictor) variables.

5.1.1 Biographical information

Table 5.1 provides the results of the age of the sample.

**TABLE 5.1: AGE OF SAMPLE (N=311)**

<table>
<thead>
<tr>
<th>Age</th>
<th>Count</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-25</td>
<td>58</td>
<td>18.7</td>
</tr>
<tr>
<td>26-44</td>
<td>229</td>
<td>73.9</td>
</tr>
<tr>
<td>45-64</td>
<td>23</td>
<td>7.4</td>
</tr>
</tbody>
</table>

The age variable, as indicated in table 5.1 shows that 18.7% of the sample were between the ages of 18 and 25, 73.9% between the ages 26 and 44 and 7.4% between the ages of 45 and 64. One participant did not complete this part of the biographical questionnaire.
Table 5.2 provides information on the gender and race of the sample.

**TABLE 5.2: GENDER AND RACE OF SAMPLE (N=311)**

<table>
<thead>
<tr>
<th>Gender/race</th>
<th>Count</th>
<th>Gender %</th>
<th>Count</th>
<th>Race %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>247</td>
<td>80.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>61</td>
<td>19.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>55</td>
<td>17.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>African</td>
<td>199</td>
<td>64.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indian</td>
<td>2</td>
<td>0.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coloured</td>
<td>53</td>
<td>17.2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The sample presented in table 5.2 indicates that 80.2% of the sample were males and 19.8% females. All the race groups were represented in the sample with 17.8% White, 64.4% African, 0.6% Indian and 17.2% Coloured. The race sample provides a close approximation to the racial makeup of South Africa’s population. Three members did not indicate their gender and two members did not indicate their race in the biographical questionnaire.

Table 5.3 provides data on the years of service linked to the sample group.

**TABLE 5.3: YEARS OF SERVICE (N=311)**

<table>
<thead>
<tr>
<th>Years of service</th>
<th>Count</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 5</td>
<td>59</td>
<td>19.2</td>
</tr>
<tr>
<td>6-10</td>
<td>96</td>
<td>31.2</td>
</tr>
<tr>
<td>11-15</td>
<td>96</td>
<td>31.2</td>
</tr>
<tr>
<td>16-25</td>
<td>41</td>
<td>13.3</td>
</tr>
<tr>
<td>&gt;25</td>
<td>16</td>
<td>5.2</td>
</tr>
</tbody>
</table>

Years of service as indicated in table 5.3 show that 19.2% had been with the organisation for less than five years, while 31.2% had served for 6 to 10 and 11 to 15 years respectively. Of the sample, 13.3% had served between 16 to 25 years, with 5.2% having served more than 25 years. Three participants did not complete this part of the biographical questionnaire.
Table 5.4 provides a breakdown of the various rank levels participating in the research.

**TABLE 5.4: RANK LEVELS (N=311)**

<table>
<thead>
<tr>
<th>Rank levels</th>
<th>Count</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>27</td>
<td>8.8</td>
</tr>
<tr>
<td>Junior NCO</td>
<td>64</td>
<td>20.8</td>
</tr>
<tr>
<td>Senior NCO</td>
<td>60</td>
<td>19.5</td>
</tr>
<tr>
<td>Junior officer</td>
<td>109</td>
<td>35.5</td>
</tr>
<tr>
<td>Senior officer</td>
<td>47</td>
<td>15.3</td>
</tr>
</tbody>
</table>

Ranks levels, as indicated in table 5.4, ranged from privates to senior officers with 8.8% comprising privates, 20.8% junior NCOs (Non Commissioned Officers), 19.5% senior NCOs, 35.5% junior officers and 15.3% senior officers. The rank levels are an indication of the diverse nature of the group, in terms of rank, comprising the followers who rated their leaders. Four members did not indicate their rank in the biographical questionnaire.

It was necessary for this study to obtain as diverse a sample as possible in terms of units accessed for the research. Table 5.5 is an indication of the various units and the size of participation included in the study. The differences were caused by the availability of people to participate in the study. It was not the aim of this study to differentiate between the various units but to use the sample as a whole for the study.

**TABLE 5.5: PARTICIPATING UNITS (N=311)**

<table>
<thead>
<tr>
<th>Units</th>
<th>Count</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Defence Artillery Formation Headquarters</td>
<td>23</td>
<td>7.4</td>
</tr>
<tr>
<td>School of Armour</td>
<td>71</td>
<td>22.8</td>
</tr>
<tr>
<td>School of Artillery</td>
<td>41</td>
<td>13.2</td>
</tr>
<tr>
<td>Mobilisation Regiment</td>
<td>11</td>
<td>3.5</td>
</tr>
<tr>
<td>4 Artillery Regiment</td>
<td>96</td>
<td>30.9</td>
</tr>
<tr>
<td>SA Army College</td>
<td>17</td>
<td>5.5</td>
</tr>
<tr>
<td>Air Defence Artillery School</td>
<td>52</td>
<td>16.7</td>
</tr>
</tbody>
</table>
5.1.2 Sampling adequacy

According to Hair, Anderson, Tatham, and Black (1998), a sampling adequacy of 0.6 and higher as determined by means of the Kaiser-Meyer-Olkin measure, is required for acceptability. Table 5.6 is an indication of the sampling adequacy of the MLQ (Form 5X) and it is clear that the data set for the MLQ (Form 5X) complied with the requirements of sampling adequacy, because adequacy is reported at 0.948.

**TABLE 5.6: SAMPLING ADEQUACY LEADERSHIP MLQ (FORM 5X)**

<table>
<thead>
<tr>
<th>KMO and Bartlett’s Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaiser-Meyer-Olkin measure of sampling adequacy</td>
</tr>
<tr>
<td>Bartlett’s test of sphericity</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Table 5.7 indicates the sampling adequacy of the UWES-17 at 0.931. It is clear that the data set for the UWES-17 complied with the requirements of sampling adequacy.

**TABLE 5.7: SAMPLING ADEQUACY WORK ENGAGEMENT (UWES-17)**

<table>
<thead>
<tr>
<th>KMO and Bartlett’s test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaiser-Meyer-Olkin measure of sampling adequacy</td>
</tr>
<tr>
<td>Bartlett's test of sphericity</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
5.1.3 Descriptive statistics for the independent (predictor) variable (MLQ [Form 5X])

Descriptive statistics were calculated for the independent variable (MLQ (Form 5X) by means of the SPSS statistical package. The aim was to determine the statistical properties of the instrument applied in the study to fulfil the function of the independent variable.

**TABLE 5.8: MEANS, STANDARD DEVIATION, MINIMUM AND MAXIMUM FOR THE MLQ (Form 5X) (N=311)**

<table>
<thead>
<tr>
<th>Leadership dimension</th>
<th>Mean</th>
<th>SD</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Idealised influence (attributes)</td>
<td>2.4</td>
<td>0.98</td>
<td>0.00</td>
<td>4.0</td>
</tr>
<tr>
<td>Idealise influence (behaviour)</td>
<td>2.4</td>
<td>0.84</td>
<td>0.25</td>
<td>4.0</td>
</tr>
<tr>
<td>Inspirational motivation</td>
<td>2.5</td>
<td>0.89</td>
<td>0.00</td>
<td>4.0</td>
</tr>
<tr>
<td>Intellectual stimulation</td>
<td>2.3</td>
<td>0.88</td>
<td>0.00</td>
<td>4.0</td>
</tr>
<tr>
<td>Individualised consideration</td>
<td>2.0</td>
<td>0.96</td>
<td>0.00</td>
<td>4.0</td>
</tr>
<tr>
<td>Constructive transaction</td>
<td>2.4</td>
<td>0.94</td>
<td>0.00</td>
<td>4.0</td>
</tr>
<tr>
<td>Management by exception active</td>
<td>2.0</td>
<td>0.87</td>
<td>0.00</td>
<td>4.0</td>
</tr>
<tr>
<td>Management by exception passive</td>
<td>1.5</td>
<td>0.83</td>
<td>0.00</td>
<td>3.5</td>
</tr>
<tr>
<td>Laissez-faire</td>
<td>1.2</td>
<td>0.94</td>
<td>0.00</td>
<td>4.0</td>
</tr>
<tr>
<td>Extra effort</td>
<td>2.3</td>
<td>1.07</td>
<td>0.00</td>
<td>4.0</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>2.3</td>
<td>1.09</td>
<td>0.00</td>
<td>4.0</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>2.5</td>
<td>1.11</td>
<td>0.00</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Table 5.8 describes the mean, standard deviation and minimum and maximum scores for the sample of followers when rating their officer leaders, using the MLQ (Form 5X). The MLQ (Form 5X) measures eight factors as indicated under the leadership dimension of the table. The scores for each of the dimensions are indicative of the followers’ perception of their leaders’ leadership style.

Scores obtained on the MLQ (Form 5X) are based on a frequency of occurrence ranging from a low of 0 to a high of 4. Activity levels should be high for all factors except management by exception and Laissez-faire leadership.
Table 4.2 in chapter 4 provides the norms for the MLQ (Form 5X), based on a normative sample of n=2080, which indicates that for transformational leaders to be effective and active, the frequency scores should be >3.0. For constructive transaction, scores should be >2.0 while for MBE A/P, scores should be <1.5. Finally for Laissez-faire, the scores should be <1 (Bass & Avolio, 1997). It is interesting to observe (table 5.8) that the scores obtained for transformational leadership were all <3.0, with a standard deviation between 0.84 and 0.98, which indicates that the frequency of leadership behaviour falls in the “sometimes” category, as indicated on the scale applied in the MLQ (Form 5X).

The MLQ (Form 5X) also measures outcomes of leadership, that is extra effort (EE) (2.3), effectiveness (EFF) (2.3) and satisfaction (SAT) (2.5) with the leader. The scores show that <3 indicates that followers observe or experience these factors sometimes to fairly often. Highly positive outcomes as measured by EFF, SAT and EE reflect highly favourable transformational leadership ratings, somewhat lower ratings reflect constructive transaction and MBE-A ratings, while lower outcomes reflect MBE-P outcomes. Finally, very low outcomes should reflect Laissez-faire ratings (Bass & Avolio, 1997).

Individualised consideration, 2.0, scored the least of the transformational items. This factor focuses on the individual and his or her professional development in the workplace and the low outcome of the item is possibly indicative of a lack of consideration for the follower by the leader. A lack of consideration for the follower by the leader may have a negative influence on the followers’ work engagement.

5.1.4 Descriptive statistics for the dependent (criterion) variable (UWES-17)

Descriptive statistics were calculated for the dependent variable (UWES-17) used in this study, using the SPSS statistical package to determine the statistical properties of the UWES-17.
The UWES-17 measures the three factors of vigour, dedication and absorption. Table 5.9 provides the means, standard deviation and the minimum and maximum for each of the factors. The scale is from 0 to 6 and mean scores of 4.17 for vigour and 4.34 for dedication seem to indicate that average levels of engagement were possibly experienced by the followers participating in the study. Although absorption (3.84) scored somewhat lower, it still falls in the average category of the norm scores for the UWES-17, when considering the norms of this instrument, as indicated in table 4.6 in chapter 4.

5.1.5 The Cronbach alpha for the independent (predictor) variable MLQ (FORM 5X)

Table 5.10 provides Cronbach alpha reliability coefficients for each of the factors contained in the MLQ (Form 5X) as calculated from the collected sample data. All of the subscales comprising the various items in the MLQ (Form 5X) were included in the study. The scores indicate that 8 out of the twelve cronbach alpha scores obtained from the sample are 0.83.
It is interesting to note that the correlation coefficients as presented in table 5.10, indicate a very strong relationship because the scores range from 0.83 to 0.90. Bass and Avolio (1997) found, in their research, that the reliability coefficients for the MLQ rater form yielded a range of 0.81 through 0.96. Comparing Bass and Avolio’s (1997) findings, the results in table 5.10 seem to confirm their research. According to Cronbach (1951), a score of 0.83 means that 83% of the variance in the item is because of the common factor in the MLQ (Form 5X) and this high score is desirable in this test. A study conducted by Mester, Visser, Roodt and Kellerman (2003) using the MLQ 5(X) also returned reliability scores ranging from 0.54 to 0.86, which seems to confirm the reliabilities of this study. In this study the only scale that did not correlate strongly was management by exception passive (0.54).

### 5.1.6 The Cronbach alpha for the dependent (criterion) variable (UWES-17)

Table 5.11 provides Cronbach alpha reliability coefficients for each of the factors contained in the UWES-17, calculated from the collected sample data. All of the subscales comprising the various items in the UWES-17 were included in the study.

<table>
<thead>
<tr>
<th>MLQ Items</th>
<th>Cronbach alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influence attributes</td>
<td>0.82</td>
</tr>
<tr>
<td>Influence behaviour</td>
<td>0.83</td>
</tr>
<tr>
<td>Inspirational motivation</td>
<td>0.83</td>
</tr>
<tr>
<td>Intellectual stimulation</td>
<td>0.83</td>
</tr>
<tr>
<td>Individualised consideration</td>
<td>0.83</td>
</tr>
<tr>
<td>Constructive transaction</td>
<td>0.83</td>
</tr>
<tr>
<td>Management by exception active</td>
<td>0.86</td>
</tr>
<tr>
<td>Management by exception passive</td>
<td>0.89</td>
</tr>
<tr>
<td>Laissez-faire</td>
<td>0.90</td>
</tr>
<tr>
<td>Extra effort</td>
<td>0.83</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>0.83</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>0.83</td>
</tr>
</tbody>
</table>
TABLE 5.11: CRONBACH ALPHA FOR THE UWES-17 (N-311)

<table>
<thead>
<tr>
<th>UWES Scales</th>
<th>Cronbach alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vigour</td>
<td>0.80</td>
</tr>
<tr>
<td>Dedication</td>
<td>0.85</td>
</tr>
<tr>
<td>Absorption</td>
<td>0.90</td>
</tr>
</tbody>
</table>

The correlation coefficients for the three scales as indicated in table 5.11, are similar to the findings of Schaufeli and Bakker (2003), in which the Cronbach alpha for the UWES-17 scale ranged from 0.82 to 0.93. The alpha coefficients in table 5.11 range from 0.80 to 0.90 and were therefore in line with the research conducted by Schaufeli and Bakker (2003). In a study by Storm and Rothmann (2003), the internal consistency of the scales was found to range from 0.78 to 0.89, which seems to indicate acceptable reliability.

5.2 MULTIVARIATE CORRELATION ANALYSIS

Multivariate correlations are relevant when more than two variables are involved. In this study, the criterion (dependent) variable was the UWES-17 and the predictor (independent) variable, the MLQ (Form 5X). Correlations were done on the research data, which included correlations between each of the factors in the MLQ (Form 5X) and the UWES-17 to determine the covariance of the constructs being measured. What follows are outcomes of this analysis. In order to analyse and interpret the data collected in this study p values of p=<0.01 and p=<0.05 were considered to be significant, as indicated by Rosenthal and Rosnow (2008). The test statistic for significance used in this calculation was Wilks’s lambda, which tests whether there are differences between the means of the identified groups or subjects. It is a direct measure of the proportion of variance in the combination of dependent variables that is unaccounted for by the independent variable (Bartlett et al., 2000).
5.2.1 Intercorrelations

According to Kachigan (1991), it is important to assess the possible association, if any, between variables. The general approach is to determine whether above-average values on one variable tend to be associated with below-average values on another. In a correlational relationship, the researcher has no control over the values of the variables possessed by the objects being studied. The focus is to merely observe the covariance of the variables in a natural surrounding. This relationship may be positive or negative, depending on the data, it may be unrelated or uncorrelated.

The main measure of the degree of association is known as the Pearson product moment correlation coefficient and is designated with by the letter $r$ which in turn is an estimate of the population correlation coefficient designated by the Greek letter $\rho$, rho (Rosenthal & Rosnow, 2008).

The correlation coefficient $r$ may range in value from -1.00 to +1.00, where $r=+1.00$ signifies a perfect positive linear correlation relationship. The converse is also true, where $r=-1.00$, a perfect negative linear correlation relationship exists. Where $r = 0$, no relationship exists between the variables (Kachigan, 1991).

Of significance for this study was the amount of covariance between the independent and dependent variables. Covariance is the degree to which a variation in one variable can be attributed to a variance in another. This means that the greater the degree of overlap, the greater will be the degree to which values on the two variables covary. The square of the correlation coefficient $r^2$, indicates the proportion of variance in one of the variables accounted for (Kachigan, 1991).

5.2.1.1 Intercorrelations for the biographical data and the independent (predictor) variable MLQ (Form 5X)

The intercorrelations between the biographical data and the factors in the MLQ (Form 5X) were presented to explain possible correlations. The results are provided in table 5.12.
TABLE 5.12: INTERCORRELATIONS BETWEEN THE BIOGRAPHICAL VARIABLES AND THE MLQ (FORM 5X) (N-311)

<table>
<thead>
<tr>
<th></th>
<th>IIA</th>
<th>IIB</th>
<th>IM</th>
<th>IS</th>
<th>IC</th>
<th>CT</th>
<th>MBE-A</th>
<th>MBE-P</th>
<th>LF</th>
<th>EE</th>
<th>EFF</th>
<th>SAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>0.04</td>
<td>0.00</td>
<td>0.07</td>
<td>0.00</td>
<td>0.08</td>
<td>0.013</td>
<td>0.00</td>
<td>-0.06</td>
<td>0.06</td>
<td>0.01</td>
<td>0.01</td>
<td>0.05</td>
</tr>
<tr>
<td>Gender</td>
<td>-0.06</td>
<td>-0.01</td>
<td>-0.01</td>
<td>0.01</td>
<td>-0.03</td>
<td>-0.018</td>
<td>0.00</td>
<td>-0.04</td>
<td>-0.08</td>
<td>-0.01</td>
<td>-0.03</td>
<td>-0.03</td>
</tr>
<tr>
<td>Years of service</td>
<td>0.06</td>
<td>0.06</td>
<td>0.11</td>
<td>0.05</td>
<td>0.13(*)</td>
<td>0.06</td>
<td>0.034</td>
<td>-0.04</td>
<td>0.03</td>
<td>0.05</td>
<td>0.05</td>
<td>0.08</td>
</tr>
<tr>
<td>Rank</td>
<td>0.06</td>
<td>0.06</td>
<td>0.07</td>
<td>0.04</td>
<td>0.13(*)</td>
<td>0.09</td>
<td>-0.069</td>
<td>-0.04</td>
<td>-0.03</td>
<td>0.06</td>
<td>0.02</td>
<td>0.03</td>
</tr>
<tr>
<td>Race</td>
<td>0.09</td>
<td>0.11(*)</td>
<td>0.04</td>
<td>0.09</td>
<td>0.13(*)</td>
<td>0.10</td>
<td>0.081</td>
<td>-0.09</td>
<td>0.01</td>
<td>0.11(*)</td>
<td>0.11(*)</td>
<td>0.03</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2 tailed): p <=0.01.
* Correlation is significant at the 0.05 level (2 tailed): p <=0.05.

Table 5.12 indicates that individualised consideration (IC) correlated significantly (p<=0.05) with years of service, r=0.13, rank, r=0.13 and race, r=0.13, while only idealised influence behaviour correlated with race r=0.11.

Another interesting finding was that age and gender had no reported significant correlation with the scales of the MLQ (Form 5X). Race, however, had a weak correlation with extra effort r=0.11 and effectiveness r=0.11 (p<=0.05).

The data show that biographical variables had a limited effect on the construct, transformational leadership, as measured by the MLQ (Form 5X). The observation that the biographical variables had a weak correlation on the MLQ (Form 5X) could mean that these elements in the leadership measure did not demonstrate a significant influence on the independent variable.

5.2.1.2 Intercorrelations between the biographical data and the dependent (criterion) variable UWES-17

The intercorrelations between the biographical data and the factors in the UWES-17 were presented to describe possible correlations. The results are provided in table 5.13.
TABLE 5.13: INTERCORRELATIONS BETWEEN THE BIOGRAPHICAL DATA AND THE UWES-17 (N=311)

<table>
<thead>
<tr>
<th></th>
<th>Vigour</th>
<th>Dedication</th>
<th>Absorption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>0.25(**)</td>
<td>0.20(**)</td>
<td>0.21(**)</td>
</tr>
<tr>
<td>Gender</td>
<td>-0.13(*)</td>
<td>-0.12(*)</td>
<td>-0.00</td>
</tr>
<tr>
<td>Years of service</td>
<td>0.27(**)</td>
<td>0.25(**)</td>
<td>0.27(**)</td>
</tr>
<tr>
<td>Rank</td>
<td>0.16(**)</td>
<td>0.12(*)</td>
<td>0.23(**)</td>
</tr>
<tr>
<td>Race</td>
<td>0.01</td>
<td>0.04</td>
<td>0.02</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2 tailed): p <=0.01.
* Correlation is significant at the 0.05 level (2 tailed): p <=0.05.

The intercorrelations between the biographical data and the factors as contained in the UWES-17 (table 5.13) indicate that vigour correlated significantly (p<=0.01) with age r=0.25, years of service r=0.27, and rank r=0.16. A negative significant correlation between vigour and gender r=-0.13 was also observed.

The intercorrelations between the biographical data and the factors as contained in the UWES-17 (table 5.13) indicate that dedication correlated significantly (p<=0.01) with age r=0.20 and years of service r=0.25, while gender r=-0.12 indicates a significant negative correlation. Rank r=0.12 correlated significantly with dedication.

The intercorrelations between the biographical data and the factors as contained in the UWES-17 (table 5.13) indicate that absorption correlated significantly (p<=0.01) with age r=0.21, years of service r=0.27 and rank r=0.23.

There appears to be significant influences of the biographical variables on the outcomes of the UWES-17, and these biographical variables appear to play a more significant role than was originally envisaged.

5.2.1.3 Intercorrelations of the Independent (predictor) variable MLQ (Form 5X)

The intercorrelations between the factors as measured on the MLQ (Form 5X) are provided in table 5.14.
Table 5.14: Intercorrelations for the MLQ (Form 5X) (N=311)

<table>
<thead>
<tr>
<th></th>
<th>IIA</th>
<th>IIB</th>
<th>IM</th>
<th>IS</th>
<th>IC</th>
<th>CT</th>
<th>MBE-A</th>
<th>MBE-P</th>
<th>LF</th>
<th>EE</th>
<th>EFF</th>
<th>SAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>IIA</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IIB</td>
<td>0.76(**)</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>IM</td>
<td>0.78(**)</td>
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<tr>
<td>IS</td>
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<td>0.71(**)</td>
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<tr>
<td>IC</td>
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<td>0.68(**)</td>
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<tr>
<td>CT</td>
<td>0.78(**)</td>
<td>0.75(**)</td>
<td>0.76(**)</td>
<td>0.77(**)</td>
<td>0.68(**)</td>
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<tr>
<td>MBE-A</td>
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<td>0.14(*)</td>
<td>0.23(**)</td>
<td>0.18</td>
<td>0.16</td>
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<tr>
<td>MBE-P</td>
<td>-0.32(**)</td>
<td>-0.24(**)</td>
<td>-0.25(**)</td>
<td>-0.34(**)</td>
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<tr>
<td>LF</td>
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<td>-0.38(**)</td>
<td>-0.42(**)</td>
<td>-0.45(**)</td>
<td>-0.30(**)</td>
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<td>0.20(**)</td>
<td>0.61(**)</td>
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<tr>
<td>EE</td>
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<td>0.73(**)</td>
<td>0.74(**)</td>
<td>0.71(**)</td>
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<tr>
<td>EFF</td>
<td>0.76(**)</td>
<td>0.66(**)</td>
<td>0.72(**)</td>
<td>0.73(**)</td>
<td>0.64(**)</td>
<td>0.77(**)</td>
<td>0.08</td>
<td>-0.35(**)</td>
<td>-0.48(**)</td>
<td>0.82(**)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>SAT</td>
<td>0.76(**)</td>
<td>0.64(**)</td>
<td>0.70(**)</td>
<td>0.70(**)</td>
<td>0.63(**)</td>
<td>0.74(**)</td>
<td>0.09</td>
<td>-0.35(**)</td>
<td>-0.47(**)</td>
<td>0.81(**)</td>
<td>0.86(**)</td>
<td>1</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2 tailed): *p* <= 0.01
* Correlation is significant at the 0.05 level (2 tailed): *p* <= 0.05

Each of the transformational factors, namely idealised influence attributed (IIA) and idealised influence behaviour (IIB), inspirational motivation (IM), intellectual stimulation (IS), and individualised consideration (IC) correlated significantly with each other, ranging from a minimum of *r*=0.67 (*p*=<0.01) to a maximum of *r*=0.79 (*p*=<0.01), which confirms the correlation research findings proposed by Bass and Avolio (1997). The outcomes of leadership as indicated by extra effort (EE), effectiveness (EFF) and satisfaction (SAT) also indicated statistically significant correlations with the transformational aspects of the instrument. An example of this significant correlation is evident when looking at the IM and EE correlation.

Of interest here is the complete lack of a significant correlation between management by exception active (MBE-A) and IC and CT. This could be ascribed to the fact that MBE-A, by its very nature is a checking and fault-finding style of leadership, while IC focuses on developing the follower and CT on setting standards to be achieved in a more collaborative environment (Bass & Avolio, 1997). The two styles are thus opposed and are antithesis in the transformational leadership approach.
The positive correlations between the transactional and transformational leadership scales are to be expected since both styles of leadership represent active and constructive forms of leadership, and effective leaders also demonstrate varying amounts of both transformational and transactional leadership (Avolio et al.1999).

5.2.1.4 Intercorrelations of the dependent (criterion) variable (UWES-17)

Table 5.15 depicts the result of the correlation analysis conducted on the UWES-17.

| TABLE 5.15: INTERCORRELATIONS OF THE DEPENDENT VARIABLE (UWES-17) (N=311) |
|-----------------|-----------------|-----------------|
|                  | Vigour           | Dedication      | Absorption      |
| Vigour           | 1               |                 |                 |
| Dedication       | 0.82(***        | 1               |                 |
| Absorption       | 0.74(***        | 0.68(***        | 1               |

** Correlation is significant at the 0.01 level (2 tailed): p <=0.01.
* Correlation is significant at the 0.05 level (2 tailed): p <=0.05.

Dedication and vigour had a significant correlation at r=0.82 (p=<0.01), while absorption and vigour correlated significantly at r=0.74 (p=<0.01) levels. Dedication and absorption also showed a significant correlation at 0.68 (p=<0.01). These significant correlation results are indicative of previous research conducted on the UWES-17 by Schaufeli and Bakker (2003), where correlations between the three factors usually exceed r=0.65.

5.2.1.5 Intercorrelations between the independent and the dependent variable

The results of the intercorrelation analysis as depicted in table 5.16 provide an interesting insight into the possible relationships between the various scales as measured by the MLQ (Form 5X) and the UWES-17.

Table 5.16 is a multivariate correlation of the averages for each of the dimensions of the UWES-17, namely vigour, dedication, absorption, and the MLQ (Form 5X) namely idealised influence attributed (IIA), idealised influence behaviour (IIB), inspirational motivation (IM), intellectual stimulation (IS), constructive transaction (CT), management by exception active (MBE-A), management by exception passive (MBE-P) and laissez-
faire (LF). Also included in table 5.16 are the outcome leadership scales of extra effort (EE), effectiveness (EFF) and satisfaction (SAT).
### TABLE 5.16: INTERCORRELATIONS FOR THE DIMENSIONS OF THE MLQ (FORM 5X) AND UWES-17 (N=311)

<table>
<thead>
<tr>
<th></th>
<th>Vigour</th>
<th>Dedication</th>
<th>Absorption</th>
<th>IIA</th>
<th>IIB</th>
<th>IM</th>
<th>IS</th>
<th>IC</th>
<th>CT</th>
<th>MBE-A</th>
<th>MBE-P</th>
<th>LF</th>
<th>EE</th>
<th>EFF</th>
<th>SAT</th>
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</thead>
<tbody>
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<td>Vigour</td>
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<tr>
<td>Dedication</td>
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<tr>
<td>Absorption</td>
<td>0.74(**)</td>
<td>0.68(**)</td>
<td>1</td>
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<tr>
<td>II A</td>
<td>0.32(**)</td>
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<td>0.27(**)</td>
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<tr>
<td>II B</td>
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<td>0.28(**)</td>
<td>0.27(**)</td>
<td>0.76(**)</td>
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</tr>
<tr>
<td>IM</td>
<td>0.28(**)</td>
<td>0.32(**)</td>
<td>0.26(**)</td>
<td>0.78(**)</td>
<td>0.75(**)</td>
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<tr>
<td>IS</td>
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<td>0.29(**)</td>
<td>0.25(**)</td>
<td>0.79(**)</td>
<td>0.73(**)</td>
<td>0.71(**)</td>
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<tr>
<td>IC</td>
<td>0.22(**)</td>
<td>0.26(**)</td>
<td>0.31(**)</td>
<td>0.75(**)</td>
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<tr>
<td>CT</td>
<td>0.26(**)</td>
<td>0.34(**)</td>
<td>0.25(**)</td>
<td>0.78(**)</td>
<td>0.75(**)</td>
<td>0.76(**)</td>
<td>0.77(**)</td>
<td>0.68(**)</td>
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<tr>
<td>MBE – A</td>
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<td>0.05</td>
<td>0.05</td>
<td>0.19(**)</td>
<td>0.24(**)</td>
<td>0.14(*)</td>
<td>0.23(**)</td>
<td>0.18</td>
<td>0.16</td>
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<tr>
<td>MBE – P</td>
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<td>-0.09</td>
<td>-0.05</td>
<td>-0.32(**)</td>
<td>-0.24(**)</td>
<td>-0.25(**)</td>
<td>-0.34(**)</td>
<td>-0.20(*)</td>
<td>-0.32(**)</td>
<td>0.28(**)</td>
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</tr>
<tr>
<td>LF</td>
<td>-0.12(*)</td>
<td>-0.17(**)</td>
<td>-0.13(*)</td>
<td>-0.45(**)</td>
<td>-0.38(**)</td>
<td>-0.42(**)</td>
<td>-0.45(**)</td>
<td>-0.30(**)</td>
<td>-0.48(**)</td>
<td>0.20(**)</td>
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<tr>
<td>EE</td>
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<td>0.38(**)</td>
<td>0.30(**)</td>
<td>0.79(**)</td>
<td>0.67(**)</td>
<td>0.73(**)</td>
<td>0.74(**)</td>
<td>0.71(**)</td>
<td>0.74(**)</td>
<td>0.17</td>
<td>-0.31(**)</td>
<td>-0.42(**)</td>
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<tr>
<td>EFF</td>
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<td>0.21(**)</td>
<td>0.76(**)</td>
<td>0.66(**)</td>
<td>0.72(**)</td>
<td>0.73(**)</td>
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<td>0.77(**)</td>
<td>0.08</td>
<td>-0.35(**)</td>
<td>-0.48(**)</td>
<td>0.82(**)</td>
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<tr>
<td>SAT</td>
<td>0.28(**)</td>
<td>0.31(**)</td>
<td>0.23(**)</td>
<td>0.76(**)</td>
<td>0.64(**)</td>
<td>0.70(**)</td>
<td>0.70(**)</td>
<td>0.63(**)</td>
<td>0.74(**)</td>
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<td>-0.47(**)</td>
<td>0.81(**)</td>
<td>0.86(**)</td>
<td>1</td>
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</table>

** Correlation is significant at the 0.01 level (2 tailed): p <=0.01.
* Correlation is significant at the 0.05 level (2 tailed): p <=0.05.
Vigour correlated significantly at \(p<=0.01\) with the transformational leadership styles IIA \(r=0.32\), IIB \(r=0.22\), IM \(r=0.28\), IS \(r=0.29\) and IC \(r=0.22\). When considered with transactional leadership style, vigour correlated significantly with CT \(r=0.26\), but not with MBE-A or MBE-P. There was a significant negative correlation with LF \(r=-0.12\) \((p<=0.05)\). The outcomes of leadership EE \(r=0.36\), EFF \(r=0.22\) and SAT \(r=0.28\) all correlated significantly with vigour.

Dedication correlated significantly at \(p<=0.01\) with the transformational leadership styles IIA \(r=0.36\), IIB \(r=0.28\), IM \(r=0.32\), IS \(r=0.29\) and IC \(r=0.26\). When considered with the transactional leadership style, dedication correlates significantly with CT \(r=0.34\), but not with MBE-A or MBE-P. There was a significant negative correlation with LF \(r=-0.17\) \((p<=0.05)\). The outcomes of leadership EE \(r=0.38\), EFF \(r=0.28\) and SAT \(r=0.31\) all correlated significantly with dedication.

Absorption correlated significantly at \(p<=0.01\) with the transformational leadership styles IIA \(r=0.27\), IIB \(r=0.27\), IM \(r=0.26\), IS \(r=0.25\) and IC \(r=0.31\). When considered with the transactional leadership style, absorption correlates significantly with CT \(r=0.25\), but not with MBE-A or MBE-P. There was a significant negative correlation with LF \(r=-0.13\) \((p<=0.05)\). The outcomes of leadership EE \(r=0.30\), EFF \(r=0.21\) and SAT \(r=0.23\) all correlated significantly with absorption.

**5.3 INTERPRETATION OF THE RESULTS**

The aim of this study was to determine the possible relationship that leaders (officers in the SA Army), or more specifically, transformational leaders have on their followers' level of work engagement. The study was based on the followers' perception of their leaders. The literature review provided an overview of leadership and its development over time, culminating at this point in the full range of leadership as proposed by Bass and Avolio (1997). The literature review focused on a relatively new construct termed “work engagement” coined by Schaufeli and Bakker (2002), and was conceptualised by attempting to provide insight into the outcomes of engagement, namely vigour, dedication and absorption.
In the context of this study, the dependent variable was viewed as work engagement, while the independent variable was regarded as transformational leadership. The empirical part of the study endeavoured to identify a significant correlation between the two variables by administering the MLQ (Form 5X) and the UWES-17 to a sample of followers in the SA Army.

The data were processed by means of the SPSS programme to first provide descriptive statistics of the collected data; followed by an analysis using Wilks’s lamda to determine significance and the Pearson product moment coefficient to determine r. These correlations were calculated using the data provided by the MLQ (Form 5X) and the UWES-17.

Both instruments also proved to have been sampled adequately when considering the data provided in tables 5.6 and 5.7, where the Kaiser-Meyer-Olkin measure of sampling adequacy equalled 0.95 for the MLQ (Form 5X) and 0.93 for the UWES-17.

The age of the sample (table 5.1) indicated a sample group between the ages of 18 and 64 with the majority of the sample between the ages of 26 and 44 (73.9%). The group was thus reasonably entrenched in the SA Army and possibly able to make a well-informed decision about the leadership style of the officer they were rating according to the scales in the MLQ (Form 5X). The UWES-17 was a self-rating questionnaire could also have been indicative of the significant correlations as indicated in table 5.13. The role of background variables such as age, race and gender also seem to have contributed to work engagement (Mostert & Rothmann, 2006). Significant differences between the age groups relating to work engagement, were also evident. This study, however, did not focus on the impact that age, race and gender may have had on work engagement, but did provide an overview of the sample participating in the study.

The results relating to gender indicated a majority for males (80.2%). This result is normal for the SA Army and only serves to indicate that the majority of the results were based on the opinions of males and to a lesser extent on females.
The results on years of service indicated that the majority of the sample had between six to 25 years of service, which may have been the basis for a more objective opinion of leadership and work engagement because sufficient time had passed for the participants to develop an understanding of the questions posed in the two questionnaires.

The data that may have been more relevant to the study were the level of rank of the sample. Only a tiny percentage 8.8%, were privates, with the balance all being rank-carrying members of the organisation. Members of rank have usually undergone some sort of training and development and have been exposed to leadership development at various levels of the organisation. They should also been able to formulate a coherent concept of work engagement. This result may also have added to the value of the study.

The means for the MLQ (Form 5X) (table 5.18) as collected from the sample provided interesting results. The transformational scores were all <3, which indicates a sometimes to fairly often response to the items contained in the MLQ (Form 5X) (Bass & Avolio, 1997). These somewhat low scores could be indicative of the frequency of the leadership style practised in the unit, as perceived by the followers, but are in general not so low as to be of concern for this study.

Any attempt to measure a construct as diverse as leadership is difficult. This was conceded by Bass (1985). However, the research conducted by Bass (1985) attempted to present a model of transformational and transactional leadership as being conceptually different from each other. The reliability scores as indicated in table 5.10 seem to support the notion that it is particularly difficult to differentiate between the subscales of the MLQ. Avolio et al. (1999), concede that there may have been difficulties with the initial version of the MLQ, but state that the MLQ (Form 5X) included better item wording, better discriminant validity and the incorporation of behaviours and attributes in the same scale. Hence the MLQ (Form 5X) had more than sufficient reliability and validity for the purposes of the study. However, the purpose of the study was not to validate the MLQ (Form 5X) but to use the results to
determine a possible correlation between transformational leadership and work engagement.

The intercorrelations between the biographical data and the MLQ (Form 5X) (table 5.12) seem to indicate that there was limited to no effect on the outcome of the MLQ (Form 5X).

Table 5.13 indicates that vigour, dedication and absorption correlated significantly (p<=0.01) with age, years of service, and rank. This was to be expected since people with more experience in the organisation may tend to being more engaged at work.

The intercorrelations reported in table 5.14 provide data that indicated a significant correlation (p<=0.01) between all the scales of the MLQ (Form 5X) except between management by exception active and individualised consideration, constructive transaction, extra effort, effectiveness and satisfaction.

The intercorrelations of the dependent variable (UWES-17) as reported in table 5.15 are an indication of the significant correlation between the dimensions of the UWES-17 namely vigour, dedication and absorption.

Table 5.16 provides data indicative of a significant correlation between transformational leadership and work engagement. The leadership scales that did not correlate with the scales of the UWES-17, namely vigour, dedication and absorption, were the management by exception active and passive factors which showed no correlation to work engagement, while laissez-faire correlated negatively with work engagement. This is to be expected if one considers the reaction followers of the laissez-faire style leadership generates. This stands to reason because these leadership behaviours are not conducive to the development of a relationship containing the work engagement elements required for people to display vigour, dedication and absorption. Bass and Avolio (1999) provide key descriptors for the factors contained in the MLQ (Form 5X) and for management by exception active. These include a focus on irregularities, attention to failures and making sure one knows when things are about to go wrong. For management by exception passive, the
behaviours focus on avoiding change, being satisfied with standard performance and waiting for mistakes to occur before acting

The results of the descriptive analysis for the UWES-17 (table 5.9) indicate that the results fell in the average levels of engagement, as determined by Schaufeli and Bakker (2003). The levels of engagement as measured by vigour, dedication and absorption were not as high as anticipated, but if one considers the mean of transformational leadership, which indicates “sometimes” then this is to be expected. This could be because SA Army officers did not demonstrate effective and active transformational leadership behaviours either “frequently” or even “frequently if not always”. Therefore the higher frequency of transformational leadership behaviours could well have resulted in higher engagement results for the officers’ followers.

The reliability scores of the UWES-17 (table 5.11) indicate an extremely strong positive correlation. This factor was addressed in a two sample confirmatory factor analytical approach which was conducted by Schaufeli et al. (2002) to study the factorial structure of the UWES-17 to measure work engagement. The factor analysis confirmed the three-factor structure of engagement (vigour, dedication and absorption) with correlations of r>0.60 in both samples. Basakin (2007) applied the UWES-17 to teachers, the results of which indicated good reliability data of an overall alpha = 0.91, with alphas = 0.76, 0.83 and 0.79 respectively for vigour, dedication and absorption scales.

The role of background variables such as age, race and gender were found to seemingly to contribute to work engagement (Mostert & Rothmann, 2006). This study was able to confirm this to some degree, with age correlating significantly (p<=0.01) with all the scales of work engagement, while gender showed a significant negative correlation at the (p<=0.05) level with vigour (-0.13) and dedication (-0.12).

With vigour, dedication and absorption showing a significant correlation with the scales of the MLQ (Form 5X) except for MBE-P and MBE-A (table 5.16), it is to be expected that an increase in transformational leadership behaviour could well result in a commensurate increase in work engagement, taking into account all the other
variables that could impact on the result such as age, race, gender, tenure and the work context.

The findings of this study tend to support the literature relating to the two constructs of transformational leadership and work engagement. Avolio et al. (1991), have stated that transformational leadership is an effective means of maintaining or achieving acceptable standards of performance by followers. According to Howell and Hall-Merenda (1999), different performance effects by followers were observed, depending on whether the leadership practised was either transactional or transformational. Other studies have also reported significant relationships between transformational leadership and the amount of effort followers are prepared to exhibit, are satisfied with the leader, practise high levels of job performance and are effective (Purvanova et al., 2006). These studies and findings provide evidence in the literature of what was determined in the study.

Hakanen et al. (2008) provided evidence of job resources being a precursor to work engagement. They indicate that having control over the job and experiencing organisation-based self-esteem are among the best predictors of the dimensions of work engagement, namely vigour, dedication and absorption. Having control and experiencing self-esteem are some of the outcomes of transformational leadership behaviour and tie in with the approach of transformational leadership behaviour as described by Bass and Avolio (1997).

The researcher made an effort not to infer causality in any way. This study, however, indicated a significant correlation between the dependent and independent variables at the p=<01 level. For this reason the researcher accepted the hypothesis formulated in section 6.1, phase 3, step 5, namely that there is a relationship between the transformational leadership style of officers and the levels of work engagement reported by their followers.
5.4 COMMENT

In concluding this chapter the following theoretical aim, as indicated in Section 1.3.2.2, was achieved:

- To determine the possible relationship between transformational leadership styles and work engagement in a sample of SA Army career officers and their followers

5.5 CHAPTER SUMMARY

In this chapter, the research results were presented with the emphasis on the intercorrelations between the dependent and the independent variables. Reference was made to the adequacy of the sample. The data were integrated and interpreted against the collected data. The conclusions, summary and discussion are provided in Chapter 6.
CHAPTER 6

CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

This chapter discusses the conclusions and limitations of the study and makes recommendations for future research. The chapter concludes with a summary.

6.1 CONCLUSIONS

This study achieved its stated aims of describing leadership, in general, and transformational leadership in particular. The various scales comprising the MLQ (Form 5X) were explained to identify what the questionnaire measured. The literature review provided insight into the effect and outcomes of leadership, and focused on the research conducted on leadership. This was also done during the work engagement literature review in which each of the factors (dedication, vigour and absorption) were presented and explained. Research and extended reading did not provide insight into any kind of relationship with leadership in its purest form, but did explain how work engagement is influenced by elements of the management effort such as planning, providing control and developing self-esteem. The possible effect management activities may have on the followers’ work engagement was also explained.

The integration of the two research variables provided some insight into the possible relationship between the effects of transformational leadership and the outcomes of work engagement. The data collected in this study suggested that there is a correlation between the independent and the dependent variables, the results of the intercorrelations showing significance at the p=<01 level. This suggests that a change in the independent variable (leadership) may well result in some change in the dependent variable (work engagement).

The biographical data served to support certain findings of researchers that age and gender had a significant correlation with work engagement results, whereas these factors had a negligible correlation with the leadership scores.
The results obtained for the UWES-17 indicated that work engagement was measured at the average level but still correlated significantly with the MLQ (Form 5X) results. This could be interpreted to mean that if efforts are made by the rated officers to increase the frequency of leadership behaviour a result could be expected from the followers in terms of their levels of work engagement.

The data collected indicated that there is in fact a relationship between the transformational leadership factors as measured by the MLQ (Form 5X) and the outcomes of work engagement as measured by the UWES-17.

The research has shown that the MLQ (Form 5X) does, in all probability, form the foundation for leadership measurement and, together with its significant correlation with the UWES-17 can be used to determine the possible effect of leadership behaviour on the work engagement levels of followers.

6.2 LIMITATIONS OF THE STUDY

The study revealed the following limitations, which will be discussed in sections 6.2.1 and 6.2.2 below.

6.2.1 Limitations of the literature review

Limitations in the literature review relate specifically to the absence of specific published works on transformational leadership and its purported effects on work engagement. An extensive search of all the available databases did not reveal any meaningful articles on this topic. There were numerous references to job satisfaction but they were not relevant to this study.

A further limitation of this study was the paucity of literature on transformational leadership and its possible influence on work engagement in a military setting. This prevented comparisons in the literature review relating to the two variables and the population on which the research was conducted.
6.2.2 Limitations of the empirical study

A simple random sample was used in this study. Since it was not feasible to access all the followers of officer leaders, a random selection was done of all the Army Formations, together with a specific selection of units that could assist in the study. The sample yielded a sample size of $N=311$. The sample size could have been larger to cater for more generalisations in the population but the researcher deemed this size to be adequate for the purposes of the study.

The MLQ (Form 5X) questionnaire is based solely on a followers’ perception of his or her leader. This perception can be influenced by a myriad of confounding variables that were beyond the control and scope of this study.

The work engagement questionnaire was administered with the heading (Work Engagement Survey) which may have influenced the rater to a certain extent about the approach of the questionnaire. This was reported by Schaufeli and Bakker (2003) mentioned this as a possible factor to consider in their UWES manual. The researcher did not think that this would have had any real effect on the way the participants completed the questionnaire.

The extended period in which the data were collected from the various units may have influenced the results. The research did not occur at a specific time and in a specific place for all the participants, because the researcher had to personally travel to the various units to administer the questionnaires.

6.3 RECOMMENDATIONS

The general aim of the research was to determine whether there is a relationship between the followers’ perception of their leader’s transformational leadership style and the followers’ own levels of work engagement. The findings of this study indicated that leaders who practise transformational leadership, namely idealised influence, inspirational motivation, intellectual stimulation and individualised consideration together with constructive transaction may in all probability have an effect on their followers in terms of their work engagement (vigour, dedication and absorption).
For leadership interventions to be effective in organisations it is imperative that the suggestions by Kouzes and Posner (2007) should be considered:

- Leaders need to model the way, by setting a good example, being a role model and living what they as the leaders say. The role of value clarification is critical in this process (idealised influence).

- Leaders need to inspire a shared vision by enlisting in others a commitment to the future and what it entails (idealised influence).

- Leaders need to challenge the process by setting out, searching for new possibilities and embracing change (intellectual stimulation).

- Leaders need to afford their followers opportunities to act and become part of the solution. This leads to collaboration and the development of trust because these individuals become willing to participate in the processes at work (individualised consideration).

- Finally, leaders need to encourage the heart by recognising their achievements, providing encouraging messages and celebrating victories and achievements (inspirational motivation).

For the full range of leadership to be effective in the SA Army it is imperative for senior leaders to demonstrate their commitment to the FRL programme, behave appropriately, and demonstrate competent leadership. The FRL programme as presented by the SA Army to its members as a leadership intervention does appear to be having some effect on the work engagement levels of followers even though this was not a specific aim of the study.

Military officers at all levels should constantly be exposed to leadership development programmes such as the FRL programme to instil an understanding of the principles of leadership, according to the SA Army’s requirements in this regard.
The inclusion of leadership training programmes at all levels of officer development is strongly recommended, because this would lay the foundation for effective and active leadership practices. The ratings of leadership used in the training programmes would provide insight into the leaders’ leadership style, thus providing a baseline for self-development.

The implementation of a peer coaching system to provide ongoing feedback reports to leaders at all levels would enhance the understanding of the basics of leadership according to the model adopted by the SA Army.

The initial findings of this research could be extended by means of more vigorous research using the MLQ (5X) and the UWES-17 in a controlled environment and with a larger sample to provide results that may be more valid and reliable.

The following could serve as recommendations for industrial and organisational psychologists in developing optimum leadership behaviour of transformational leaders in creating higher levels of work engagement:

- Comprehensive and detailed feedback should be given to leaders on the basis of an in-depth understanding of the MLQ (Form 5X).

- It is necessary for leaders to understand the process of feedback and prepare them for the feedback they will receive.

- Time should be set aside for the processing of the leadership report and reasons should be advanced for why ratings could differ from the self-ratings and those of others.

- Comprehensive leadership development and training also form part of the leader development. This understanding of required leadership behaviours normally forms a firm base for the development of required behaviour.
• The formal training of leaders could also be reinforced by the implementation of a mentorship programme whereby the leader is provided with constant developmental feedback on behaviour and reactions.

• It is imperative for leaders to develop a future context based on the feedback they receive. This will provide a framework for ensuring that there is systematic and planned development. The idea here is to minimise ineffective leadership behaviours, reduce discrepancies in scores between self-rating and others’ ratings of the leader and improve some of the transformational and transactional leadership ratings.

• Leaders should be assisted to develop what is already known about leadership and link to this the ideal qualities that foster effective and active leadership behaviour.

• Industrial and organisational psychologists who are involved in developing leaders should understand that leaders have different backgrounds, experiences and professional exposure, are at different stages of personal development and display clear preferences in terms of leadership styles. In addition, leaders have different capabilities, desires and motives. Recognising these broad differences provides a firm base for the development of leaders.

• Understanding the role of change and managing change is a crucial part of leader development, because behaviour change requires a specific and planned approach based on an approved process or plan, to which the leader should agree and be able to apply. These strategies could include developing a formal leadership development plan, reading case studies linked to great leaders, practising experimental interactions to demonstrate new behaviour and note the observations of others (feedback) on how new leadership behaviour is being experienced by followers.
6.4 COMMENT

In concluding this chapter the following theoretical aim as formulated in section 1.3.2.3 has been achieved:

- To make possible recommendations for industrial and organisational psychologists, regarding the optimum behaviour of transformational leaders in creating work engagement

6.5 CHAPTER SUMMARY

This chapter drew conclusions about the findings of the study, and also discussed the limitations of the research process. Finally, recommendations were made for future research and development.
REFERENCES


121


SPSS Version 15.0.0 (6 Sep 2006). SPSS Inc.


