

**THE RELATIONSHIP BETWEEN LEADERSHIP
STYLE AND EMPLOYEE ENGAGEMENT IN SASOL
GAS, SOUTH AFRICA**

A thesis submitted in partial fulfilment of the requirements for the degree of

MASTER OF BUSINESS ADMINISTRATION

of

RHODES UNIVERSITY

by

THOBILE DUMA

November 2017

DECLARATION

I, the undersigned, hereby declare that this research thesis is my own original work and that all sources have been accurately reported and acknowledged, and that this document has not been previously, in its entirety or in part, submitted at any university in order to obtain academic qualifications.

Date: _____

ABSTRACT

The main purpose of this study was to determine whether there is a significant relationship between leadership styles of Sasol Gas leaders and their followers' level of employee engagement. The instruments used in the study were the Multifactor Leadership Questionnaire (MLQ) (Form 5X) and the Utrecht Work Engagement Scale (UWES 9). The MLQ (5X) was completed by the followers and leaders of Sasol Gas to determine whether Sasol Gas leaders use transactional, transformational and/or laissez-faire leadership styles. The work engagement instrument was completed by each follower to determine current levels of employee engagement. Descriptive statistics were obtained and correlations completed for the data to determine whether the different leadership styles exhibit different levels of engagement. The MLQ survey results indicate that leaders of Sasol Gas have more transformational than transactional leadership styles. The UWES 9 measured the three factors of vigour, dedication, and absorption; dedication had the highest mean compared to vigour and absorption, indicating that Sasol Gas employees strongly identify themselves with their work because it is experienced as meaningful, inspiring, and challenging. This research found a statistically significant, albeit weak, relationship between transformational and transactional leadership styles and employee engagement. This is a positive reflection of the current Sasol Gas leaders because empirical evidence shows that transformational leadership behaviours are more successful for attaining and fulfilling goals during organisational change.

ACKNOWLEDGEMENTS

The author would like to express her gratitude to:

- Trevor Amos (Supervisor), whose support and guidance made this research possible;
- Sasol Gas for affording me the opportunity to undertake this study;
- Mandla, my children, my brothers and my friends for their encouragement and support;
- Mindgarden, for granting me permission to use the MLQ instrument.

TABLE of CONTENTS

DECLARATION	i
ABSTRACT	ii
ACKNOWLEDGEMENTS	iii
LIST OF FIGURES	vi
LIST OF TABLES	vi
CHAPTER ONE: INTRODUCTION	1
1.1 Background of the Study	1
1.2 Problem Statement	3
1.3 Research Objectives	3
1.4 Significance of the Study	4
1.5 Scope of This Study	4
1.6 Outline of the Study	4
1.7 Limitations of the Study	5
1.8 Research Questions	5
1.9 Definition of Key Terms	6
1.9.1 Leadership	6
1.9.2 Employee Engagement	7
CHAPTER TWO: LEADERSHIP	8
2.1 Introduction	8
2.2 The Concept of Leadership	8
2.3 Leadership Theories	9
2.3.1 Trait Approach	9
2.3.2 Behavioural Approach	9
2.3.3 Contingency Approach	11
2.3.4 The Full-Range Model of Leadership	12
2.4 Conclusion	17
CHAPTER THREE: EMPLOYEE ENGAGEMENT	18
3.1 Introduction	18
3.2 The Concept of Employee Engagement	18
3.3 Employee Engagement Theories	21
3.3.1 The Conservation of Resources (COR) theory	21
3.3.2 The Job Demands-Resources (JD-R) Model	21
3.4 Antecedents of Employee Engagement	22

3.4.1 Job Characteristics	24
3.4.2 Rewards and Recognition.....	24
3.4.3 Perceived Organisational and Supervisor Support	24
3.4.4 Distributive and Procedural Justice	25
3.5 Consequences of Employee Engagement	25
3.5.1 Employee Productivity	25
3.5.2 Employee Retention	25
3.5.3 Employee Performance	25
3.5.4 Successful Organisational Change	26
3.5.5 Health and Well-being	26
3.6 Leadership Style and Employee Engagement	26
3.7 Measuring Employee Engagement	27
3.7.1 The Utrecht Work Engagement Scale (UWES).....	28
3.7.2 Gallup Workplace Audit (Q12)	29
3.8 Conclusion	30
CHAPTER FOUR: RESEARCH AND METHODOLOGY.....	31
4.1 Introduction	31
4.2 Goals of the Research and Hypothesis.....	31
4.3 Research Design.....	32
4.3.1 Ethical Considerations.....	32
4.4 Research Population and Sample.....	32
4.5 Research Variables.....	34
4.6 Data Collection Techniques	34
4.6.1 Multifactor Leadership Questionnaire (MLQ).....	34
4.6.1 a) Administration of the Survey	35
4.6.1 b) Data Analysis.....	36
4.6.2 Utrecht Work Engagement Scale (UWES)	36
4.6.2 a) Administration of the Survey	37
4.6.2 b) Data Analysis.....	37
4.7 Conclusion	38
CHAPTER FIVE: ANALYSIS OF RESULTS	39
5.1 Multifactor Leadership Questionnaire.....	39
5.1.1 Descriptive Statistics.....	39
5.2 The Utrecht Work Engagement Scale (UWES).....	43
5.2.1 Descriptive Statistics.....	43
5.3 Statistical Analysis	44
5.3.1 Intercorrelations for the MLQ (Form 5X) (N=37)	45
5.3.2 Intercorrelations for the UWES 9 (N=35).....	46

5.3.3 Intercorrelations Between the Independent and the Dependent Variables	46
5.4 Chapter Summary	49
CHAPTER SIX: DISCUSSION, RECOMMENDATIONS AND CONCLUSIONS.....	50
6.1 Introduction	50
6.2 Discussion of the Results.....	50
6.3 Recommendations for Further Research	51
6.4 Conclusion	54
LIST OF REFERENCES	56
LIST OF APPENDICES	68
Appendix A: Multifactor Leadership Questionnaire Leader Form Sample.....	68
Appendix B: Multifactor Leadership Questionnaire Rater Form Sample	69
Appendix C: Multifactor Leadership Questionnaire Scoring Key Sample.....	70
Appendix D: Utrecht Work Engagement Scale	71
Appendix E: Leader Spearman Rho Coefficients.....	72
Appendix F: Rater Spearman rho coefficients.....	74
Appendix G: Leader Pearson correlation	76
Appendix H: Rater Pearson correlation.....	78

LIST OF FIGURES

Figure 1: Model of full-range leadership development theory (Bass and Avolio 1994:5)	13
--	----

LIST OF TABLES

Table 1: Comparison of drivers in Europe versus US (Source: Towers Perrin, 2003)	23
Table 2: Population, sample and response rates for MLQ 5X	33
Table 3: Population, sample and response rates for UWES.....	33
Table 4: Scale: Leter and Rater Cronbach's Alpha coefficients.....	37
Table 5" UWES 9 Reliability Statistics	38
Table 6: Leader descriptive statistics.....	40
Table 7: Rater descriptive statistics	41
Table 8: Leaders' mean score on the Multifactor Leadership Questionnaire 5X (N=20)	42
Table 9: Raters' mean score on the Multifactor Leadship Questionniare 5X (N=37)	42
Table 10: Means, standard deviation, minimum and maximum for the UWES 9 (N=35)	44
Table 11: Intercorrelations for the MLQ (form 5X) (N=37)	45
Table 12: Intercorrelations for the UWES 9 (N=35)	46
Table 13: Intercorrelations for the dimension of the MLQ (5X) and the UWES 9 (N=37)	48

CHAPTER ONE: INTRODUCTION

This chapter provides an overview of the background of the study, the problem statement, the research questions, the research objectives, the significance, and scope of the study.

1.1 Background of the Study

Current market conditions and regulatory trends are increasingly complex and have changed the fundamental basic principles of doing business in South Africa. This increasing complexity has impacted the natural gas industry which had no regulatory framework. However, the demand for natural gas as a primary energy source has grown from approximately 3% to approximately 7% in the last ten years (Department of Minerals and Energy, 2005:2). As a result, the South African government is in the process of regulating the piped-gas and petroleum pipeline industries in South Africa for the first time in order to promote orderly development within the industry (Maduna & Shabangu, 1998:72). The regulation of the piped-gas and petroleum industry is very important as energy is one of the key elements in production processes in South Africa.

Sasol Gas has been the only supplier of natural gas in South Africa and the government wants to introduce a new tariff procedure to improve the sector, reduce monopoly, improve competition and boost economic growth (van Basten, 2007). The National Energy Regulator of South Africa (NERSA) is a regulatory authority established as a juristic person in terms of Section 3 of the National Energy Regulator Act, 2004 (Act No. 40 of 2004) to regulate the electricity, piped-gas and petroleum pipeline industries. Sasol Gas presently dominates the piped-gas retail industry as the only producer and distributor. Other players in the market are PetroSA which converts offshore gas into liquid fuels and Egoli Gas which supplies industrial customers and domestic consumers (van Basten, 2007). Sasol Gas owns about 1500 km of gas distribution and transmission pipeline, serving about 600 customers, mainly industrial (Sasol, 2007:32).

The proposed regulatory environment has been accepted by Sasol Gas as it provides for credibility in the eyes of investors and legitimacy in the eyes of consumers because of the principle of the rule of law. However, the regulatory changes require the piped-

gas industry business to change the current organisational structure and working processes in order to meet NERSA requirements. These new changes to be adopted by Sasol Gas present Sasol Gas leaders with a huge challenge in convincing the existing pool of employees to adapt and perform under the new energy sector regulations because employees feel that their jobs are at risk under the restructuring conditions, and will resist any attempt to change. Employees are an organisation's greatest assets during this challenging transition period as the organisation structure, the skills required and the reporting relationships change. Therefore, keeping employees engaged is one of the key issues; management must ensure employees are passionate about their work performance and continuously strive to improve themselves and the company as a whole (Welbourne, 2007:46). In order for Sasol Gas to remain competitive in the market, the organisation needs to find effective ways to harness staff skills, knowledge, and commitment to work (Endres & Mancheno-Smoak, 2008; CIPD 2007; Tritch, 2003).

Employee engagement has garnered much attention in the last few years from business leaders and human resource managers. The term has been loosely used by various companies and educational institutions to refer to employee attitudes, motivation and willingness to work (Endres & Mancheno-Smoak, 2008:69). 'Employee engagement' was coined by the Gallup Organisation who defined it as "the involvement with and enthusiasm for work" (BSI Consulting, 2003:269). Overall research evidence (Cawe, 2006) indicates that engaged employees increase customer loyalty and financial bottom line, thereby creating a sustainable competitive advantage (CIPD, 2006; Buckingham & Coffman, 1999; Towers Perrin, 2003). The link between employee engagement, increased employee performance, and improved business outcomes has been researched extensively by the Gallup Organisation (Thackray, 2003:5). Gallup reviewed their database of employee and manager interviews to identify the elements most important in sustaining workplace excellence. Twelve key elements were identified and this led to the development of the instrument called the Q12 (twelve-question assessment) which measures important drivers of employee engagement (Ammma, 2007).

There are a number of factors that influence increased levels of employee engagement (CIPD, 2006), of which leadership has been found to play a vital role in influencing

employee engagement (Development Dimensions International (DDI), 2005). The level of employees' relationship with their leaders is often synonymous with how they feel about their jobs and the organisation, and leadership styles can influence those attitudes significantly. (Melcrum, 2005). Early studies classified leadership styles as either autocratic, democratic, or laissez-faire (McGregor, 1960). According to Moore and Rudd (2004:23), "a new paradigm of leadership has emerged that shifted emphasis from the traditional, or transactional, models of leadership toward the study of transformational leadership". Seminal work done (Avolio & Bass, 2002 Amarjit *et al.*, 2006; Bass, 1990a) on the relationship between leadership and employee engagement identified transformational leadership and transactional leadership as two major leadership styles that influence employee engagement and performance.

1.2 Problem Statement

Sasol Gas has been the only supplier of natural gas in South Africa and the government wanted to introduce a new tariff methodology to improve the sector, reduce monopoly, improve competition and boost economic growth (van Basten, 2007). Increased competition and economic changes demand a balance of leadership styles in order to ensure successful, sustainable change within the organisation. Leadership is a major determining factor in whether Sasol Gas will be able to manage the change successfully and effectively, and optimise the emotional climate within the business. Therefore, the business needs to determine the style of leadership needed from Sasol Gas leaders during organisational restructuring in order to comply with gas-related regulations. As a result, the business will acquire knowledge about the leadership styles that will assist leaders to enhance motivation and engagement within the business (Schaufeli and Salanova, 2007).

1.3 Research Objectives

The general purpose of this study is to establish the relationship between leadership style and employee engagement within Sasol Gas. The specific objectives are:

- To determine whether Sasol Gas leaders use transactional, transformational and/or laissez-faire leadership styles;
- To determine the current levels of employee engagement within Sasol Gas;

- To determine whether the different leadership styles will exhibit different levels of employee engagement.

1.4 Significance of the Study

The study of the relationship between leadership style and employee engagement seems to be important from both the theoretical and practical perspectives. Much of the literature demonstrates that employee engagement with effective leadership style predicts organisational success and financial performance (Bates, 2004; Richman, 2006). This study intends to investigate the relationship between leadership style and employee engagement. The implication of this study is that a difference may well be discovered between the perceptions by Sasol Gas leaders of their own leadership styles, and the perceptions that their subordinates have of their leadership styles. Moreover, this study may suggest a particular leadership style that yields higher levels of employee engagement. Sasol Gas leaders could benefit from this study as they would know which leadership styles to use to maximise employee engagement levels, thereby working together to achieve their objectives.

1.5 Scope of This Study

The unit of analysis of this study is the Sasol Gas organisation.

The scope of the study includes:

1. A review of contemporary leadership theory and practice, which is centred on a literature review and other information sources.
2. An evaluation of the impact of leadership styles on employee work engagement.

1.6 Outline of the Study

The thesis has six chapters.

Chapter 1 (Introduction) provides an introduction to the research background and significance, the research questions, and the structure of the thesis.

The literature review section is divided into two main chapters: a review of the literature on leadership, and employee work engagement. Chapters 2 and 3 present the overall conceptual framework of the research topic and review the literature on leadership, leadership styles and employee engagement. Chapter 2 begins with a review of

leadership theories and tracks their evolution over the past few decades. It looks at trait theories, behaviourist theories, situational leadership, and contingency theory and goes on to review new leadership approaches (transactional and transformational leadership). Chapter 3 conceptualises a theoretical relationship between leadership styles and employee engagement and provides a discussion of general key drivers of employee engagement. Models of employee engagement are then examined to highlight key drivers and the extent to which employees value these factors.

Chapter 4 (Research methodology) presents the unit of study, population, sample size, and sampling procedures. It introduces the questionnaire used, including the questionnaire design, content, and coding, as well as measures for the variables. It also describes the data collection methods.

Chapter 5 (Analysis of results) presents the labels and sources of the variables, and describes how the data were cleaned and prepared for further analysis. The chapter reports some essential descriptive statistics.

Chapter 6 (Discussion, recommendations and conclusions) summarises the study, discusses the research findings, and draws conclusions. It presents this thesis' contributions to knowledge and its managerial implications. Finally, this chapter provides recommendations for future research and concluding remarks.

1.7 Limitations of the Study

Due to the sensitivity of the topic and method of data collection, respondents may be reluctant to express strong negative feelings. As a result, higher levels of engagement may be reported by respondents in order to protect themselves against a perceived notion that the data will not be kept confidential. In an attempt to reduce the bias, most raters were not required to provide personal information that would allow the researcher to link the results back to the respondent.

1.8 Research Questions

Question 1: Is there a statistically significant relationship between transformational leadership and employee engagement?

Question 2: Is there a statistically significant relationship between transactional leadership and employee engagement?

Question 3: Is there a statistically significant relationship between laissez-faire leadership and employee engagement?

1.9 Definition of Key Terms

1.9.1 Leadership

The earliest theories of leadership focused on the performance of great men, beginning with the leadership studies of Lewin and Lippitt in 1938, from which numerous studies of leadership and numerous leadership theories developed. Major theories explored include the Trait Theory, Situational Theory, and Contingency Theory, Power and Influence Theory, and Transactional and Transformational leadership. During the period from 1904 to 1948, Trait Theory was the influential leadership theory with over one hundred trait studies being conducted (Yukl, 2002). Early definitions of leadership in the 1930s tended to focus on the power to command or ability to dominate. Research in the early 1940s demonstrated that the ability to command as a leader was inadequate as a basis for getting results from followers, which led to the expansion of the concept of leadership to be broadly defined as a “relational process involving interactions among leaders, followers, and outside constituencies” (Fleishman, 1953). The early 1960s saw leadership as a process which influences the follower’s psychological attitudes.

Stogdill (1974), as cited in Yukl (1989: 252) reviewed trait studies of leadership and noted that there are almost as many definitions of leadership as there are persons who have attempted to define the concept. As a result, there are a number of theories used to define leadership. Many theories felt that Trait Theory was missing a variable called ‘situation’ (Bass, 1990b; Yukl, 2002). The Situational Theorist’s variables included the structural prosperities of the organisation, organisation climate or culture, role characteristics such as power, type or difficulty of task, and subordinate characteristics such as education and experience (Hoy and Miskel, 1987). Transformational and transactional leadership emerge from social exchange theory (Yukl, 2002; Lucas, 1994). Transactional theories were used in the 1970s to define leadership; these transactional, or ‘exchange’, theories are characterised by a transaction made between

the leader and the followers. The theory values a positive and mutually beneficial relationship. Raunch and Behling (1984), as cited in Watkins and Rikard (1991:46), define leadership as a “process of influencing the activities of an organised group in its efforts towards goal setting and goal achievement”. The 1990s focused on transformational theory, a theory that is still the principal model of the twenty-first century. Many authors of this period equate leadership with the process of transforming an organisation to achieve excellence (Hosking and Morley, 1991).

The main leadership styles used in this study are transformational, transactional, and laissez-faire. For the purpose of this study, these new leadership theories are given primary consideration.

1.9.2 Employee Engagement

The term ‘employee engagement’ originates from consultants and survey houses rather than academia (Rafferty *et al.*, 2005); and the concept of employee engagement denotes employee commitment and motivation. Employee engagement was conceptualised by Kahn (1990:694) as a stage where people employ and express themselves physically, cognitively and emotionally during work-role performance. The Institute of Employment Studies (2003) as cited in Endres and Mancheno-Smoak (2008:71), defines employee engagement as a “positive attitude held by the employee towards the organisation and its values”. Employee engagement is a sense of feeling involved in and enjoying work.

CHAPTER TWO: LEADERSHIP

2.1 Introduction

Leadership is a complex concept influenced by numerous factors relating to traits, behaviour, and situation. The concept of leadership applies many arenas of life, including business, community, governance, and family life, giving rise to numerous definitions of leadership. According to Stogdill (1974, as cited in Yukl, 1989: 252), “there are almost as many definitions of leadership as there are persons who have attempted to define the concept”. As a result, there are a number of theories used to define effective leadership and the role of followers (von Wielligh, 2006). In organisations concerned with building high-performance human systems, the concept of leadership has become increasingly important in order to succeed in a highly competitive business environment.

2.2 The Concept of Leadership

Most definitions reflect the assumption that leadership involves a process whereby an individual exerts influence on others in an organisational context (Bratton, Grint & Nelson, 2005). This leads to the leadership concept being broadly defined as a relational process involving interactions among leaders, followers, and outside constituencies (Bass, 1990b). Raunch and Behling (1984, as cited in Watkins and Rikard, 1991:46) agree that leadership is a “process of influencing the activities of an organised group in its efforts towards goal setting and goal achievement”. Similarly, Nirenberg (2001) regards leadership as a social function necessary for the achievement of collective objectives by the leader and followers. This approach sees leaders playing a major role in shaping the organisation’s values, vision and culture.

In defining leadership, the question about its similarity to and difference from management becomes very important because leadership is often confused with the concept of management (Hoosain *et al.*, 2006). The term ‘manager’ is closely related to a leader but is importantly different. A manager is often in a position where he/she has the authority to command others and decide the course of action. The distinction between a manager and a leader is best explained by Kotter (1990) who points out that a manager deals mainly with planning and budgeting, organising and staffing,

controlling and monitoring, whereas a leader deals with establishing a sense of direction by developing a vision of the future. Some researchers argue that leadership and management are mutually exclusive, meaning that management and leadership cannot exist in the same person. Managers perform activities associated with planning, organising and controlling whereas leaders tend to inspire, provide emotional support and rally employees towards a shared vision (Bass, 1981). A manager values stability, order and efficiency, while a leader values flexibility, innovation and adaptation (Yukl, 2006). Zaleznik (1977) states that managers worry about how things get done and exercise authority, while leaders worry about influencing the commitment of people. According to Kotter (1990), if organisations are to survive in today's changing environments, managers must be able to manage and lead because "successful transformation is 70 per cent leadership and only 10 to 30 percent management" (Kotter, 1996: 26).

2.3 Leadership Theories

2.3.1 Trait Approach

The concept of leadership is understood through three traditional approaches: trait, behaviour, and situation theories. Early research attempts in the 1930s to study leadership are based on trait theory or 'the great man theory'. Traits are distinctive physical and psychological characteristics that account for a person's behaviour. Most of the trait research focuses on identifying a list of personal characteristics that set effective leaders apart from other people. There is an assumption that some people are natural leaders and possess personal attributes that other people do not have. However, despite exhaustive research, trait studies prove inconclusive as researchers failed to identify leadership qualities that lead to success (Stogdill, 1974). Furthermore, the trait theory fails in that it ignores other important factors, such as followers, and situational conditions (Armandi *et al.*, 2003). There are also numerous questions about its validity and how it relates to effective leadership (Gibson *et al.*, 2000). As a result, there was a shift towards studying leadership behaviour.

2.3.2 Behavioural Approach

Behavioural theories arose to identify determinants of leadership so that people could be trained to be effective leaders. The behaviour approach garnered attention as

research results had an influential effect on people. According to Sadler (2003:14), behaviourist theories tend to focus on “what leaders actually do rather than their qualities.” These theories explore the relationship between behaviour of a leader and his/her followers’ performance. Among the most important work done were studies carried out at the Ohio State University and University of Michigan (Fleishmann, 1953). These studies identify two behavioural dimensions: one that focuses on employee orientation (feelings and interpersonal relationships), and a second dimension that suggests a focus on tasks to achieve goals. The task-centred dimension focuses on close supervision and use of coercive reward and legitimate power to influence subordinate behaviour. The employee-centred approach examines delegation of authority, decision-making, focusing on subordinate human needs and creating a supportive environment.

The two main theories of the behavioural approach to leadership are McGregor’s X and Y Theory, and The Leadership Grid of Blake and Mouton. These were the first theories that studied styles of leadership. These theories assist managers to develop a particular style. According to McGregor (1960), leaders can be viewed as having one of two basic orientations. Those with a Theory X approach are of the view that workers inherently do not like to work and will avoid work if possible, therefore workers must be coerced into working and their activities must be controlled and directed by management. Theory X maintains that the average worker shuns responsibility and has little ambition to grow in the job, and no desire to achieve organisational goals. By contrast, leaders with a Theory Y orientation believe that workers find work as natural a part of their lives as play or rest. They are accordingly regarded as being self-motivated, desiring responsibility, and committed to the organisation and its goals. Theory X and Theory Y are still important in terms of understanding motivation; however, these theories do not adequately demonstrate how leaders’ behaviour is associated with performance outcomes (Yukl, 2002).

Robert Blake and Jane Mouton (1964) developed another theory known as the Leadership Grid, based on the styles of concern for people and production, with leadership styles falling on a position from low in concern for both people and production to high in concern for both. The model is based on an approach in which

managers and leaders range 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)

The Leadership Grid provides little guidance on the effective leadership styles in different situations. These behavioural theories pay little attention to the changing relationship between leaders and followers, leading many researchers to explore the situational and contingency factors that influence leader-follower relations and group performance.

2.3.3 Contingency Approach

Situational leadership models arose from the deficiencies of trait and personal characteristic theories to explain leadership phenomena. Accurate assessment of the environment is critical for situational leadership to be successful. Situational leadership is based on leadership styles that vary from leader to leader (Stogdill, 1974). The behaviour of some leaders involves initiating structure to accomplish tasks, other leaders build and maintain good personal relationships, and still others do both, or neither (Halpin & Winer, 1957). The most effective behavioural style of leaders is one that adapts to the situation (Fiedler, 1967; Korman, 1966).

Hersey and Blanchard’s Situational Leadership model, Fiedler Contingency’s model, and the Path-goal model provide the foundation for much of the leadership research conducted during the 1970s (Vroom & Yetton, 1973; Hosking, 1978). Hersey and Blanchard’s (1969) situational leadership model suggests that leader behaviour should correspond to the maturity of followers. A leader must be able to determine a follower’s readiness levels in order to decide on the appropriate leadership style. For example, as the followers mature in terms of experience, ability, and motivation, the leader’s behaviour should show a decreasing emphasis on task-oriented behaviour and increasing emphasis on relation-oriented behaviour. This approach consists of both

directive and supportive dimensions, which are then appropriately applied to a specific situation.

Fiedler's (1967) model emphasised that differing roles and behaviour of leaders require not only an understanding of interactions with subordinates, but also favourable conditions in order to be effective.

The Path-goal Leadership model holds that the effective leader clarifies paths by which followers can achieve goals, both organisational and personal. The theory is based on the expectancy theory of motivation. The Path-goal theory assumes that leaders clarify the path to help their followers achieve their goals (Bass, 1990a) and maintains that leaders are flexible and that they can change their style as situations require. There are four possible leadership behaviours or styles:

- **Directive:** informs subordinates what is expected
- **Supportive:** demonstrates concern and treats all employees equally
- **Participative:** consults with subordinates and uses their suggestions
- **Achievement-oriented:** sets challenging goals and expects subordinates to work together continuously seeking performance improvement.

The situational factors are, however, complex to assess and are not the only variables of importance. The leader's technical competencies and the characteristics of followers are not considered. Studies tried to identify "distinctive characteristics of the setting to which the leader's success could be attributed" (Hoy & Miskel, 1987: 273). According to Hencley (1973:38), "the situation approach maintains that leadership is determined not so much by the characters of the individuals as by the requirements of the social situation". The right leadership style will depend on the person being led.

2.3.4 The Full-Range Model of Leadership

Recent approaches to leadership attempt to examine leadership from the point of view of people rather than of complex leadership behaviours. Recent work distinguishes leadership as a quality that inspires and motivates people beyond their normal levels of performance. Goleman *et al.* (2002) note that most effective leaders act according

to one or more of the approaches to leadership and skilfully switch between the various styles depending on the situation, as Hersey and Blanchard's Situational Leadership Model and Fiedler Contingency's Models predict. They further note that four of the leadership styles (visionary, coaching, affiliative, and democratic) create resonance that boosts performance while the other two styles of pacesetting and commanding should be applied with caution. Avolio and Bass (2002) believe that leadership styles exist on a continuum from laissez-faire, transactional to transformational leadership, as depicted on the full-range leadership model below (Bass and Avolio,1994).

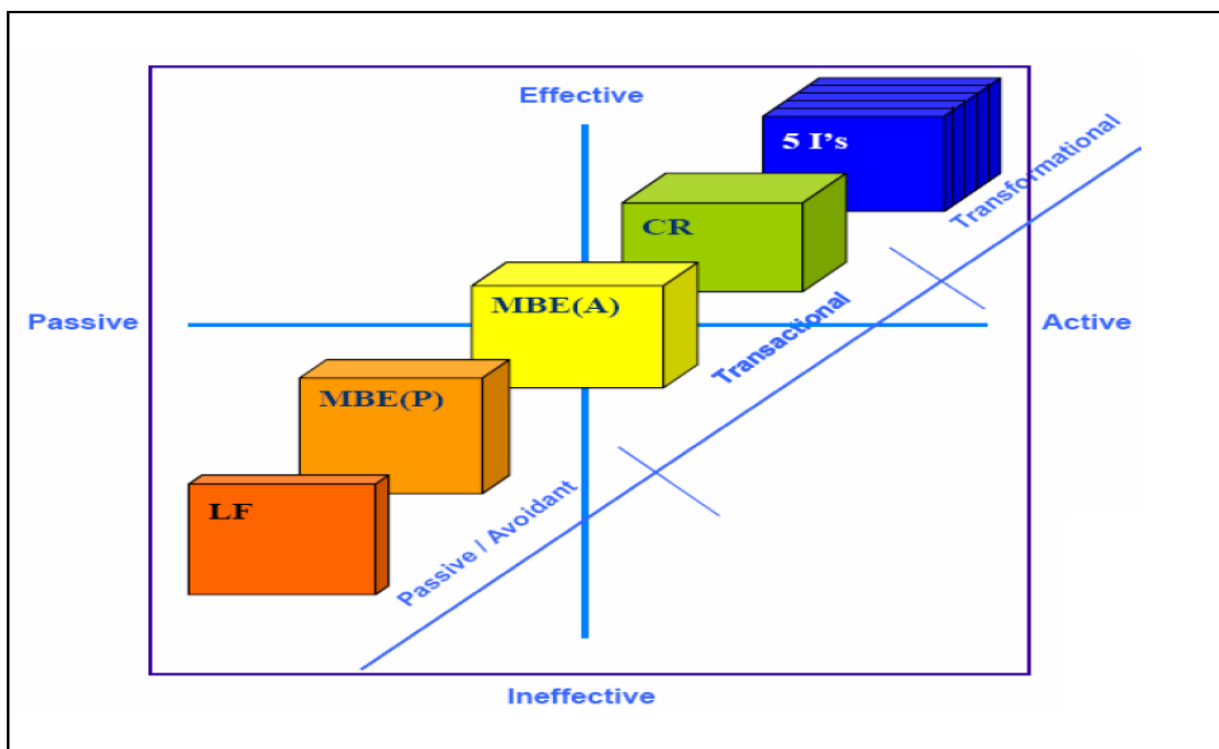


Figure 1: Model of full-range leadership development theory (Bass and Avolio 1994:5)

According to Avolio and Bass (2002), the full range of leadership has leadership dimensions that are highly transformational at one end, to highly avoidant at the other end.

Laissez-faire leadership

Laissez-faire leadership is based on trust and indicates a complete abdication of leadership (Avolio and Bass, 2002). Laissez-faire leadership occurs when leaders give group members complete freedom of action, provide them with resources, and do not

become actively involved in problem-solving or evaluation. Researchers characterise laissez-faire as the least effective leadership style (Robbins & Judge, 2007).

Organisations that are run by laissez-faire leaders are mostly either in the incubator phase of product development or engaged in highly creative businesses. This leadership style is particularly appropriate in start-up companies, where innovation is crucial to a company's initial success. Examples of businesses where laissez-faire leadership works well are:

- Advertising agencies
- Product design firms
- Start-up social media companies
- Research and development departments
- Venture capital investment companies
- High-end architectural and specialised engineering firms

One criticism of the laissez-faire style of leadership is that it tends to serve the needs of the people who most benefit from it instead of the needs of customers and communities. Early studies of laissez-faire leadership (Lewin, Lippitt, & White, 1939) found that laissez-faire leadership led to lower productivity and satisfaction among followers when compared with autocratic and democratic leadership styles. Although subordinates desired the autonomy that laissez-faire leadership provided, subsequent research has substantiated followers' dissatisfaction with this leadership style (Bass and Avolio, 2002).

Transactional Leadership

Transactional leadership theories attempt to explain the relationships between leaders and followers. These models add the concept of exchange to the analysis of the leader's personal characteristics and leadership style (Bass, 1999). The transactional leadership is characterised by an exchange interaction in which leaders motivate followers with rewards in return for follower effort. Transactional leaders excel at management functions. They are efficient, organised, considerate, fair-minded,

tolerant, hardworking, committed to the goals of the organisation and the needs of subordinates.

According to Harter and Bass (1988), transactional leadership is a three-dimensional construct consisting of the following:

1. Contingent reinforcement or contingent reward. The leader rewards followers based on their specified performance levels
2. Active management by exception. The leader actively seeks out deviations from desired performance on the part of subordinates, with a view to taking corrective action. This leadership behaviour is not effective as it results in poor satisfaction of followers.
3. Passive management by exception (laissez-faire leadership). The leader does not seek out deviations from desired performance and only takes action when problems present themselves. This is a style of leadership in which the leader fails to accept the responsibilities of the position. He/She allows followers free rein to set their own goals. The leader only responds to errors and corrects problems once they surface in some unavoidable way (Atwater *et al.*, 1998). This leadership style has been found to be the least effective of the leader behaviours.

Laissez-faire leaders are best in stable situations (Waldman, Bass and Einstein, 1987). However, transactional leadership is not effective in these turbulent times where leaders are not in a position to provide expected rewards due to the regulatory environment and time pressures (Boonzaier, 2008). Although transactional leadership may produce the required performance outcome, commitment and enthusiasm to task activities may not be present (Yukl, 2006). Transactional leadership is insufficient to meet the leadership challenges and demands of today's dynamic work environments as it cannot guarantee motivated followers and long-term organisational success (Yammarino & Bass, 1990). However, transactional leadership is a foundation or building block that helps support transformational leadership (Bass, 1990a). The main limitation is the assumption that people are largely motivated by money and simple reward, and hence their behaviour is predictable.

Transformational Leadership

Transformational leadership theories build on the transactional models, and the earlier work done on personal traits and leadership styles (Fiedler, 1967; McGregor, 1960; Stogdill, 1974). The concepts of charisma and vision are important and the transformational theories recognise the importance of change as a part of leadership. Transformational leaders can be found at different levels and are not necessarily restricted to the top of the hierarchy.

Transformational leadership occurs when leaders broaden and elevate the interests of their followers. Transformational leaders inspire followers to transcend their own self-interest for the good of the organisation (Bass, 1990a). According to Bass and Avolio (1994), transformational leadership refers to a leadership type in which leaders possess charisma and provide intellectual stimulation, individualised consideration and inspirational motivation to followers. Bass (1990b) suggests that there are four components of transformational leadership:

Idealised influence: transformational leaders act as role models for their followers. Because transformational leaders put others' needs ahead of their own and share risks with followers, they are admired, respected and trusted, and followers want to emulate them. Thus, in contrast to purely charismatic leaders (especially unethical charismatics), transformational leaders can be counted on to do the right thing and maintain high standards for ethical and personal conduct.

Inspirational motivation: transformational leaders motivate and inspire followers by providing meaning and challenge to their work.

Intellectual stimulation: transformational leaders encourage followers to be creative and innovative, to question assumptions, and to look at problems and situations in new ways, even if they differ from the leader's ideas.

Individual consideration: transformational leaders pay special attention to followers' individual needs by creating learning opportunities, accepting and tolerating individual differences, encouraging two-way communication and being a good listener.

Researchers believe that transformational leadership has a positive impact on followers, and substantial empirical evidence supports the effects of transformational leadership on both productivity and work performance (Avolio & Howell, 1992; Bass, 1985; Harter & Bass, 1988; Lowe *et al.*, 1996). A study conducted with 78 managers, showed that transformational leadership directly and positively predicted unit-level performance (Howell & Avolio, 1993). In addition to having a positive impact on work performance, transformational leadership has also been linked with employee attitudes towards the organisation (Barling *et al.*, 1996). Transformational leaders give guidance to employees on what they do and how important its effect is on the organisation. As a result, employees realise their job and performance matter. Moreover, employees become aware of their own growth needs for personal development and accomplishment, and how the organisation may help them achieve them.

Many researchers agree that a transformational leadership style results in positive organisational outcomes, especially when organisations are changing (Bass & Avolio, 1994; Wilmore & Thomas, 2001). This positive influence has been demonstrated in military (Yammarino & Bass, 1990), and most importantly, in educational (Hoover 1991) contexts. A successful, effective leader has the ability to have his or her vision accepted, as well as to motivate followers to work towards a common outcome. Egri and Herman (2000) believe that transformational leaders have the characteristics of empathy, self-confidence, and compassion. It has also been observed that transformational leaders normally emerge during times of organisational change, usually in response to increased competition.

2.4 Conclusion

The review of the literature shows that there is a high degree of overlap between the different styles of leadership and a combination of leadership styles that might be valuable to organisations. Transformational and transactional leadership have been found to be effective leadership styles. Transactional leadership focuses on task-oriented exchange relationships to achieve success. Transformational leadership focuses on stimulating subordinates and on differences among people (Yammarino & Bass, 1990).

CHAPTER THREE: EMPLOYEE ENGAGEMENT

3.1 Introduction

Many organisations have identified the need to invest in human capital in order to achieve the maximum effort from their employees and so be competitive in today's market. Employee engagement has become a hot topic as mounting evidence shows that employee engagement correlates to organisational performance in the area of productivity (Ketter, 2008; Richman, 2006). Thus, it is important that managers and leaders investigate employee engagement in order to improve employee commitment, retention, and motivation. This chapter presents an overview of the evolution of the concept of employee engagement and highlights the key characteristics by which an engaged workforce can be identified.

3.2 The Concept of Employee Engagement

Rafferty *et al.* (2005) state that the term 'employee engagement' originated from consultants and survey houses rather than academia. The concept of employee engagement has its origins in employee commitment and motivation in the management literature. Although employee engagement is closely associated with the existing concept of commitment, Meere (2005) emphasises that organisations need to look beyond commitment in order to understand and improve employee engagement. Definitions of organisational commitment and employee engagement have been confused because of the similarities between the two constructs. Organisational commitment has been defined as a force that binds an employee to an organisation (Nyengane, 2007) and is a relative strength of an individual's identification with and involvement in a particular organisation (Porter *et al.*, 1974). Kahn (1990), however, argues that employee engagement is a changing phenomenon and not a constant like commitment; individuals will have periods of engagement rather than levels of engagement on a continuum. According to Kahn (1990), employee engagement is a multi-dimensional construct, different from the concept of commitment because engagement focuses on how the psychological experiences of work and work contexts shape the process of people presenting and absenting themselves during task performances.

Employee engagement was conceptualised by Kahn (1990) as a situation where people employ and express themselves physically, cognitively, and emotionally during work-role performances. Schaufeli *et al.* (2002a) regard employee engagement as characterised by energy, involvement and efficacy which, in turn, are considered the direct opposites of the burnout dimensions of exhaustion, cynicism and lack of professional efficacy (Maslach & Leiter, 1997). Building upon Maslach and Leiter's (1997) concept of engagement, Schaufeli *et al.*, (2002b:71) define employee engagement as a "combination of vigour, dedication and absorption". Vigour refers to the high levels of energy and mental resilience while working. Dedication is characterised by significance, enthusiasm, pride and challenge at work. Absorption consists of being fully concentrated, happy and deeply engrossed in one's work. Recent empirical evidence (González-Romá *et al.*, 2006) has identified two bipolar dimensions (vigour-exhaustion; dedication-cynicism) that underlie the constructs of work engagement and burnout.

However, many researchers have struggled to define employee engagement and this led to Macey and Schneider (2008) concluding that employee engagement is an "aggregate multi-dimensional construct" meaning that it is a little bit of this and that. Greenfield (2004) explains employee engagement as a sense of feeling involved and actually enjoying their work.

Recent studies have revealed that, to have engaged employees, employers need to take pro-active steps to foster a deeper engagement level between their staff and organisations. Overall research evidence (Cawe, 2006) indicates that engaged employees increase customer loyalty and financial bottom line, thereby creating a sustainable competitive advantage (CIPD, 2006). Although the validity of the construct is still debated, according to Towers Perrin (2003, as cited in Cawe, 2006:23), research shows that "companies with higher levels of employee engagement outperform their competitors in terms of profitability". Similarly, Baumruk (2006) agrees that employee engagement is a good way to increase the productivity of an organisation's talent pool.

It is not easy to differentiate the construct of employee engagement from other employee attitudes from the above definitions. There is little academic research available on a common definition of employee engagement. The construct is broad

and subsumes many ideas such as commitment, satisfaction, loyalty and behaviour, which creates a challenge when employee engagement has to be assessed.

Buckingham and Coffman (1999) describe three levels of engagement:

- Engaged – employees who work with passion and feel a profound connection to their organisation. They drive innovation and move the organisation forward;
- Not engaged – employees who attend and participate at work but are time-serving and put no passion or energy into their work; and
- Disengaged – employees who are unhappy at work and who act out their unhappiness.

The CIPD Annual Survey Report (2006) defines employee engagement in terms of three dimensions:

- Emotional engagement
- Cognitive engagement
- Physical engagement

Emotional engagement focuses on how employees feel about their relationships with their managers and colleagues; the cognitive engagement aspect concerns the employee's beliefs about the organisation, its leaders and working conditions, while the physical engagement aspect focuses on going the extra mile for the employer.

It is clearly important for researchers to seek reasons that may lead to employees becoming highly engaged as it is beneficial for the organisation. According to Dibley (2009:69), “[employee engagement] 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”. It is therefore essential to look at what engagement means to people and how leadership may play a role in sustaining high levels of engagement. A final benefit is reduced turnover because engaged people are less likely to leave the organisation.

3.3 Employee Engagement Theories

To understand the development of employee engagement, the Conservation of Resources (COR) theory, the Job Demands-Resources model (JD-R) and Self-Determination Theory (SDT) are discussed.

3.3.1 The Conservation of Resources (COR) theory

The Conservation of Resources theory (COR) was developed by Hobfoll (1989) as a comprehensive theory of stress, based on the premise that people strive to obtain, build, and protect that which they value; psychological stress occurs when these resources are lost. Hobfoll (1989) recognised four types of resources: objects (e.g., home, car), personal characteristics (e.g., positive outlook), conditions (e.g., good marriage, financial security) and energies (e.g., time, knowledge). Hobfoll (1989, 2001) based the model on two principles. Firstly, individuals invest their resources in order to deal with threatening conditions and prevent themselves from negative outcomes (Hobfoll, 2001). Secondly, individuals not only strive to protect these resources, but also to accumulate them, since resources tend to generate other resources (Hobfoll, 2002). The COR theory has been adjusted and made situation-specific for use in the business environment, and evolved into the Job Demands-Resources (JD-R) model (Schaufeli & Bakker, 2001), which illustrates the basic tenets of COR and places them within the specific framework of work characteristics, burnout, and work engagement.

3.3.2 The Job Demands-Resources (JD-R) Model

The Job Demands-Resources (JD-R) model proposes that working conditions can be categorised into two broad categories (job demands and job resources) that are differentially related to specific outcomes (Demerouti *et al.*, 2001). Job demands are primarily related to the exhaustion component of burnout, whereas (lack of) job resources are primarily related to disengagement. The model assumes that high job demands are predictors of burnout, disengagement, and health problems, whereas job resources can prevent burnout and lead to engagement and positive outcomes (Bakker *et al.*, 2003). Job resources predict work engagement better than job demands (Mauno *et al.*, 2007). Previous studies (Bakker *et al.*, 2003) have shown that several job resources, such as social support and supervisory coaching (leadership), lead to employee engagement.

3.4 Antecedents of Employee Engagement

In this study, it is necessary to attempt to identify various factors that could influence employee engagement. Organisations drive employee engagement by focusing on employees, leaders, and organisational systems and strategies. Although there is little empirical research on the factors that predict employee engagement, employee engagement models assist in identifying a number of potential antecedents (Kahn, 1990; Maslach *et al.*, 2001).

Towers Perrin (2003) carried out two sets of research, one in the US and one across six countries in Europe. The research questioned both groups on a variety of workplace factors on their organisation practices, processes, culture, leadership style, and development opportunities. Although the study found a top ten list of drivers of attraction, engagement and retention, the key factors were quite divergent in each list (Table 1). The top three among the ten drivers listed for each country are: senior management interest in the employee's well-being, challenging work, and decision-making authority. Table 1 shows that most drivers of employee engagement are non-financial in nature and do not require money to implement them in the business.

Table 1: Comparison of drivers in Europe versus US (Source: Towers Perrin, 2003)

The Top 10 Drivers in Europe

	TOP 10 ATTRACTION DRIVERS	TOP 10 ENGAGEMENT DRIVERS	TOP 10 RETENTION DRIVERS
1	Work/life balance	Senior management interest in employees	Manager inspires enthusiasm for work
2	Recognition for work	Ability to improve skills	Career advancement opportunities
3	Career Advancement opportunities	Senior management demonstrates values	Company reputation as a good employer
4	Challenging work	Challenging work	Fair and consistent pay determination
5	Competitive Pay	Decision - making authority	Intent to work after retirement in another field
6	Learning/Development opportunities	Company reputation as a good employer	Decision making authority
7	Job autonomy	Ability to influence company decisions	Overall work environment
8	Variety of work	Company focus on customer satisfaction	Intent to work after retirement to stay active
9	Pay rises linked to individual performance	Fair and consistent pay determination	Manager provides access to learning opportunities
10	Company reputation as a good employer	Overall work environment	Senior management demonstrates values

The Top 10 Drivers in the US

	TOP 10 ATTRACTION DRIVERS	TOP 10 ENGAGEMENT DRIVERS	TOP 10 RETENTION DRIVERS
1	Competitive Healthcare benefits	Senior management interest in employees	Career advancement opportunities
2	Competitive Pay	Challenging work	Retention of high-caliber people
3	Work/life balance	Decision - making authority	Overall work environment
4	Competitive retirement benefits	Company focus on customer satisfaction	Ability to improve skills
5	Career Advancement opportunities	Career Advancement opportunities	Resources to get job done
6	Challenging work	Company reputation as a good employer	Competitive Pay
7	Caliber of coworkers	Collaboration with coworkers	Clear goals from manager
8	Pay rises linked to individual performance	Resources to get job done	Challenging work
9	Recognition for work	Ability to influence company decisions	Manager inspires enthusiasm for work
10	Company reputation as a good employer	Senior management vision	Overall satisfaction with benefits

Saks (2006) identified a model of the antecedents and consequences of employee engagement and found that the following are common antecedents of employee engagement: job characteristics, perceived organisational support, perceived supervisor support, rewards and recognition, procedural and distributive justice.

3.4.1 Job Characteristics

Kahn (1990) found that psychological meaningfulness can be achieved from task characteristics that provide challenging work and variety; allow the use of different skills and personal discretion, and the opportunity to make important contributions. Jobs that are high on the core job characteristics provide individuals with the room and incentive to bring more of themselves into their work, or to be more engaged (Kahn 1992). Job enrichment is positively related to meaningfulness and engagement. The workload and control conditions from the Maslach *et al.* (2001) model also suggest the importance of job characteristics for engagement. Job characteristics such as feedback and autonomy have been consistently related to engagement (Maslach *et al.*, 2001).

3.4.2 Rewards and Recognition

According to Kahn (1990), people vary in their engagement as a function of their perceptions of the benefits they receive from a role. Melcrum (2007) points out the importance of compensation, benefits and formal recognition in promoting employee engagement, for example, timely recognition and rewards drive engagement and are positively related to performance. Employees need to feel valued and appreciated in the work they do. Therefore, one might expect that employees would be more likely to engage at work to the extent that they perceive greater reward and recognition for their role performances.

3.4.3 Perceived Organisational and Supervisor Support

Employees perceive the role of line managers as providing care and support within the organisation. According to Kahn (1990), supportive management relationships provide psychological safety as employees feel safe in work environments characterised by openness and supportiveness. A study by Schaufeli and Bakker (2004) found that a measure of job resources that includes support from colleagues predicted engagement. A study by Kenexa Research Institute (2008) found that effective managers have more engaged staff than ineffective managers. Similarly, a study by Judge *et al.* (2001), found that individual performance was closely linked to satisfaction with one's supervisor. In all, research studies have found significant positive

relationships between employee engagement and employees with good relationships with their leaders or managers (CIPD, 2006).

3.4.4 Distributive and Procedural Justice

Distributive justice is defined as the perceived fairness of the means and processes used to determine the amount and distribution of resources (Rhoades *et al.*, 2001), whereas procedural justice is concerns the fairness of the ways used to determine the distribution of resources among employees (Greenberg, 1990). Organisations are expected to be consistent in terms of the distribution of rewards and procedures used to allocate them. Organisational justice studies have found that perceptions of justice are related to organisational outcomes such as job satisfaction and performance (Colquitt *et al.*, 2001) and impact, in part, employee engagement. In contrast, low perceptions of fairness are likely to cause employees to disengage themselves from their work roles and Maslach *et al.* (2001) demonstrate that a lack of fairness can exacerbate burnout, while positive perceptions of fairness may improve engagement.

3.5 Consequences of Employee Engagement

3.5.1 Employee Productivity

Research shows that engaged employees perform better for the organisation (Kahn, 1990; Saks, 2006). A study conducted by Corporate Leadership Council (2004) found that the most engaged and committed employees perform 20% better than their colleagues.

3.5.2 Employee Retention

Levinson (2007) found that employees who are happy in their work are more likely to stay in the organisation. According to Blessing White (2008), 85% of engaged employees plan on sticking around, compared to 27% of disengaged employees.

3.5.3 Employee Performance

Engaged employees have been found to contribute to business performance (Dibley, 2009). There is evidence that improved engagement correlates with improved performance (Gallup, 2006). Tower Perrins (2006) conducted a global survey to

compare the financial performance of organisations with a highly engaged workforce to their peers with a less engaged workforce over a 12-month period. The results indicated a significant difference in bottom-line results in companies with highly engaged employees when compared to companies with low levels of employee engagement. According to Tower Perrins (2006), research shows that of 75 possible drivers of engagement, the one that was rated as the most important was the extent to which employees believed that their senior management had a vested interest in their well-being.

3.5.4 Successful Organisational Change

Employee engagement plays a major role in aiding the successful implementation of organisational change (Graen, 2008). Cambridgeshire County Council found that their employee engagement improvement plans save them time when introducing new policies and implementing change within the council (Scottish Executive Social Research, 2007).

3.5.5 Health and Well-being

Recent studies indicate that engagement may result in positive health effects and positive feelings towards work and the organisation (Rothbard, 2001). According to Kahn (1990), engagement and investment of the self in one's work may lead to intrinsic motivation, creativity, increased involvement, and overall, a more productive and happy employee.

3.6 Leadership Style and Employee Engagement

Studies have shown that leadership has been found to be a critical factor leading to employee engagement (Vazirani, 2007). The level of the employee's relationship with the leaders is often synonymous with how they feel about their jobs and the organisation (Melcrum, 2005). Leaders possess different leadership styles that determine the working conditions that influence an employee to be either engaged or disengaged in their work and their company. Recent studies by Avolio and Bass (2004), Amarjit *et al.* (2006) on the relationship between leadership and employee engagement identified transformational leadership as the major leadership style that influences employee engagement. According to Vaananen *et al.* (2003), a leader's

appreciation and support inspire people and assist the employee to cope with work. A supportive leader exhibits perceptions of safety and enhances employees interest in and willingness to work (Edmondson 1999).

Although few studies have focused on leadership styles that influence employee engagement levels, Towers Perrin Research (2003) has investigated key drivers of employee engagement and has demonstrated that leadership is the top driver of employee engagement.

3.7 Measuring Employee Engagement

According to Wellins *et al.* (2005), organisations want employees who are engaged in their work. Gallup research has linked employee engagement in a number of studies (Buckingham & Coffman, 1999) to such variables as employee turnover, customer satisfaction and productivity (Harter Schmidt & Hayes, 2002). The ability of an organisation to manage employee engagement allows it to achieve high-performance levels. Therefore, employee engagement is critical to any organisation that seeks to motivate and retain its employees. As organisations globalise and labour legislation becomes more stringent, connecting and engaging with employees is increasingly necessary. To achieve this end, a number of measures that have been developed by large consultancies that assist organisations to benchmark their levels of engagement against data derived from hundreds or thousands of companies (Schaufeli, *et al.*, 2002b). Balain and Sparrow (2009) suggest that organisations use the measures with caution as there is a wide variation in the measures in terms of what is actually measured.

Employers can explore a variety of factors to measure engagement; to date such measures available include: IES Engagement Survey, Gallup Workplace Audit (Q12), Netpromoter, Roffey Park Institute's Engagement Diagnostic Service, Towers Perrin Rapid Engagement Diagnostic Survey, Utrecht Work Engagement Scale (UWES) and Workplace Insight Tool (WIT™). The Gallup Workplace Audit (Q12) and UWES have been used extensively in most countries.

3.7.1 The Utrecht Work Engagement Scale (UWES)

The UWES was established in 1999 to determine engagement. This scale defines engagement as “a positive, fulfilling, work-related state of mind that is characterised by vigour, dedication and absorption” (Schaufeli, Salanova, González-Romá and Bakker 2002a:74). UWES is currently available in 20 languages and can be used freely for non-commercial purposes. Vigour is assessed by six items that refer to high levels of energy and resilience, the willingness to invest effort, not being easily fatigued, and persistence in the face of difficulties. People who score high on vigour have more energy, zest and stamina when working than those who score low on vigour. Dedication is assessed by five items that refer to deriving a sense of significance from one’s work, feeling enthusiastic and proud about one’s job, and feeling inspired and challenged by it. People who score high on dedication identify strongly with their work because it is experienced as meaningful, inspiring and challenging whereas those who score low on dedication feel neither enthusiastic nor proud about their work. Absorption is measured by six items that refer to being totally and happily immersed in one’s work and having difficulty detaching oneself from it so that time passes quickly and one forgets everything else. People who score high on absorption feel that they are usually happily engrossed in their work, they feel immersed in it and have difficulty detaching from it because it carries them away, whereas those who score low on absorption do not feel engrossed or immersed in their work.

The UWES has been used in a variety of sample groups such as managers, executives, farmers, blue-collar workers, police officers and health care workers (Schaufelli & Bakker 2003). Work engagement, as measured by the UWES, has been found to be positively related to job involvement and organisational commitment (Hallberg & Schaufeli 2006). Engaged workers are characterised by low levels of burnout (González-Romá *et.al*, 2006). The construct validity of the UWES has been thoroughly established and the instrument is internally consistent and shows good factorial validity across both occupational groups, and different countries and cultures (Schaufeli *et al.*, 2002b).

3.7.2 Gallup Workplace Audit (Q12)

Gallup (2006), the pioneers of employee engagement, created the Q12, a twelve-question survey based on the work of Buckingham and Coffman (1999) to identify and measure elements of worker engagement closely associated to the financial bottom line. The Q12 is a diagnostic employee survey tool that identifies strong feelings of employee engagement. To identify the elements of worker engagement, Gallup conducted hundreds of focus groups and many thousands of worker interviews in all kinds of organisations, at all levels, in most industries, and in many countries (Luthans and Peterson 2002).

Gallup's 12 questions, Q12, (Vazirani, 2007):

- Do you know what is expected of you at work?
- Do you have the materials and equipment you need to do your work right?
- At work, do you have the opportunity to do what you do best every day?
- In the last seven days, have you received recognition or praise for doing good work?
- Does your supervisor, or someone at work, seem to care about you as a person?
- Is there someone at work who encourages your development?
- At work, do your opinions seem to count?
- Does the mission/purpose of your company make you feel your job is important?
- Are your associates (fellow employees) committed to doing quality work?
- Do you have a best friend at work?
- In the last six months, has someone at work talked to you about your progress?
- In the last year, have you had opportunities at work to learn and grow?

The 12 engagement questions are answered by employees on a scale of one to five, based on their weak or strong agreement. However, the Q12 is far more than a baseline litmus test of the degree of existing employee engagement; it deploys a feedback methodology for improving engagement by creating a factual base for discussion and debate of the causes behind the numbers, and it yields actionable input

from staff and managers for changes in attitude, conduct, policies and processes. Validation studies show that Gallup Q12 has a valid, reliable instrument that is capable of providing an organisation with accurate data (Wilson 2009).

3.8 Conclusion

This chapter provided an insight into the concept of employee engagement and presented an argument for the importance of employee engagement for an organisation's success. After introducing the concept of employee engagement and discussing its empirical underpinnings, various conclusions can be drawn: employee engagement is positively associated with social support, performance feedback, job autonomy, task variety, positive organisational outcomes, and high performance. Employee engagement plays a crucial role in the development of an organisation's human capital.

CHAPTER FOUR: RESEARCH AND METHODOLOGY

4.1 Introduction

This chapter describes the research methodology used in the study. The hypotheses, research design, population and sampling used in the study will be presented. The two instruments used for data collection will be described in detail. A description of the data analysis and statistical techniques utilised in the study will be provided.

4.2 Goals of the Research and Hypothesis

The general purpose of the research is to establish the relationship between leadership style and employee engagement within Sasol Gas. The main objective of the study is to investigate the relationship between various leadership styles and various employee engagement levels within Sasol Gas. From the identification of the broad objectives of the research, specific hypotheses were formulated.

The research hypotheses investigated:

H₁ – There is no significant positive linear relationship between transactional leadership style and employee engagement.

H₀ – There is a significant positive linear relationship between transactional leadership style and employee engagement.

H₂ – There is no significant positive linear relationship between transformational leadership style and employee engagement.

H₀ – There is a significant positive linear relationship between transformational leadership style and employee engagement.

H₃ – There is no significant positive linear relationship between laissez-faire leadership style and employee engagement.

H₀ – There is a significant positive linear relationship between laissez-faire leadership style and employee engagement.

4.3 Research Design

The principle of positivism was used throughout the dissertation, based on the assumption that there are known truths. According to Denzen and Lincoln (1994:109), in a positivism paradigm, “An apprehendable reality is assumed to exist, driven by immutable natural laws and mechanisms”. This researcher used the existing theory to develop hypotheses and tested them using a quantitative survey. The researcher adopted a positivistic view to ensure independence.

4.3.1 Ethical Considerations

The researcher was conscious of the ethical requirements for the study with regard to the following:

- Ethical considerations of confidentiality and privacy were addressed.
- A guarantee was given to the Sasol Gas respondents that their names would not be revealed in the research report. In order to ensure the success of the research, managers were linked to subordinates in such a manner that each subordinate’s response remained anonymous, apart from being linked to a particular manager.
- All research instruments were submitted to the supervisor for approval before use.
- Sources of literature used in the research were recognised and referenced accordingly.
- All participants in the survey were free to participate; no candidate felt compelled to do so.
- Personal details of the respondents were not recorded; anonymity was guaranteed.

4.4 Research Population and Sample

Babbie and Mouton (2007:174) describe a study population as the “aggregation of elements from which the sample is actually selected”. The study was conducted within Sasol Gas, which is the only supplier of natural gas in South Africa. Sasol Gas assets are located mainly in Gauteng, Mpumalanga and Kwa-Zulu Natal. Owing to the size of the organisation, it was not practical or possible to access the whole of Sasol Gas for this study.

A sample of 138 (N=138) was selected from Sasol Gas using the stratified sampling method, which was chosen to assist in “obtaining a greater degree of representativeness” (Babbie & Mouton, 2007:191). Currently, the total employee Sasol Gas) pool is approximately 210. Participants were briefed about the aim and purpose of the study, and the confidentiality issues.

The sample size (table 2) was as follows:

Employees without supervisory responsibilities (Total Sample=118).

Employees with supervisory responsibilities (Total Sample=20).

Formula used to determine the study population:

$n = N / (1 + N(e)^2)$ where n = desired sample size, N=Size of the population and e=Limit of error tolerance assured at 5%.

Table 2: Population, sample and response rates for MLQ 5X

	Leaders	Raters	Total
Sample	20	118	138
Responses	20	37	57
Response Rates	100%	31%	41%

Table 3: Population, sample and response rates for UWES

	Raters
Sample	118
Responses	35
Response Rates	30%

The low response rate can compromise the validity of the results because it can give rise to sampling bias if the non-response is unequal among the participants regarding exposure and/or outcome.

4.5 Research Variables

Leadership style is used as the independent variable and employee engagement the dependent variable.

4.6 Data Collection Techniques

Two questionnaires were selected to measure leadership style and employee engagement:

1. Multifactor Leadership Questionnaire (MLQ)
2. Utrecht Work Engagement Scale (UWES)

4.6.1 Multifactor Leadership Questionnaire (MLQ)

The measuring instrument used for the independent variable was the MLQ (Form 5X) and was used to gather information on the leadership style of the Sasol Gas participants. The MLQ Form 5X was developed by Mind garden based on the work by Bass and Avolio (2000) to assess the extent to which leaders exhibit transformational, transactional and laissez-faire leadership, and the extent to which followers are satisfied with their leaders. The MLQ instrument measures leadership effectiveness and the full range of leadership styles (Avolio & Bass, 1994). The 45-item instrument contains nine leadership scales and three outcome scales (Rowold, 2005). The instrument offers a full range of assessment of leadership behaviours:

- Transformational leadership, which consists of five factors, namely: idealised attributes (IIA), idealised behaviours (IIB), inspirational motivation (IM), intellectual stimulation (IS), and individualised consideration (IC).
- Transactional leadership, namely: contingent rewards (CR), management by expectation: active (MBEA) and management by expectation: passive (MBEP).
- laissez-faire (LF).
- Outcomes of leadership (attributions), namely:
Extra effort (EE), effectiveness (EFF) and satisfaction (SATIS)

Reliability and validity of the MLQ 5X instrument has been well established (Bass and Avolio, 2002; Patten, 2004) and has both external validity and construct validity (Avolio & Bass, 2004), and Bass and Avolio (2002) report reliabilities for each of the scales ranging from 0.74 to 0.91.

The recent MLQ 5X-Short developed by Bass and Avolio (2002) was used to measure all nine dimensions of the full-range leadership model. The survey is designed to place the leader on a continuum from laissez-faire to transformational leadership (Bass and Riggio, 2006).

4.6.1 a) Administration of the Survey

In order to conduct research in Sasol Gas, initial permission was obtained from the Human Resources Manager, and the publisher, Mind garden (www.mindgarden.com), gave special permission to use the MLQ developed by Bass and Avolio (2000).

The survey was distributed by the researcher and the Human Resource Manager to Sasol Gas employees. Most questionnaires were distributed by e-mail and some were directly hand delivered to the respondents. E-mail recipients were requested to print the form, complete the questionnaires on paper, and return them to the author either via e-mail, fax, or hand delivery. The MLQ consists of two versions, one for the leader to complete, and one for the raters of the leaders to complete. Leaders completed the self-rater MLQ (leader form, see Appendix A), by rating themselves in terms of the transformational, transactional or laissez-faire leadership factors. Subordinates also completed the rater version (Rater Form, see Appendix B) of the same questionnaire. The leaders were rated in terms of the same criteria by which they rated themselves. As shown in Table 2, 20 managers successfully completed and returned the questionnaires, resulting in a response rate of 100%. Only 37 of the raters successfully completed the questionnaires resulting in a response rate of 31%. The total number of responses analysed, including leaders and their raters, was 57 employees.

4.6.1 b) Data Analysis

Once the questionnaires had been collected by the researcher, they were coded and the responses collated in Excel format for analysis using the Social Package for Social Sciences (SPSS) statistical software. The MLQ 5X was individually scored after completion by the respondents using the Scoring Key (5X) Short (Appendix C) and the MLQ scores were obtained by summing up items and dividing the items by the number of items that made up the scale.

The Reliability of the Multifactor Leadership Questionnaire

A recent review of literature indicates that there is inconsistency among researchers as to the “best” index to use to ascertain goodness of fit. Spearman’s rho correlation matrix was used to test goodness of fit (Tables 5 and 6), but for confirmation purposes, the procedure was repeated using Pearson’s correlation matrix (Table 7).

Cronbach’s Alpha (Cronbach, 1951) was employed to test the internal consistency-reliability of the 12 scales. A reliability check for the MLQ was conducted to provide evidence to ensure the instrument produced the relevant accurate data. Cronbach alpha was computed for the instrument. The overall alpha reliability coefficients based on standardised items for the MLQ yielded coefficients of 0.703 and 0.836 for leaders and raters, respectively (Table 4). According to Nunnally (1970), a reliability coefficient of 0.70 or higher is acceptable for testing of constructs. It is therefore evident from the results obtained (Table 4) that the company’s leadership questionnaire is acceptable and a reliable measure of the leadership style for this study.

4.6.2 Utrecht Work Engagement Scale (UWES)

The UWES was used to measure engagement (Schaufeli *et al.*, 2006). The items of the UWES 9 were grouped into three sub-scales that reflect the dimensions of employee work engagement: vigour, dedication and absorption.

Table 4: Scale: Leader and Rater Cronbach's Alpha coefficients

Leader Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardised Items	N of Items
.666	.703	12

Rater Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardised Items	N of Items
.795	.836	12

4.6.2 a) Administration of the Survey

Questionnaires were distributed by e-mail and some were directly hand delivered to the respondents. Participants were requested to print and complete the questionnaires and return them to the author either via e-mail or hand delivery. A sample of 138 employees was used for the study. As shown in Table 2 and 3, 35 subordinates successfully completed and returned the questionnaires, resulting in a response rate of 30%.

4.6.2 b) Data Analysis

Once the questionnaires had been collected, the researcher coded the questionnaires and collated the responses in Excel format for analysis with the SPSS statistical software. The UWES 9 form was individually scored after completion by the respondents. The mean scale score of the three UWES sub-scales was computed by adding the scores on the particular scale and dividing the sum by the number of items

of the sub-scale involved, and a similar procedure was followed for the total score. UWES yields three sub-scale scores and/or a total score that range between 0 and 6.

The Reliability of the Utrecht Work Engagement Scale

The factorial validity of the UWES is high and has been generalised to different samples across different countries (Schaufeli *et al.*, 2002b) and all scales of the various UWES are highly internally consistent. A reliability check for the UWES 9 was conducted to provide evidence to ensure the instrument produced the relevant accurate data. Cronbach's Alpha was computed for the instrument. The overall alpha reliability coefficient based on standardised items yielded a coefficient of 0.855 (Table 5). It is therefore evident from the results obtained that the questionnaire is a reliable measure of the employee engagement for this study. The coefficients over 0.8 are acceptable and considered good.

Table 5: UWES 9 Reliability Statistics

UWES 9 Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardised Items	N of Items
.857	.855	3

4.7 Conclusion

This chapter presented the methodology of the research together with the process of data collection and analysis for each instrument. Information was presented regarding the sample size the number of participants included in the final statistical analysis and ethical considerations. An overview of the data collection method was then provided. Each of the two instruments used in this research, as well as their reliability and validity, were then discussed in detail.

CHAPTER FIVE: ANALYSIS OF RESULTS

The previous chapter discussed the methodology followed in this research study: the goals of the research and the hypothesis; the research population and sample; the instruments used, and their respective reliability and validity; the process of data collection, capture and analysis, and the calculation of Cronbach's Alpha coefficient. This chapter presents and discusses the results of the correlation analysis and descriptive statistics of the research hypothesis.

Descriptive statistics were used to summarise the quantitative data. The first part discusses findings from the demographic characteristics of the target population. The second part focuses on the analysis of standard statistical tools. The third part presents findings of the correlation analysis of leadership styles and employee engagement, followed by a summary.

5.1 Multifactor Leadership Questionnaire

5.1.1 Descriptive Statistics

Descriptive statistics were used to describe the leadership style of the Sasol Gas leaders and to extract, arrange, summarise, use and present data in such a way as to make the data meaningful (Keller & Warrack 1999). A sample of 138 was identified (20 leaders and 118 raters). Twenty leaders (100%) and thirty-seven raters (31%) returned the surveys. The sample sizes, means, and standard deviations of each of the MLQ factors for the leaders and raters are given in Tables 6 and 7. Leadership scale scores have a range of possibility of 0 to 4. A score of 0 means the behaviour was not used at all while 4 indicated a behaviour style used frequently, if not always. A score of 0-1 represents a leadership style used minimally or never. A score of 1-2 demonstrates a style used once in a while to sometimes. A score between 2 and 3 demonstrates behaviours used fairly often within the business. The results of descriptive statistics for employees' and leaders' responses to the MLQ are presented below in Tables 6 and 7.

Table 6: Leader descriptive statistics

Leader Descriptive Statistics								
	N	Range	Minimum	Maximum	Sum	Mean	Std. Deviation	Variance
Respondents	20	19	1	20	210	10.50	5.916	35.000
IIA	20	1.25	2.25	3.50	59.50	2.9750	.37081	.137
IIB	20	2.50	1.50	4.00	61.50	3.0750	.62880	.395
IM	20	2.00	2.00	4.00	63.75	3.1875	.49254	.243
IS	20	2.25	1.50	3.75	62.25	3.1125	.53481	.286
IC	20	1.75	2.25	4.00	64.25	3.2125	.47486	.225
CR	20	1.50	2.50	4.00	65.00	3.2500	.43679	.191
MBEA	20	2.50	1.00	3.50	47.25	2.3625	.81303	.661
MBEP	20	2.75	.00	2.75	23.75	1.1875	.69242	.479
LF	20	2.25	.00	2.25	11.75	.5875	.67510	.456
EE	20	2.00	2.00	4.00	63.05	3.1525	.52201	.272
EFF	20	1.50	2.50	4.00	63.50	3.1750	.42996	.185
SATIS	20	1.50	2.50	4.00	64.34	3.2170	.46869	.220
Valid (listwise)	N 20							

Tables 6, 7, 8 and 9 indicate the leaders' and raters means and standard deviations of the scales used. The mean of the leader transformational leadership score was 3.1115, while the mean of transactional leadership was 2.2667. The laissez-faire leadership mean was 0.5875 (Table 8). The range of transformational leadership was 1.5 to 4.00, and the range of transactional leadership was 0.00 to 4. The range of laissez-faire leadership was 0 to 2.25. According to Bass and Avolio (1997), transformational leadership sub-scale mean score are less than 3. It can be seen from Tables 6 and 7 that there were variations in both leaders' and employees' mean scores and standard deviation. These variations may be due to the differences of perception of the groups about leadership styles.

Table 7: Rater descriptive statistics

Rater Descriptive Statistics								
	N	Range	Minimum	Maximum	Sum	Mean	Std. Deviation	Variance
IIA	37	2.50	1.50	4.00	108.50	2.9324	.57629	.332
IIB	37	2.75	1.25	4.00	107.25	2.8986	.65208	.425
IM	37	3.00	1.00	4.00	112.50	3.0405	.60814	.370
IS	37	2.50	1.50	4.00	106.25	2.8716	.54525	.297
IC	37	3.50	.50	4.00	103.50	2.7973	.73323	.538
CR	37	3.00	1.00	4.00	106.75	2.8851	.80492	.648
MBEA	37	4.00	.00	4.00	77.50	2.0946	1.02800	1.057
MBEP	37	3.00	.00	3.00	45.00	1.2162	.68253	.466
LF	37	3.00	.00	3.00	29.75	.8041	.94673	.896
EE	37	3.00	1.00	4.00	112.00	3.0270	.73917	.546
EFF	37	2.75	1.25	4.00	115.50	3.1216	.66568	.443
SATIS	37	3.00	1.00	4.00	114.00	3.0811	.71213	.507
Valid (listwise)	N 37							

The Sasol Gas managers who were surveyed rated their leadership behaviour as more transformational than transactional, although it should be noted that the mean for transactional leadership behaviours is still 2.26 and thus there seems to be regular use of transactional leadership behaviours in conjunction with transformational leadership behaviours. All leaders rated themselves as using transformational leadership behaviours more frequently than transactional leadership behaviours. Laissez-faire was perceived to be the least prominent style among Sasol Gas leaders.

Table 8: Leaders' mean score on the Multifactor Leadership Questionnaire 5X (N=20)

MLQ5x	<i>M</i>	SD
Transformational leadership	3.1115	0.5000
Transactional leadership	2.2667	0.6474
Laissez-faire leadership	0.5875	0.67510

Table 9: Raters' mean score on the Multifactor Leadership Questionnaire 5X (N=37)

MLQ5x	<i>M</i>	SD
Transformational leadership	2.90805	0.6229
Transactional leadership	2.0653	0.8384
Laissez-faire leadership	0.5875	0.67510

The mean of the raters transformational leadership score was 2.90805, while the mean of transactional leadership was 2.0653. The laissez-faire leadership mean was 0.5875 (Table 9). The range of transformational leadership was 1.5 to 4.00, and the range of transactional leadership was 0.5 to 4. The range of laissez-faire leadership was 0 to 2.25. Regarding standard deviation, there was slight difference in variability of the scores of the leader and employees.

It can be deduced from Table 9 that there is a relatively high trend towards transformation present in the management structure of Sasol Gas, as shown by a mean of 2.90, while, at the same time, exhibiting some characteristics of transactional leadership ($M = 2.06$). The transformation components that were the strongest in the Sasol Gas leaders were those of inspiration, motivation and individualised influence (Attributed) with means of 3.04 and 2.93 respectively. The high scores indicate that the Sasol Gas leaders talk optimistically about the future and instil pride in others. Inspirational motivation and individualised influence is shown in leaders when they inspire their followers to demonstrate commitment to the shared vision of the company. None of the leaders show a high score in the laissez-faire leadership style. The average mean score was 0.59, showing that it is not a preferred leadership style. These results are a positive sign for Sasol Gas.

According to Tichny and Devanna (1990), effective and successful leaders use transformational leadership most of the time, followed by some transactional leadership. The results indicate that a statistically significant and direct correlation exists between transformational leadership and the overall dimensions of employee engagement. This is in line with Raja (2012), who explored how transformational leadership leads to higher employee work engagement in the service sector firms of Pakistan. Schaufeli and Bakker (2004) also confirm that all dimensions of transformational leadership positively impact on employee engagement. Tims, Bakker and Xanthopoulou (2011), who examined how transformational leaders enhance employee engagement, also authenticate the fact that transformational leadership positively impacts employee engagement.

Transactional leadership also showed large positive correlation with engagement; Bass (1985) claims that the best leaders are both transactional and transformational, while, according to Burns (1978), transactional leaders focus on the proper exchange of resources (reward and recognition). These job resources foster employee engagement and affect behavioural work outcomes (Koyuncu, Burke & Fiksenbaum, 2006).

The data were also analysed in order to establish whether there were any significant differences between the rater mean scores and the leaders' self-ratings on each of the three leadership styles. Tables 8 and 9 do not show any significant differences in the ratings of transformational, transactional and laissez-faire leadership styles. Neither the leaders nor the raters indicated transactional leadership as a dominant leadership style. These results support findings in previous research that self-report ratings are more favourable than ratings by others.

5.2 The Utrecht Work Engagement Scale (UWES)

5.2.1 Descriptive Statistics

Descriptive statistics for the dimensions of employee engagement were calculated for the dependent variable (UWES 9; see Appendix D) used in this study, using the SPSS statistical package to determine the statistical properties of the UWES 9.

The UWES 9 measures the three factors of vigour, dedication and absorption. Table 10 provides the means, standard deviation and the minimum and maximum for each of the factors. The lowest mean value was for vigour, followed by absorption, while the highest mean value was for dedication. This implies that the workforce's dedication to their work is relatively high when compared to other components.

Table 10: Means, standard deviation, minimum and maximum for the UWES 9 (N=35)

MEANS, STANDARD DEVIATION, MINIMUM AND MAXIMUM FOR THE UWES 9 (N=35)								
Engagement Dimension	N	Range	Minimum	Maximum	Sum	Mean	Std. Deviation	Variance
Vigour	35	4	1	6	135	3.86	1.269	1.611
Dedication	35	4	2	6	156	4.45	1.259	1.585
Absorption	35	5	1	6	150	4.29	1.112	1.237
Valid (listwise)	N 35							

The scale is from 0 to 6 and mean scores of 3.86 for absorption and 4.45 for dedication seem to indicate that average levels of engagement were possibly experienced by the followers participating in the study. Although vigour (3.86) scored somewhat lower, it still falls within the average category of the norm scores (3.26 – 4.80) for the UWES 9, when considering the norms of this instrument (Schaufelli & Bakker, 2003)

5.3 Statistical Analysis

The Pearson product moment correlation coefficient was used to determine the strength and direction of the relationship between transformational, transactional, and laissez-faire leadership styles and employee engagement. It is important to assess the possible association, if any, between variables (Kachigan 1991). All statistical analyses were performed with SPSS version 17.0. An alpha level of 0.05 was used to establish significance. 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).

5.3.1 Intercorrelations for the MLQ (Form 5X) (N=37)

There is a lack of a significant correlation between management by exception active (MBEA) and IIA, IIB, IC and CR. Similarly, there is a negative correlation between MBEP and IIA, IIB, IC and CR. LF is also shows negative correlation.

Table 11: Intercorrelations for the MLQ (form 5X) (N=37)

		IIA	IIB	IM	IS	IC	CR	MBEA	MBEP	LF	EE	EFF	SATIS
IIA	Pearson Correlation	1											
IIB	Pearson Correlation	.582**	1										
IM	Pearson Correlation	.702**	.711**	1									
IS	Pearson Correlation	.541**	.451**	.534**	1								
IC	Pearson Correlation	.706**	.689**	.712**	.493**	1							
CR	Pearson Correlation	.394*	.609**	.492**	.385*	.692**	1						
MBEA	Pearson Correlation	.240	.139	.171	.100	.130	-.022	1					
MBEP	Pearson Correlation	.201	-.043	.187	-.222	-.226	-.257	.230	1				
LF	Pearson Correlation	-.130	-.227	-.161	-.269	-.371*	-.427**	.323	.452**	1			
EE	Pearson Correlation	.576**	.677**	.679**	.645**	.786**	.595**	.022	-.262	-.348*	1		
EFF	Pearson Correlation	.375*	.661**	.622**	.556**	.657**	.701**	-.027	-.270	-.325*	.841**	1	
SATIS	Pearson Correlation	.538**	.624**	.481**	.466**	.684**	.695**	-.110	-.237	-.450**	.703**	.631**	1
** . Correlation is significant at the 0.01 level (2-tailed).													
* . Correlation is significant at the 0.05 level (2-tailed).													

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 $r=0.45$ ($p<0.01$) to a maximum of $r=0.71$ ($p<0.01$), 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 (SATIS) also indicated statistically significant correlations with the transformational aspects of the instrument. An example of this significant correlation is evident from the IM and EE correlation. The positive correlations between the transactional and transformational leadership scales were expected because effective leaders demonstrate varying amounts of both transformational and transactional leadership (Avolio *et al.* 1999).

5.3.2 Intercorrelations for the UWES 9 (N=35)

Dedication and vigour had a significant correlation at $r=0.828$ ($p<0.01$), while absorption and vigour correlated significantly at $r=0.532$ ($p<0.01$) levels. Dedication and absorption also showed a significant correlation at 0.628 ($p<0.01$). It shows that there are large positive correlations between the three dimensions of engagement (vigour, dedication and absorption). This is in line with Schaufeli and Bakker's (2003) previous research that work engagement as assessed by the UWES might be considered as a one-dimensional as well as a three-dimensional construct.

Table 12: Intercorrelations for the UWES 9 (N=35)

Intercorrelations for the UWES 9 (N=35)				
		Vigour	Dedication	Absorption
Vigour	Pearson Correlation	1		
Dedication	Pearson Correlation	.828**	1	
Absorption	Pearson Correlation	.532**	.628**	1
** Correlation is significant at the 0.01 level (2-tailed).				

5.3.3 Intercorrelations Between the Independent and the Dependent Variables

The results of the intercorrelation analysis (Table 13) demonstrate possible relationships between the various scales as measured by the MLQ (Form 5X) and the

UWES 9. Table 13 is a multivariate correlation of the averages for each of the dimensions of the UWES 9, namely vigour, dedication, absorption on the one hand, and the MLQ (Form 5X), namely idealised influence attributed (IIA), idealised influence behaviour (IIB), inspirational motivation (IM), intellectual stimulation (IS), contingent reward (CR), management by exception active (MBEA), management by exception passive (MBEP) and laissez-faire (LF) on the other. The outcome leadership scales of extra effort (EE), effectiveness (EFF) and satisfaction (SATIS) have also been included. Table 13 presents the correlation scores of the relationship between the leadership dimensions described in the Full-Range Leadership Development Theory, and the dimensions of employee engagement, as described in the UWES Questionnaire.

According to Devore and Peck (1993), coefficients of less than 0.5 represent a weak relationship, coefficients greater than 0.5 but less than 0.8 represent a moderate relationship, and coefficients greater than 0.8 represent a strong relationship between variables. The MLQ uses a 5-point Likert scale from 0 to 4 while the UWES uses a 7-point Likert scale from 1 to 7; therefore, the instruments are negatively correlated.

When considered with transactional leadership style, vigour had no correlation with CR, MBEA or MBEP. Nor was a correlation with LF $r=-0.28$ evident. None of the outcomes of leadership, EE $r= - 0. 270$, EFF $r= - 0.257$ and SATIS $r=-0.28$, correlated with vigour. When considered with the transactional leadership style, dedication did not correlate with CR MBEA or MBEP.

Based on the correlation analysis evidence presented in Table 13, there is a positive but weak relationship. The correlation coefficients were below 0.5, so indicating a weak relationship. Vigour did not correlate with the transformational leadership styles IIA $r= -0.140$, IIB $r= -0.014$, IM $r= -140$, IS $r= -0. 154$ and IC $r= -0.09$, nor did dedication and absorption.

There was a significant negative correlation with laissez-faire. The outcomes of leadership EE, EFF and SATIS did not correlate with dedication either.

Table 13: Intercorrelations for the dimension of the MLQ (5X) and the UWES 9 (N=37)

INTERCORRELATIONS FOR THE DIMENSIONS OF THE MLQ (FORM 5X) AND UWES 9 (N = 37)																
		Vigour	Dedication	Absorption	IIA	IIB	IM	IS	IC	CR	MBEA	MBEP	LF	EE	EFF	SATIS
Vigour	Pearson Correlation	1														
Dedication	Pearson Correlation	.828**	1													
Absorption	Pearson Correlation	.532**	.628**	1												
IIA	Pearson Correlation	-.140	-.120	-.117	1											
IIB	Pearson Correlation	-.014	.052	.088	.582**	1										
IM	Pearson Correlation	-.140	-.114	-.124	.702**	.711*	1									
IS	Pearson Correlation	-.154	-.102	.020	.541**	.451*	.534*	1								
IC	Pearson Correlation	-.009	-.085	-.016	.706**	.689*	.712*	.493*	1							
CR	Pearson Correlation	.104	-.072	-.087	.394*	.609*	.492*	.385*	.692*	1						
MBEA	Pearson Correlation	-.102	.058	.189	.240	.139	.171	.100	.130	-.022	1					
MBEP	Pearson Correlation	-.082	.041	-.063	.201	-.043	.187	-.222	-.226	.257	.230	1				
LF	Pearson Correlation	-.028	.218	.300	-.130	-.227	-.161	-.269	-.371*	.427*	.323	.452**	1			
EE	Pearson Correlation	-.270	-.302	-.151	.576**	.677*	.679*	.645*	.786*	.595*	.022	-.262	-.348*	1		
EFF	Pearson Correlation	-.257	-.275	-.216	.375*	.661*	.622*	.556*	.657*	.701*	-.027	-.270	-.325*	.841**	1	
SATIS	Pearson Correlation	-.028	-.152	-.137	.538**	.624*	.481*	.466*	.684*	.695*	-.110	-.237	-.450**	.703**	.631**	1

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

5.4 Chapter Summary

This chapter provided an overview of the most salient findings which emerged from the empirical analysis. The hypotheses which were generated and emanated from engagement with the literature in this area were tested and have been reported on. This chapter included the descriptive statistics of the study population and the independent and dependent variables.

The next chapter presents a discussion of the findings and compares them with other research conducted in this field. It endeavours to elucidate the relationship between leadership and employee engagement.

CHAPTER SIX: DISCUSSION, RECOMMENDATIONS AND CONCLUSIONS

6.1 Introduction

The implications of the results presented in the previous chapter are discussed in the light of the literature reviewed in the first few chapters of this research. Recommendations for future research are also outlined in this chapter.

6.2 Discussion of the Results

The fast pace of organisational change has resulted in employees around the world becoming susceptible to high levels of stress and lower performance in their organisations (Schaufeli & Bakker, 2003). Therefore, this research offers some understanding of the relationships that leaders in Sasol Gas have on their employees level of work engagement. The study was based on the followers' perception of their leaders. Correlation analysis was used to test for a relationship between the two research variables. The results indicated that the subordinates of supervisors who adopt a transformational leadership style, who show an interest in and value their subordinates, and who make the employees feel important, will show more affective commitment towards their organisation.

From the results in Table 13, it is apparent that a weakly correlated relationship exists between leadership and employee engagement within Sasol Gas. The correlations were found to be significant at a 99% confidence level, indicating that there is a 99% probability that the population will fall within the correlation coefficients of this study. Therefore, the null hypotheses have to be rejected because a statistically significant, albeit weak, relationship exists between leadership style and employee engagement levels within Sasol Gas organisation. This research found a weak relationship between the factors of transformational and transactional leadership styles and certain factors of employee engagement. Laissez-faire leadership style resulted in employee disengagement within Sasol Gas.

6.3 Recommendations for Further Research

The results of this study showed that Sasol Gas leaders were not displaying the ideal levels of transformational leadership behaviour. Engagement can affect employees' attitudes, absence, and turnover levels, and various studies have demonstrated links with productivity and organisational performance (Kahn,1990). Organisations with higher engagement levels tend to have lower employee turnover, higher productivity, higher total shareholder returns and better financial performance (Baumruk, 2006).

The further result of this study showed that leaders demonstrated high levels of transformational and transactional leadership behaviours at Sasol Gas with transformational leadership identified as the dominant leadership style. The positive correlations between the transactional and transformational leadership scales were expected as effective leaders demonstrate varying amounts of both transformational and transactional leadership (Avolio *et al.*1999).

The results reflect a positive relationship between transformational leadership behaviour and employees' engagement (vigour, dedication and engagement), as is supported by different researchers. Engaged employees display greater strength and dedication, and the totality of their work should demonstrate ever-increasing performance because they focus on the responsibilities and duties of employees (Scaufeli, Bakker, and Salanova, 2006). Transformational leaders provide job resources (e.g. supervisory support, coaching, opportunities for development) that have a positive effect on employee health, motivation and engagement (Schaufeli and Bakker, 2004). On the other hand, the result of this study showed a positive relationship between transactional leadership behaviour and employees' engagement behaviours. Bass (1985) claims that the best leaders are both transactional and transformational.

Strategic Implications for Sasol Gas

There are many potential avenues for future research that could elaborate upon this research study. There is a need for longitudinal studies of engagement, to demonstrate a clear link between engagement and organisational performance, and also to assess long-term outcomes and benefits. Any future research should bear in

mind the practical usage of engagement in order for practitioners to identify individuals who are more likely to engage.

Based on the findings and conclusions of this study, the recommendations that follow are put forward in order to strengthen the positive aspects of leaders of Sasol Gas with regard to the leadership styles they exercise.

Sasol Gas leaders must continue to set a good example as role models, and to challenge the organisational changes processes by setting out, searching for new possibilities and embracing change in order to practise transformational leadership behaviours. Leaders can play a major role in developing and improving the engagement of employees. Leaders should display their commitment to the employees with a strong acceptance of organisational goals and values, as well as willingness to exert efforts to engage employees.

It is also suggested that the leaders of Sasol Gas should pay more attention to developing efficient team work and the trust of co-workers through transformational leadership behaviours in order to increase the psychological attachment of employees to the organisation. Sasol Gas could consider providing relationship training as part of their leadership development programme. Leaders should strive to influence employee perceptions for the better. Formal training of leaders by the company could be reinforced by the implementation of a leadership mentorship programme where the managers are provided with constant developmental feedback on their behaviour and shown how they can link to this the ideal qualities that foster effective and pro-active transformational leadership behaviour. The result shows that when managers practise all the aspects of transformational leadership – inspirational motivation, idealised influence, individual consideration and intellectual stimulation – it leads to higher employee work engagement (Raja, 2012).

The empirical results highlighted the importance of giving recognition to employees when it is deserved. The results of this study indicate that both transformation and transactional leadership styles are important prerequisites for employees to become engaged (Raja, 2012). Regular constructive and balanced feedback is important. Leaders must provide contingent rewards to their employees, through negotiation, to

ensure that employees receive the rewards they prefer. This implies that the transformational leader should have the ability to formulate and set well-defined goals that are clearly understood and supported by the employees.

Sasol Gas must adopt an approach that understands that transformational leadership involves everyone in the decision-making process to achieve success. Transformational leaders reshape organisational structures to be more effective when the command centre can disseminate information in a decentralised way as opposed to centralised command. Decentralised structures shift the power of decision-making to the lower levels and subsequently inspire organisational members to create new ideas and implement them, while centralised structures may negatively impact inter-departmental communications and inhibit knowledge exchange.

It is important for Sasol Gas leadership to let the employees share ideas and experiment with new ideas, posing questions for others to think about. The needs and wants of the employees should be considered; their attitudes and philosophies should be heard. Using active listening will show them that they are cared about. When they feel this, they are likely to be more productive.

Limitations

A limitation of the research was the small sample size as employees felt that taking the survey will be useless, knowing from previous surveys that nothing will be done. Further research should duplicate the study with a larger sample. It would be useful to do confirming research in a sample outside of this sphere. It would also be interesting to look at the effect of Sasol Gas biographical data (gender, race, rank etc) on employee engagement to see if follower responses vary significantly. The question of which leadership style factors promote employee engagement within Sasol Gas could be most appropriately addressed in further research. This type of research would enable Sasol Gas and other organisations' managers to work on those specific factors that promote highly engaged employees, possibly increasing the likelihood of the success for the organisation.

6.4 Conclusion

In this chapter conclusions regarding the theoretical and empirical objectives were drawn. The limitations of the research were pointed out and recommendations were made for Sasol Gas, as well as for future research. All theoretical and empirical objectives formulated for this research, have been attained.

The findings of this study found that Sasol Gas leaders tend to use transformational leadership more often than transactional or laissez-faire approaches. It has been reported that effective leaders use transformational leadership behaviours more often than transactional or laissez-faire leadership styles (Tichny and Devanna, 1990). This is in line with Veldsman's (2002) findings that a synergy between transactional and transformation leadership is required to offset any weaknesses inherent in each. Transformational leaders encourage their followers to adopt the organisation vision as their own. Laissez-faire leadership means were very low, which is good for Sasol Gas because laissez-faire leadership occurs when leaders give group members complete freedom of action, provide them with resources, but do not become actively involved in problem-solving or evaluation. While laissez-faire promotes relative freedom, it is not conducive to group cohesion and productivity, and satisfaction suffers under this leadership style. Laissez-faire leadership is a passive style.

Sasol Gas should continue to use transformational leadership as their chances for success and continued viability are promising. Transformational leadership aligns employee work activities to the organisation's vision and long-term strategy. The transformational leader encourages autonomy and empowers his followers to take on more responsibility and develop their knowledge and skills.

MLQ results showed that there were differences between the self-rating correlations of the leaders and the ratings of their followers on the MLQ questionnaire dimensions, indicating that leaders perceive the influence of the different leadership dimensions differently from their followers (subordinates). This suggests that leadership development is essential for Sasol Gas leaders in order to help them to anticipate the needs of their followers, and to assist them in dealing more effectively with these needs. In order for Sasol Gas to remain competitive, the organisation needs to find

effective ways to harness their current staff skills, knowledge and commitment (CIPD, 2007; Tritch, 2003). According to Towers Perrin (2003), companies with the highest levels of employee engagement achieve better financial results and are more successful in retaining their most valued employees.

LIST OF REFERENCES

- AMARIJIT, S.G., FLASCHNER, A.B. and SHACAR, M. 2006. Mitigating stress and burnout by implementing transformational leadership. *International Journal of Contemporary Hospitality*. 18, 6: 469–481.
- AMMA. 2007. *Workplace improvement through employee engagement* [Online]. Available: www.amma.org.au/home/publications/employeeengagement_a_lifetime_of_opportunity_sept2007.pdf [Accessed 20/12/2008].
- ARMANDI, B., OPEDISANO, J. and SHERMAN, H. 2003. Leadership Theory and Practice: a “case” in point. *Management Decision*. 41, 10: 1076–1088.
- ATWATER, L. E., DIONNE, S.D., CAMOBRECO, J.F., AVOLIO, B. J., and NAU, A. 1998. Individual attributes and leadership style: predicting the use of punishment and its effects. *Journal of Organisational behaviour*. 19: 559–576.
- AVOLIO, B.J. and BASS, B. M. 2002. *Developing Potential across a Full Range of Leadership: Cases on transactional and transformational leadership*. Mahwah, NJ: Lawrence Erlbaum Associates.
- AVOLIO, B. J. and BASS, B. M. 2004. *Multifactor Leadership Questionnaire. Manual and sampler set* (3rd ed.) Redwood City, CA: Mind Garden.
- AVOLIO, B.J. and HOWELL J. M. 1992. The impact of leader behaviour and leader-follower personality match on satisfaction and unit performance. In K. E. Clarke, M.B. Clarke, and D.R. Campbell (Eds.). *Impact of Leadership*. Greensboro, NC: The Center for Creative Leadership.
- BABBIE, E. and MOUTON, J. 2007. *The practice of social research*. Cape Town, South Africa: Oxford University Press.
- BAKKER, A. B., DEMEROUTI, E., TARIS, T., SCHAUFELI, W. B., and SCHREURS, P. 2003. A multi-group analysis of the job demands – resources model in four home care organizations. *International Journal of Stress Management*. 10:16–38.
- BALAIN, S. and SPARROW, P. 2009. *Engaged to Perform: A new perspective on employee engagement*. Executive Summary, Lancaster University Management School.
- BARLING, J., WEBER, T. and KELLOWAY, E.K. 1996. Effects of transformational leadership training on attitudinal and fiscal outcomes: a field experiment. *Journal of Applied Psychology*. 81:827–832.

BASS, B.M. 1981. *Handbook of leadership: revised and expanded edition*. New York: Free Press.

BASS, B. M. 1985. *Leadership and performance beyond expectations*. New York: Free Press.

Bass, B.M., 1990a. From Transactional to Transformational Leadership: Learning to Share the Vision. *Organizational Dynamics*. 18, 3: 19–31.

BASS, B.M. 1990b. *Bass and Stogdill's handbook of leadership: Theory, research, and managerial applications*. New York: The Free Press.

BASS, B.M. 1999. Stress and transactional-transformational leadership. *Transformational Leadership: Industrial, Military, and Educational Impact*. 79:28–33.

BASS, B. M. and AVOLIO, B. J., 1994. *Improving Organizational Effectiveness through Transformational Leadership*. California: Sage.

BASS, B. M. and AVOLIO, B. J., 2000. *MLQ: Multifactor questionnaire: Third edition manual and sampler set*. Redwood City, CA: Mind Garden.

BASS, B.M. and RIGGIO, R.E. 2006. *Transformational Leadership* (2nd ed.). Mahwah, NJ: Lawrence Erlbaum Associates.

BATES, S. 2004. Getting Engaged. *HR Magazine*. 49:44-51.

BAUMRUK, R. 2006. An interview by Bob Gorman Jr. *Strategic HR Review*. 15:47.

BLAKE, R. R. and MOUTON, J. S. 1964. *The Managerial Grid*. Houston: Gulf Publishing.

BLESSING WHITE. 2008. Employee Engagement Report 2006 Blessing White, Inc. Princeton, New Jersey. . [Online] Available:www.blessingwhite.com [Accessed 10/12/2008].

BOONZAIER, A. 2008. *The influence of transactional, transformational leadership on leader-follower value congruence and leadership success*. Unpublished MCom (Human Resources) thesis: Faculty of Economic and Management Sciences, Stellenbosch University.

BRATTON, J., GRINT, K. and NELSON, D. 2005. *Organisational Leadership*. Ohio: South-Western.

- BSI CONSULTING. 2007. *Employee Engagement – A concept clean-up*. BSI Consulting Paper.
- BUCKINGHAM, M. and COFFMAN, C. 1999. *First, break all the rules: What the world's greatest managers do differently*. New York, NY: Simon and Shuster.
- BURNS, J.M. 1978. *Leadership*. New York: Harper & Row.
- CAWE, N. 2006. *Factors contributing to Employee Engagement in South Africa*. Unpublished MA (Human Resources) thesis: Faculty of Commerce, Law and Management, University of Witwatersrand.
- CHARTERED INSTITUTE OF PERSONNEL AND DEVELOPMENT (CIPD). 2006. Reflections on employee engagement: Change agenda. [Online] Available: <http://www.cipd.co.uk/changeagendas> [Accessed 14 June 2008].
- CHARTERED INSTITUTE OF PERSONNEL AND DEVELOPMENT (CIPD). 2007. Employee engagement. [Online]. Available: <http://www.cipd.co.uk/subjects/empreltns/general/empengmt.htm?lsSrchRes=1> [Accessed 14 June 2008].
- CIPD. 2006. Learning and development: annual survey report. *Chartered Institute of Personnel and Development*. [online]. Available: <https://www.cipd.co.uk/knowledge/strategy/development/surveys>. [Accessed 23 January 2010].
- CIPD. 2007. Learning and the line: the role of line managers in training, learning and development. *Chartered Institute of Personnel and Development*. [online]. Available: <https://www2.cipd.co.uk/NR/rdonlyres/45B74613-3157-4064-93CD-7EA30AA8A172/0/learnline.pdf> [Accessed 23 March 2007].
- COLQUITT, J. A., CONLON, D. E., WESSON, M. J., PORTER, C. and NG, K. Y. 2001. Justice at the millennium: A meta-analytic review of 25 years of organizational justice research. *Journal of Applied Psychology*. 86: 425–445.
- CORPORATE LEADERSHIP COUNCIL. 2004. *Driving Employee Performance and Retention through Engagement*. Washington DC: Corporate Executive Board.
- CRONBACH, L.J. 1951. Coefficient alpha and the internal structure of tests. *Psychometrika*. 16: 297–334.
- DEMEROUTI, E., BAKKER, A. B., NACHREINER, F. and SCHAUFELI, W. B. 2001. The job demands resources model of burnout. *Journal of Applied Psychology*. 86: 499–512.

DENZIN, N. K. and LINCOLN, Y. 1994. *The SAGE handbook of qualitative research*. Thousand Oaks, CA: Sage Publications

DEPARTMENT OF MINERALS AND ENERGY. 2005. *Energy efficiency strategy of the Republic of South Africa*. March 2005. Pretoria, DME. [Online] Available: http://www.dme.gov.za/energy/pdf/ee_strategy_05.pdf.

DEPARTMENT OF MINERALS AND ENERGY. 2005. *Gas infrastructure plan*. DME [Online]. Available: http://www.dme.gov.za/pdfs/energy/gas/gas_infrastructure_plan.pdf [accessed 30/12/2008]

DEVELOPMENT DIMENSIONS INTERNATIONAL. 2005. *Predicting Employee Engagement* MRKSRR12-1005 Development Dimensions International, Inc., MMV. [Online] Available: www.ddiworld.com [Accessed 30/10/2008].

DEVELOPMENT DIMENSIONS INTERNATIONAL (DDI). 2005. Whitepaper - Driving employee engagement. [Online] Available: <http://ddiworld.com> [accessed 30/12/2008].

DEVORE, J. and PECK, R. 1993. *Statistics – the exploration and analysis of data*. (2nd ed.) California: Wadsworth Inc.

DIBLEY, J. E. 2009. *The relationship between the transformational leadership style of officers and the levels of their followers work engagement in the South African Army*. Unpublished MA (Industrial and Organisational Psychology) thesis: University of South Africa.

EDMONDSON, A. 1999. Psychological Safety and Learning Behaviour in work terms. *Administrative Science Quarterly*. 44:350–383.

EGRI, C.P. and HERMAN, S. 2000. Leadership in the North American environmental sector: Values, leadership styles and contexts of environmental leaders and their organizations. *Academy of Management Journal*. 43,4: 571–604.

ENDRES, G.M. and MANCHENO-SMOAK, L. 2008. The Human Resource Craze: Human Performance Improvement and employee engagement. *Organisation Development Journal*. 26, 1: 66–75.

FIEDLER, F. E. 1967. *A Theory of Leadership Effectiveness*. New York: McGraw-Hill.

FLEISHMAN, E.A. 1953. The Description of Supervisory Behaviour. *Journal of Applied Psychology*. 37:1–6.

GALLUP. 2006. Engaged employees inspire company innovation: national survey finds that passionate workers are most likely to drive organisations forward. *Gallup study*. [Online]

Available: <http://gmj.gallup.com/content/24880/Gallup - Study - Engaged - Employees - Inspire - Company.aspx> [Accessed 20/06/2009].

GIBSON, J.L., IVANSEVICH, J. M. and DONNELLY, J.H. 2000. *Organisations: Behaviour, Structure and Processes*. (10th ed.). Chicago: Von Hoffman Press.

GOLEMAN, D., BOYATZIS, R. and McKEE, A. 2002. *Primal Leadership: Realising the power of emotional intelligence*. Cambridge, MA: Harvard Business School Press.

GONZALEZ-ROMA, V., SCHAUFELI, W.B., BAKKER, A. and LLORET, S. 2006. Burnout and engagement: Independent factors for opposite poles? *Journal of Vocational Behaviour*. 68:165–174.

GRAEN, G.B. 2008. Enriched engagement through assistance to systems change: A Proposal. *Industrial and Organisational Psychology*. 1:74–75.

GREENBERG, J., 1990. Organisational Justice: Yesterday, today and tomorrow. *Journal of Management* 16: 399-432.

GREENFIELD, W.M. 2004. Decision-making and employee engagement. *Employee Relations Today*. Summer:13–24.

HALLBERG, U. and SCHAUFELI, W.B. 2006. “Same same” but different: Can work engagement be discriminated from job involvement and organizational commitment? *European Journal of Psychology*. 11: 119–127.

HARTER

HALPIN, A. W. and WINER, B. J. 1957. A factorial study of the leader behaviour descriptions. In R. M. Stogdill and A. E. Coons Leader (Eds.) *Behavior: Its description and measurement*. Columbus, Bureau of Business Research, Ohio State University.

HARTER, J. and BASS, B.M.1988. Superior evaluation and subordinates' perceptions of transformational and transactional leadership. *Journal of Applied Psychology*. 73: 695–702.

- HARTER, J. K., SCHMIDT, F. L. and HAYES, T. L. 2002. Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. *Journal of Applied Psychology*. 87, 2: 268–279.
- HENCLEY, S.P. 1973. Situational behavioral approach to the study of educational leadership. In L. C. Cunningham and W.J. Gephart (Eds.). *Leadership: The science and art today*. Itaska, IL: F.E. Peacock Publishers.
- HERSEY, P. and BLANCHARD. 1969. Life Cycle Theory of Leadership. *Training and Development Journal*. 23, 5: 26–34.
- HOBFOLL, S.E. 1989. Conservation of Resources: A new attempt at conceptualizing stress. *American Psychologist*. 44,3: 513–524.
- HOBFOLL, S.E. 2001. The influence of culture, community, and the nested-self in the stress process: Advancing Conservation of Resources Theory. *Applied Psychology: An International Review*. 50,3:337–421.
- HOBFOLL, S.E. 2002. Social and Psychological Resources and adaptation. *Review of General Psychology*. 6: 307–324.
- HOOVER, N.R. 1991. *Transformational and Transactional Leadership: An empirical test of a theory*. Annual meeting of the American Educational Research Association, Chicago, Illinois.
- HOSKING, D.M. 1978. Organising, leadership, and skilful process. *Journal of Management Studies*. 25:147–166.
- HOSKING, D.M. and MORLEY, I.E. 1991. *A Social Psychology of Organizing: People, Processes and Contexts*. New York: Prentice Hall.
- HOWELL, J.M. and AVOLIO, B.J. 1993. Transformational leadership, transactional leadership, locus of control and support for innovation: key predictors of consolidated-business-unit performance. *Journal of Applied Psychology*. 78,6: 891–902.
- HOY, W. K. and MISKEL, C. G. 1987. *Educational Administration: Theory, Research, and Practice* (3rd Ed). New York: Random House.
- JUDGE, T.A., THOROSSEN, C.J., BONO, J.E. and PATTON, G.K. 2001. The job satisfaction job performance relationship: a qualitative and quantitative review. *Psychological Bulletin*, 127:376–407.

KACHIGAN, S.K., 1991. *Multivariate statistical analysis; A conceptual introduction* (2nd ed.). New York: Radius Press.

KAHN, W.A. 1990. Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*. 33,4: 692–724.

KAHN, W.A. 1992. To be fully there: Psychological presence at work. *Human Relations*. 45,4 :321–350.

KENEXA. 2008. *Engaging the Employee: A Kenexa Research Institute World Trends Report*. Kenexa Research Institute.

KETTER, P. 2008. What's the big deal about employee engagement? *Training and Development*. 62, 1: 44–49.

KORMAN, A. K. 1966. Consideration, "Initiating Structure," and Organizational Criteria- A Review. *Personnel Psychology. A Journal of Applied Research*. 19: 349–361.

KOTTER J. P. 1990. *A Force for Change: How Leadership Differs from Management*. New York, The Free Press.

KOTTER, J.P. 1996. *Leading change*. USA: Harvard Business School Press.

KOYUNCU, M., BURKE, R.J. and FIKSENBAUM, L. 2006. Work engagement among women managers and professionals in a Turkish bank. *Equal Opportunities International*. 25, 4: 299–310.

LEVINSON, E. 2007. Developing High Employee Engagement Makes Good Business Sense. [Online]. Available: www.interactionassociates.com/ideas/2007/05/developing_high_employee_engagement_makes_good_business_sense.php. [Accessed 10/12/2009]

LEWIN, K., LIPPITT, R. and WHITE, R.K. 1939. Patterns of aggressive behaviour in experimentally created social climates. *Journal of Social Psychology*. 10:271–279. San Francisco: Jossey-Bass.

LOWE, K.B., KROECK, K. and SIVASUBRAMANIAM, N. 1996. Effectiveness Correlates of Transformational and Transactional Leadership: A Meta-analytic Review of the MLQ Literature. *Leadership Quarterly*. 7,3: 385–426.

- LUTHANS, F. and PETERSON, S. J. 2002. Employee engagement and manager self-efficacy: implications for managerial effectiveness and development. *Journal of Management Development*. 21,5: 376–387.
- MACEY, W.H. and SCHNEIDER, B. 2008. The meaning of employee engagement. *Industrial and Organisational Psychology: Perspectives on Science and Practice*. 1:3–30.
- MADUNA, P.M. and SHABANGU, S. 1998. Energy White Paper, DME, Pretoria.
- MASLACH, C. and LEITER, M.P. 1997. *The truth about burnout: How organisations cause personal stress and what to do about it*. San Francisco, CA: Jossey-Bass
- MASLACH, C., SCHAUFELI, W.B. and LEITER, M.P. 2001. Job Burnout. *Annual Review of Psychology*. 52: 397–422.
- MAUNO, S., KINNUNEN, U. and RUOKOLAINEN, M. 2007. Job demands and resources as antecedents of work engagement: A longitudinal study. *Journal of Vocational Behaviour*. 70,1: 149–171.
- MCGREGOR, D. 1960. *The Human Side of Enterprise*. New York: McGraw-Hill.
- MEERE, M. 2005. *High cost of disengaged employees*. Victoria: Swinburne University of Technology. [Online]
Available: <http://www.swinburne.edu.au/corporate/industrysolutions/ee/reports/Employee%20Engagement%20Industry%20Briefing%20Paper%20Dec%202005%20.pdf>
[Accessed 14 August 2008].
- MELCRUM PUBLISHING. 2005. Employee Engagement: How to build a high-performance workforce. An independent Melcrum Research Report Executive Summary. [Online] Available: <http://www.melcrum.com/pdf/Journals/SCM11.4.pdf>.
[Accessed 20/10/2008].
- MELCRUM. 2007. *The Practitioner's Guide to: essential techniques for employee engagement*. Melcrum Publishing Limited.
- MOORE, I. I. and RUDD, R.D. 2004. *Leadership styles of current extension leaders*. [Online]. Available: <http://pubs.aged.tamu.edu/jae/pdf/Vol47/47-01-006.pdf>.
[Accessed 14 /06/2008].
- NIRENBERG, J. 2001. Leadership: A practitioner's perspective on the literature. *Singapore Management Review*. 23, 1:1–33.

NUNNALLY, J. C. 1970. *Introduction to Psychological Measurement*. New York: McGraw-Hill.

NYENGANE, M.H. 2007. *The Relationship between Leadership and Employee Commitment: An exploratory study in an electricity utility of South Africa*. Unpublished MBA thesis: Investec Business School, Rhodes University.

PORTER, L., STEER, R., MOWDAY, R. and BOULIAN, P. 1974. Organizational commitment, job satisfaction, and turnover among psychiatric technicians. *Journal of Applied Psychology*. 59:603–609.

RAFFERTY, A.M., MABEN, J., WEST, E. and ROBINSON, D. 2005. *What makes a good employer?* Geneva: International Council of Nurses.

RAJA, M. W. 2012. Does transformational leadership lead to higher employee work engagement: A study of Pakistani service sector firms. *International Journal of Academic Research in Business and Social Sciences*. 2(1):160–166.

RAUNCH, C.F. and BEHLING, O. 1984. Functionalism: Basis for alternate approach to the study of leadership. In J.G. Hunt, D.M. Hosking, C.A. Schriesheim and R. Stewart (eds.), *Leaders and managers: International perspectives on managerial behaviour and leadership*. New York:Pergamon Press.

REPUBLIC OF SOUTH AFRICA. 2004. *National Energy Regulator Act, 2004* (Act No. 40 of 2004). Pretoria: Government Gazette.

RHOADES, D.R., MCFARLAND, K.F., FINCH, W.H. et al. 2001. Speaking and interruptions during primary care office visits. *Family Medicine*. 33,7: 528–532.

RICHMAN, A. 2006. Everyone wants an engaged workforce how can you create it? *Workspan*. 49: 36–39.

ROBBINS, S., and JUDGE, T. 2007. *Organizational Behavior* (12th ed.). Upper Saddle River, NJ: Prentice Hall.

ROTHBARD, N. P. 2001. Enriching or depleting? The dynamics of engagement in work and family roles. *Administrative Science Quarterly*. 46:655–684.

SADLER, P. 2003. *Business and Economics* (2nd Ed.). London: Kogan Page.

SAKS, A.M. 2006. Antecedents and consequences of employee engagement. *Journal of Managerial Psychology*. 21, 7: 600–619.

- SASOL. 2007. *Annual Report 2007*. [Online]. Available:http://sasol.investoreports.com/sasol_ar_2007/downloads/sasol_ar_2007.pdf. [Accessed 7/10/2009].
- SCHAUFELI, W.B. and BAKKER, A.B. 2001. Work and well-being: towards a positive approach in Occupational Health Psychology. *Gedrag & Organisatie*. 14:229–253.
- SCHAUFELI, W. B. and BAKKER, A.B. 2003. *Test manual for the Utrecht Work Engagement Scale*. Unpublished manuscript, Utrecht University, the Netherlands. Retrieved from <http://www.schaufeli.com>.
- SCHAUFELI, W.B. and BAKKER, A.B. 2004. Job demands, job resources, and their relationship with burnout and engagement: a multi-sample study. *Journal of Organisational Behaviour*. 25:293–315.
- SCHAUFELI, W.B., BAKKER, A.B. and SALANOVA, M. 2006. The measurement of work engagement with a short questionnaire. *Educational and Psychological Measurement*. 66,4:701–716.
- SCHAUFELI, W.B., BAKKER, A.B. and SALANOVA, M. 2007. Work engagement: An emerging psychological concept and its implications for organizations. In S.W. Gilliland, D.D. Steiner. and D.P. Skarlicki (Eds.). *Research in Social Issues in Management (Volume 5): Managing Social and Ethical Issues in Organizations*. (pp. 135-177). Greenwich, CT: Information Age Publishers.
- SCHAUFELI, W.B., SALANOVA, M., GONZALEZ-ROMA, V. and BAKKER, A.B. 2002a. The measurement of engagement and burnout: a two-sample confirmatory factor analytic approach. *Journal of Happiness Studies*. 3: 71–92.
- SCHAUFELI, W. B., MARTINEZ, I.M., PINTO, A.M., SALANOVA, M. and BAKKER, A.B. 2002b. Burnout and engagement in university students. *Journal of Cross-Cultural Psychology*. 33, 5: 464–481.
- SCHAUFELI, W.B. and SALANOVA, M. 2007. Work engagement: An emerging psychological concept and its implications for organizations. In S.W. Gilliland, D.D. Steiner and D.P. Skarlicki (Eds.). *Research in social Issues in Management: Vol. 5. Managing Social and Ethical Issues in Organizations*. Greenwich, CT: Information Age Publishers.
- SCOTTISH EXECUTIVE SOCIAL RESEARCH. 2007. *Employee engagement in the Public Sector: a review of literature*. [Online] Available: www.scotland.gov.uk/Publications/2007/05/09111348/3 [Accessed 14/03/2008].

- STOGDILL, R. M. 1974. *Handbook of Leadership*. New York: The Free Press.
- THACKRAY, J. 2003. *Elements of Great Managing*. [Online]
Available <http://gmj.gallup.com/content/default.aspx?ci=811> [Accessed 14/03/2008].
- TICHNY, N. M. and DEVANNA, M.A. 1990. *The Transformational Leader*. New York: John Wiley.
- TIMS, M., BAKKER, A.B. and XANTHOPOULOU, D. 2011. Do transformational leaders enhance their followers' daily work engagement? *The Leadership Quarterly*. 22:121-131.
- TOWERS PERRIN. 2003. *Working today: understanding what drives employee engagement*. [Online].
Available: http://www.towersperrin.com/tp/getwebcachedoc?webc=HRS/USA/2003/200309/Talent_2003.pdf [Accessed 10/06/2008].
- TOWERS PERRIN. 2006. *Ten Steps to Creating an Engaged Workforce: Key European Findings*. Towers Perrin Human Resources Services.
- TRITCH, T. 2003. *B&Q boosts employee engagement - and profits* [Online]
Available: <http://gmj.gallup.com/content/1036/BQ-Boosts-Employee-Engagement---and-Profits.aspx> [Accessed 10/06/2008].
- VAANANEN, A., TOPPINEN-TANNER, S. and KALIMO, R. 2003. Job characteristics, physical and psychological symptoms, and social support as antecedents of sickness absence among men and women in the private industrial sector. *Social Science and Medicine*. 57,5: 807–824.
- VAN BASTEN, C. 2007. *Economic Regulations of SA's Public Utilities* [Online].
Available: www.tips.org.za/files/Economic%20Regulation%20Concept%20Paper.pdf. [Accessed 10/01/2009].
- VAZIRANI, N. 2007. *Employee Engagement*. [Online] Available: http://www.siescoms.edu/images/pdf/research/working_papers/employee_engagement.pdf [Accessed 29/07/2008].
- VELDSMAN, T.H. 2002. *Into the people effectiveness arena: navigating between chaos and order*. Johannesburg: Knowledge Resource (Pty) Ltd.
- VON WIELLIGH, M.M.H. 2006. *Scientists' leadership style in a scientific organisation*. Unpublished MBL (Human Resources) thesis: Faculty of Management, University of South Africa.

- VROOM, V.H. and YETTON, P.W. 1973. *Leadership and Decision Making*. Pittsburgh: University of Pittsburgh.
- WALDMAN, D.A., BASS, B.M. and EINSTEIN, W.O. 1987. Leadership and outcomes of performance appraisal processes. *Journal of Occupational Psychology*. 60: 177–186.
- WATKINS, D.L. and RIKARD, G.L. 1991. Perceptions of leader behaviours of athletic directors: Implications for change. *Physical Educator*. 48,1: 2–6.
- WELBOURNE, T. M. 2007. Employee engagement: Beyond the fad and into the executive suite. *Leader to Leader*. 44: 45–51.
- WELLINS, R.S., BENTHAL, P., and PHELPS, M. 2005. Employee Engagement: The Key to Realising Competitive Advantage [Online]
Available: http://www.ddiworld.com/pdf/ddi_employeeengagement_mg.pdf
[Accessed 15/10/2008].
- WILMORE, E. and THOMAS, C. 2001. The new century; is it too late for transformational leadership? *Education Horizons*. 79,3: 115–123.
- WILSON, K. 2009. A survey of employee engagement. [Online]. Available: <http://edt.missouri.edu/Spring2009/Dissertation/WilsonK-042209-D631/research.pdf>.
[Accessed 11/11/2009].
- YAMMARINO, F.J., and BASS, B. M. 1990. Transformational leadership at multiple levels of analysis. *Human Relations*. 43: 975–995.
- YUKL, G. 1989. Managerial Leadership: a review of theory and research. *Journal of Management*. 15, 2: 251–289.
- YUKL, G. 2002. *Leadership in Organizations*. Englewood Cliffs, NJ: Prentice Hall.
- YUKL, G. 2006. *Leadership in Organisations* (6th ed.). Upper Saddle River, NJ: Pearson Education Inc.
- ZALEZNIK, A. 1977. Managers and leaders: are they different? *Harvard Business Review*. 55:67–78.

LIST OF APPENDICES

Appendix A: Multifactor Leadership Questionnaire Leader Form Sample

For use by Thobile Duma only. Received from Mind Garden, Inc. on June 29, 2009

MLQ Multifactor Leadership Questionnaire Leader Form (5x-Short)

My Name: _____ Date: _____

Organization ID #: _____ Leader ID #: _____

This questionnaire is to describe your leadership style as you perceive it. Please answer all items on this answer sheet. **If an item is irrelevant, or if you are unsure or do not know the answer, leave the answer blank.**

Forty-five descriptive statements are listed on the following pages. Judge how frequently each statement fits you. The word “others” may mean your peers, clients, direct reports, supervisors, and/or all of these individuals.

Use the following rating scale:

Not at all	Once in a while	Sometimes	Fairly often	Frequently, if not always
0	1	2	3	4

1.	I provide others with assistance in exchange for their efforts.....	0	1	2	3	4
2.	I re-examine critical assumptions to question whether they are appropriate	0	1	2	3	4
3.	I fail to interfere until problems become serious.....	0	1	2	3	4
4.	I focus attention on irregularities, mistakes, exceptions, and deviations from standards	0	1	2	3	4
5.	I avoid getting involved when important issues arise	0	1	2	3	4
6.	I talk about my most important values and beliefs	0	1	2	3	4
7.	I am absent when needed.....	0	1	2	3	4
8.	I seek differing perspectives when solving problems	0	1	2	3	4
9.	I talk optimistically about the future.....	0	1	2	3	4
10.	I instill pride in others for being associated with me.....	0	1	2	3	4
11.	I discuss in specific terms who is responsible for achieving performance targets.....	0	1	2	3	4
12.	I wait for things to go wrong before taking action	0	1	2	3	4
13.	I talk enthusiastically about what needs to be accomplished.....	0	1	2	3	4
14.	I specify the importance of having a strong sense of purpose	0	1	2	3	4
15.	I spend time teaching and coaching.....	0	1	2	3	4

Continued =>

Appendix B: Multifactor Leadership Questionnaire Rater Form Sample

For use by Thobile Duma only. Received from Mind Garden, Inc. on June 29, 2009

MLQ Multifactor Leadership Questionnaire Rater Form (5x-Short)

Name of Leader: _____ Date: _____

Organization ID #: _____ Leader ID #: _____

This questionnaire is to describe the leadership style of the above-mentioned individual as you perceive it. Please answer all items on this answer sheet. **If an item is irrelevant, or if you are unsure or do not know the answer, leave the answer blank.** Please answer this questionnaire anonymously.

IMPORTANT (necessary for processing): Which best describes you?

I am at a higher organizational level than the person I am rating.

The person I am rating is at my organizational level.

I am at a lower organizational level than the person I am rating.

I do not wish my organizational level to be known.

Forty-five descriptive statements are listed on the following pages. Judge how frequently each statement fits the person you are describing. Use the following rating scale:

Not at all	Once in a while	Sometimes	Fairly often	Frequently, if not always
0	1	2	3	4

THE PERSON I AM RATING. . .

1.	Provides me with assistance in exchange for my efforts	0	1	2	3	4
2.	Re-examines critical assumptions to question whether they are appropriate.....	0	1	2	3	4
3.	Fails to interfere until problems become serious.....	0	1	2	3	4
4.	Focuses attention on irregularities, mistakes, exceptions, and deviations from standards.....	0	1	2	3	4
5.	Avoids getting involved when important issues arise.....	0	1	2	3	4
6.	Talks about their most important values and beliefs	0	1	2	3	4
7.	Is absent when needed.....	0	1	2	3	4
8.	Seeks differing perspectives when solving problems	0	1	2	3	4
9.	Talks optimistically about the future	0	1	2	3	4
10.	Instills pride in me for being associated with him/her.....	0	1	2	3	4
11.	Discusses in specific terms who is responsible for achieving performance targets	0	1	2	3	4
12.	Waits for things to go wrong before taking action	0	1	2	3	4
13.	Talks enthusiastically about what needs to be accomplished	0	1	2	3	4
14.	Specifies the importance of having a strong sense of purpose	0	1	2	3	4
15.	Spends time teaching and coaching.....	0	1	2	3	4

Continued =>

MLQ, © 1995 Bruce Avolio and Bernard Bass. All Rights Reserved.
Published by Mind Garden, Inc., www.mindgarden.com

Appendix C: Multifactor Leadership Questionnaire Scoring Key Sample

For use by Thobile Duma only. Received from Mind Garden, Inc. on June 29, 2009

MLQ Multifactor Leadership Questionnaire Scoring Key (5x) Short

My Name: _____ Date: _____

Organization ID #: _____ Leader ID #: _____

Scoring: The MLQ scale scores are average scores for the items on the scale. The score can be derived by summing the items and dividing by the number of items that make up the scale. All of the leadership style scales have four items, Extra Effort has three items, Effectiveness has four items, and Satisfaction has two items.

Not at all	Once in a while	Sometimes	Fairly often	Frequently, if not always
0	1	2	3	4

Idealized Influence (Attributed) total/4 =	Management-by-Exception (Active) total/4 =
Idealized Influence (Behavior) total/4 =	Management-by-Exception (Passive) total/4 =
Inspirational Motivation total/4 =	Laissez-faire Leadership total/4 =
Intellectual Stimulation total/4 =	Extra Effort total/3 =
Individualized Consideration total/4 =	Effectiveness total/4 =
Contingent Reward total/4 =	Satisfaction total/2 =

1.	Contingent Reward	0	1	2	3	4
2.	Intellectual Stimulation	0	1	2	3	4
3.	Management-by-Exception (Passive)	0	1	2	3	4
4.	Management-by-Exception (Active)	0	1	2	3	4
5.	Laissez-faire	0	1	2	3	4
6.	Idealized Influence (Behavior)	0	1	2	3	4
7.	Laissez-faire	0	1	2	3	4
8.	Intellectual Stimulation	0	1	2	3	4
9.	Inspirational Motivation	0	1	2	3	4
10.	Idealized Influence (Attributed)	0	1	2	3	4
11.	Contingent Reward	0	1	2	3	4
12.	Management-by-Exception (Passive)	0	1	2	3	4
13.	Inspirational Motivation	0	1	2	3	4
14.	Idealized Influence (Behavior)	0	1	2	3	4
15.	Individualized Consideration	0	1	2	3	4

MLQ, © 1995 Bruce Avolio and Bernard Bass. All Rights Reserved.
Published by Mind Garden, Inc., www.mindgarden.com

Appendix D: Utrecht Work Engagement Scale

Work & Well-being Survey (UWES) ©

The following 9 statements are about how you feel at work. Please read each statement carefully and decide if you ever feel this way about your job. If you have never had this feeling, cross the "0" (zero) in the space after the statement. If you have had this feeling, indicate how often you feel it by crossing the number (from 1 to 6) that best describes how frequently you feel that way.

	Almost never	Rarely	Sometimes	Often	Very often	Always
0	1	2	3	4	5	6
Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day

1. _____ At my work, I feel bursting with energy
2. _____ At my job, I feel strong and vigorous
3. _____ I am enthusiastic about my job
4. _____ My job inspires me
5. _____ When I get up in the morning, I feel like going to work
6. _____ I feel happy when I am working intensely
7. _____ I am proud of the work that I do
8. _____ I am immersed in my work
9. _____ I get carried away when I'm working

© Schaufeli & Bakker (2003). The Utrecht Work Engagement Scale is free for use for non-commercial scientific research. Commercial and/or non-scientific use is prohibited, unless previous written permission is granted by the authors

Appendix E: Leader Spearman Rho Coefficients

Leader Spearman rho coefficients														
			IIA	IIB	IM	IS	IC	CR	MBEA	MBEP	LF	EE	EFF	SATIS
Spearman's rho	IIA	Correlation Coefficient	1.000	.562**	.234	.335	.214	.212	.154	.071	-.198	.365	.337	.425
		Sig. (2-tailed)	.	.010	.321	.149	.364	.369	.516	.765	.402	.113	.147	.062
		N	20	20	20	20	20	20	20	20	20	20	20	20
	IIB	Correlation Coefficient	.562**	1.000	.512*	.548*	.509*	.279	.298	.236	-.097	.388	.555*	.308
		Sig. (2-tailed)	.010	.	.021	.012	.022	.234	.202	.317	.683	.091	.011	.187
		N	20	20	20	20	20	20	20	20	20	20	20	20
	IM	Correlation Coefficient	.234	.512*	1.000	.121	-.057	.068	-.045	.090	.345	.017	-.043	-.064
		Sig. (2-tailed)	.321	.021	.	.612	.810	.775	.850	.704	.136	.944	.857	.790
		N	20	20	20	20	20	20	20	20	20	20	20	20
	IS	Correlation Coefficient	.335	.548*	.121	1.000	.042	.240	.240	-.130	-.210	.120	.565**	.436
		Sig. (2-tailed)	.149	.012	.612	.	.860	.309	.309	.585	.374	.613	.009	.054
		N	20	20	20	20	20	20	20	20	20	20	20	20
	IC	Correlation Coefficient	.214	.509*	-.057	.042	1.000	-.145	.273	.307	-.110	.039	.394	.119
		Sig. (2-tailed)	.364	.022	.810	.860	.	.542	.245	.187	.646	.871	.085	.616
		N	20	20	20	20	20	20	20	20	20	20	20	20
	CR	Correlation Coefficient	.212	.279	.068	.240	-.145	1.000	.054	.205	-.360	.441	.529*	.258
		Sig. (2-tailed)	.369	.234	.775	.309	.542	.	.823	.386	.119	.051	.016	.272
		N	20	20	20	20	20	20	20	20	20	20	20	20

			IIA	IIB	IM	IS	IC	CR	MBEA	MBEP	LF	EE	EFF	SATS	
	MBEA	Correlation Coefficient	.154	.298	-.045	.240	.273	.054	1.000	.379	-.019	.347	.403	-.049	
		Sig. (2-tailed)	.516	.202	.850	.309	.245	.823	.	.099	.938	.134	.078	.836	
		N	20	20	20	20	20	20	20	20	20	20	20	20	20
	MBEP	Correlation Coefficient	.071	.236	.090	-.130	.307	.205	.379	1.000	.393	.089	.310	-.233	
		Sig. (2-tailed)	.765	.317	.704	.585	.187	.386	.099	.	.086	.708	.184	.324	
		N	20	20	20	20	20	20	20	20	20	20	20	20	
	LF	Correlation Coefficient	-.198	-.097	.345	-.210	-.110	-.360	-.019	.393	1.000	-.104	-.137	-.576**	
		Sig. (2-tailed)	.402	.683	.136	.374	.646	.119	.938	.086	.	.663	.564	.008	
		N	20	20	20	20	20	20	20	20	20	20	20	20	
	EE	Correlation Coefficient	.365	.388	.017	.120	.039	.441	.347	.089	-.104	1.000	.650**	.285	
		Sig. (2-tailed)	.113	.091	.944	.613	.871	.051	.134	.708	.663	.	.002	.223	
		N	20	20	20	20	20	20	20	20	20	20	20	20	
	EFF	Correlation Coefficient	.337	.555*	-.043	.565**	.394	.529*	.403	.310	-.137	.650**	1.000	.404	
		Sig. (2-tailed)	.147	.011	.857	.009	.085	.016	.078	.184	.564	.002	.	.078	
		N	20	20	20	20	20	20	20	20	20	20	20	20	
	SATS	Correlation Coefficient	.425	.308	-.064	.436	.119	.258	-.049	-.233	-.576**	.285	.404	1.000	
		Sig. (2-tailed)	.062	.187	.790	.054	.616	.272	.836	.324	.008	.223	.078	.	
		N	20	20	20	20	20	20	20	20	20	20	20	20	
	** . Correlation is significant at the 0.01 level (2-tailed).														
	* . Correlation is significant at the 0.05 level (2-tailed).														

Appendix F: Rater Spearman rho coefficients

Rater Spearman rho coefficients														
			IIA	IIB	IM	IS	IC	CR	MBA	MBEP	LF	EE	EFF	SATS
Spearman's rho	IIA	Correlation Coefficient	1.000	.467 ^{**}	.655 ^{**}	.429 ^{**}	.654 ^{**}	.332 [*]	.217	.097	-.086	.411 [*]	.210	.271
		Sig. (2-tailed)	.	.004	.000	.008	.000	.045	.198	.569	.613	.011	.211	.105
		N	37	37	37	37	37	37	37	37	37	37	37	37
	IIB	Correlation Coefficient	.467 ^{**}	1.000	.615 ^{**}	.333 [*]	.608 ^{**}	.472 ^{**}	.133	-.055	-.202	.620 ^{**}	.531 ^{**}	.544 ^{**}
		Sig. (2-tailed)	.004	.	.000	.044	.000	.003	.432	.748	.231	.000	.001	.001
		N	37	37	37	37	37	37	37	37	37	37	37	37
	IM	Correlation Coefficient	.655 ^{**}	.615 ^{**}	1.000	.446 ^{**}	.602 ^{**}	.412 [*]	.161	.276	-.070	.581 ^{**}	.483 ^{**}	.399 [*]
		Sig. (2-tailed)	.000	.000	.	.006	.000	.011	.340	.098	.681	.000	.002	.014
		N	37	37	37	37	37	37	37	37	37	37	37	37
	IS	Correlation Coefficient	.429 ^{**}	.333 [*]	.446 ^{**}	1.000	.397 [*]	.322	.105	-.206	-.204	.558 ^{**}	.383 [*]	.321
		Sig. (2-tailed)	.008	.044	.006	.	.015	.052	.535	.222	.227	.000	.019	.053
		N	37	37	37	37	37	37	37	37	37	37	37	37
	IC	Correlation Coefficient	.654 ^{**}	.608 ^{**}	.602 ^{**}	.397 [*]	1.000	.645 ^{**}	.114	-.225	-.283	.775 ^{**}	.570 ^{**}	.535 ^{**}
		Sig. (2-tailed)	.000	.000	.000	.015	.	.000	.501	.181	.089	.000	.000	.001
		N	37	37	37	37	37	37	37	37	37	37	37	37
	CR	Correlation Coefficient	.332 [*]	.472 ^{**}	.412 [*]	.322	.645 ^{**}	1.000	-.012	-.298	-.443 ^{**}	.540 ^{**}	.624 ^{**}	.632 ^{**}
		Sig. (2-tailed)	.045	.003	.011	.052	.000	.	.946	.073	.006	.001	.000	.000
		N	37	37	37	37	37	37	37	37	37	37	37	37

			IIA	IIB	IM	IS	IC	CR	MBEA	MBEP	LF	EE	EFF	SATIS
	MBEA	Correlation Coefficient	.217	.133	.161	.105	.114	-.012	1.000	.215	.193	.083	-.050	-.213
		Sig. (2-tailed)	.198	.432	.340	.535	.501	.946	.	.201	.253	.625	.768	.205
		N	37	37	37	37	37	37	37	37	37	37	37	37
	MBEP	Correlation Coefficient	.097	-.055	.276	-.206	-.225	-.298	.215	1.000	.330	-.215	-.259	-.273
		Sig. (2-tailed)	.569	.748	.098	.222	.181	.073	.201	.	.046	.200	.121	.103
		N	37	37	37	37	37	37	37	37	37	37	37	37
	LF	Correlation Coefficient	-.086	-.202	-.070	-.204	-.283	-.443**	.193	.330	1.000	-.276	-.242	-.483**
		Sig. (2-tailed)	.613	.231	.681	.227	.089	.006	.253	.046	.	.098	.149	.002
		N	37	37	37	37	37	37	37	37	37	37	37	37
	EE	Correlation Coefficient	.411*	.620**	.581**	.558**	.775**	.540**	.083	-.215	-.276	1.000	.713**	.619**
		Sig. (2-tailed)	.011	.000	.000	.000	.000	.001	.625	.200	.098	.	.000	.000
		N	37	37	37	37	37	37	37	37	37	37	37	37
	EFF	Correlation Coefficient	.210	.531**	.483**	.383*	.570**	.624**	-.050	-.259	-.242	.713**	1.000	.616**
		Sig. (2-tailed)	.211	.001	.002	.019	.000	.000	.768	.121	.149	.000	.	.000
		N	37	37	37	37	37	37	37	37	37	37	37	37
	SATIS	Correlation Coefficient	.271	.544**	.399*	.321	.535**	.632**	-.213	-.273	-.483**	.619**	.616**	1.000
		Sig. (2-tailed)	.105	.001	.014	.053	.001	.000	.205	.103	.002	.000	.000	.
		N	37	37	37	37	37	37	37	37	37	37	37	37
**. Correlation is significant at the 0.01 level (2-tailed).														
*. Correlation is significant at the 0.05 level (2-tailed).														

Appendix G: Leader Pearson correlation

Leader Pearson Correlation													
		IIA	IIB	IIM	IS	IC	CR	MBEA	MBEP	LF	EE	EFF	SATIS
IIA	Pearson Correlation	1	.516 [*]	.351	.214	.181	.203	.239	.083	-.135	.325	.318	.449 [*]
	Sig. (2-tailed)		.020	.129	.365	.445	.390	.310	.727	.569	.163	.172	.047
	N	20	20	20	20	20	20	20	20	20	20	20	20
IIB	Pearson Correlation	.516 [*]	1	.451 [*]	.375	.506 [*]	.132	.156	.125	-.016	.292	.423	.388
	Sig. (2-tailed)	.020		.046	.104	.023	.580	.510	.601	.946	.212	.063	.091
	N	20	20	20	20	20	20	20	20	20	20	20	20
IIM	Pearson Correlation	.351	.451 [*]	1	.128	-.151	.153	.018	.094	.275	.047	-.039	-.024
	Sig. (2-tailed)	.129	.046		.591	.525	.520	.938	.693	.241	.845	.871	.921
	N	20	20	20	20	20	20	20	20	20	20	20	20
IS	Pearson Correlation	.214	.375	.128	1	.108	.268	.204	-.389	-.348	.109	.582 ^{**}	.501 [*]
	Sig. (2-tailed)	.365	.104	.591		.650	.254	.389	.090	.133	.648	.007	.024
	N	20	20	20	20	20	20	20	20	20	20	20	20
IC	Pearson Correlation	.181	.506 [*]	-.151	.108	1	-.222	.250	.313	-.071	-.055	.453 [*]	.156
	Sig. (2-tailed)	.445	.023	.525	.650		.347	.288	.180	.765	.817	.045	.513
	N	20	20	20	20	20	20	20	20	20	20	20	20
CR	Pearson Correlation	.203	.132	.153	.268	-.222	1	-.083	.109	-.379	.432	.420	.289
	Sig. (2-tailed)	.390	.580	.520	.254	.347		.727	.648	.099	.057	.065	.216
	N	20	20	20	20	20	20	20	20	20	20	20	20

		IIA	IIB	IIM	IS	IC	CR	MBEA	MBEP	LF	EE	EFF	SATIS
MBEA	Pearson Correlation	.239	.156	.018	.204	.250	-.083	1	.346	.053	.352	.383	-.084
	Sig. (2-tailed)	.310	.510	.938	.389	.288	.727		.135	.824	.128	.096	.725
	N	20	20	20	20	20	20	20	20	20	20	20	20
MBEP	Pearson Correlation	.083	.125	.094	-.389	.313	.109	.346	1	.512 [*]	.172	.249	-.228
	Sig. (2-tailed)	.727	.601	.693	.090	.180	.648	.135		.021	.470	.291	.334
	N	20	20	20	20	20	20	20	20	20	20	20	20
LF	Pearson Correlation	-.135	-.016	.275	-.348	-.071	-.379	.053	.512 [*]	1	-.214	-.294	-.549 [*]
	Sig. (2-tailed)	.569	.946	.241	.133	.765	.099	.824	.021		.364	.209	.012
	N	20	20	20	20	20	20	20	20	20	20	20	20
EE	Pearson Correlation	.325	.292	.047	.109	-.055	.432	.352	.172	-.214	1	.600 ^{**}	.314
	Sig. (2-tailed)	.163	.212	.845	.648	.817	.057	.128	.470	.364		.005	.178
	N	20	20	20	20	20	20	20	20	20	20	20	20
EFF	Pearson Correlation	.318	.423	-.039	.582 ^{**}	.453 [*]	.420	.383	.249	-.294	.600 ^{**}	1	.541 [*]
	Sig. (2-tailed)	.172	.063	.871	.007	.045	.065	.096	.291	.209	.005		.014
	N	20	20	20	20	20	20	20	20	20	20	20	20
SATIS	Pearson Correlation	.449 [*]	.388	-.024	.501 [*]	.156	.289	-.084	-.228	-.549 [*]	.314	.541 [*]	1
	Sig. (2-tailed)	.047	.091	.921	.024	.513	.216	.725	.334	.012	.178	.014	
	N	20	20	20	20	20	20	20	20	20	20	20	20

*. Correlation is significant at the 0.05 level (2-tailed).

** . Correlation is significant at the 0.01 level (2-tailed).

Appendix H: Rater Pearson correlation

Rater Pearson Correlation													
		IIA	IIB	IIM	IS	IC	CR	MBEA	MBEP	LF	EE	EFF	SATIS
IIA	Pearson Correlation	1	.582**	.702**	.541**	.706**	.394	.240	.201	-.130	.576**	.375	.538**
	Sig. (2-tailed)		.000	.000	.001	.000	.016	.153	.232	.443	.000	.022	.001
	N	37	37	37	37	37	37	37	37	37	37	37	37
IIB	Pearson Correlation	.582**	1	.711**	.451**	.689**	.609**	.139	-.043	-.227	.677**	.661**	.624**
	Sig. (2-tailed)	.000		.000	.005	.000	.000	.412	.800	.176	.000	.000	.000
	N	37	37	37	37	37	37	37	37	37	37	37	37
IIM	Pearson Correlation	.702**	.711**	1	.534**	.712**	.492**	.171	.187	-.161	.679**	.622**	.481**
	Sig. (2-tailed)	.000	.000		.001	.000	.002	.310	.267	.342	.000	.000	.003
	N	37	37	37	37	37	37	37	37	37	37	37	37
IS	Pearson Correlation	.541**	.451**	.534**	1	.493**	.385	.100	-.222	-.269	.645**	.556**	.466**
	Sig. (2-tailed)	.001	.005	.001		.002	.019	.557	.187	.108	.000	.000	.004
	N	37	37	37	37	37	37	37	37	37	37	37	37
IC	Pearson Correlation	.706**	.689**	.712**	.493**	1	.692**	.130	-.226	-.371*	.786**	.657**	.684**
	Sig. (2-tailed)	.000	.000	.000	.002		.000	.444	.179	.024	.000	.000	.000
	N	37	37	37	37	37	37	37	37	37	37	37	37
CR	Pearson Correlation	.394	.609**	.492**	.385	.692**	1	-.022	-.257	-.427**	.595**	.701**	.695**
	Sig. (2-tailed)	.016	.000	.002	.019	.000		.896	.125	.008	.000	.000	.000
	N	37	37	37	37	37	37	37	37	37	37	37	37

		IIA	IIB	IM	IS	IC	CR	MBEA	MBEP	LF	EE	EFF	SATIS
MBEA	Pearson Correlation	.240	.139	.171	.100	.130	-.022	1	.230	.323	.022	-.027	-.110
	Sig. (2-tailed)	.153	.412	.310	.557	.444	.896		.171	.051	.897	.872	.515
	N	37	37	37	37	37	37	37	37	37	37	37	37
MBEP	Pearson Correlation	.201	-.043	.187	-.222	-.226	-.257	.230	1	.452**	-.262	-.270	-.237
	Sig. (2-tailed)	.232	.800	.267	.187	.179	.125	.171		.005	.118	.107	.158
	N	37	37	37	37	37	37	37	37	37	37	37	37
LF	Pearson Correlation	-.130	-.227	-.161	-.269	-.371*	-.427**	.323	.452**	1	-.348*	-.325*	-.450**
	Sig. (2-tailed)	.443	.176	.342	.108	.024	.008	.051	.005		.035	.050	.005
	N	37	37	37	37	37	37	37	37	37	37	37	37
EE	Pearson Correlation	.576**	.677**	.679**	.645**	.786**	.595**	.022	-.262	-.348*	1	.841**	.703**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.897	.118	.035		.000	.000
	N	37	37	37	37	37	37	37	37	37	37	37	37
EFF	Pearson Correlation	.375*	.661**	.622**	.556**	.657**	.701**	-.027	-.270	-.325*	.841**	1	.631**
	Sig. (2-tailed)	.022	.000	.000	.000	.000	.000	.872	.107	.050	.000		.000
	N	37	37	37	37	37	37	37	37	37	37	37	37
SATIS	Pearson Correlation	.538**	.624**	.481**	.466**	.684**	.695**	-.110	-.237	-.450**	.703**	.631**	1
	Sig. (2-tailed)	.001	.000	.003	.004	.000	.000	.515	.158	.005	.000	.000	
	N	37	37	37	37	37	37	37	37	37	37	37	37

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).