EXPLORING THE RELATIONSHIP BETWEEN THE PERCEIVED LEADERSHIP BEHAVIOURS AND JOB SATISFACTION AT THE LIBYAN PETROCHEMICAL COMPANIES

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EXPLORING THE RELATIONSHIP BETWEEN THE PERCEIVED LEADERSHIP BEHAVIOURS AND JOB SATISFACTION AT THE LIBYAN PETROCHEMICAL COMPANIES

by

Farag Ali Mohamed Al-Sayah

A thesis submitted in fulfilment of the requirements for Doctor of Philosophy at Durham University

School of Government and International Affairs
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Exploring the Relationship between the Perceived Leadership Behaviours and Job Satisfaction at the Libyan Petrochemical Companies

Farag Ali Mohamed Al-Sayah

Abstract

The ever-changing complex business environment has created a need for leaders who can meet the demands and challenges of organisations who are grappling with the new organisational climate, with a real need for improved productivity and competitive performance in order to survive. To achieve this target, it is imperative for both leaders and organisations to change their way of thinking to foster and sustain the motivation and satisfaction levels of their employees for maintaining their competitive edge.

This research, hence, aims to explore the relationship between leaders’ leadership behaviours and employees’ level of job satisfaction in two petrochemical companies in Libya: Raslanuf Oil and Gas Processing Company (Rasco) and Harouge Oil Operations Company. The relationship between these two variables and the selected demographic characteristics of the employees – namely age, gender, marital status, number of dependents, job grade, job classification, educational qualifications and tenure - were examined. It should be noted that the literature survey indicates that no previous research conducted on the nexus between the leadership behaviour and its impact on the level of job satisfaction of Libya’s petrochemical companies’ employees. This lack of empirical research, hence, was the primary motivator for this study.

The study employed Avolio and Bass (1991) full range of leadership theory (transformational, transactional and laissez-faire) to determine the leadership behaviours in these two companies. In addition, Herzberg’s job satisfaction theory (1959) which is based on the Job Satisfaction Survey (JSS) was utilised to measure the level of job satisfaction of employees in the mentioned companies.

Structured questionnaires in the form of the Multifactor Leadership Questionnaire (MLQ) by Bass and Avolio (1995) to measure leadership and the Job Satisfaction Questionnaire (JSS) by Spector (1997) to measure the level of job satisfaction, were employed as the data collection methods.

The sampling frame was comprised of 70 of the 340 leaders, and 280 of the 3481 followers at Rasco Company, and 40 of the 120 leaders and 110 of the 1480 followers for Harouge Company. The study generated an 86.12% response rate (96% for Rasco and 76.25% for Harouge) with 451 participants (110 leaders and 354 followers) who worked at these two Companies at the time of the questionnaire administration.

The collected data were computed and analysed using descriptive statistics, t-test, analysis of variance (ANOVA), correlation, multiple regression analysis, exploratory factor analysis and multiple discriminant analysis to explore the relationships between these variables in a systematic manner.

The research findings indicate a statistically significant relationship between transformational leadership dimensions, especially the two dimensions of individual consideration and intellectual stimulation behaviours, and employees’ job satisfaction levels within the two companies. The findings demonstrate that the leaders tend to be perceived by their employees as demonstrating transactional and laissez-faire leadership behaviour more often than transformational behaviour in the case of the two companies analysed. It should, however, be noted that the exercise of a degree of transformational leadership behaviour by leaders was much lower than employees’ expectations showed. There was also a significant association between the employees’ job satisfaction level (which is significantly higher in Rasco than at Harouge), and operation conditions, nature of work, fringe benefits, supervision and communication. Demographic characteristics are further identified as non contributors to the level of job satisfaction.
Acknowledgements

I started this study in June 2008 and it led to more than three years of hard work on the part of my supervisor and myself.

No work is ever done in isolation, and this work is no exception. I must begin by thanking the Almighty Allah (SWT) for granting me the strength, courage, and inspiration to prosper in this endeavour and thus enriching my knowledge. He is indeed the unseen force behind making this study a success.

There are a few special people who have really helped to make this extraordinary journey a lot less complicated and more rewarding for me.

First and foremost, I would like to thank my supervisor, Dr Mehmet Austy for his willingness to guide me through this long journey and his encouragement while we were on it. His tireless efforts (and many meetings in his office) to help shape and guide my doctoral experience are appreciated and were definitely necessary in order for me to attain this distinguished goal. His ability as an academic to view things pragmatically needs to be commended; it is a trait that is seldom found among academics I have had experience with and I feel incredibly fortunate to have had the chance to work with this person.

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My sincere gratitude, of course, also goes out to my children, Ali, Mohamed and my lovely daughter Youser for their support and sacrifices. I realise that it was not always easy for them to sacrifice their weekends and holidays while I was busy with my study.
Declaration

I the undersigned hereby declare that this dissertation “Exploring the Relationship between the Perceived Leadership Behaviours and Job Satisfaction at the Libyan Petrochemical Companies” is my own work and that all the sources I have used and quoted have been indicated and acknowledged by means of complete references.

Name: Farag Ali Mohamed Al-Sayah

Signature:

Date:
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# Table of contents

Abstract ................................................................................................................................. i
Acknowledgement ............................................................................................................... iii
Declaration ............................................................................................................................. iv
Table of contents ................................................................................................................... v
List of tables ........................................................................................................................... xvii
Table of figures ...................................................................................................................... xx

**Chapter One** ..................................................................................................................... 1

**FOUNDATION OF THE STUDY** ...................................................................................... 1

1.1 INTRODUCTION ........................................................................................................... 1
1.2 BACKGROUND OF THE STUDY ................................................................................. 1
1.3 STATEMENT OF THE PROBLEM .............................................................................. 6
1.4 AIMS AND OBJECTIVES OF THE STUDY ............................................................. 7
1.5 RESEARCH QUESTIONS ............................................................................................ 8
1.6 ASSUMPTIONS OF THE STUDY ............................................................................. 9
1.7 SIGNIFICANCE OF THE STUDY ........................................................................... 10
1.8 MOTIVATION FOR THE RESEARCH .................................................................... 11

1.8.1 Advantage and Pertinence .................................................................................. 12
1.8.2 Consistency ........................................................................................................ 12
1.8.3 Topic Competency .............................................................................................. 13
1.8.4 Access ................................................................................................................ 13

1.9 OPERATIONAL DEFINITIONS OF TERMS .......................................................... 13

1.9.1 Leadership .......................................................................................................... 13
1.9.2 Leadership Behaviour ......................................................................................... 13
1.9.3 Transformational Leadership Behaviour ......................................................... 14
1.9.4 Transactional Leadership Behaviour ............................................................... 14
1.9.5 Laissez-Faire Leadership Behaviour ............................................................... 15
1.9.6 Acceptance of the Leader ................................................................................. 16
1.9.7 Job Satisfaction .................................................................................................. 16
1.9.8 Satisfaction in the Leadership of the Leader ................................................ 17
1.9.9 Leader ................................................................................................................ 17
1.9.10 Employee .......................................................................................................... 17

1.10 RESEARCH METHODOLOGY ............................................................................ 18
1.11 ORGANISATION OF THE STUDY ..................................................................... 19

**Chapter Two** ................................................................................................................ 21

**LEADERSHIP: A LITERATURE SURVEY ON CONCEPT, MODELS AND EMPIRICAL STUDIES** .................................................................................................................. 21

2.1 INTRODUCTION ........................................................................................................ 21
2.2 LEADERSHIP: CONCEPTUAL DEFINITION ....................................................... 22
2.3 BACKGROUND ON LEADERSHIP RESEARCH ............................................. 24
2.4 THE IMPORTANCE OF LEADERSHIP RESEARCH ........................................ 27
2.5 LEADERSHIP THEORIES ..................................................................................... 28

2.5.1 Traditional Leadership Approaches ..................................................................... 29

2.5.1.1 Great man and trait leadership theories ................................................... 29
2.5.1.2 Behavioural leadership approaches ......................................................... 30
Chapter Six

LEADERSHIP BEHAVIOURS AND THEIR IMPACT ON JOB SATISFACTION IN LIBYAN PETROCHEMICAL INDUSTRY: DATA ANALYSIS AND INTERPRETATIONS

6.1 INTRODUCTION

6.2 DESCRIPTIVE STATISTICAL ANALYSIS

6.2.1 Response Rates

6.2.2 Demographic Questionnaire

6.2.2.1 Age

6.2.2.2 Gender

6.2.2.3 Marital Status

6.2.2.4 Number of Dependents

6.2.2.5 Educational Qualifications

6.2.2.6 Job Classification

6.2.2.7 Job Grade

6.2.2.8 Tenure

6.3 INFERENTIAL STATISTICAL ANALYSIS

6.3.1 Comparison of Leadership Behaviour against MLQ (Form 5X-Short) Norms Perceived by Employees at Harouge and Rasco Companies

6.3.2 Comparison of Leadership Behaviour against MLQ (Form 5X-Short) Norms Perceived By Leaders at Harouge and Rasco

6.3.3 Comparison of the Different Types of Leadership Behaviours at Harouge and Rasco

6.3.4 Comparison of Overall Job Satisfaction Levels of Employees at Harouge and Rasco

6.3.5 Comparison of Overall Job Satisfaction Levels of Employees at Harouge and Rasco Measured as an Outcome of Leadership Behaviours using the MLQ (Form 5X-Short)

6.3.6 The Relationships between the Perceived Transactional and Transformational Behaviours of the Leaders and the Employees’ Job Satisfaction

6.3.7 The Relationships between Demographic Variables and Leadership Behaviours Perceived by Employees

6.3.8 The Relationship between Different Dimensions of Job Satisfaction Measured Using the JSS and MLQ (Form 5x-Short)

6.3.9 The Relationships between the Demographic Characteristics and the Combined Responses of the Employees at Harouge and Rasco to the MLQ (Form 5X-Short) and JSS

6.3.9.1 Pay satisfaction (PAYSAT)

6.3.9.2 Promotion satisfaction (PROSAT)

6.3.9.3 Supervision satisfaction (SUPSAT)

7.3.9.4 Fringe benefits satisfaction (FRISAT)

6.3.9.5 Contingent rewards satisfaction (CORSAT)

6.3.9.6 Operating conditions satisfaction (OPCSAT)
6.3.9.7 Co-workers satisfaction (COWSAT) ..............................................................229
6.3.9.8 Nature of work satisfaction (NATSAT) ......................................................230
6.3.9.9 Communication satisfaction (COMMSAT) .................................................231
6.3.9.10 Total job satisfaction (TOTSAT) ..............................................................231
6.3.9.11 Transformational leadership (TRANSFORM) ............................................232
6.3.9.12 Transactional leadership (TRANSACT) .....................................................233
6.3.9.13 Laissez-Faire leadership (LF) .................................................................234
6.4 SUMMARY .....................................................................................................236
Chapter Seven ......................................................................................................238
CONTEXTUALISING THE FINDINGS, PRACTICAL SIGNIFICANCE AND
IMPLICATIONS .....................................................................................................238
7.1 INTRODUCTION .................................................................................................238
7.2 SUMMARY OF FINDINGS .................................................................................238
7.3 DISCUSSING THE RESULTS: AN INTERPRETATIVE APPROACH ............241
7.3.1 Reflecting on the Type of Observed Leadership Behaviours .................242
7.3.2 Reflecting on the Leadership Behaviours and Overall Job Satisfaction ...243
7.3.3 Reflecting on the Differences between Leadership Behaviours at Rasco and
Harouge .............................................................................................................245
7.3.4 Reflecting on the Differences between Job Satisfaction at Rasco and
Harouge .............................................................................................................247
7.3.5 Discussing the Effects of Demographic Characteristics on Job Satisfaction
.........................................................................................................................247
7.3.6 The Relationship between Job Satisfaction Measures: Using the JSS and
MLQ ....................................................................................................................250
7.4 PRACTICAL SIGNIFICANCE AND IMPLICATIONS ..................................250
7.4.1 Importance of Demographic Factors ...........................................................250
7.4.2 Gender .........................................................................................................251
7.4.3 Marital Status .............................................................................................251
7.4.4 Educational Level .......................................................................................252
7.4.5 Age .............................................................................................................252
7.4.6 Number of Dependents ..............................................................................252
7.4.7 Tenure .........................................................................................................253
7.4.8 Occupational Level ....................................................................................253
7.4.9 The Relationship between Job Satisfaction and Leadership Behaviour ....254
7.4.10 Herzberg's Two-Factor Theory of Job Satisfaction .................................256
7.4.11 Transformational Leadership Theory .........................................................258
7.5 CONCLUSION .................................................................................................258
Chapter Eight ....................................................................................................260
CONCLUSION, LIMITATIONS AND RECOMMENDATIONS .....................260
8.1 CONCLUSION .................................................................................................260
8.2 PRACTICAL RECOMMENDATIONS FOR THE DEVELOPMENT OF
LEADERSHIP QUALITIES ..................................................................................261
8.3 LIMITATIONS OF THE STUDY ....................................................................264
8.4 RECOMMENDATIONS FOR FURTHER RESEARCH .................................267
8.5 EPILOGUE ......................................................................................................269
BIBLIOGRAPHY ............................................................................................271


## Table of Contents

**Table 2.1** Eras of Leadership Theory and Research .................................................. 26  
**Table 2.2** Differentiation between Transformational and Transactional Leaders ................................. 53  
**Table 2.3** Comparison of Transformational and Transactional Leadership Qualities .................................................. 54  
**Table 3.1** Facets of Job Satisfaction and their Descriptions .................................................. 78  
**Table 4.1** The National Oil Corporation and its Affiliated Companies .............................................. 132  
**Table 4.2** Distribution of the Rasco Workforce According to Departments ............................. 137  
**Table 4.3** Distribution of the Harouge Workforce According to Departments .............................. 141  
**Table 5.1** Leadership Constructs (Transformational and Transactional) and Descriptions Relating to the Specific Construct in the MLQ .................................................. 165  
**Table 5.2** Example Survey Items from the JSS ........................................................................ 173  
**Table 5.3** Quantitative Variables Measured at the Scale or Interval Level Concerning Specified Leadership Constructs in the MLQ .................................................. 178  
**Table 5.4** Quantitative Dependent Variables (DV$s$) Measured at the Scale or Interval Level Concerning Specified Constructs Concerning Job Satisfaction in (JSS) ........ 179  
**Table 5.5** Variables Measured at the Nominal or Ordinal Level to Describe the Demographic Characteristics of the Respondents, and to Classify them into Mutually Exclusive Groups for Purposes of Statistical Analysis .................................................. 179  
**Table 6.1** Total Survey Response Rates for the Two Companies ................................................. 191  
**Table 6.2** Survey Response and Rates from Harouge Company’s Departments .......................... 192  
**Table 6.3** Survey Response Rates from RASCO Company’s Departments .............................. 193  
**Table 6.4** Demographic Distribution According to Age .......................................................... 195  
**Table 6.5** Demographic Distribution According to Gender ....................................................... 195  
**Table 6.6** Demographic Distribution According to Marital Status ............................................ 196  
**Table 6.7** Demographic Distribution According to the Number of Dependents ........................ 196  
**Table 6.8** Demographic Distribution According to Educational Qualifications ..................... 197  
**Table 6.9** Demographic Distribution According to Job Classification .................................. 198  
**Table 6.10** Demographic Distribution According to Job Grade .............................................. 198  
**Table 6.11** Demographic Distributions According to Tenure .................................................... 199  
**Table 6.12** Comparison of the Mean Leadership Behaviour Scores Perceived by Employees at Harouge and Rasco against the MLQ Norms .................................................. 202  
**Table 6.13** Comparison of the Mean Leadership Behaviour Scores Perceived By Leaders at Harouge and Rasco against the MLQ Norms .................................................. 204  
**Table 6.14** Results of Multi-Factorial ANOVA .......................................................... 206  
**Table 6.15** Correlation Matrix (Pearson’s Correlation Coefficients) between Nine Dimensions of Job Satisfaction Measured Using the JSS at Harouge and Rasco .............................. 210  
**Table 6.16** Comparison of Mean Levels of Nine Dimensions of the Job Satisfaction of Employees Measured Using the JSS at Harouge and Rasco .................................................. 210  
**Table 6.17** Comparison of the Mean Job Satisfaction Scores Reported by Employees at Harouge and Rasco against the MLQ Norm .................................................. 213  
**Table 6.18** Multiple Regression Model to Predict Overall Job Satisfaction .................................. 214  
**Table 6.19** Associations between Job Grades and other Categorical Variables .................... 216  
**Table 6.20** Multi-factorial ANOVA to Determine the Influence of the Demographic Characteristics of Employees on Perceived Transformational Leadership Behaviour ................................. 218
Table 6.21  Multi-Factorial ANOVA to Determine the Influence of the Demographic Characteristics of Employees on Perceived Transactional Leadership Behaviour....219
Table 6.22  Multi-factorial ANOVA to Determine the Influence of the Demographic Characteristics of Employees on Laissez-Faire Leadership Behaviour..............220
Table 6.23  Factor Analysis using Job Satisfaction Constructs measured with the JSS..............................................................................................................221
Table 6.24  Multiple Regression Model to Predict Job Satisfaction As an Outcome of Leadership Behaviour Measured Using the MLQ ...........................................223
Table 6.25  Factor Analysis Using Job Satisfaction Constructs Measured with the JSS plus Job Satisfaction Measured as an Outcome to Leadership Behaviours with the MLQ..............................................................................................................224
Table 6.26  Variables used in Multi-factorial ANOVA ........................................225
Table 6.27  Results of Multi-Factorial ANOVA on PAYSAT .................................226
Table 6.28  Results of Multi-factorial ANOVA on PROSAT .................................226
Table 6.29  Results of Multi-factorial ANOVA on SUPSAT .................................227
Table 6.30  Results of Multi-factorial ANOVA on FRISAT .................................227
Table 6.31  Results of Multi-factorial ANOVA on CORSAT .................................228
Table 6.32  Results of Multi-factorial ANOVA on OPCSAT .................................228
Table 6.33  Results of Multi-factorial ANOVA on COWSAT .................................229
Table 6.34  Results of Multi-factorial ANOVA on NATSAT .................................230
Table 6.35  Results of Multi-factorial ANOVA on COMMSAT .............................231
Table 6.36  Results of Multi-factorial ANOVA on TOTSAT .................................232
Table 6.37  Results of Multi-factorial ANOVA on TRANSFORM .......................233
Table 6.38  Results of Multi-factorial ANOVA on TRANSACT .............................234
Table 6.39  Results of Multi-factorial ANOVA on LF .......................................235
List of Figures

Figure 2.1 Black and Mouton's Leadership Grid ..................................................32
Figure 2.2 The Full Range of Leadership Theory ..................................................40
Figure 3.1 Factors that affect Job Satisfaction in Terms of Herzberg’s Theory ...... 85
Figure 4.1 Rasco Company’ Organisational Chart .............................................136
Figure 4.2 Harouge Oil Operations Company’ Organisational Chart ...............140
Figure 5.1 Research Process ..............................................................................150
Figure 6.1 Frequency Distributions of the Scores for the Constructs in the Leadership Scales Perceived by Employees at Harouge ...........................................201
Figure 6.2 Frequency Distributions of the Scores for the Constructs in the Leadership Scales Perceived by Employees at Rasco .................................................201
Figure 6.3 Frequency Distributions of the Scores for the Constructs in the Leadership Scales Perceived by Leaders at Harouge ..................................................203
Figure 6.4 Frequency Distributions of the Scores for the Constructs in the Leadership Scales Perceived by Leaders at Rasco ..................................................203
Figure 6.5 Comparison of Mean Scores’ ± 95% Confidence Intervals Awarded by Leaders (L) and Followers (F) for Perceived Transformational (Transform), Transactional (Transact) and Laissez-Faire (Lf) Leadership Behaviours at Harouge and Rasco ........................................................................................................205
Figure 6.6 Frequency Distribution of Overall Job Satisfaction (TOTSAT) Reported by Employees at Harouge Measured Using JSS ...........................................207
Figure 6.7 Frequency Distribution of Overall Job Satisfaction (TOTSAT) Reported by Employees at Rasco Measured Using JSS .................................................207
Figure 6.8 Frequency Distributions of Nine Dimensions of Job Satisfaction Reported by Employees at Harouge Measured Using JSS .............................................209
Figure 6.9 Frequency Distributions of Nine Dimensions of Job Satisfaction Reported by Employees at Rasco Measured Using JSS .................................................209
Figure 6.10 Frequency Distribution of Job Satisfaction (SAT) of Employees at Harouge as the Outcome of Leadership Behaviours Measured Using MLQ (Form 5X-Short) ...........................................................................................................211
Figure 6.11 Frequency Distribution of Job Satisfaction (SAT) of Employees at Rasco Measured as an Outcome of Leadership Behaviours Using MLQ .........................212
Figure 6.12 Distribution of Residuals for the Model to Predict Job Satisfaction .................................................................215
Figure 6.13 Mean Scores ± 95% Confidence Intervals for Transformational Leadership Behaviour Perceived by Employees at Harouge and Rasco .................218
Figure 6.14 Mean Scores ± 95% Confidence Intervals for Transformational Leadership Behaviour Perceived by Employees at Harouge and Rasco ..............................219
Figure 6.15 Comparison of mean SUPSAT scores ± 95% confidence intervals with respect to job classification ................................................................................227
Figure 6.16 Comparison of mean OPCSAT scores ± 95% confidence intervals with respect to job grade ..............................................................................................229
Figure 6.17 Comparison of mean COWSAT scores ± 95% confidence intervals with respect to job grade ..............................................................................................230
Figure 6.18 Comparison of mean NATSAT scores ± 95% confidence intervals with respect to job classification ................................................................................231
Figure 6.19 Comparison of mean TOTSAT scores ±95% confidence intervals with respect to job grade and tenure. ..............................................................................232
Figure 6.20 Comparison of mean TRANSFORM scores ± 95% confidence intervals with respect to job classification ................................................................. 233
Figure 6.21 Comparison of mean TRANSACT scores ± 95% confidence intervals with respect to job classification ........................................................................... 234
Figure 6.22 Comparison of mean LF scores ± 95% confidence intervals with respect to job classification .................................................................................. 235
Chapter 1

FOUNDATION OF THE STUDY

1.1 INTRODUCTION

The focus of the present study is to explore the relationship between the leadership behaviours (transformational, transactional and lassiez-faire) exhibited by the leaders in two petrochemical industry companies in Libya-Ras Lanuf Oil and Gas Processing Company (Rasco) and Harouge Oil Operations Company (Harouge). In addition, this study also aims to search for the impact of these leadership behaviours on the level of job satisfaction among the two companies’ employees.

1.2 BACKGROUND OF THE STUDY

All organisations operate with a purpose. The need to achieve this purpose successfully and efficiently creates the need for leadership more important than ever before (Kanungo, 2003; Bass et al., 2003; Krishnan, 2005).

In addition, the essential elements of leadership that defines the degree of effectiveness of a leader are based on interactions between the leader and his or her followers. As a result, behaviours and traits of the leader play crucial roles in leadership success. Hence, it is the leaders of the organisation who must ensure that all their employees are working in a dynamic and flexible environment towards the achievement of the same goals and objectives (Brewster et al., 2003; Benson, 2009; Mullins, 2010).

Krishnan (2005) states that there are a number of different leadership theories which can be employed to determine how leadership behaviours influence and improve organisational outcomes.

Yates (2005) lists a number of leadership behaviours, including autocratic, bureaucratic, democratic, behavioural, contingency, transformational, transactional
and laissez-faire. These are products of different individual, organisational and environmental settings. However, it is important to note that different circumstances call for different leadership behaviours, and each leader needs to know when to implement a particular behaviour in order to achieve an efficient and effective outcome. A leader may have awareness and the ability to perform effectively in one situation, but may not appear as effective under other situations (Bass, 2008, Mullins, 2010).

As the present study will focus on the full range of leadership theory (transformational, transactional and laissez-faire leadership), a brief explanation of each theory is given below.

Regarding the transformational leadership theory, it concentrate on the values, ethics, standards and long-term goals of organisation, and focus on employees’ satisfaction, performance, productivity and development in order to increase their potential and capabilities.

According to this theory, leaders who are exhibiting transformational leadership behaviour have strong internal ideals and standards (Northouse, 2007). Such leaders help their employees to look at old problems from a new angle. They motivate, inspire and encourage their employees to achieve higher standards than usual levels of performance, to aspire beyond their own aims and interests, and to focus on greater team, organisational, national and global objectives. By providing future targets, such leaders influence their employees in such a manner that the employees adopt their leader’s perspective as their own and exert great efforts to achieve the shared vision. Furthermore, transformational leaders are able to move the organisation towards this ideal perspective by both coordinating the employees and integrating the system components (Northouse, 2007).

In comparison to transformational leadership, transactional leadership behaviour assumes that the leader holds control and power over the employees and that when they agree to do a particular assignment part of the agreement is that they give up all authority to their leader. Therefore, under this style of leadership behaviour, the main objective of the employees is to comply with the instructions of their leaders.
The relationship between the employee and the leader, thus, becomes transactional; the company pays money or other forms of reward to its employees in exchange for their compliance and effort. In addition, a transactional leader also has the right to punish his or her employees if their performance is not in accordance with the predetermined standards (Bass, 2008; John et al., 2010).

In contrast, laissez-faire leadership behaviour or ‘hands off’ leadership is where leaders avoid accepting their responsibilities or are unavailable when needed, resist expressing their views on important issues, gives no feedback, makes little effort to help employees satisfy their needs and there is no exchange with employees or attempt to help them grow (Bass and Avolio, 1997). Many researchers have evaluated this leadership behaviour as the most passive and unsuccessful one, which is strongly associated with employee dissatisfaction, conflict and ineffectiveness (Avolio, 1999; Bass, 2008).

When leadership behaviour is being studied, either from a business or an academic perspective, it is often correlated with employees’ job satisfaction (Bass et al., 2006), as it is the leadership behaviour which affects the behaviour of the employees in an organisation and produces an efficient organisation. Northouse (2007) argues that job satisfaction is the overall attitude of liking one’s job and the existence or absence of high levels of job satisfaction is commonly accepted as being a result of leadership behaviour.

Misener et al. (1996) state that surveys of job satisfaction from the 1920s onward illustrate the importance of effective leadership. Employees are often considered the lifeblood of an organisation and the success or failure of an organisation usually resides in the hands of those who are employed to carry out the routine functions of that organisation. However, in many instances, when the leadership of an organisation focuses on improvements, it usually looks for solutions in areas other than those related directly to employees (or employee satisfaction), such as productivity, efficiency, conservation, or statistics (Deci and Ryan, 1985).

According to Burns (2003) many leaders are not sufficiently aware of the effects that their employees’ satisfaction can have on their business. Therefore, it is essential that they learn and recognise the importance of the aspects that determine positive
satisfaction in the work place. Many employers focus on satisfying employees by extrinsic means such as monetary incentives. However, these extrinsic motivators are not always enough to keep them satisfied, as extrinsic satisfaction enhances indirect needs, which are unrelated to the task the employees are performing. On the other hand, intrinsic satisfaction, such as recognition and challenge at work, enhances direct needs which inspire employees to perform a particular task; therefore it is important for a company’s well-being that they find ways of fostering and sustaining intrinsic satisfaction.

Organisations measure job satisfaction primarily because of its presumed direct relationship to the short-term goals of cost reduction through increased employee performance and reduced absences, errors and turnover (Spector, 2008). It is, thus, in the interests of any organisation to maintain its employees’ satisfaction and to reduce the level of turnover among them. Turnover is costly to the organisation, both financially and due to the impact it has on those employees remaining with the organisation (Hannay and Northam, 2000; Mullins, 2010).

A contributing factor leading to turnover is a gap between what employees believe is important to them and what leadership believes is important to the organisation (Kay and Jordan-Evans, 1999). This gap needs to be recognised before any attempt can be made to ease or bridge the gap to reduce turnover within the organisation (Peters, 2001).

Once the restrictions are recognised, policies can be analysed and opportunities for reducing the gap can be investigated. However, many leaders have little understanding of how to satisfy their employees and how their satisfaction levels influence their intentions to leave their positions. As a result, leaders’ efforts to improve employee satisfaction can sometimes create more conflict than cohesion between employees and leadership, leading to excessive employees’ dissatisfaction and turnover.

This study explores job satisfaction within the workforce; in particular, it is concerned with the satisfaction of the workers employed at two Libyan oil companies, Rasco and Harouge, using Herzberg’ two factors theory of job satisfaction as the guiding theory.
Through this, the leadership behaviours in these companies will be explored as the determinant factor of job satisfaction.

According to this theory, job satisfaction and dissatisfaction should be viewed as separate entities with different motivational principles. Employees are seen to derive internal satisfaction from elements related to the work itself, and dissatisfaction from items concerning the surroundings or the work environment. For instance, motivational factors deal with the items classically employed to motivate workers, such as salary, achievement, recognition, responsibility and opportunities for advancement. These factors may or may not motivate depending on the current state of employee’s hygiene factors. By contrast hygiene factors are those items that deal with the work environment and include items such as physical space, bureaucratic procedures and supervision (Herzberg, 1959).

Herzberg’s job satisfaction theory was selected as the theoretical base for this study, because it is deals with employees on an individual level. In addition, the theory presents the possibility to identify commonalities within the two companies, something inherently important given the diversity of the two companies’ workforces. Furthermore, the Job Satisfaction Survey (JSS) instrument by Spector (1997) used in this study to measure the level of job satisfaction is also based on this theory (Spector, 2008).

In this context, studying the job satisfaction and perceived leadership behaviour of leaders in Rasco and Harouge companies will help to better understand the problem stated below.

1.3 STATEMENT OF THE PROBLEM

Libya’s petrochemical industry is undergoing a period of transformation. Since 1990, it has expanded significantly with regard to its infrastructure and the development of facilities. Despite this expansion and the huge investment in this industry, the service provided by the employees has not seen any significant improvement, and the quality of these services has remained poor compared to the size of investment. Moreover, the size of the workforce serving this industry has increased by 45,000 employees.
representing 20 per cent of the total workforce in Libya’s public sector, which has caused a major problem with regard to their training and development (NOC, 2010).

Since the early 2000s, the National Oil Corporation (NOC) of Libya has been working on a comprehensive industrial reform programme for the petrochemical industry. One of the aims of this programme is to strengthen the modern leadership theories in the petrochemical industry companies. However, human resource management is still not what it should be, and the human aspects relating to employee satisfaction and quality of work environment, which affect productivity and organisational effectiveness, are neglected.

It should, however, be noted that the employees’ dissatisfaction and turnover rate in these two companies is still increasing year after year, despite the many rewards and privileges such as fair salaries, comfortable working environment and social recognition which are available to them and which compare favourably to other public sector employment in the country. Although job satisfaction is not the only path generating turnover, job satisfaction does predict later turnover (Mullins, 2007). Both intended and actual turnover can be attributed to dissatisfaction with various aspects of the job. Studies have also suggested that the motive of finding a more satisfying job is often a driving force behind job change (Mobley et al., 1979; French, 2003).

As mentioned earlier, there is no previous research on transformational, transactional and laissez-faire leadership behaviours and their impact on the level of job satisfaction in Libyan petrochemical industry companies. Therefore, this research is an important step towards improving companies’ effectiveness and increasing their efficiency.

From studying Rasco and Harouge, it can be concluded that the lack of both an application of modern leadership theories (transformational, transactional and laissez-faire) and the practice of modern managerial systems, such as recruitment, job design, job enrichment, training and development, and so on, has negative effects on employee job satisfaction in the workplace. The result is a high level of employees’ dissatisfaction, absenteeism and turnover (Spector, 2008).

The results of this research will allow for a better understanding of the relationship between leadership behaviours (transformational, transactional and laissez-faire) and
employee’ job satisfaction in Rasco and Harouge, as well as in the case of a small late-development country, such as Libya. Such an understanding of the components of effective leadership and job satisfaction can aid further research and help to identify better strategies for recruitment, promotion and training of future company leaders and employees, not only in those two companies but also in other companies in the same industry.

1.4 AIMS AND OBJECTIVES OF THE STUDY

The petrochemical industry is the dominant industry in Libya. Rasco, a state-owned oil Company, and Harouge, a company that is jointly owned by the state and Petro Ex-Canada, are among the leading companies in this industry. These companies are characterised by structural stability and play a crucial role in the development of the country’s economy. They are also ideal examples, as they comply to a large extent with the prescribed criteria in terms of the existence of management and development functions or programmes.

This research, hence, aims to explore the particular leadership behaviour prevailing in each of these companies. In addition, the study aims to analyse the relationship between employees’ job satisfaction and leadership behaviour in both companies. It is expected that through this it may be possible, as another aim, to determine whether leadership behaviour can predict employees’ overall job satisfaction, and what areas of leadership behaviour are rated as important by employees.

To fulfil these aims, the following objectives have been developed:

a) First, to examine the transformational, transactional and laissez-faire leadership theories from a theoretical perspective, and to discover the fields in which they are used and evaluate their necessity; and also to examine the job satisfaction related theories to identify the most appropriate model for the study;

b) Secondly, to examine to what degree transformational, transactional and laissez-faire leadership behaviours are exhibited by leaders in these companies;

c) Thirdly, to evaluate the perceived importance of leadership behaviours in affecting the employees’ satisfaction with leadership. The employees’ satisfaction with their
leaders’ behaviours is then evaluated to investigate their overall level of job satisfaction. From this it can be determined that job satisfaction is related to leadership behaviours. This can also give an insight into leaders in both companies regarding the level of importance attributed to their leadership behaviour by their employees;

e) Fourthly, to conduct a questionnaire survey to gather all the necessary primary data to demonstrate the nature of the leadership behaviours as well as the relationship between leadership behaviour and job satisfaction in the companies in question;

(d) Finally, to interpret the results of employees’ satisfaction and the said leadership behaviours in order to make recommendations for how the level of job satisfaction can be improved and enhanced.

1.5 RESEARCH QUESTIONS

The aim of this study is to explore the leadership behaviours and then examine the relationship between perceived leadership behaviour and job satisfaction in Rasco and Harouge. The following six research questions are developed to examine how job satisfaction is affected by the perceived leadership behaviours:

a) As perceived by the employees of Rasco and Harouge, what kind of leadership behaviour is adopted by the leaders of these two companies?

b) Do Rasco’s and Harouge’s employees perceive their leaders’ leadership behaviour as transformational, transactional or laissez-faire, and what is the relationship between these perceptions and the employees’ overall job satisfaction in the two companies?

c) Is there any significant difference in the perceived leadership behaviours and job satisfaction between the two companies’ employees?

d) What is the level of job satisfaction in the two companies’ employees and is there any significant difference in employees’ job satisfaction levels between the two companies?

e) How far do the employees’ demographic characteristics, such as gender, age, marital status, number of dependents, educational attainment, job classification, job
grade and tenure, influence the effect of their perceived leadership behaviour on job satisfaction?

f) How far do job satisfaction extrinsic factors such as working conditions, nature of work, communication, co-workers, recognition, supervision, promotion, benefits and pay influence the effect of perceived leadership behaviour on job satisfaction?

1.6 ASSUMPTIONS OF THE STUDY

It should be stated that assumptions are conditions “taken as granted without which the research situation would be impossible” (Leedy and Ormrod, 2001:8).

Based on the nature of this study the following assumptions were made about the research and the participants:

a) It was assumed that the Multifactor Leadership Questionnaire (MLQ) would measure the transformational, transactional and lassiez-faire leadership behaviour factors and the Job Satisfaction Survey (JSS) would measure the job satisfaction level of the employees in the two companies. The researcher is aware that MLQ and JSS have not been used in context of Arab culture and Libya in particular and efforts have been made to compensate for such shortcomings when interpreting the results.

b) It was assumed that the respondents were aware of the concept of job satisfaction and transformational, transactional and lassiez-faire leadership behaviours’ components and determinants, answered the surveys honestly and truthfully, and had a reasonable understanding of their leaders. In addition, the respondents would not be extremely affected by their disposition or even a possible passive-aggressive desire to have a negative effect on the outcome of the study.

1.7 SIGNIFICANCE OF THE STUDY

This study aims to contribute to the understanding of strategic matters of leadership and job satisfaction to the petrochemical industry in Libya. The expected results of this research may help the NOC of Libya, which is responsible for the petrochemical activities, to revise practices and determine an ideal method for dealing with the new parties interested to from venture with it regarding leadership behaviours and job satisfaction.
As far as the researcher can determine, no previous effort has been made to test transformational, transactional and lassiez-faire leadership theories factors and their impact on the level of job satisfaction using Herzberg’s two factors theory of job satisfaction within the context of Libya’s petrochemical industry. The current study examines the relationship between the perceived leadership behaviours (transformational, transactional and lassiez-faire) of leaders in two petrochemical companies in Libya (Rasco and Harouge), and the impact of these leadership behaviours on the level of job satisfaction among their employees in their current positions.

The relationship between perceived leadership and its contribution to job satisfaction warrants an explanation. Discovering ways in which perceived leadership exercises an influence on job satisfaction can have a significant impact on the two companies’ organisational planning and decision-making process.

The study of perceived leadership behaviours and how they relate to the job satisfaction of the two companies provides data that can be used for different purposes.

First, the two companies’ leaders can gain valuable information about how their employees perceive their leadership behaviours in order to determine leaders’ expectations about the job and work environment.

Secondly, the results of the study can help both NOC and its companies to find a better way to encourage their local leaders and individuals to increase their efforts to access, acquire, and share the leadership skills transferred by the foreign partners, as it is considered that learning from partner is one of the most crucial processes in the joint venture context. In addition, they can use the results of this study to improve their leadership training and development and to direct their own organisational leaders onto a new path that, ultimately, could give both companies a strong and productive workforce that is better equipped to satisfy the needs of their employees.

Thirdly, this research will provide leaders and personnel with information about both companies’ internal environment and leadership pool. This characterisation will help each of them to make the necessary changes to the system as a whole, and to their
programmes, components and personnel if necessary. Such information is applicable to both companies’ planning and operational efforts, and is valuable for future organisational development activities. Therefore, the results of this study will greatly contribute to the body of knowledge on this topic and will be useful for researchers interested in this area of research.

Lastly, this research will contribute to the subject of leadership and job satisfaction in the petrochemical industry in Libya, about which there is a scarcity of literature. This may render a better understanding to various parties, such as local and foreign petrochemical companies as well as researchers interested in this area of research.

1.8 MOTIVATION FOR THE RESEARCH

The Libyan economy depends primarily upon revenues from petrochemical industry, which contribute practically all export earnings. In addition, in recent years, Libya has made good progress on economic reforms as part of a broader campaign to reintegrate the country into the international fold. This effort gained imputes after UN sanctions were lifted in September 2003. This progress has led several foreign companies to think about investing in Libya by forming joint ventures with the NOC, which is responsible for the administration, development and exploitation of petrochemical industry wealth locally and in other countries. It operates through joint venture with foreign oil companies as well as having a number of subsidiary companies (Table, 4.1) which are active in various areas of the petrochemical industry though production sharing agreements.

In this section the reasons as why this specific topic was chosen for the research are put forward. The following factors proposed by Fisher (2007) were taken into account when choosing the topic: advantage and pertinence, consistency, competency, and access.

1.8.1 Advantage and Pertinence

The petrochemical industry is a growing industry in Libyan economy and employs a very large number of people. As employees are a company’s valuable assets, increased attention must be paid to leadership behaviour in order for the employees to
provide an efficient service. Job satisfaction of employees also has fundamental role in any organisation, and plays a part in avoiding situations where employees do not perform according to their capability. Therefore, the study is relevant as leadership behaviours (transformational, transactional and lassiez-faire) and their impact on the level of job satisfaction of employees is a contemporary topic and relevant to the two of petrochemical companies in Libya, namely for Rasco and Harouge.

1.8.2 Consistency

The topic of this research is consistent as the leadership of both Rasco and Harouge can use the recommendations by the HRM departments to improve job satisfaction. There is the chance that the two companies’ organisational structure, regulations and policies might change with time, but the research can still be useful regarding the improvement of leadership behaviours of their leaders and employees job satisfaction. In addition, other companies in this industry might be able to use the research work as a guide to decide how to develop their leaders’ leadership behaviours and to improve the level of their employees’ job satisfaction.

1.8.3 Topic Competency

According to the requirements of this doctoral research, the topic is in the field of leadership behaviours and job satisfaction. Although job satisfaction is an intangible concept, it includes many factors that need to be looked into to ensure that employees are satisfied and motivated in their work place. The subject involves not just understanding the individual leadership behaviours of each of the leaders of the two companies, but, most importantly, understanding the needs and desires of the employees working in those companies and what should be done to keep them motivated, satisfied, and working to their optimal capabilities. Due to the importance of the topic to the two companies as well as other companies in this industry, it is considered to be relevant for a doctorate level thesis.

1.8.4 Access

Information accessibility is very important in this research process. As the researcher has access to both the companies, this ensured that information could be obtained
quickly and in a way comfortable for the companies without effecting their daily business operations.

Rasco and Harouge have a great need for this research, as they have not been subjected similar examination before. Therefore, they were very willing to make available required information and the leaders gave their commitment to the project.

1.9 OPERATIONAL DEFINITIONS OF TERMS

It is important to define the key concepts that consistently feature in the research study to eliminate ambiguity and to enable the reader to understand the context in which they appear.

1.9.1 Leadership

This study worked with Bass’s (2008) definition of leadership as the influence of leaders on the behaviour of employees directed through a communication process for the attainment of specific goals. Leaders can satisfy their employees’ needs in various ways by articulating the company’s vision, involving employees in the decision-making process, supporting them and listening to their problems in order to enhance their level of job satisfaction and self-esteem.

1.9.2 Leadership Behaviour

This refers to the unique pattern of behaviour that characterises an institution or a person, and by which such people or institutions administer their authority on their employees (Bass, 2008). It is the process by which leaders interact with their subjects to ensure that responsibilities are executed as expected and that organisational goals are realised and achieved.

In this study, leadership behaviours implies the ways of guiding employees in the two companies under investigation to achieve organisational objectives by ensuring a satisfactory level of job satisfaction in order to achieve the desired goals. The following three behaviours are considered:
1.9.3 Transformational Leadership Behaviour

This is a leadership behaviour that involves initiation of change among employees. The leader undertakes to instil a culture of improvement as well as the willingness to submit to leadership. This leadership style also involves a direct relationship between the leader and employees where the former evaluates the drivers of the employees, “satisfy their needs and value them” (Bryant, 2003:143). Leaders in this category set standards to be adopted, and consequently influence their followers into adopting the following four behaviours (Bass, 2008; Mullins, 2010).

a) Idealised Influence (II): Behaviour exhibited by leaders results in them being a role model for their employees. It is measured in both behavioural and attributed terms; employees identify with and emulate these leaders, who are trusted and are seen to have an achievable mission and vision. Idealised leaders consider the needs of others before their own personal needs, avoid the use of power for their personal gain, demonstrate high moral standards, and set challenging goals for their employees (Popper and Lipshitz, 2000; Northouse, 2007);

b) Inspirational Motivation (IM): Behaviour exhibited by leaders which motivates and inspires employees by providing meaning and challenge to their work. These leaders encourage their employees to achieve levels of performance beyond their own expectations by using stories and symbols to communicate their vision and message (Kelloway and Barling, 1993; Mullins, 2007);

c) Intellectual Stimulation (IS): Behaviour exhibited by leaders which results in employees’ efforts being innovative and creative by questioning assumptions, reframing problems, and approaching old situations in new ways. Such leaders induce changes in the values and beliefs of their employees. They stimulate employees to imagine a new and different future state for the groups (Champoux, 2000; John et al., 2010);

d) Individualised Consideration (IC): The way leaders pay special attention to each employee’s needs for achievement and growth by acting as a coach or mentor (Bass et al., 2003). A key assumption of individualised consideration is that each employee
has different needs and that for any specific employee, those needs will change over time, based partially on the influence of the leader (Bass, 2008).

1.9.4 Transactional Leadership Behaviour

This kind of leadership strategy is based on the postulate that “people are motivated by reward and punishment” (Straker, 2010:36). In this style, the leader outlines expected duties and performances of the led group and punishment or appreciations provided depending on whether the employees attain the expectations or not (Bass, 2008).

Though the transactional leader is not directly involved in his or her employees operations, the style is identified to be “effective in creating and sharing knowledge” in an organisation due to the freedom of the employees and the reward or punishment factors (Lussier and Achua, 2004:354). In addition, such leaders guiding their employees in the direction of organisational goals, which they achieve by clearly, clarifying the respective tasks and objectives that each work category must meet by using the following four behaviours:

a) Contingent Reward (CR): This leadership behaviour involves an interaction between the leader and the employees that emphasises an exchange. The leader provides appropriate rewards when employees meet agreed upon objectives;

b) Management by Exception Active (MBEA): This leadership behaviour is found when the leader arranges to actively monitor deviances from standards, mistakes and errors in the employee’s assignments and takes corrective action as necessary;

c) Management by Exception Passive (MBEP): This leadership behaviour is found when the leader waits passively for mistakes and errors to occur and then takes corrective action (Bass et al., 2003; Northouse, 2004).

1.9.5 Laissez-Faire Leadership Behaviour

This kind of leadership behaviour is displayed when a leader chooses not to guide performance and employees are given freedom to operate without influence of a leader, when the situation would usually demand that he or she do so. The leader is in most cases left with only the communication role for facilitation (Daniels, 2004). This
leadership behaviour is the most ineffective and inactive behaviour of leadership, and is strongly associated with employees dissatisfaction, conflict and ineffectiveness (Fennell, 2002).

1.9.6 Acceptance of the Leader

This concept refers to acceptance of the leader by his or her employees. The employees comply with the directives and orders of the leader and are always ready to accept the decisions made by the leader; they are comfortable with the leader and feel easy while working with him or her (Bass, 1999).

1.9.7 Job Satisfaction

Job satisfaction is an attitude towards working conditions, the general atmosphere of the company, interaction with leaders and employees. It is, thus, the feeling an employee has about his or her job experiences in relation to previous experiences, current expectations, or available alternatives (Spector, 2008).

For the purpose of this study, job satisfaction was used as an indicator of the relationship of the two companies’ (Rasco and Harouge) employees with work and with leaders as measured by the individual scores of the work variables: pay, opportunities for promotions, supervision, co-workers, fringe benefit, contingent rewards, operations conditions, nature of work, communication satisfaction and overall job satisfaction from the job satisfaction survey (JSS) measurement instrument by Spector (1997).

1.9.8 Satisfaction in the Leadership of the Leader

Satisfaction in the leader’s leadership behaviour is evaluated as the average of the sum of satisfaction in relation to certain facets (Buitendach, 2005). In the current study, these facets include: working relationship with the leader; respect from the leader; guidance and help from the leader; fairness of the leader; feedback from the leader; quality of the leader; emotional support from the leader; and the attitude of the leader toward employees.
1.9.9 Leader

The leader is the unit-in-charge or office-in-charge who leads the service unit and is responsible for the unit’s administration, development, supervision of employees and coordination of the service. He or she is characterised by a strong drive of responsibility and task completion, strength and persistence in search of goals, a drive to exercise initiative in social situations, self-confidence, a sense of personal identity, the willingness to accept consequences of decision and action, and the ability to influence others’ behaviours (Bass, 2008).

1.9.10 Employee

The employee is the front-line service provider employed by the service unit and works under the leadership of the manager or leader.

1.10 RESEARCH METHODOLOGY

After presenting the operational definitions of the terms used in this study, this section aims to provide a brief understanding of the research methodology process pursued in this study.

As a perception-based study, this research is constructed with qualitative research methodology due to being an explorative study based on the individual perceptions and opinions. In terms of operational aspect of the research, the research utilizes quantitative data collection and analysis methods. Thus, questionnaire survey was utilised as a method of primary data collection; and statistical analysis is used to help make sense of the assembled data.

The sampling frame for this study, comprised leaders and the followers in the companies in question: 70 or 20% of the 340 leaders, and 280 or 8% of the 3481 followers at Rasco Company, and 40 or 33% of the 120 leaders and 110 or 7% of the 1480 followers for Harouge Company.

In this study, the Statistical Package for Social Sciences (SPSS version 17.0) was utilised to compute descriptive and inferential statistics. Data was collected by means of a Demographic Questionnaire, Job Satisfaction Survey (JSS) and Multi-Factor
Leadership Questionnaire (MLQ) and all the data collected from the respondents at the Rasco Company and Harouge Company was aggregated into one SPSS file.

The variables collected using the Demographic Questionnaire, MLQ and the JSS consisted of measurements of specified constructs based on Likert-type scales, all of which were scored in the same logical direction from low to high. The Job Satisfaction Survey (JSS) required 18 of the 36 items to be reverse scored for this reason.

Although considered controversial by some statisticians, numerically-coded responses based on Likert-type scales are commonly analysed by social scientists if they are measured on a scale/interval level so that parametric statistics such as the mean, standard deviation, t-tests, analysis of variance (ANOVA), correlation, regression, exploratory factor, and multiple discriminants are applicable to define the relationship between these variables. It is assumed that the intervals between each point on a Likert-scale are approximately equal for the purposes of statistical analysis (Tabachnik and Fidell, 2007).

1.11 ORGANISATION OF THE STUDY

This thesis consists of seven main chapters.

**Chapter one** provides an introduction to the study by highlighting the need and significance of the study; a statement of the problem, the purpose, motivation, and the scope of the study were also presented. The assumptions, definitions of key terms used in this study and the structure of the research are also considered.

**Chapter two** begins by dealing with leadership definition and levels of the conceptualisation of leadership. It then outlines the major leadership theories and provides a framework for understanding this body of knowledge. The leadership theories discussed in this chapter are organised into conceptual representations or groups. Each theory provides a basis for the development of other leadership theories within a theoretical group. The transformational, transactional and laissez-faire leadership behaviours are described in detail in order to provide a specific theoretical background into leadership for this study.
**Chapter three** provides a comprehensive discussion of job satisfaction concept, where theories, dimensions and consequences of job satisfaction are discussed. The basic question is what makes subordinates at Rasco and Harouge companies motivated and satisfied in the workplace such that they engage themselves in the activities that ultimately bring either a sense of fulfilment or of disappointment in their current positions.

**Chapter four** gives the broad context of Libya, including its geography, population, history, health and political system. The chapter then discusses the country economic, culture, leadership and communications aspects in Libyan organisations. The chapter further provides an overview of petrochemical industry in Libya, paying particular attention to two of the biggest petrochemical companies in the country, Ras Lanuf Oil and Gas Processing Company (Rasco) and Harouge Oil Operations Company (Harouge) as these are the two companies to be investigated in the study. Joint ventures and training are also reviewed in order to understand how these concepts work in the petrochemical industry in Libya.

**Chapter five** presents the research methodology and all the measures that were performed in order to achieve the objective set for this study in more detail. In addition, the research design and the method of carrying out the study are explained in detail. This chapter also further explains the population of the study, the research instruments employed and their validity and reliability, and the procedures that were followed and the method of data analysis. Furthermore, the ethical considerations and confidentiality aspects are also addressed.

**Chapter six** concentrates on the results obtained based on the empirical analyses conducted in order to test the research hypotheses. The descriptive statistics calculated for the sample are provided in this chapter. The data relating to the variables included in the study, as collected by the three measuring instruments: Demographic Questionnaire, MLQ and the JSS are summarised by means of the calculation of descriptive measures. In this manner, the properties of the observed data clearly emerge and an overall picture thereof is obtained. The descriptive and inferential statistics generated for the conjectured relationships are also presented and discussed.
Chapter seven presents the research findings from the literature study as well as the empirical study. The results of testing the hypotheses are presented, discussed and outlined in the relevant tables and figures stating its implications.

Chapter eight presents the main conclusions of the study. The chapter further highlighted some of the study limitations as well as some recommendations for improvement based on the research findings. It also delineates areas for further research in the area of leadership behaviours and job satisfaction.
Chapter 2

LEADERSHIP: A LITERATURE SURVEY ON CONCEPT, MODELS AND EMPIRICAL STUDIES

2.1 INTRODUCTION

In every field of life either personal or professional, everyone requires proper guidance in order to exactly know what they are required to do which will be in their collective as well as individual benefit. Therefore everyone regardless of age, gender, education requires some form of guidance including religious, political, social, organisational etc., so that they can satisfy their differing needs. Thus, leadership is something which provides guidance to others so that they can both collectively and individually achieve their desired objective and success (Avolio et al., 2009).

Leadership is created when the suggestions or orders of a person known as ‘leader’ are agreed, believed and performed by that person’s employees. In other words, a relationship of leadership is created when someone’s suggestions or orders are listened and implemented by some other person(s). The reason due to which employees willingly follow their leader is that employees have full confidence and trust in their leader, on the basis of knowledge, past behaviour, leadership skills and qualities demonstrated by the leader. Therefore, it proves that a person cannot become a leader unless he or she has full confidence and trust of employees as well as special knowledge, capabilities and leadership skills. In addition, forms of leadership can be varying depending upon the purpose of leadership. Moreover, the extent by which employees obey and pay attention to a leader’s suggestion or advice also differ on the basis of the authority a leader possess over his or her employees. It is thus clear that the concept of leadership applies and present in every field of life (Bertocci, 2009).

This chapter, as a foundational chapter hence, provides a literature review of leadership and related issues. It begins with leadership definition and levels of
conceptualisation of leadership. It then outlines the major leadership theories and provides a framework for understanding this body of knowledge.

The leadership theories discussed in this chapter are organised into theoretical groups. Each theory provides a basis for development of the following leadership theory within a conceptual group. Transformational, transactional and lassiez-faire leadership theories are discussed in detail in order to provide a specific leadership theoretical framework for this study.

2.2 LEADERSHIP: CONCEPTUAL DEFINITION

Leadership can be defined as a process through which a person (leader) provides guidance, motivation, support, encouragement and assistance to others (followers), have their trust and confidence in return and leads them towards some commonly shared objectives without compulsion. On the basis of this definition we can identify that leadership is different from just being a boss, as employees of a boss have compulsion to follow his or her, while employees of a leader follow him or her with their own free will.

There are some elements which are considered as an integral part of a leadership which includes presence of employees, leadership qualities, influencing others without using force, having trust of the employees, leading by example, and moving towards shared objectives. Unless all of these elements are present, a relationship of social influence will not be considered as leadership. Leader possesses an authority of social influence over its employees by virtue of his or her leadership. However, the authority of social influence is not a legal one or forcefully exerted on the employees, and so employees have freedom whether to follow their leader or not. Even though, the employees tend to follow their leader’s instructions or suggestions with their own free will because they have confidence and trust in their leaders and their leadership capabilities. In addition, leadership can also be expressed as an ability to lead so in this way leadership can also be regarded as a set of skills which enables a person to lead others (Bertocci, 2009).

On the basis of above explained definition the leadership skills or the skills by possessing which a person can become a leader includes honesty, ability to motivate
others, ability to inspire, ability to lead towards desired collective goals, ability to adapt to any change, ability to identify and satisfy individual as well as collective needs of employees and ability to foresee. These are the most important skills of a leader (Avolio et al., 2009).

It is important for leaders to have full confidence and trust of their employees otherwise they will have doubts about their leaders’ objectives or decisions as a result of which they would be reluctant to follow them. Therefore presence of honesty is must for an effective leadership. Moreover, unless leaders are capable of inspiring others, they would not be able to make employees follow them and for doing so presence of charismas are mandatory of leaders. Furthermore, leaders must have an ability to predict future in advance so that they can prepare their employees to take appropriate measure and for doing so leaders must also be adaptable to any change (Bertocci, 2009).

Before delving further into the subject matter, it might be useful to present some common definitions of leadership:

Leadership is “the ability of a superior to influence the behaviour of an employee or group and persuade them to follow a particular course of action” (Bernard, 1948:25).

Leadership is “a function of knowing yourself, having a vision that is well communicated, building trust among colleagues, and taking effective action to realize your own leadership potential” (Bennis, 1999:19).

The process nature of leadership is important to identify as well. Northouse (2004:3) defined leadership as is “a process whereby an individual influences a group of individuals to achieve a common goal”.

In stressing the process nature of leadership Yukl (2006:3) also defined leadership as “a process whereby intentional influence is exerted by one person over other people to guide structure, and facilitates and relationships in a group or organisation”.

In terms of the functional role of leadership, Bass (2008:25) defined it as “the exercise of influence by one member of a group or organisation over other members to help the group or organization achieves its goals”
While each of these definitions refer to a particular aspect of the leadership, they also share some common characteristics; such as directing or having impact on others for a particular task. It can be concluded that most of the definitions of leadership involve a social influence process: There is one person who intends and exerts his or her influence over other people in a group, organisation or community to structure certain activities and relationships whereby some desired goals can be achieved.

2.3 BACKGROUND ON LEADERSHIP RESEARCH

From centuries, numerous researches have been carried out related on leadership and related issues. Consequently various theories have been proposed by different individuals to explain various characteristics, functions, forms, behaviours and power of a leader. Some consider leaders to have formal authority while according to others leaders do not have any formal authority. However, due to leader traits and charisma employees voluntarily follow them. Some of the classical theories of leadership developed as a result of leadership research include, trail based theory, activity based theory, contingency based theory, style based theory and continuum based theory (Barbuto, 2005).

In the early history of leadership, researches were focused on determining special traits or qualities which differentiate a leader from an ordinary person. On the basis of this concept that individual attributes are considered to determine leadership is recognised as trait theory of leadership. In early days it was believed that traits of leadership are inborn and so it is not possible to develop a leader. Trait theory of leadership provided basis for further leadership research. Moreover traditionally leadership was also determined on the basis of power, inheritance, socioeconomic status, intelligence and physical strength of a person (Zaccaro, 2007).

As a response to trait theory of leadership, social scientist suggested contingency theories in which they claimed that qualities and behaviour of a leader depends on a particular situation in which they perform leadership function. Therefore behaviour of a leader will vary in different situations and so no ideal personality exists. Later leadership research further proceeded and changed its focus towards evaluating behaviours and styles of leadership on the basis of which leadership behavioural and
style theories were developed. In these theories various set of behaviour and style of a successful leader were examined and concentrated on what a leader performed.

The four different approaches used by leaders were described by four terms; namely autocratic, bureaucratic or authoritarian, democratic or participative, and laissez-faire. In autocratic leadership power and authority is possessed unified by a single person. While *bureaucratic or authoritative leadership* is a leadership in which employees follow the leader because of the legal or formal power, position or authority leader possess over his or her employees. Whereas in *democratic leadership* style, leaders participate in work and employees are encouraged to participate in decision making. In *laissez-faire* leader rather than directing the employees allow them maximum freedom so that they can control their activities and take their own decisions (Bass, 1990).

Van Wart (2003) and Bass (2008) argue that it is not possible to clarify categorise all of the mainstream leadership literature into specific time periods; however, it is possible to capture the dominant themes and interests for a heuristic overview. Van Wart and Bass then illustrated the eras of leadership theories and research with corresponding time frames and features as follows in the table 2.1.
<table>
<thead>
<tr>
<th>Leadership theory</th>
<th>Time frame</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Great man</td>
<td>Pre 1900</td>
<td>This approach focuses on the emergence of a great figure of the individual that has substantial influence on the organisation and society</td>
</tr>
<tr>
<td>Trait</td>
<td>1930s</td>
<td>This theory emphasised on the individual personality characteristic or traits (<em>e.g.</em>, physical and personal), and skills (<em>e.g.</em>, the ability to communicate and influence efficiently)</td>
</tr>
<tr>
<td>Behaviour</td>
<td>1940-1950</td>
<td>This theory emphasised on the leaders that can be made, rather be born, and claims that specific leadership behaviours differentiate effective leaders from ineffective leaders. By exhibiting this behaviour leader can enhance the efficiency and outcomes of both employees and organisation</td>
</tr>
<tr>
<td>Contingency</td>
<td>1960-1970</td>
<td>This theory emphasised on the situational variables leaders must deal with, particularly with regard to the performance and employee variables (<em>e.g.</em>, job satisfaction, turnover)</td>
</tr>
<tr>
<td>Transactional</td>
<td>1970</td>
<td>This approach is based on the mutual agreement on the expectations of the leader, the followers and the reward of successful work completion</td>
</tr>
<tr>
<td>Transformational</td>
<td>1976</td>
<td>This approach involves the ideological transformation of organisation’s leadership styles, the outcome of which is a shrewd leader who is capable of turning around the fortunes of his or her organisation.</td>
</tr>
<tr>
<td>Servant</td>
<td>1979</td>
<td>This approach attempts to simultaneously enhance the personal growth of employees and improve the quality and caring through a combination of teamwork and community, personal involvement in decision making and ethical behaviour</td>
</tr>
<tr>
<td>Multifaceted</td>
<td>1990- present</td>
<td>This theory emphasised on integrating the major leadership paradigms, such as transformational, transactional and laissez-faire leadership. This contemporary perspective, which is mainly affected by the competitive global economy provides a more sophisticated and broad range approach to leadership</td>
</tr>
</tbody>
</table>

2.4 THE IMPORTANCE OF LEADERSHIP RESEARCH

The changing nature of work organisations, including recognition of the efficient use of human resource, together with advances in social democracy, have combined to place growing importance on leadership (Mullins, 2007). In support Bass (2008) argues that leadership behaviour plays a significant, if not the most critical role, and is therefore an important subject for study and research.

It is a common phenomena that things tends to change, one way of doing things replaces overtime by another way. A very successful approach, system or method may not remain successful in some other situation or time. As a result of this constant change it becomes necessary that old methods, approach, and techniques are replaced by some new, more advanced and effective ones which will prove more effective and fulfill the requirements. Therefore, and in order to determine some new, more advanced and effective approach or method, it is mandatory to carryout research. In this way, thus, leadership research serves as a means to bring change.

Just take any other research, leadership research is important because it leads towards determination of new, more advanced and effective approaches as well as evaluation of the existing leadership theories or approaches (Barbuto, 2005). Moreover, leadership research explores and provides guidance regarding traits of leadership, leadership theories, and behaviours of leadership as well as leadership approaches. It also brought diversification in leadership approaches, behaviours and theories. Furthermore, it helped us to understand that there is no perfect leadership behaviour at present which can be successful in every situation. In addition every single organisation is somewhat different from another and has different culture, environment, constraints and norms. Therefore and to determine best leadership practice, for a particular organisation it is necessary to perform a specific leadership research (Avolio et al., 2009).

Leadership research has not been carried out then we would not be able to have different leadership, behaviours or theories and still would have been using the primitive ones. It also helps in clarifying doubts and changing ideas regarding leadership, behaviours, traits, theories and approaches.
In addition, this leadership research helps in bringing change and transformation in the old leadership approaches. As a result it determines and alters the old leadership theories or approaches while suggesting the most suitable ones for a particular situation.

Leadership research also serves as a medium to predict future organisational changes and leadership requirements. It helps us in determining which leadership theory and behaviour would be most successful in what type of situation. For instance authoritative leadership behaviour is useful when quick actions are required or laissez-faire leadership behaviour is more effective when innovation is required and employees’ empowerment is desired. So in this way leadership research assist in evaluating strengths and weaknesses of existing leadership theory, behaviour and approaches. Leadership research is also useful in analysing an organisational leadership approach and what type of authority is possessed by the leaders. Moreover, what factors can influence employees to follow their leader can also be evaluated by using leadership research. So in short leadership research is important as it advances the practice, understanding and development of leadership (Bertocci, 2009).

2.5 LEADERSHIP THEORIES

Once leadership researchers moved beyond the assessment of leadership skills and effectiveness they began to develop leadership theories by identifying different leadership behaviours and trends.

The issue of leadership has traditionally been of high interest since it is widely believed that the behaviours adopted by the leader is what helps to make certain organisations succeed while others may fail. Furthermore, the concept of followership is directly linked to leadership theory because leaders and employees make up the composition of any organisation.

Davis (2003:10) argues that the concept of leadership is clarified further by “thinking more carefully about the role of employees”. It is important to consider leadership theories as a means to “distinguish leaders from non leaders” (Davis, 2003:11).
According to Turner and Muller (2005) eight main leadership approaches have emerged over the last 70 years. As depicted in table 2.1. These theories and models have been categorised into two perspectives.

The first perspective is the traditional leadership theories and include; a) ‘great man and trait’ leadership theories, which assumes that leaders are born and have innate qualities; therefore, leaders cannot be made and thought to be those having success stories; b) ‘behavioural’ leadership theories, which assumed that appropriate leaders’ behaviour varies as of one situation to another, and; c) the ‘contingency’ leadership theories, which emphasised on the situational variables leaders must deal with, particularly with regard to the performance and employee variables (e.g., motivation and satisfaction) (Bass, 2008).

The second perspective is the new leadership theories and include; a) ‘servant’ leadership theory, which emphasised on the ethical responsibilities to employees and society; b) ‘full range’ of leadership theory (FRL) (transformational, transactional, and lassiez-faire leadership), which emphasised on the ability to use this theory of leadership behaviours that separates effective from ineffective leadership behaviour (Avolio et al, 2009).

A discussion on these leadership theories is presented in the subsequent paragraphs.

2.5.1 Traditional Leadership Approaches

Traditional leadership approaches are the trait approach, the behavioural approach and the contingency approach (Berson, 2004). Each approach describes different dimensions of leadership, and has its own effect on the relationship between leaders and their employees (Schermerhorn et al., 2000; Hoy and Miskel, 2001).

2.5.1.1 Great man and trait leadership theories

Yukl (2006) argued that the great-man approach represents the earliest theory of leadership. Simply stated the theory suggested that the great leaders are born not made. Such men and women were believed to possess certain qualities that lead them to greatness. Eventually this approach evolved into what is now known as ‘trait theory of leadership’. This theory of leadership is based on the belief that leaders possess
certain personal qualities, such as courage, intelligence, strength of character, and charisma, which their employees do not have. These characteristics were seen to be fixed, largely inborn and applicable across situations (Bass, 2008).

According to Stodgill, (1974); White and Bedner, (1986); Bass, (1990); Hersey et al. (2001) the two approaches of leadership (great man and trait theories), however, failed to explain the source of effective leadership for a number of reasons;

a) Contradictory research findings suggest that successful leaders, unsuccessful leaders and even non-leaders sometime possess the same trait;
b) Leaders may be effective as a result of appropriate behaviour pattern they have learnt rather than because of some inside trait; and
c) The qualities characteristic and skills required in a leader are determined to a large extent by the demands of the situation in which he or she is to function as a leader. But despite some conflicting evidence and long argument, the consistency with which some traits have been linked to leaders and the magnitude of correlation in studies indicated that certain traits are associated with leaders in leadership situations (Bass, 1990; Yukl, 2002; Mullins, 2002).

2.5.1.2 Behavioural leadership approaches

The lack of capacity of the trait approach to consistently define specific traits that would differentiate successful and unsuccessful leaders led researchers to investigate other variables particularly the behaviour or action of leaders (Northouse, 2004; Yukl, 2006).

The three behavioural models of leadership will be briefly discussed are; the ‘Ohio State University studies; ‘University of Michigan study’; and ‘Blake and Mouton’s Leadership Grid’.

2.5.1.2.1 The Ohio State University studies

The most influential research in leadership behaviour, incorporating the surveying of employees to gain perception on leadership was founded in the 1950s and 1960s at the Ohio state university (Yukl, 2006). This study identifies two dimensions;
a) Initiating structure: This dimension refers to the extent that leaders are likely to define and structure their role and those of employees in the search for goal achievement (Robbins, 2000).

b) Considerations: This refers to the extent that leaders are likely to have job relationships characterised by mutual trust, respect for employees thoughts, ideas and opinions and regard for their feelings, needs and desires. The consideration dimension of leadership behaviour refers to behaviour indicating friendship and respect in the interactions between the leader and his or her employees (Yukl, 2002).

2.5.1.2.2 University of Michigan Study

According to Robbins and De Cenzo (2001) this study was similar to the Ohio State and identified behavioural characteristics of leaders that were related to job satisfaction and performance. The Michigan Study also identified two basic behaviours of leadership namely, employee oriented and production oriented.

Employee oriented leaders emphasis interpersonal relations in the needs of their employees and accept individual differences among members (Robbins, 2000). They feel that every employee is important and take an interest in everyone, accepting their individuality and personal needs and desires (Hersey et al., 2001). In contrast production-oriented leaders’ emphasis the technical or task aspects of the job and are concerned mainly with achieving their employees’ task and respect them as a mean to that end (Robbins and De Cenzo, 2001).

2.5.1.2.3 Blake and Mouton’s leadership grid

The leadership grid formerly known as the managerial grid which was introduced by Blake and Mouton (1964) to clarify the dynamics of the dimensions of organisational leadership (Bass, 2008).

The grid has two axes: one indicates concern for people while the other concern for production. The horizontal axis reflected in issues which include such matters as results (including high quality), performance profits and mission. Concern for people, rated on the vertical axis, reflected in issues as having support for members, achieving results based on trust and respect showing concern for employees’ job security. Each of the concerns is rated on a one (1) to nine (9) scale (Figure 2.1).
According to Bass (2008), the leadership grid identifies five leadership styles namely:
1,1 referred to as impoverished; 9,1 called authority compliance; 1,9 is country club; 5,5 is middle of the road; and 9,9 is called team leader.

a) The impoverished behaviour (1,1): This behaviour is representative of a leader who is unconcerned with both the task and interpersonal relationship. The leader using this behaviour goes through the actions of being a leader but acts uninvolved and withdrawn. Leader often has little contact with employees and can be described as indifferent and resigned.

b) The authority-compliance behaviour (9,1): This leadership behaviour places heavy emphasis on task and job requirements and less emphasis on employees, except to the extent that employees are tools for getting the job done. The leader adopting this behaviour is often seen as controlling, demanding and hard driving.

c) The country-club behaviour (1,9): This behaviour represents a low concern for task accomplishment coupled with a high concern for interpersonal relationship. Leader adopting this behaviour stress the attitudes and felling of employees, making sure the personal, social needs and desires of employees are met. They try to create a positive environment by being agreeable, and eager to help.
d) The middle of the road behaviour (5,5): This behaviour describes leaders who are compromisers, who have an intermediate concern for the task and the employees who do the task. They find a balance between taking employees into account and still emphasising the work requirements. Their compromising behaviours give up some of the push for production and some of the attention to employee needs.

e) The team/high - high behaviour (9,9): This behaviour places a strong emphasis on both task and interpersonal relationships. It promotes a high degree of participation and teamwork in the organisation and satisfied a basic need in employee to be involved and committed to their work.

As has been shown, the leadership grid is an example of a practical model of leadership that is based on the two major leadership behaviours; task and relationship. It closely parallels the ideas and findings that emerged in the Ohio State University of Michigan studies. It is used in consulting for organisational development throughout the world (Northouse, 2007).

In conclusion, great man, trait and behavioural approaches of leadership provided insight into and helped people to understand the dynamics of leadership. Great man and trait approaches consider personal characteristics in a leader that may be important in achieving success in a leadership role. Similarly, behavioural approaches attempt to specify which kinds of leader behaviours are necessary for effective leadership behaviours. However, Great man, trait and behavioural approaches fail to take into account the interaction between employees, tasks and environments (Ivancevich and Matteson, 2002; Manz, 2004; Bass, 2008).

2.5.1.3 Contingency theories approach

After the failure of great man, trait and behaviour approaches of being sufficient overall theories of leadership, researchers turned their attention to the contingency aspects of leadership (Bass et al., 2006; Yukl, 2006).

Contingency or situational theories of leadership suppose that appropriate leader’s behaviour differs from one situation to another. The aim of contingency theories is to identify important situational factors and to specify how they interact to determine appropriate leader behaviour. These types of theories revolve around the concept that
situational factors or intervening variables affect the relationship between leader behaviour, employee job satisfaction, performance and morale (Mullins, 2007).

According the Bass (2008) the most widely known contingency theories found in the literature are; a) the *Tannenbaum and Schmidt leadership* theory (Tannenbaum and Schmidt, 1958); b) *path-goal leadership* theory (House, 1971); c) *Hersey-Blanchard’s contingency leadership* theory (Hersey-Blanchard, 1977).

Although these theories differ in the way they investigate leader and employee characteristics (Hughes *et al.*, 2009) and how they measure leader effectiveness (Robbins, 2000); they share some similarities (Jones, 2004). For example, they are based on the idea that effective leadership is a function of the employees, the leader, and the situation. They also assume, at least, in part that leaders are capable of assessing key employees and situational factors.

The review of these theories of contingency leadership is briefly presented in the subsequent paragraphs.

### 2.5.1.3.1 The Tannenbaum and Schmidt leadership continuum

According to Mullins (2007) the Tannenbaum and Schmidt leadership continuum is one of the best-known works on leadership behaviour. Initially written in 1958 and updated in 1973. Their work suggests a variety of possible leadership behaviours to a leader and along which various behaviours of leadership may be placed.

Tannenbaum and Schmidt (1973) propose that a leader may behave in one of the following ways:

a) The leader makes a decision and announces it: The leader uses his or her insight to make decisions, and makes sure that the decision will facilitate what he or she wants to see happening without giving any opportunity for employees’ input. The leader announces the decision to the employees for implementation and the employees are supposed to comply with the decision (Chen *et al.*, 2005).

b) The leader sells a decision: The leader makes a decision and sells it to the employees. He or she motivates the employees by explaining to them the reasons for
making that decision, and then persuades them to buy the decision by explaining how the decision will benefit the employees (Bass, 1997).

c) The leader presents ideas and encourages questions: The leader presents his or her ideas and encourages questions from employees so as to clarify the importance of the decision and to request for its approval. It is up to the leader to hold on to or modify his or her ideas (Bass and Avolio, 1990).

d) The leader presents a provisional decision subject to change: The leader makes a provisional decision and presents it to the employees. The decision is subject to change if the employees come up with a better idea, and their opinions may bring about a change in the leader’s decision (Northouse, 2004).

e) The leader presents problems gets suggestions and makes decisions: The leader identifies the problems but does not come up with any solution; instead, the leader allows the employees to suggest solutions and the leader choose the best out of the solutions suggested by the employees and makes the final decision (Fields, 2002).

f) The leader allows the employees to make decisions within prescribed limits: The leader gives the employees freedom to identify any problem in the organisation and to suggest solutions to the problem. From the alternatives given, the group selects the solution to the problem (Gregoire and Arendt, 2004).

2.5.1.3.2 The path-goal leadership theory

The path-goal theory of leadership is another theory of contingency approach, which was developed by Evans and House in the 1970s and based on the assumption that the leader behaviour and the environment in which the leader is central rather than on the personal traits of the leader (Yukl, 2006).

House called it the ‘path-goal theory’ because it focuses on how leaders influence their employees’ perceptions of work goals, self development goals, and paths to goal achievement (Ivancevich and Matteson, 1999; Hazy, 2006).

Lussier and Achua (2004) pointed out that path-goal theory has four general leadership behaviours and several assumptions based on the works of House. These leadership behaviours from the foundation of path-goal theory include:
a) Directive leadership behaviour: The leader who exhibit this behaviour of leadership is involves in letting employees know exactly what is expected of them and giving specific guidance, asking them to follow rules and procedures, scheduling and coordinating the task;

b) Supportive leadership behaviour: The leader is giving consideration to the needs of employees, displaying concern for their wellbeing, and creating a friendly and collective environment in the work place;

c) Participative leadership behaviour: The leader who uses this behaviour consults with employees and taking their opinions and suggestions into consideration. This behaviour is effective when employees are well satisfied and capable in doing their jobs;

d) Achievement-oriented behaviour: When the leader demonstrate this behaviour, he or she sets challenging goals for employees and seeks performance improvements in and showing confidence that employees will achieve high standards.

According to this theory, hence, leader must carefully evaluate his or her employees and their tasks and then choose appropriate leadership behaviour to match those characteristics. If employees are feeling insecure about doing a task, the leader needs to adopt a behaviour that builds employee confidence. In addition, if employees are uncertain whether their efforts will result in reaching their goals, the leader needs to prove to them that their efforts will be rewarded (Bess and Goldman, 2001; Taffinder, 2006).

2.5.1.3.3 Hersey and Blanchard’s contingency leadership theory

This approach of leadership was first introduced by Heresy and Blancheed (1977) and further developed in (1984) which based on the consideration and initiating structure dimensions of the Ohio state leadership studies (Avolio et al., 2009). The theory proposed that leadership behaviour should be matched to the maturity of the employees. The leader must judge or intuitively know employees’ maturity levels and then employ a leadership behaviour that fits the level.
Heresy and Blanchard (1988:187) discuss four leadership behaviours: “telling; selling; participating; and delegating”. Each is built on two dimensional concepts: task and relationship behaviour, with emphasis on the maturity level of employees (Bass, 2008).

a) Telling behaviour: This leadership behaviour is characterised by a high task focus to ensure the definition of roles for employees who are unable and unwilling to take responsibility. The leader who adopts such behaviour has well-defined strategies to achieve set goals. He or she gives detailed instructions as to what the task is and when, where and how to perform it (Mullins, 2007);

b) Selling behaviour: This behaviour comprises both high task direction and high personal support for employees who are unable but willing to take up responsibility. The leader who demonstrates this behaviour gives the employees specific instructions and monitors their work (Yukl, 2006);

c) Participating behaviour: This behaviour is characterised by supportive behaviour with a lower task focus is provided to employees being able but unwilling. Through involvement is decision making processes the satisfaction levels of employees are increased. However, Hersey and Blanchard (1993) explain that employees unwillingness to do the job may be as a result of lack of confidence if it is their first time handling such a task; if they lack of satisfaction as a result of performing routine tasks for a long time; or if there is a clash between the leadership and the employees. This behaviour is perfect with highly creative employees who have necessary skills and self-confidence (Avolio et al., 2009);

d) Delegating behaviour: This behaviour is characterised by low levels of both task direction and personal support are provided when employees are able and willing to perform the task. Employees in this category are well competent and highly motivated. The leader tells the employees what to do, answer their questions and provides little or no direction. However, Hersey and Blanchard (1993) argue that this behaviour is not effective when employees feel that the leader is providing little structure and support when necessary.
Matching the leader’s leadership behaviour with the appropriate situation enhances effectiveness (Hersey and Blanchard, 1993). This indicates that the increase in level of maturity and readiness with regards to accomplishing specific task will afford the leader the opportunity to change his or her leadership behaviour to a more relationship-oriented behaviour for increase productivity.

This approach of leadership were criticised for the limited testing of the model and failing to provide significant evidence of the predictions that could be made with the model and which behaviour is best. Despite the criticism, the model is well accepted in organisational environments and is thought to be practical and useful in training settings (Ivancevich and Matteson, 1999; Avolio et al., 2002).

2.5.2 New Leadership Approaches

The previously discussed approaches to a certain extent provide insights into an understanding of leadership and leadership effectiveness (Hoy and Miskel, 2001; Bass et al., 2006). Nevertheless, they do not provide a convincing meaning to leadership and its effectiveness; as leadership effectiveness is not about possessing personal traits, what leaders do (behaviour) or the leaders’ ability to do the right thing at the right time depending on the situation (contingency). Therefore, and since the 1970s many alternative theoretical frameworks for the study of leadership have been advanced.

Among the more important of these are, servant leadership theory, (transformational leadership theory, transactional leadership theory and lassiez-faire leadership theory) are named as the full-range of leadership theory (FRL) (Northouse, 2007; Bass, 2008). ‘FRL’ theory in particular will be discussed in more detail in order to provide a specific leadership theoretical framework for this study.

2.5.2.1 Servant leadership theory

This approach of the new leadership theories, which was introduced by Greenleaf in the late 1970s, and reflects a philosophy whereby leaders should be serve first rather than to lead first, and always should trying to fulfill the highest priority needs and
desires of their employees and organisation ahead of their own interest in order to be effective leaders (Stone, 2004; Bass et al., 2006).

In organisational environment, this means leaders must be able to change the usual way of thinking on their heads, it is not about what their employees can do for them but about how they can serve them to fulfill their needs and desires, help them become healthier, more willing to accept their responsibilities, keeping actions consistent with values and showing trust in them. In addition the servant leader must empower employees instead of using power to control them and being completely honest and open and care more about making sure that everyone in the organisation has the necessary equipment and tools to perform their best and they care less about increasing their own status and reputation. Such behaviour can create an environment of bonding and trust that increases the moral of the employees which also leads to a greater sense of commitment, satisfaction, and integrity (Bass, 2008).

2.5.2.3 Full-range of leadership theory (FRL)

Transformational, transactional and laissez-faire leadership are three major paradigms of leadership that have provided the foundation for the study of leadership among disciplines during the last two decades (Bass et al., 2006; Mullins, 2007; Northouse, 2007). Avolio and Bass (1991) referred to these paradigms as three broad categories of leadership behaviour that are distinct but not mutually exclusive and highly transformational at one end to highly avoidant or (lassiez-faire) at the other end.

According to Avolio and Bass (1991); Antonakis et al. (2003) full-range of leadership theory describes the extent to which each of the three leadership behaviours (transformational, transactional and lassiez-faire) are active, passive, effective and ineffective, and the frequency with which of these behaviours are practiced within an organisation (figure 2.1).
Figure 2.1 The Full Range of Leadership Theory

The transformational factors is characterised in this theory by four dimensions, named as the four I’s, all of which are seen by Bass (1994), as the most active and effective behaviours of leadership. These include; a) idealised influence: where the leader is being trusted and respected, as he or she maintains high moral standards and the followers seek to emulate him or her; b) individualised consideration: the leader treats employees as individuals and all are treated equitably. Individual’s needs are recognised plus assignments are delegated to followers to offer learning opportunities; c) Intellectual stimulation: the leader stimulates the followers’ understanding of the problems as well as an identification of their own beliefs and standards and; d) inspirational motivation: the leader expressly as well as characteristically emphasises to followers the need to perform well plus helps to accomplish the organisational goals.

Transactional factors emerging from this theory on the other hand, include contingent reward and management-by-exception. Contingent reward involves an interaction between the leader and the employees in which the leader uses rewards and promises to inspire employees to reach optimum performance levels contracted by both of them. Management-by-exception on the other hand, is defined as being active or passive. This perspective of transactional leadership behaviour happened when the leader monitors employees’ performance for any significant deviations from standards and taking corrective action when needed. In contrast, passive management-by-
exception occurs when a leader waits passively for mistakes to happen and intervening only if standards are not fully met.

Laissez-faire or ‘hands-off’ leadership behaviour is a passive kind of leadership style where there is no relationship exchange between the leaders and the followers. It represents a non-transactional kind of leadership style in which necessary decisions are not made, actions are delayed, leadership responsibilities ignored, as well as authority unused. Leader displaying this form of non-leadership normally avoids decision making, the providing of rewards and the providing of positive or negative feedback to their employees, with the leaders clearly leaving responsibility to others (Mester et al., 2003).

The following subsequent sections will discuss each theory in more detail.

2.5.2.3.1 Transformational leadership theory

One of the recent approaches of leadership that has been the focus of much research since the early 1980s is the transformational leadership theory (Northouse, 2007).

In the last three decades, the concept of transformational leadership has drawn a considerable attention as of management researchers along with specialists. This theory has been initiated by Burns (1978) and further expanded and refined by Bass (1985) to include certain behaviours of a transformational leaders and being role models in front of their employees which will result in building trust and confidence (Avolio et al., 2009).

Bass (2008) has described this theory as exceptional leadership behaviour that exists when leaders broaden in addition to promote the interests of their employees, when they generate awareness as well as acceptance of the purposes and mission of the group, and when those leaders stir their employees to look beyond their self-interest for the group benefit. In addition, transformational leadership theory is in a number of ways related charismatic and visionary leadership theories and incorporates affective state of employees and their emotions as its defining variables. In this way transformational leadership depicts itself as a mixed approach that includes several aspects of the wider range of leadership and has a strong influence on employees’
ability, satisfaction and motivation, performance and productivity (Avolio et al., 2009).

The effectiveness of this theory of leadership can be indicated by the degree to which a leader can obtain efforts from his or her employees, leader effectiveness and the employees’ level of satisfaction with the leader. In addition, transformational leaders go beyond merely exchanging incentive but instead develop intellectually inspiring and stimulating employees whose collective interests are higher than their personal interests (Bass, 2008).

Transformational leaders exhibit exceptional leadership behaviour and administration qualities and in most cases tend to make direct eye contacts to their employees, wear animated facial expressions and have very powerful but dynamic interaction behaviours. Such leaders always show genuine concern for the organisation and their employees.

In their working environment, transformational leaders recognise the existing needs of the employees and appeal to their values by offering them inspirational motivation and encourage them to reason critically and seek new and better ways of approaching their jobs, and this makes the employees more involved in their duties and thus plants a component of satisfaction (Wilmore and Thomas, 2001).

Furthermore, transformational leadership emphasised on that leaders should share power with employees rather than exercise power over them. In other words, they should use their power to help employees to achieve what they think are essential, become successful and experience a greater sense of efficiency. As a result, employees are exposed to responsibilities that release their potential and ability. In addition, transformational leaders are more concerned with what employees are accomplishing rather than what they are doing. Furthermore, empowering employees to establish a system for shaping the vision and mission of the organisation, indicating the importance of their achievement and exhibit a clear interest in fostering collegiality and collective leadership are the core aspect of the transformational leaders (Sergiovanni, 1999; Bass, 2002; Brown and Keeping, 2006; Gumusluoglu, 2009).
For the purpose of this study, transformational leadership is considered as the leadership behaviours practiced by the two companies (Rasco and Harouge) leaders which can create an environment conductive to enhance employees’ interests and focus their work objectives beyond their personal interests in order to improve the level of job satisfaction, performance and effectiveness of their employees.

2.5.2.3.1.1 Components of transformational leadership theory

Transformational Leadership represents the most active or effective form of leadership, a form in which leaders are closely engaged by means of employees, motivating them to perform beyond their transactional agreements (Bennett, 2009).

The transformational leadership behaviour is characterised in the full-range leadership theory by four dimensions. These dimensions as called the four I’s which includes the following components; idealised influence (attribute and behaviour); individualised consideration; intellectual stimulation and inspirational motivation (Bass and Avolio, 1993). Based on these components, transformational leaders should do more with colleagues and employees rather than set up simple exchange or agreement. They should behave in ways to advanced results by employing one or more of the four core components of transformational leadership theory (Brown and Keeping, 2006).

Each of these dimensions will be discussed in more detail in following paragraphs.

a) Idealized influence: This behaviour constitutes the charismatic factor of transformational leadership in which leaders turn out to be role models for ethical behaviour by their employees. As a result of the leaders’ behaviours, employees are expected to have faith along with trust in them plus in their actions as well as decisions (Boerner, 2007; Mullins, 2010). In addition, idealised leaders consider the needs of others before their own personal needs; avoid the use of power for their personal gain, and set challenging goals for their employee (Popper et al., 2000; Gumusluoglu et al., 2009). Such leaders often have high self-confidence, self-esteem and self determination, create the trust, respect of their employees and maintains high moral standards which encourage employees to follow them (Champoux, 2000; Northouse, 2007);
b) Inspirational motivation: This behaviour refers to the descriptive of leaders who, motivate employees as well as encourage them to conduct good behaviours inspirationally, articulate an appealing vision of the future, challenge employees with high standards, talk optimistically with enthusiasm and provide encouragement, raising the consciousness of employees regarding the organisation's mission as well as vision (Bass, 2002). In addition, inspirational motivation leaders encourage their employees to achieve levels of performance beyond their own expectations and able to strengthen their employees’ responses in addition to explain significant ideas in simple manners by using stories and symbols to communicate their vision and message and then employees react by willing to increase their efforts to attain the vision (Berson and Avolio, 2004; Boerner et al., 2007);

c) Intellectual stimulation: This behaviour refers to the leader’s ability to challenge employees to think critically. The leader stimulates the employees’ understanding of the problems as well as an identification of their own beliefs and standards. In addition, leaders who are intellectually stimulating provide employees with challenging new ideas, offer learning and training for them, develop innovative along with creative climate in organisation, encourage creativity in addition to accept challenges as part of their jobs (Bass, 1985). As a result employees develop their own capabilities to recognise, understand and eventually solve following problems (Boerner et al., 2007);

d) Individualised consideration: This behaviour is concerned with developing employees by coaching, mentoring and dealing by means as significant contributors to the organisation (Avolio et al., 1991). Champoux (2000) pointed out that a key component of individualised consideration is the degree to which the leaders show a real interest in their employees. These leaders treat employees as individuals by being sympathetic, appreciating, responding to their needs, recognising and celebrating their achievements (Kelloway and Barling, 1993). In addition, individualised consideration leaders help their employees in fulfilling their potential talents and increasing their responsibilities in the organisation and get to know that each of them has different needs and that for a specific employee those needs will change over time (Avolio et al., 1991; Bolden, 2004).
2.5.2.3.2 Characteristics of a transformational leader

According to Avolio et al. (2009) transformational leaders are those leaders who basically inspire their employees to the extent that they are literally transformed, either physically or mentally, to a potential leader that can carry out a set of work or strategies that can help in achieving a specific goal. By expressing their charisma, the transformational leaders motivate employees to think out of the box and work with dedication.

Stating unbiased and friendly helps the transformational leaders to get a familiar with everyone in a friendly way and so they get to know every single employee in a customised way rather than just calling them his or her employees. This in another trait of a transformational leader that creates space within the employees heart and mind for him or her and therefore the employees unintentionally start liking and following the leader in the beginning. As the work proceed they start understanding and liking their leader and thus they become a part of a successful team. Working ahead with the same pattern of trust and courage, the transformational leader assigns and supports his or her employees by giving them the power to carry out their day to day activities on their own. This injects ownership in the employees and thus they feel themselves as an important part of the organisation.

From their survey, Bennis and Nanus (1985) identified several common strategies used by leaders in transforming organisations. They asked 90 leaders basic questions such as what are your strengths and weaknesses. What past event has most influenced your leadership approach? What were the critical points in your career? From the answers leaders provided to these questions, the following strategies were identified:

a) Transforming leaders create trust in their employees and organisations by making their own positions clearly known and then standing by them: Trust has to do with being predictable or reliable, even in situations that are uncertain. Leaders build trust by articulating a direction and then constantly implementing them, even though the vision may involve a high level of uncertainty;
b) Transforming leaders are social architects for their organisations: This means they create a shape or form for the shared meanings employees maintained within their organisations. These leaders communicate a direction that transforms their organisation’s values and norms. In many cases, these leaders are able to encourage employees to adopt a new group identity or a new philosophy for their organisations;

c) Transforming leaders use creative deployment of self through positive self-regard, know their strengths and weaknesses and they emphasise their strengths rather than dwelling on their weaknesses.

Nadler, (1988); Yukl, (2006); Bass et al., (2006); Kaiser, (2008); Bertocci, (2009) further suggested a set of general guidelines for transformational leaders in order to be effective leaders:

a) Transformational leader should articulate a rational and attractive vision of what the organisation could accomplish or become to help employees understand the purpose, objectives and priorities of the entire organisation, and to help guide the actions and decisions of individual members. The vision should be communicated at every opportunity and in a variety of ways. The leader should meet with employees directly to describe the vision and answer questions; this is probably more effective than less interactive forms of communication, for example, letters, newsletters or articles (Bass et al., 2006).

b) Transformational leader should explain how the vision can be achieved: It is not enough to articulate an appealing vision; the leader must also convince employees that the vision is possible. It is essential to make a clear link between the vision and a likely strategy for attaining it. This link is easier to establish if the strategy has a few clear themes that are relevant to shared values of organisation members (Bertocci, 2009).

c) Transformational leader should act confidently and optimistically about likely success: Employees are not going to have trust in a vision unless the leader demonstrates self-confidence and certainty. It is essential to remain optimistic about the likely success of the group in attaining its vision, especially in the face of temporary road block and setbacks. A leader’s confidence and optimism can be highly
infectious. It is best to emphasise what has been achieved so far rather than how much more is yet to be done (Nadler, 1988; Stone, 2004).

d) Transformational leader should express confidence in employees and their ability to carry out the strategy for accomplishing the vision, especially when the task is difficult or dangerous, or when employees lack confidence in themselves. If appropriate, the leader should remind employees how they overcame obstacles to achieve an earlier success if they have not been successful in the current team or organisational unit (Yukl, 2006).

e) Lead by example: According to the old saying, actions speak louder than words: One way a leader can influence employee commitment is by setting an example of exemplary behaviour in day to day interaction with employees. Leading by example is sometimes called “role modeling” (Bass et al., 2006:124). It is especially important for actions that are unpleasant or dangerous. A leader who asks employees to observe a particular standard should also observe the same standard. A leader who asks employees to make special scarifies should set an example by doing the same (Kaiser, 2008).

From the above discussed factors it is apparent that the transformational leader should makes employees more aware of the importance and value of the work, and persuades employees to go beyond self-interest for the sake of the organisation. In addition, transformational leaders develop employees with skills and confidence to prepare them to assume more responsibility in an empowered organisation. Furthermore, they should provide support and encouragement when necessary to maintain enthusiasm and effort in the face of obstacles, difficulties, and tiredness. As a result of this influence, employees feel trust and respect toward the leader and they are motivated to do more than what was originally expected (Northouse, 2007; Zenger, 2009).

2.5.2.3.3 How does the transformational approach work?

According to Northouse (2007) the transformational approach to leadership is a broad based concept that includes many facets and dimensions of the leadership process. It describes how leaders can activate, and carry out significant changes in organisations. Although not definitive, the steps followed by transformational leaders empower
employees. They attempt to go beyond their own self interests for the benefit of others.

When Jung et al. (2003) studied upper level leaders in 32 Taiwanese companies, they found that transformational leadership created a culture in which employees felt empowered and encouraged to openly discuss and try different things. To create change, transformational leaders must be powerful role models for their employees. They must possess a highly developed set of ethical values and a self determined scene of identity (Avolio and Gibbons, 1988). They are positive, competent, express strong ideas, listen to employees and are tolerant of opposing viewpoints. It is common for transformational leaders to create a common vision which emerges from the collective interests of different employees and units in an organisation. The overall vision provides an important point for transformational leadership. It gives the leader and the organisation a conceptual map of where the organisation is headed; it gives meaning and clarifies the organisation's identity (Shamir et al., 1993; Avolio et al., 2009).

In addition, the transformational behaviour also wants that leaders become social architects by means of making clear the promising values and norms of the whole organisation and involve themselves in the culture of the organisation and help develop its meaning.

Employees want to identify their respective roles and know how they can contribute to the greater purposes of the organisation. Through this process, transformational leaders are successful at working with employees and can build trust, foster cooperation with their employees and encourage them to celebrate their achievements (Kouzes and Posner, 2002; Barbuto, 2005).

2.5.2.3.4 Strengths and weaknesses of the transformational leadership theory

As with any theory or approach to leadership, strengths and weaknesses become evident. Northouse (2007) for example, identify the strengths and weaknesses of this leadership approach as follows:

One of the most important strengths of this theory is the confirmation of its utility for increasing organisational satisfaction, commitment, and effectiveness (Bass, 2008). In
addition transformational leadership treats leadership as a practice that happens between employees and leaders. Since this process integrate both the employees’ and the leader’s needs, leadership is not the sole responsibility of a leader but rather emerge from the interaction between leaders and employees (Avolio et al., 2003). In support, Yukl (2006) argue that transformational leadership involves an attempt by leaders to move employees to a higher standard of moral responsibility.

It includes motivating employees to go beyond their own self interest for the good of the team, organisation, or community. Furthermore transformational leadership behaviour offers a wider view of leadership that enhances other leadership models. Many leadership theories focus primarily on how leaders exchange rewards for achieved goals whereas this approach provides an expanded picture of leadership that includes not only the exchange of rewards but also leaders’ attention to the needs, desires and growth of employees (Avolio et al., 2003).

In contrary, this approach of leadership has several criticisms: For example, Northouse (2007) argues that it lacks theoretical clarity. As it covers such a wide range including creating a vision; motivating; being a change agent; building trust; and acting as social architect, it is difficult to define exactly the parameters of transformational leadership. Specifically, research by Tracy and Hinkin (1998) has shown substantial overlap between each of the four I’s, suggesting that the dimensions are not clearly delimited. Furthermore, the parameters of transformational leadership often overlap with similar conceptualisations of leadership (Bryman, 1992).

Even though many scholars including (Bass et al., 2006; Northouse, 2007) emphasis that transformational leadership is concerned with leader behaviour such as how leaders involve themselves with employees, there is preference to see this approach from trait perspective. Perhaps this problem is exacerbated because the word transformational creates images of one person being the most active component in the leadership process.

In conclusion, in an evaluation of transformational leadership, Yukl (2006) reports that in studies that used the MLQ to apprise leaders; transformational leadership was positively related to employees’ satisfaction, motivation and performance.
Furthermore, in studies that used interviews and observations, transformational leadership was shown to be effective in a variety of different situations.

Transformational leadership behaviour is the one, which can change employees’ values and move them to new directions. But who is to determine whether the new directions are clear and more affirming? Who decides that a new vision is a better vision? If the values to which the leader is moving his or her employees are not better, and if the set of human values is not more redeeming, then the leadership must be challenged (Northouse, 2007).

2.5.2.3.2 Transactional leadership theory

Another theory of the new leadership approaches is the transactional leadership (Bass, 2008). This kind of leadership strategy involves leaders guiding their employees in the direction of organisational goals and they achieve this by clearly clarifying the respective tasks and objectives that each work category must meet (Avolio et al., 2009).

According to Bass et al. (2006) transactional leadership is centred on leader employees’ exchanges. Employees perform according to the will plus direction of the leaders as well as leaders positively rewards the efforts. The baseline is reward which can be negative like corrective action, if employees fail to comply by means of or it can be positive like praise as well as recognition, if employees comply by means of the intent and direction settled by a leader in addition to achieve the given objectives. This theory of leadership entails a leaders discussing with his or her employees about what is required of a particular task and clarifies clearly how the outcomes should be achieved. This is done in anticipation of securing the employee’s satisfaction and remarkable work performance (Bass, 2002). This way, the leader is able to built strong levels of confidence with their employees and this is essential in the achievement of organisational goals. In addition transactional leaders should help their employees identify what should be done to achieve the desired objectives. By doing so, transactional leader takes into account the employees self perception and value needs (Avolio, 1999; Yukl, 2006).
2.5.2.3.2.1 Components of transactional leadership theory

Transactional leadership theory comprises four components usually characterised as instrumental in employees’ goal achievement: namely contingent reward; management-by-exception (passive); management-by-exception (active); and laissez-faire (Bass and Avolio, 1991; Bass, 1998).

a) Contingent reward: It is an exchange process between leaders and employees in which effort by employees is exchanged for specified rewards. With this kind of leadership behaviour, the leader tries to obtain agreement from employees on what must be done and what the rewards will be for the employees doing it;

b) Management-by-exception (passive) (MP): A passive form of management by exception characterises leaders who monitors employees closely for mistakes or regulation deviations and then takes corrective action. They intervene only when it is necessary to correct these deviations after they have occurred. This usually happens when performance problems become serious or chronic. Performance should then revert to previously specified levels;

c) Management-by-exception (active) (MA): These leaders establish rules and regulations which they monitor closely for any deviations. They attend to exceptions and focus on the extreme to prevent problems. Active management by exception is an active process of monitoring employees’ performance and intervention to correct mistakes. These leaders usually spend significant time inspecting work systems, processes and performance. Leaders who firmly believe in the status quo and do not take proactive organisational roles are likely to manifest a variety of management by exception behaviours (Curphy, 1993; Avolio, 1999).

In both types of management-by-exception leadership behaviours the mode of reinforcement is negative contingent reinforcement or punishment rather than the positive reinforcement associated with contingent reward leader behaviour (Yukl, 2006).

d) Laissez-faire: This is no leadership or ‘hand-off’ leadership behaviour, where leaders avoid accepting their responsibilities or are unavailable when needed, resist
expressing their views on important issues, gives no feedback, makes little effort to help employees satisfy their needs and there is no exchange with employees or attempt to help them grow (Bass and Avolio, 1997). Furthermore, laissez-faire leadership behaviour is the most ineffective and inactive behaviour of leading and is strongly associated with employee dissatisfaction, conflict and ineffectiveness (Bass, 2002).

2.5.2.4 Transformational leadership vs. transactional leadership

According to Basu and Green (1997) transactional and transformational leadership are at opposite ends of the same leadership range. In addition, Bass et al. (2006) argued that transactional and transformational leadership are somewhat complementary and both can potentially be displayed by leaders. However, transformational leader works as a model and a motivator, encouraging the followers to work not because of an exchange of value but for the love of their work and encourages his or her followers to love their job and value their own input, making a positive change toward being future leaders.

They further argued that the root of transformational leadership lies in changing familiar ways of doing things, such as using unconventional strategies, recognising the need for change, managing the change process, introduce a dream within their employees and push them towards attaining that dream. However, the transformational leaders put the goal in front of the employees and work with them as employees or a team in order to achieve that goal. They transfer their vision in the minds of their employees and lead them in the quest of attaining the goal and exemplify their vision to expand the mental state and state of mind in their employees to follow this dream of the prospect (Bass, 2008).

On the contrary, transactional leader can provide goal clarity and acceptance of responsibility from employees. Transactional leaders, thus, are able to create a virtual vision whereby they develop a strong sense of solidarity among the employees and give rewards to those who perform and are following their orders correctly and vice versa. In addition, transactional leaders can be either passive or active: Passive transactional leader or management-by-exception allows the status quo to exist as long as the old ways are working. Active transactional leaders, on the other hand,
emphasises rewarding employees on achieving expected performance (Eisenbach et al., 1999). According to Bass (2002); Avolio et al. (2003) there are several fundamental distinctions between transformational and transactional leadership theories’ behaviours and quality.

The Tables 2.2 and 2.3 present some of the characteristics that distinguish transformational and transactional leadership.

**Table 2.2 Differentiation between Transformational and Transactional Leaders**

<table>
<thead>
<tr>
<th>Transformational Leader</th>
<th>Transactional Leader</th>
</tr>
</thead>
<tbody>
<tr>
<td>May identify with the goals towards which he or she directs employees to work</td>
<td>May tell employees about the specific benefits they will be given for complying with directions</td>
</tr>
<tr>
<td>May provide influential symbols and images about what a reward organisation would look like</td>
<td>May depend on standard forms of encouragement, reward and punishment to control behaviours</td>
</tr>
<tr>
<td>May consult employees on their awareness of the importance of the organisation’s objectives</td>
<td>May consult on what the employees want to receive in exchange for compliance</td>
</tr>
<tr>
<td>May change the organisational culture; i.e. accepts ‘status quo’</td>
<td>May work within the organisational culture as it exists; i.e. accepts ‘status quo’</td>
</tr>
<tr>
<td>May search for a participative agreement for restructuring the organisation</td>
<td>May participate with employees in reaching an agreement on how they will each fulfil an acceptable exchange</td>
</tr>
<tr>
<td>May delegate to encourage employees’ development and involvement in decision making process</td>
<td>May delegate responsibility to employees in exchange for their satisfying an agreement</td>
</tr>
<tr>
<td>May motivate employees to work for goals that go beyond his or her self-interest</td>
<td>May depend on their power to reinforce employees for their successful completion of the task</td>
</tr>
</tbody>
</table>

*Source: Compiled from Bass (2002); Avolio et al. (2003); Northouse (2007)*
Table 2.3 Comparison of Transformational and Transactional Leadership Qualities

<table>
<thead>
<tr>
<th>Leadership Quality</th>
<th>Transformational Leadership</th>
<th>Transactional Leadership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time orientation</td>
<td>Long, future</td>
<td>Short, today</td>
</tr>
<tr>
<td>Co-ordination mechanism</td>
<td>Goal and value</td>
<td>Rules and regulation</td>
</tr>
<tr>
<td>Communication</td>
<td>Multidirectional</td>
<td>Vertical, downward</td>
</tr>
<tr>
<td>Focus</td>
<td>Employee (internal and external)</td>
<td>Financial</td>
</tr>
<tr>
<td>Reward system</td>
<td>Personal, intrinsic</td>
<td>Organisational, extrinsic</td>
</tr>
<tr>
<td>Source of power</td>
<td>From below</td>
<td>From position</td>
</tr>
<tr>
<td>Decision making</td>
<td>Dispersed, upward</td>
<td>Centralised, downward</td>
</tr>
<tr>
<td>Employees</td>
<td>Valuable resource</td>
<td>Replaceable commodity</td>
</tr>
<tr>
<td>Compliance mechanism</td>
<td>Rational explanation</td>
<td>Directive</td>
</tr>
<tr>
<td>Guiding mechanism</td>
<td>Vision and values</td>
<td>Profit</td>
</tr>
</tbody>
</table>

*Source: Compiled from Bass (2002); Avolio et al. (2003); Northouse (2007)*

In conclusion, the transformational leadership generates greater effects than transactional leadership, whereas transactional leadership results in expected outcomes, and transformational leadership results in performance that goes well beyond what is expected (Lowe et al., 1996). In addition, transformational leadership can be successfully applied wherever wanted, in both organisations and societies. In particular, transformational leadership application is more effective in comparison with transactional and laissez-faire leadership within business, hospitals, educational institutions and industrial enterprises (Northouse, 2004; Avolio et al., 2009). Furthermore, transformational leadership can be actively applied and be effective not only in top-down hierarchical organisations in which the leader directs the employees but can be useful also from bottom to top. No matter what the level of the supervisor in the organisation, he or she can use the four components of transformational leadership style to influence others from his or her current level (Mullins, 2010).

In support, a study based on Meta analysis of 39 studies in the transformational literature using Bass’s MLQ leaders who exhibited transformational leadership were perceived to be more effective leaders with better work outcomes than those who exhibited transactional leadership and seen by their colleagues and employees as satisfying and successful leaders than those who behave like transactional leaders (Bass et al., 2006).
2.6 LEADERSHIP AND MANAGEMENT

When one thinks of leadership, management also comes to mind. Leadership is often misinterpreted as management and sometimes they are used interchangeably. However, in reality there is some difference between leadership and management. Moreover, people sometimes get confused in differentiating between the two because many characteristics of both leadership and management are the same. Therefore it is important to understand the differences between leadership and management in order to have proper understanding and applicability of these different terms.

The prime difference between management and leadership is the way in which authority is exercised over employees or followers and they are motivated towards achieving collective goals (Armstrong et al., 2005). Management is performed by managers and leaders have leadership. Moreover, managers have formal, official or legal authority and influential power over employees where as leaders do not possesses any formal, official or legal authority and influential power over their employees. It is also important to understand that a manager can also be a leader at the same time. Thus if a manager has charismatic personality, trust of employees and ability to inspire them then a manager can become a leader (Zenger and Folkman, 2009). It is often emphasised that in an organisation, a manager must behave like a leader by developing leadership qualities to obtain full compliance, support, confidence, respect and commitment of his or her employees.

Managers have influence or authority over their employees by the virtue of their organisational post or official position. Thereby their influence would be totally authoritative. The nature of managers’ job is official and so they get remuneration for making employees obey them. Moreover, they delegate work to employees and motivates them by rewards and punishment. Some people consider management and transactional leadership as one and the same because they both have the same characteristics.

The focus of management is concentrated on managing the work or completing the assigned tasks in an efficient and effective manner. Additionally managers have realistic expectations and direct employees towards fulfilling those expectations. Employees do not completely or blindly trust and have confidence in their
management and so for carrying out managers’ instructions they require rewards (Smith et al., 2004). On the other hand, leaders have influence or authority over their employees by virtue of their inspiring qualities, charisma and ability to influence employees without any formal authority. Thus the influence of leaders on employees is totally charismatic.

The nature of leader’ function is not official or legal; therefore leaders do not get remuneration for making employees follow him or her. They assist employees in decision making, resolve their problems and maintain good behaviour with them. Moreover the focus of leaders is often on bringing in some change. Leaders focusing on doing the right things, leading by example and participate in work along with their employees. In addition leaders are considered to have vision and direct employees towards his or her vision which can be possible with trust and confidence of employees and so they follow leaders voluntarily (Kaiser et al., 2008).

It is important to state that in an organisation a manager can be a leader. However, a leader may not necessarily be a manager. Because even an ordinary employee or an ordinary group member can be a leader by having leadership qualities whereas leader cannot be a manager unless he possesses some legal, formal or official authority. Management can also be explained as an organisational process comprises of planning, organising, controlling, communicating and leading. However, in a process of management, leadership is merely a function and a component part of the whole management process. There are some functions which are shared collectively by both management and leadership namely planning, organising, controlling, communicating, motivating and leading.

Both manager and leaders perform planning to ascertain what to do, when to do, where to do, who will do, why to do and how to do something. Moreover, they both perform function of organising resources, allocating task, assigning responsibilities etc. Motivating and leading is also performed by both managers and leaders to direct employees towards desired goals. In organisations development of leadership is specially focused because leadership motivates employees intrinsically due to whom they will be willing to achieve the desired performance with their own free will and get satisfaction by doing so (Armstrong, 2005).
In summary, management is a systematic way to deal where manager ensures all the things move on their directions by compliance to the formal rules and policies. Whereas leadership as mentioned is a kind of art and it tend to be more subjective where depend to particular leader. In other words, it could be inferred that a manager’s activities are geared toward getting the job done in a particular manner in order to enhance consistency and organisational stability. Whereas, a leader’s activities are directed toward establishing good interpersonal relationships with the followers, motivating and encouraging the followers to be independent as they endeavour to accomplish the shared vision in order to sustain continuous improvement of the organisational performance.

2.7 LEADERSHIP EFFECTIVENESS

The topic of leadership effectiveness has been explored with different conflicting views, which has also been a subject of scrutiny for a long time with influence from economic developments and globalisation among others (Yukl, 2000; Northouse, 2007). Regardless of the length of time over which it has been reviewed, interest has continued to grow into further studies into leadership effectiveness transforming it into a worthwhile concept (Fleenor and Bryant, 2002; Bass, 2008).

In addition to the scientific inquiries, everyday wisdom also informs us on the nature of leadership. There has for instance been a popularised concept that “leaders are made, not born” (Northouse, 2007:74). This illustrates the fact that not every individual can be a leader. Thus, effective leadership is not a universal experience, and therefore some individuals will be in failed leaderships.

The effectiveness of leadership is translated into its impacts on the led group with success or failure of the group being one of the indicators of the effectiveness of a leader. There are a number of characteristics that have been positively correlated with effective leadership to imply that a leader who exhibits these features is more likely to be successful with the lead group or team. One of such features is ‘honesty’ that helps in building teams into willingness to cooperate towards attainment of objectives. Taking action with respect to any statements made by the leader also reveals a leader’s level of commitment, which can consequently be transmitted to the led group.
The types of leaders who take responsibilities over mistakes and empower their employees have also been associated with effective leadership (Straker, 2010).

Classification of leadership as either effective or not and its subsequent impact on the level of job satisfaction of employees has also been translated into employees having preference with respect to leadership behaviours as was evidenced in this study of the relationship between the leadership behaviours and their impact on the employees’ job satisfaction in the two companies under investigation (Rasco and Harouge). As a result, the employees of the said companies had their preference on transformational leadership behaviour and experienced a higher level of job satisfaction to transformational leadership behaviour and least satisfaction with respect to transactional and laissez-faire leadership behaviours. It can, therefore, be stated that effectiveness of leadership depends on the person’s attributes with respect to relationship with other people, people with whom the leader interacts.

Approaches to measure leadership effectiveness such as the application of ‘Myers Briggs type instrument and Campbell leadership index instrument’ have particularly illustrated the fact that there is a significant relationship between leadership behaviour and leadership effectiveness (Straker, 2010). Consequently, leadership styles which are based on behaviours of the leaders are associated with the degree of effectiveness of a leader. This particularly applies to the extent to which employees will be willing to submit to the influence of the leader based on the approach that the leader adopts.

As discussed earlier, there are a number of styles that are based on the relationship between a leader and his or her employees with respect to behaviour. Behaviours such as to: “seek excellence, lead by example, take care of other people, be humble and exhibiting good character” also influence leadership (Sansom and Graham, 2011:4).

These elements form the basis of classification of leadership into styles such as “transformational, transactional or laissez-faire” (Benson, 2009:51), which are discussed in the preceding sections. It should, however, be noted that the level preference among employees of the two companies under investigation (Rasco and Harouge) over these behaviours confirms the fact that effectiveness of a leader depends on the approach to leadership.
As has been argued and observed, leadership is not an inborn trait. Though it can be nurtured, it is identified that the level of effectiveness of a leader depends on a variety of factors that surrounds the interaction between the leader and his or her employees, such as personality of the leader, leadership behaviour adopted. In addition, a successful leader is usually the individual who can decide on the relevant person for a duty from a committed team in which employees work in harmony and hold a vision, while encouraging the personnel to commit themselves to their work and creating a feeling of trust inside and outside the organisation. Furthermore, leadership behaviours are important for the effectiveness of leading autonomous work groups, specifically, these are behaviours that encourage group members to assume responsibility for monitoring and evaluating the group's performance, reinforcing effective performance through praise and making adjustments when necessary, setting performance goals, and communicating high expectations of performance to each other. Building on this and other descriptions of effective leadership behaviours, it is expected that specific leadership behaviours would encourage work groups to take actions and adopt strategies for enhancing the level of job satisfaction and managing performance barriers.

2.8. THE QualITIES SOUGHT IN A LEADER

A good leader must be an effective leader, who must have many skills and authority to achieve the task objective. In order to effectively use and apply these important skills during all stages of the project, a project leader must have solid and sound understanding of leadership. He or she must have knowledge and skills to totally understand the task and its demands together with his or her employees and demonstrate appropriate leadership behaviour to achieve his or her vision (Yukl, 2006).

According to Albrecht (2006); Yukl (2006); Bass (2008); Avolio et al. (2009) a successful leader is the one who inspires, motivate, empower, develop, encourage, maintain enthusiasm, his or her employees to work in effective and efficient ways. Within such an understanding, behaviours to carry a leader to success include:

a) Personality: A leader should have a strong and sound personality. Honesty, integrity, internal discipline, commitment, decisiveness, attention and strong work
ethic are the characteristics to be found in an individual with a good personality (Avolio et al., 2009). In addition such leaders should be reliable individuals whose words and actions do not conflict, who does not make the promise they cannot fulfill and keeps the promises they gives. Otherwise, the leaders lose all the trust and support they gained from the organisation and employees (Bass, 2008).

b) Influence: Individuals who work around the leader will follow the leader because he or she has influenced them in some way. Yukl (2006) argues that a strong leader’s influence may arise from the following:

(i) The position he or she holds and ability to motivate;
(ii) Outcomes of the work produced by him or her;
(iii) Amendment of the organisation and personnel to develop conditions in accordance with his or her behaviour.

c) Vision: Having a common vision is very essential for the organisation. While a manager ensures the progress of the work by sticking to the available system, a leader makes use of “innovation and creative” characteristics belonging to the employees around him or her (Albrecht, 2006:126). Vision directs an organisation and provides guidance. The direction determined by rules, laws or regulations is ineffective when compared to the direction drawn by the vision. If the leader has a limited vision, the outcome of his or her work and the number of his or her employees will be relatively small. Only the individuals who are not afraid of taking risks, have flexibility, and do not restrict their own potential and think big, can grow and become a strong leader (Avolio et al., 2009).

d) Collaboration: The team that carries the leader to success is a competent, capable and satisfied team which observes the vision of the leader. Without collaboration achieving tasks are impossible. It is through collaboration that many difficulties are overcome. Leaders who address the team members by their first name are an essential factor affecting them. On the other hand, leaders who work with their team under difficult conditions are action motivating and increase their commitment. Leader who does not want to bond with their employees and does not value the job they are doing are unable to reach the higher position they aspires to (Bass, 2008).
e) Situational awareness: This means understanding aspects of the situation that are appropriate for the effectiveness of a leader. It is necessary to understand external events and trends that will impact on performance and require adjustments in strategy and work processes. It is also necessary to understand the processes and employees within the organisation. It is difficult to resolve a problem, initiate a change, or inspire commitment without a clear understanding of the shared values and beliefs that make up the organisation culture; the prior events and decisions that determine how the organisation got to where it is now; and the impact proposed changes could have on work processes and customers that affect major decisions (Albrecht, 2006).

f) Effective communication: Effective communication is needed for the leader to succeed, as communication is the key to implementing vision and the process of change. Different communications styles will be required according to the situation and must support the leadership behaviour that is required. It concerns listening and reading critically as well as writing and speaking. Effective communication enables leaders to become familiar to their environment and the individual needs of their employees (Yukl, 2006).

g) Consultation: The quality of decisions is likely to be enhanced when the leader consults with employees who have both relevant expertise and strong commitment to achieve task objectives and goals. Sometimes it is appropriate to hold meetings to jointly solve problems and other times it is more appropriate to consult with one or two employees before making the final decision (Bass, 2008).

h) Providing training to an inexperienced employee: When the task is complex and an employee is inexperienced at doing it, more instruction and training by the leader is required. Lack of experience is likely for employees who are new to the job, but it also happens when there is a major change in how the work is done (e.g., new technology, reconfigured jobs). A leader with strong expertise can help an employee discover the reasons for weak performance. One analytical approach is to jointly review step by step how the employee carries out the task to determine whether any essential steps are omitted, unnecessary steps are included, or key steps are performed incorrectly (Avolio et al., 2009).
i) Leaders must be more supportive to employees with a highly challenging and stressful task: An employee who becomes emotionally upset will have difficulty performing a task successfully, especially if it requires way of thinking and problem solving. Stress is increased by unreasonable demands, uncontrollable problem, difficult interpersonal relations (e.g., critical, abusive customers), dangerous conditions (e.g., fire fighting, police work), and the risk of costly errors (surgery, aircraft maintenance). Employees in such situations have more need for emotional support which may be provided by a leader, co-workers and other individuals outside the organisation (Yukl, 2006).

As it is being observed that, leaders are confer the opportunity to lead, not for the reason that they are appointed by senior leaders; they lead for the reason that they are perceived as well as accepted by employees as leaders. In fact, a leader has to offer the employees what is needed to keep them productive and proceed towards the shared vision in the form or organisational objectives. However, if the leaders fail to offer what was promised before, it flourishes the sense of distrust as well as demotivation. Thus, a leader needs to be focused on his or her employees’ needs both inside and outside the organisation to keep them moving ahead consistently and plan alternative strategies to meet uncertainties (Gumusluoglu et al, 2009).

### 2.9 PROBLEMS ENCOUNTERED BY THE LEADERS

According to Yukl (2006) problems that the leader may encounter are related to weak personnel who give unsatisfactory performance as well as the certain shortcomings in the leader. The decisions to be made with respect to this category of personnel are among the most difficult. Senior leaders have to make specific choices in such situations. If a leader cannot cope with weak personnel, this will not only decrease his or her respect but it will also prevent the organisation’s ability to reach its objectives and disrupt the motivation of the employees.

A leader has three choices if faced with weak personnel:

- **a) Training and development**: Formal training and development plans are widely used to improve leadership ability in organisations. Most organisations have leadership training and development programs of one kind or another and many organisations
send their leaders to outside seminars and workshops (Yukl, 2006). These programs are usually designed more for lower and middle level leaders than for top leaders and there are usually more emphasis on skills needed by leaders in their current positions than on skills needed to prepare for promotion to a higher position (Rothwell and Kazanas, 1994).

b) Substitution: Sometimes leaders cannot show their abilities and skills in the unit are assigned to. If the leader is making an effort and showing a decision to be successful but cannot, he or she can be rotated to another unit more appropriate to his or her abilities (Northouse, 2004).

c) Dismissal: This is one of the most difficult decisions that a leader will have to make because it will necessitate the employment of new recruits from outside the organisation. This poses a new risk and causes loss of time and money because the new personal is not known to the organisation, and there is a possibility that he or she may not be appropriate for the job and may need further training and development before he or she can deal with the now tasks. Therefore, finding a suitable substitute is as important as dismissing personnel with low performance (Yukl, 2006).

2.10 LEADERSHIP AND POWER RELATIONSHIPS

To be effective as a leader, it is necessary to influence individuals to carry out requirements, support proposals and implement decisions (John et al., 2011). A leader influences the followers, peers with power he or she has. The power that the leader has helps him or her direct the organisation, allocating the resources, punishing those who should be punched and rewarding those who should be awarded are all a result of the power of the leader (Bass, 2008).

In organisations, there are two major kinds of power: positional power and personal power (Northouse, 2007). Positional power is the power a person derives from a particular office or rank in a formal organisational system. It is also called the traditional power. A person who has been promoted the superior post in the organisation is considered as powerful by other employees. Therefore, it is reported that a person being appointed to a new post is to handle the power that the post bring about on the first day he or she appointed to that post. The power that leader should
have depends on the nature of organisation, the task they conduct and the conditions of the workers. A leader should be able to make necessary changes within the organisation, have the power to reward successful employees and punish the problem makers. For example, if a leader can reward the success of his personnel, give them time off, create positive conditions and eliminate the negative ones, this power is an indicator of the leaders’ positional power or rewarding the personnel (Yukl, 2006). As another example, if the leader can assign a task and empower the personnel, increase or decrease their current authority, change their position, assign a worker at a higher position to a lower task, or prevent the promotion of the personnel who should be promoted, this power constitutes the positional power of sanction of the leader (Northouse, 2007; Bass, 2008).

In contrast, personal power is the power deriving from the personality of the leader. This power cannot be separated from the leader. When the leader takes a new post, then this power will accompany him or her to the new post. In the event of a conflict, personal power is more dominant than the power deriving from the position. As mentioned under the heading of the features required in the leader, such as vision, charisma, self confidence, honestly, personal integrity, establishing good communication, these are the features that increase personal power of the leader.

The personal influence of a leader becomes a personal power; Followers want to identify themselves with the leader, and they want to be as their leaders are. Therefore, they respect the leader and want to be appreciated by him or her. All these feelings ensure the followers will comply with the leader’s direction. This particular type of leader, possessing a high level of power and influence is included in the charismatic leader category. In addition, a leader’s influence over his or her superiors and laterals is as important as his or her influence with the followers. A leader can provide satisfactory benefits to the followers and can be effective if his or her communication with the superiors and laterals is good. Having good influence over the superiors and laterals increases a leader’s positional power and increased positional power helps a leader to by-pass the limitations of the formalities which impede the accomplishment of the tasks (Yukl, 2006). In addition, the leader’s expertise in the field of the task he or she is carrying out, and being appreciated for
this skill by both the workers and others, indicates the personal power deriving from expertise (Bass, 2008).

In summary, the overall success of a leader depends greatly on the precise manner in which authority is exercised. Effective leaders are expected to exercise power in a careful fashion that minimises status differentials and avoids threats to an employee’s self esteem. In contrast, leaders who exercise power in an arrogant and dominant manner are expected to cause resentment and resistance (Yukl, 2006; Northouse, 2007).

2.11 SURVEYING THE EMPIRICAL RESEARCH ON THE FULL RANGE OF LEADERSHIP THEORY

The full range of leadership theory (transformational, transactional and lassiez-faire) does not replace the conception of leadership as an exchange of reinforcements by the leader that are contingent on the employees’ performance rather it adds the role of the transformational leader in enlarging and elevating employees’ motivation, understanding, maturity and sense of self worth (Bass et al., 2006).

The great impact of full range of leadership theory on job satisfaction, productivity and performance has been apparent in numerous organisational setting (Hughes et al., 2009; John et al., 2011). Leaders who were assessed by their employees as adopting more transformational leadership behaviour were evaluated within the hierarchal order by their direct leaders as higher performers, satisfiers and productive leaders. Transformational compared to transactional leadership has also been shown to be more strongly correlated with lower turnover rates, higher research productivity, and commitment, as well as greater overall organisational effectiveness (Bass and Avolio, 1997). In addition, leaders in public organisations also, were described by their employees as exhibiting more management-by-exception behaviour compared to leaders in private organisations. No differences were indicated in the frequency of contingent reward behaviour demonstrated in public or private organisations.

An applied study on commercial banks in Egypt is by Susan (1995) on the impact of the interaction between transformational leadership behaviour and organisational climate on job satisfaction. The study aims to attempt to link patterns of leadership
behaviour and organisational climate and measure the degree of job satisfaction, as reflected by the entire regulatory environment and its relationship to efficient performance and efficiency levels. The study focused on the problem of raising the efficiency of the performance of organisations in various stages, both the stage of survival, growth or stability, or the lead researcher, linking the problem with behaviour of leadership approach.

The researcher concluded that: a) there is a substantial relationship between leadership behaviour and the prevailing organisational climate and job satisfaction, performance and effectiveness of the organisation; b) the study confirms that positive organisational climate is affecting the performance level of staff and then the level of the organisation performance; c) the necessity of adopting senior leadership in the organisations under study, the modern concepts of leadership behaviours in order to achieve efficiency and promote the concept of performance; d) the study proved that there are items of excellence, and the senior management to guide to achieving efficiency in the organisation.

In determining the relationship between principle leadership style and teacher job satisfaction, Karen (2002) utilized Bass and Avolio (1991) model of transformational leadership behaviour. The research was conducted using descriptive/correlation design focusing on elementary schools in Morris County, New Jersey, in which the principle has been at school at least one year.

The study found that the transformational leaders tended to have higher levels of teacher job satisfaction in the areas of supervision, contingent rewards, operating conditions, communication and total job satisfaction. Principles with 11-15 years of experience tended to have higher levels of teacher job satisfaction reported in the area of pay, promotion, communication. Principles with over ten years of experience at the present school tended to have lower levels of teacher job satisfaction in the areas of operating conditions, communication and total job satisfaction. Differences in age, gender, and highest degree earned were not found to be statistically significant.

Chong (2003) compared the leadership behaviour underlying the leader and employees’ preference leadership behaviour in context of Malaysian construction industry with respect to transformational and transactional leadership. The results
shows that the leaders tended to demonstrate transformational leadership with mean of 52.2% whereas 47.4% for transactional behaviour. On the other hand 85% of employees in favor with transformational leadership, whereas 15 % left in favor with transactional leadership. However the exercising degree of transformational leadership by the leaders was much lower than employees’ expectation. The leaders tended to demonstrate Management-by-Exception leadership rather than Contingent reward leadership with respect to transactional leadership facets. It implies that the leaders are tend to follow the rules and prefer not to change any things if everything is going well. In addition, employees show their much preference on contingent reward with compare to Management-by-Exception in terms of transactional leadership facts. The study concludes that argument of Bass and Avolio (1994) that the same individual may vary his or her leadership behaviour at different times or in different situation is applicable in context of Malaysian construction industry.

A study by Balgobind (2002) aimed at determining the impact of transformational leadership behaviour of leaders on employee’s job satisfaction in a steel and miming company in South Africa. The study was exploratory and a random sample of 126 out of 3589 employees was participated in this study. The MLQ to measure transformational leadership behaviour and JSS to measure employees’ job satisfaction were used in this study. The results indicated that there was a significant impact of transformational leadership behaviours of leaders on employees’ job satisfaction, more specifically, in terms of fringe benefits and pay dimensions of job satisfaction, as well as the demographical variable, age.

Another study on the relationship between leadership behaviour and job satisfaction in community care services for the elderly is by Shan (2003). This study was conducted in the Centre of Ageing of the University of Hong Kong. The objective of the research was to investigate the relationship between employees’ job satisfaction and leadership behaviour in the realms of elderly community services. The target group was the staff from elderly service homes. The study was based on Herzberg’ two-factor theory of job satisfaction and found that both extrinsic and intrinsic factors are related to employees’ job satisfaction. All research participants were employees with social working training and these were drawn from various community based organisations for provision of social; services to the elderly. The research findings were classified
into four parts: importance of leadership behaviour, perceived discrepancy in leadership behaviour, overall job satisfaction and characteristics of respondents.

The study revealed that there was a strong correlation between perceived leadership behaviour and employees’ job satisfaction. Employees were moderately satisfied with the working environment. Leadership behaviour, salary level and job position emerged as the strongest indicators of employees’ level of job satisfaction.

Transformational leadership behaviours were identified as the predominant leadership behaviours in the elderly nursing homes. Among the aspects of leadership behaviour that had a bearing on employees’ job satisfaction was leader’s ability to organise things, clarification of issues and problem solving. Employees’ job satisfaction was less influence by interpersonal relationships. There was a very strong correlation between employees’ level of education and job satisfaction. Degree holders were less satisfied with their jobs than were their diploma counterparts.

A study of the relationship between leadership behaviour and employees’ job satisfaction was conducted by Mosadeghrad (2004) in Isfahan University Hospital in Iran. The study revealed that several factors influence employees' job satisfaction and these factors are: salaries, fringe benefits, autonomy, achievements, communication, recognition, working conditions, co-workers, job importance, organisational climate, degree of professionalism, organisation's reputation, interpersonal relationships, positive affectivity, supervisory support, workplace flexibility and job security among other factors. The study also revealed that the predominant leadership behaviour in the hospital was transformational leadership. It also showed that most of the employees were moderately satisfied with the leadership behaviour in the organisation. Most of the employees were less satisfied with salaries, benefits, working conditions and the way promotions were awarded.

There was significant correlation \( p < 0.001 \) between leadership behaviour and employees job satisfaction. There was no statistically significant correlation between the employees’ job satisfaction and their level of education or the type of employment they were engaged in. But there was a very strong correlation between employees’ job satisfaction and their age, organisational position and years of work experience. The
study survey revealed that employees’ job satisfaction is directly related on the leader’s leadership behaviour.

Wang (2004) in study, aimed to investigate the level of job satisfaction and perception on head nurses’ leadership among staff nurses in Sakaeo Provincial Hospital, Thailand. The research design was a cross-sectional and descriptive study. Data were analysed by using descriptive and analytical statistics. Spearman rank correlation and Chi-square tests were employed. The results indicated that the level of staff nurses’ job satisfaction and their perception of head nurses’ leadership were at moderate levels. There was significant association between staff nurses’ job satisfaction and their perception on head nurses’ leadership. There was also a significant association between staff nurses’ job satisfaction and duration of working as a nurse as well as duration of working in this hospital ($p < 0.05$).

Another study by Al-Omari (2008) on the impact of transformational leadership on organisational culture in the United Arab Emirates with reference to the petroleum sector. The aim of this study was to identify the concept of the pattern of transformational leadership and its characteristics, and distinguish it from other leadership behaviours, also aims to identify the dimensions of leadership behaviour transfer of leaders in the petroleum sector, and analysis of the relationship between leadership behaviour transformational change in organisational culture with its various dimensions, and to test staff understanding of the relationship between the behaviour of transformational leadership and organisational culture of the institutions to which they belong.

The findings of the study revealed that; a) transformational leadership was one of the most important mechanisms that affect the organisational culture; b) transformational leadership affect the organisational culture by talking about seeing the leader and the employees to accept that vision, creating a mismatch between the personal interests of employees and vision; c) the associated employees with transformational leaders can adapt better with cultural change, and also have the consent of the largest and functional organisation remain online for longer periods; d) there is constant overlap between the leadership and organisational culture, leaders are creating a mechanism for cultural development and promote the principles and behaviours that are expressed
within the boundaries of culture; e) transformational leadership behaviours are better able to meet the needs of organisations; f) high degree of satisfaction of respondents on the methods pursued by the leaders of the company in dealing with employees, to determine the availability of transformational leadership behaviour in the companies under study; g) the study showed the attention of corporate leaders under study inspirational stimulation to their subordinates through a letter the company’s commitment to leadership and objectives, building effective work teams; h) significant relationship exists between transformational leadership behavioural among the respondents and the nature of their work.

Another empirical study aimed at investigating the impact of leadership behaviour on job satisfaction on construction companies in India and Taiwan was conducted by Bidhancha (2008). The aim of the research was to explore the impact of perceived leadership behaviours (transformational, transactional and laissez-faire) on job satisfaction among the India and Taiwan employees as moderated by organisational culture. Specifically, the research sought to answer the following two questions:

a) Is there any significant difference between job satisfaction and perceived leadership behaviours between Indian and Taiwan employees; b) to what extent does the organisational culture moderate the relationship between perceived leadership behaviours and job satisfaction?

The research findings revealed that transformational leadership was the most dominant leadership behaviour in both India and Taiwan. Furthermore, it indicated that the Indian and Taiwan employees are moderately satisfied with their jobs. The research also showed that there was significant relationship between perceived leadership behaviours and the innovative culture. Furthermore, leadership behaviour was the strongest indicator of employee’ overall job satisfaction. Among the two perceived leadership behaviours, transactional and transformational, the latter (transformational leadership) positively and significantly predicted the level of job satisfaction.

Study by Mohamed (2008) investigating the relationship between leadership behaviour and attitudes towards work, organisational commitment and performance of employees aims to analyse and tests the relationship between transformational
leadership and reciprocity, absolute free restraint to the commander, attitudes towards work, career commitment and performance of employees and its impact on the performance of the public sector banks in Cairo, Egypt. The research sample includes all directors of middle leadership and branch leaders. The findings of the study were as follows;

a) There is a correlation between the leadership transformational, transactional behaviours, work expectations and employees in terms of attitudes towards work and organisational performance;

b) There is a correlation between the transformational and transactional leadership behaviours and the outputs of work expected of employees. Results of the study also indicated the need for attention to the selection and preparation and measurement of transformational leadership behaviour ability to inspire and stimulation rationality and knowledge of its potential to impact on employees and convince them of the importance of change and development in the organisation.

In exploring the perceived leadership behaviours (transformational, transactional and lassiez-faire) and their impact on the level of job satisfaction of police officers working at the Eskisehir Police Department in Turkey, Yucel (2008) revealed that the majority of the police officers perceive moderate level transformational leadership behaviour from their police chiefs. In addition, the study indicates that there is a relationship between the perceived transformational leadership behaviours of police chiefs and the level of job satisfaction of police officers.

Studying employees’ perceptions on leader’s leadership behaviour and organisational commitment in Lebanon, Yahchouchi (2009) aimed to establish the extent to which the Lebanese leader’s leadership behaviour perceived to be either more transformational or more transactional. The specific hypotheses of the study were: a) Leadership behaviours and organisational commitment tend to differ between male and female respondents; b) Transformational leadership is positively related to organisational commitment; c) Leadership behaviours and organisational commitment tend to differ between Lebanese religious communities; d) Lebanese leaders’ leadership tends to be more transformational than transactional. The data was
collected from two universities in Lebanon. One university is situated in a largely Christian area while the other is situated in a Muslim area. Yahchouchi (2009)’s findings indicated that there was a significant correlation between organisational commitment and transformational leadership. Transformational leadership was also found to be positively correlated with behavioral outcomes. Furthermore; the results indicated a very little difference between Christian and Muslim respondents’ perception on leadership behaviour and organisational commitment. As the study indicated, both groups of participants perceived their leaders to be more transformational than transactional. Serious limitation of the research was that the participant’s religious identity had a serious impact on the participant’s perception of leadership behaviour. Furthermore, the study found that gender had little influence on the respondent’s perception of leadership and organisational commitment with female respondents perceiving their leaders as being more transformational than transactional. Working environment, educational level, age and number of years of service were found to have very weak correlation with employees’ perception of leadership behaviour and organisational culture. Evidence of strong correlation between employees’ religion and their perception on leadership behaviour and organisational commitment was found. This was evident especially among the Muslim participants who showed high rankings for Muslim leaders.

In determining the relationship of personal characteristics, leadership styles, and job satisfaction to the adversity quotient of the academic heads of selected state colleges and universities in the National Capital Region in Philippine, Ferrer (2009) showed that majority of the respondents possess a participative style of leadership. In terms of job satisfaction, respondents are satisfied with their present job conditions. On the assessment of significant relationship between personal characteristics (age, gender, civil status, educational attainment, and number of years of service) the study showed that there is no significant relationship, except for educational attainment of the respondents and the leadership behaviour which are significantly related.

Lastly, a study by Amarjit et al. (2010) examined if transformational leadership and empowerment affect job satisfaction among Indian restaurant employees by employing survey research (a non-experimental field study design). A total of 218 restaurant industry employees from the Punjab area of India were surveyed to assess
their perceptions of transformational leadership, empowerment, and job satisfaction at their places of work. The findings of the study revealed that there is a positive relationships between employee perceived transformational leadership used by managers and employee perceived job satisfaction. In addition, employee perceived empowerment and employee perceived job satisfaction were found.

2.12 CONCLUSION

In this chapter the researcher traced the evolution, trends of leadership and leadership effectiveness from the great man approach to the present day where the focus is on the full range of leadership approach (transformational, transactional, and lassiez-faire).

As discussed, effective leadership behaviours are important for the effectiveness of leading autonomous work groups. Specifically, these are the behaviours that encourage group members to assume responsibility for monitoring and evaluating the group's performance, reinforcing effective performance through praise and making adjustments when necessary, setting performance goals, emphasises the issue of change, empowerment and purposeful leadership, communicating high expectations of performance to each other, focuses on building human capital in the organisation and transforms the relationship between leaders and employees so that the latter are motivated by unity of purpose and mutually shared values. The chapter further indicated that the leader is the key individual who can initiate the improvement of organisation climate in terms of employee behaviour and attitudes towards organisation and work.

The next chapter focuses on job satisfaction as a concept, meaning, importance, dimensions, theories, and research related to job satisfaction.
Chapter 3

JOB SATISFACTION: A LITERATURE SURVEY

3.1 INTRODUCTION

In this chapter, theories and other aspects of job satisfaction, including definition, concept, importance and the dimensions, will be reviewed. The most popular content and process theories found in the literature are discussed, and special attention is given to the Herzberg’s two-factor theory of job satisfaction, as this theory provides the conceptual framework for this study.

Attempting to understand the exact nature of job satisfaction and its potential effect on an organisation’s effectiveness is not an easy task. Mullins (2007) argues that job satisfaction is more of an attitude or internal state and can be associated with a personal sense of achievement, whether quantitative or qualitative. In addition, job satisfaction is a concept based on the premise that the satisfied employees are the most productive ones. However, it may not be an easy task to determine job satisfaction, as there are many variables which make a difference in the levels of job satisfaction experienced by employees; some are found within the organisation, some within the framework of the job itself and its environment, and others are inherent in each employee’s character and personality (McKenna, 2000).

By the late 20th century, the highly competitive business environment resulted in organisations having a real need for improved productivity and competitive performance. These changes have impacted on the perceptions of employees and self-esteem in the work place, and the need to ensure high levels of employee’ job satisfaction has become a dominant factor for organisations in order to survive and succeed (Hofmeyr, 1997; Cunningham, 2003).

According to Mullins (2007) there are three approaches to job satisfaction:
a) Satisfaction as the result of behaviour: This reflects employees’ assessment of the outcomes produced in relation to needs, motives, values or goals that are important to them.

b) Satisfaction as a cause of behaviour: This emphasises behaviour that arises as a result of dissatisfaction. Employees who are dissatisfied with the outcomes produced and do not consider themselves capable of changing them are more likely to strive for outcomes outside work or possibly in another organisation. By contrast, if employees are satisfied with how much they can learn from their work, their feeling of involvement increases.

c) Satisfaction as part of a controlling and organising method: This emphasises the extent to which the assessment of the results causes the introduction of changes. Employees who are not satisfied with what they receive are motivated to go in search of possible improvements. On the other hand, if employees are satisfied, they will strive to repeat the same behaviour unless other motives become more dominant.

Employees and leaders, for example, may have different reasons for wanting organisational conditions that promote job satisfaction. Today’s employees are concerned with life values, fulfilment and a sense of completeness, involvement, encouragement, purpose and meaning in order to be productive employees. As Connolly and Myers (2003) argue, just as the organisations expect optimum performance from their employees, employees have come to expect job satisfaction as a right.

This chapter, therefore, aims to survey the related body of knowledge to discuss in detail job satisfaction and the related issues.

3.2 DEFINING JOB SATISFACTION

The subject of job satisfaction is a widely researched field, which is also a complex phenomenon, and therefore there exist numerous definitions of the concept.

Cranney et al. (1999:25) define job satisfaction as an employee’s “emotional state regarding the job, considering what they expected and what they actually got out of it”. Employees with low expectations can be more satisfied with a certain job than
someone who has high expectations. If one’s expectations are met or exceeded by the job, then one is happy and satisfied with the job.

In explaining job satisfaction, Robbins (2005:80) defines it as “feelings or affective responses to facets of the situation.” He states that those feelings are caused by the difference between what is expected from the job and what is actually experienced, and comparing this difference to alternative jobs.

David and Andrzej (2010:266) defines job satisfaction as “a feeling that can produce a positive or negative effect toward one’s roles and responsibilities at work”. They added that it is important to understand the concept of job satisfaction, as the combination of feelings and beliefs, which include the mental, physical domains, worker’s emotional response to different job related factors, resulting in finding pleasure, comfort, confidence, rewards, personal growth and various positive opportunities, including upward mobility, recognition and appraisal done on a merit pattern with monetary value as compensation.

For the purpose of this study Spector’s definition of job satisfaction and his instrument to measure it, the ‘Job Satisfaction Survey’ (JSS), is utilised to examine the level of job satisfaction of employees at the two major Libyan public sector companies under investigation (Rasco and Harouge) as the case study. Spector refers to job satisfaction as “a cluster of evaluation feelings about the job” (1997:22). In explaining the cluster nature, he identifies nine facets of job satisfaction which are examined in this study to measure the level of job satisfaction of employees in the said two companies using a ‘JSS’ instrument. These nine facets are described in Table 3.1.
Table 3.1: Facets of Job Satisfaction and their Descriptions

<table>
<thead>
<tr>
<th>Facet</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pay</td>
<td>Satisfaction or dissatisfaction with pay, fairness or equity</td>
</tr>
<tr>
<td>Promotion</td>
<td>Satisfaction or dissatisfaction with the promotion opportunities provided within the organisation</td>
</tr>
<tr>
<td>Fringe Benefits</td>
<td>Satisfaction or dissatisfaction with the extra benefits and bonuses and medical allowance made by the organisation</td>
</tr>
<tr>
<td>Supervision</td>
<td>Satisfaction or dissatisfaction with the leadership behaviour, technical supervision, human relations and administrative skills and competences of their supervisors</td>
</tr>
<tr>
<td>Contingent Rewards</td>
<td>Satisfaction or dissatisfaction with the sense of respect, recognition and appreciation for accomplishment</td>
</tr>
<tr>
<td>Co-workers</td>
<td>Satisfaction or dissatisfaction with the perceived competence, helpfulness and pleasantness of one’s colleagues</td>
</tr>
<tr>
<td>Operating Procedures</td>
<td>Satisfaction or dissatisfaction with the policies, regulations, roles and procedures within the organisation</td>
</tr>
<tr>
<td>Nature of Work</td>
<td>Satisfaction or dissatisfaction with type of work done</td>
</tr>
<tr>
<td>Communication</td>
<td>Satisfaction or dissatisfaction with the sharing of information within the organisation</td>
</tr>
</tbody>
</table>

Source: Compiled from Spector (1997)

In summary, job satisfaction can be considered as the fulfillment and gratification that comes from the work; hence, it is not only the money, the benefits or the vacations. It is the good feeling an employee receives from doing the job itself, which stems from high performance, quality work, learning new skills, working as part of a team, assisting co-workers, demonstrating personal growth and receiving compliments (Spector, 2000). In addition, job satisfaction can also be experienced when an employee accepts a job for what it is and exploits the sources of satisfaction that come with it. A supervisor, for example, who successfully performs the role of team leader every day probably drives home after work with a feeling of satisfaction. In the same manner, a technician who discovers and repairs a device that has stalled probably takes pride in the accomplishment (Mullins, 2007). Thus, regardless of the nature of the job, individual personality defines the way one will get job satisfaction from the job he or she does.

3.3 THE IMPORTANCE OF JOB SATISFACTION

The concept of job satisfaction has gained significance in industrial organisational psychology and organisational behaviour, since it has implications for lower
performance and productivity, and this correlation is accepted in the literature (Mullins, 2007). However, it should be noted that job satisfaction is not the only determinant of performance and productivity, as there are other environmental and conditional factors which have an effect on performance and productivity. In fact, job satisfaction and productivity are in constant interaction (Franek and Vecera, 2008). That is to say, with high job satisfaction, employees may put more effort into what they do; similarly, high effort leads to achievement, which may increase the level of job satisfaction in return.

Ma and Macmillan (1999) argue that job satisfaction may be an indicator of whether employees: a) will be effectively connected to an organisation; b) will just obey directives, or c) will quit. Therefore, according to McKenna (2000) principals ought to have some understanding of the factors that influence employees’ satisfaction with their workplace and the impact this satisfaction has on their involvement in organisations, especially when changes are implemented.

As regards the importance of job satisfaction, Spector (1997) offered three reasons behind its importance.

a) Organisations can be directed by humanitarian values: based on these values they will attempt to treat their employees with honour and respect. Job satisfaction assessment can then serve as an indicator of the extent to which employees are dealt with effectively. High levels of job satisfaction could also be a sign of emotional wellness or mental fitness.

b) Organisations can take on an effective position in which an employee’s behaviour would be expected to influence organisational operations according to the employee’s degree of job satisfaction or dissatisfaction. In this case, job satisfaction can be expressed through positive behaviour and vice versa.

c) Job satisfaction can be an indicator of organisational operations: assessment of job satisfaction might identify various levels of satisfaction among organisational departments and, therefore, leaders should be helpful in determining the areas in need of improvement.
Spector (1997) believed that each one of the reasons mentioned above is validation enough of the significance of job satisfaction and that the combination of these reasons provides an understanding of the functionality of job satisfaction measures.

Spector, of course, is only one of many researchers and writers who addressed the importance of job satisfaction. His identified articulation of the importance of job satisfaction appears to be representative of many views in other major works dealing with job satisfaction as a concept, such as Cranny et al. (1999); Mullins (2007); David and Andrzej (2010).

In summary, a reasonably satisfied employee is a significant component in any attempt at organisational improvement. An organisation is not likely to be improved if there is a pervasive sense of dissatisfaction among its employees, and in order to enhance the performance and productivity of the employees, assessment of job satisfaction is considered an important role in the definition of job satisfaction levels.

Although more than 25,000 studies had been published on the topic of job satisfaction by 2008, it is so important to both organisation and employees that there is still plenty of scope for more research (Franek and Vecera, 2008; John et al., 2010).

3.4 JOB SATISFACTION THEORIES

There are many theories that attempt to explain the nature of job satisfaction, each of which is at least partially valid in explaining the behaviour of certain employees at certain times (Smucker and Kent, 2004; George and Jones, 2005). In addition, Mullins (2007) further argues that job satisfaction varies over time and according to circumstances. It is often most acute for younger employees starting on their career, for employees at mid-career positions or for those who find limited opportunities for promotion or further advancement.

Over the years, many contenders contributed to the development of the theoretical framework related to job satisfaction, which mainly fall into two categories: content theories and process theories (Spector, 2008).

Content theories focus on the factors within the employee (i.e. internal) that energise, direct and maintain behaviour, trying to find out the particular needs that satisfy
employees and move them toward the satisfaction and fulfilment of these needs. Process (or cognitive) theories, on the other hand, focus on description and analyse how behaviour is energised, directed, sustained and inhibited by factors primarily external to the employee, *i.e.* the job itself and the working environment surrounding that job (Spector, 2008).

### 3.4.1 Content Theories of Job Satisfaction

Theories that focus on individual’s needs and values in terms of content theories include Maslow’s hierarchy of needs theory, ERG theory, McClelland’s needs theory and Herzberg’s two-factor theory (Spector, 1997; Robbins *et al.*, 2003; Aamodt, 2004).

#### 3.4.1.1 Maslow’s hierarchy of needs theory

When discussing human needs, growth and self actualisation, one cannot look far before finding Abraham Maslow and his ‘hierarchy of needs’ theory. This theory was first introduced by Maslow in 1935 to describe human motivation and satisfaction as a hierarchy of five needs that fulfill an employee’s human desires, ranging from the most physiological needs to the highest needs for self-actualisation (Aamodt, 2004).

a) Physiological needs: These needs are the most basic and include food, water, shelter, medicine and comfort. In the job environment, these needs can be satisfied by offering attractive salaries, good working conditions, subsidised housing and free or subsidised catering.

b) Security and safety needs: Employees’ desire for physical safety and protection as well as job security are represented in this category. These needs arise after the physical needs are satisfied. Employees desire to feel security and freedom from risk and danger. In the work environment, organisations could support these needs by providing job security, job circumstances (both physical and emotional safety), attractive pension provision, safe working conditions and health insurance.

c) Social needs: In this stage, employees’ desire for social relationships and affection are addressed both inside and outside of the work environment. Employees desire
friendship and inclusion in the group. These needs could be satisfied by offering team sports, parties and encouraging open communications.

d) Esteem needs: The next level is the need to hold a position of prestige, receive public recognition, demonstrate competence, and feel self-esteem. Work-related activities that help employees meet esteem needs include successfully completing assignments, recognition, appreciation, being offered organisation titles and promotions.

e) Self-actualisation: In this stage the desire to grow or develop employees’ full potential is addressed, which is represented by the need to maximise the use of one’s skills and abilities. Organisations could help their employees to meet these needs by providing appropriate opportunities for training, development and creativity, a flexible work schedule, challenging job assignments and discretion over core work activities.

As mentioned already, the lowest unsatisfied need level becomes the most dominant or significant needs to the employees. The lower levels of needs do not necessarily motivate an employee. However, once lower level needs are met, employees will act to satisfy needs at the next highest level. In other words, the needs are progressive in the sense that one has to satisfy the lower level needs in order to be able to move onto the higher levels of need.

3.4.1.2 ERG theory

The second theory of satisfaction under the category of content theories is Alderfer’s (1969) Existence, Relatedness, and Growth (ERG) theory. Alderfer, in (1969) reworked Maslow’s needs theory and classified a human being’s needs into just three groups of core needs that he or she strives to meet. These needs include obtaining his or her material existence needs, maintaining his or her interpersonal relatedness with significant other people, and seeking opportunities for his or her unique personal development and growth (Robbins et al., 2003).

The first factor is the existence group and it is concerned with providing the physiological and material needs which includes items that Maslow’s theory considered as natural or safety needs. It relates to tangible goals such as being able to
buy food and pay for shelter (Robbins, 2000). In work environment, pay is an existence need, and by giving a raise to one employee, another employee is deprived of a raise. Organisations can satisfy these needs through salary, fringe benefits and a safe working environment (Mullins, 2007; Spector, 2008).

The second group of needs relates to maintaining important relationships, and it is concerned with the interactions and social contacts with other employees in the organisation who satisfy the need for belonging, acknowledgement and appreciation (Spector, 2000).

The third group of needs is for personal growth and development. This need can only be satisfied if employees are given opportunities to use their capabilities to the full potential (Robbins et al., 2003; Mullins, 2007).

According to Aadmodt (2004), the major difference between Maslow’s theory and the ERG theory is that the latter theory postulates that progression to the next level need not be fixed. An employee can skip levels and can be simultaneously satisfied by needs at different levels. In addition, an employee can be concerned with satisfying growth needs even though existence and relatedness needs are not met.

The ERG theory removes some of the problems associated with Maslow’s theory and several studies supported the ERG theory (Robbins et al., 2003). In addition, David and Andrzej (2010) indicated that a major deviation from Maslow’s theory is that employees can only move from the first factor to the fifth factor, whilst, ERG theory allows for movement in any direction between levels of need and also accommodates the needs of employees on different levels simultaneously.

### 3.4.1.3 McClelland's needs theory

McClelland’s needs theory was one of the popular satisfaction theories in the 1950s (Di Rodio, 2002). Robbins et al. (2003) report that this theory of job satisfaction focuses on the following needs:

a) Need for achievement: Employees with a high need for achievement seek jobs and tasks in which they have personal responsibility and can obtain quick feedback on their progress and achievement. High achievers are moderate risk takers, preferring
the odds of success to be even or in their favour. They are not motivated by success that can be put down to good luck; preferring outcomes that they believe are consequences of their own achievements.

b) Need for power: Employees with a high need for power seek situations where they can have power and influence over others. They like to be in a position of status and authority and will frequently aim to increase their influence over others in preference to concentrating on effective work performance.

c) Need for affiliation: Employees with a high need for affiliation are motivated by being liked and accepted by others. They are most satisfied in work situations where there is a high degree of collaboration and where greater priority is given to attaining mutual understanding among the group rather than to competition between employees.

In summary, the achievement need is the drive to achieve according to standards set by others and oneself; the need for power is the need to make others behave in ways they otherwise would not behave; and the need for affiliation is the desire for friendly interpersonal relationships (Spector, 2008).

3.4.1.4 Herzberg's two factor theory

Mullins (2007) pointed out that Herzberg’s original study consisted of interviews with 203 engineers and accountants from over nine companies which were chosen from different industries in the US (Herzberg et al., 1959).

These professionals were asked to describe experiences in which they felt either extremely bad or exceptionally good about their jobs and to rate their feelings on these experiences. Responses about good feelings are generally related to job satisfaction (motivators), whereas responses about bad feelings are associated with job context (hygiene factor). Motivators involve factors built into the job itself, such as achievement, recognition, responsibility and advancement. Hygiene factors are extrinsic to the job, such as interpersonal relationships, payment, working conditions, supervision and company policy (Herzberg, 1966). This leads to the two-factor theory of job satisfaction.
Figure (3.1) presents the common hygiene and motivators factors identified with Herzberg’ theory of job satisfaction.

**Figure 3.1 Factors that Affect Job Satisfaction in Terms of Herzberg’s Theory**

<table>
<thead>
<tr>
<th>Hygiene needs</th>
<th>Motivational needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reflect job context and lower - level needs</td>
<td>Reflect job content and higher - level needs</td>
</tr>
<tr>
<td>Negative job environment creates demands for</td>
<td>Positive job opportunities allow employees to achieve</td>
</tr>
<tr>
<td>Leading to dissatisfaction if not handled well</td>
<td>Enhance job satisfaction after demotivators are overcome</td>
</tr>
</tbody>
</table>

**Hygiene factors (Extrinsic)**
- Fair payment and benefits
- Suitable working conditions
- Job security and safety
- Level and quality of supervision
- Interpersonal relationships
- Company policies and

**Motivational factors (Intrinsic)**
- Sense of achievement
- Recognition for achievement
- Meaningful and interesting job
- Personal growth and advancement
- Increase responsibility and involvement

**Job Satisfaction**

The Dissatisfiers

The Satisfiers

Source: Developed from selected material in Herzberg (1959); Spector (2008)

In terms of this theory, employee needs can be divided into two groups, namely hygiene factors and motivator factors, because they are seen to be effective in motivating them to a high level of satisfaction, performance and effort (Herzberg, 1959).

The first set of factors in this theory is concerned with the factors that add weight to the satisfaction from the job itself. These factors are called intrinsic factors or motivators and will certainly increase the level of job satisfaction of the employees, but will not provoke any dissatisfaction for the employees regarding their jobs, which indicates that by increasing more motivators, organisations can increase their productivity, output, discipline, and every other factor that can improve employee’s satisfaction, effort and performance (Herzberg, 1966).
The following, accordingly, are examples of intrinsic or motivator factors that can improve the level of job satisfaction (Spector, 1997).

a) Sense of achievement: Job achievement and performance are measurable achievement results from goal satisfaction in the specified time, ability to resolve problems and difficulties that satisfy employees, and satisfaction for each job.

b) Recognition for achievement: This is related to the recognition of the situation being recognised by leaders and employees. Recognition can be in the form of praise, admiration or other actions that imply the admiration, including being assigned to an important and challenging job.

c) Opportunity for personal growth and advancement to higher level tasks: this refers to the chance to be promoted to a higher position in the present organisation, the learning of new skills and training and development opportunities for higher education.

d) Increased responsibility and involvement: this factor refers to the employee’s satisfaction with being assigned to an important job and being authorised to make a job accomplishing decision.

e) Meaningful and inspiring job: this represents the positive and negative feeling toward the work itself, whether the job is mentally challenging, personally interesting or boring, difficult or easy, so that it allows employees to learn and develop their skills, potential and ability.

In addition, the second set consists of factors that add to the dissatisfaction of employees towards their working environment or conditions that surround them while doing that job. These factors are called Hygienes, ‘extrinsic’ or ‘dissatisfiers’ and they do not motivate, but are needed to create an environment that encourages the employees toward the higher-level needs. Therefore, Hygiene factors will substantially decrease the dissatisfaction of employees, but will not enhance or improve any satisfaction for them in their present jobs; which indicates that there will be no improvement in the satisfaction level and thus there will be no effect on the
output of the organisation. They will not enhance the capabilities of the employees and might even increase the cost of work for the organisation (Spector, 1997).

Paying more attention to Hygiene factors (extrinsic job satisfaction or lower order needs) will decrease dissatisfaction, but will not increase overall satisfaction; or alternatively, there will be no improvement in performance and productivity. On the contrary, taking costs into account there will be a lowered organisational efficiency because improving Hygienes will cost the organisation more money (Herzberg, 1959).

The following are examples of Hygiene or extrinsic factors that may affect the level of job dissatisfaction (Spector, 1997):

a) Fair payment and benefits, this factor comprises of the returns from work such as wages, income and benefits, vacation, attitude towards the security in the workplace, the security in position and the reputation of the company.

b) Policies and procedures refers to the managing and administrating of the organisation, empowerment and interpersonal communication. The policy must have clear direction, appropriate work distribution and must initiate a participative leadership.

c) Level and quality of supervision includes the ability of the supervisor (leader) in leading, fairness and equity, including the willingness of leaders to offer employees suggestions, advice, encouragement and responsibility.

d) Working conditions represent the physical condition and facilities, such as light, ventilation, tools and equipment needed for employees in order to accomplish their tasks in an efficient manner.

e) Interpersonal relations refers to relationship among employees, and with their supervisor. In an organisation with high-quality social supports, the employees will enjoy working and there will be a high level of production and performance.

f) Job security refers to the feeling and attitude toward the security in the workplace, position and the reputation of the organisation.
From the above presented factors (Hygiene and motivator), it is apparent that organisations not only must provide hygiene factors to avoid dissatisfaction, but also must provide intrinsic qualities or motivators to the work itself for employees to be satisfied with their jobs (Herzberg, 1959).

Herzberg (1959) further argued that job enrichment is also required for intrinsic motivation, which can be achieved by the following:

a) The job should have sufficient challenges to utilise the full ability of the employees;

b) Employees who demonstrate increasing levels of ability should be given increasing levels of responsibility;

c) If the job cannot be designed to use employees’ full potential, then the organisation should consider automating the job or replacing the employees with one who has a lower level of skill and ability.

There have been many studies to test Herzberg’ two-factor theory of job satisfaction. However, the conclusions have been mixed. This theory has been criticised by a number of authors. Mullins (2007), for example, argues that there are two general criticisms of the theory. One is that it has only limited application to manual workers. The other is that the theory is methodologically bound. It is often claimed that the theory applies least to employees with largely unskilled jobs or whose work is uninteresting, repetitive and limited in scope. Despite such criticisms, there is still evidence of support for the continuing relevance of the theory.

In the retail setting, Carr (2005) has conducted studies using Herzberg’s two-factor theory, finding that achievement was the highest rated motivator. Likewise, making more money received the second-highest rating in the study, followed by chances of promotion and recognition. In contrast, Ramlall (2004) discovered that the supervisor-employee relationship was a significant factor influencing worker satisfaction in a study of US retail stores, and two hygiene factors were reported as significant, namely company policy and relationship with peers.
Schermerhorn et al. (2000) argued that Herzberg’s two-factor theory is an important frame of reference for leaders who want to gain an understanding of job satisfaction and related job performance issues. They assert that Herzberg’s two-factor theory is a useful reminder that there are two important aspects of all jobs; what employees do in terms of job tasks (job content), and the work setting in which they do it (job context). They further argue that organisations should always attempt to eliminate hygiene sources of job dissatisfaction in the workplace and ensure that they build satisfier factors into the job content to maximise the opportunities for job satisfaction.

Furthermore, Lloyd (2005) revived this theory from obscurity by his research that wanted to determine if Herzberg’s theory had any merit in the 21st century. He found from this survey study that employees are not particularly satisfied by money or recognition, but rather by intrinsic type factors, which is similar to what Herzberg argued nearly 50 years ago. Despite the earlier criticisms about this theory it still provides a good explanation for how employees are satisfied and how to maximise their potential and improve overall productivity and performance at the same time.

The continuing relevance of Herzberg is that there must be some direct connection between performance and reward, whether extrinsic as in recognition for achievement or intrinsic as in naturally meaningful job, to motivate employees to work to their full potential and to improve their job satisfaction, productivity and performance (Spector, 2008).

3.4.1.5 Criticisms of content theories of job satisfaction

Mullins (2010) indicates that there are two observations of content or need theories that are worthy of consideration:

First, at the heart of content theories lies the suggestion that there is a single factor, whether it is money, social needs or psychological growth that satisfies employees. The implication is that, if leaders can identify the key satisfaction factor and reinforce it, then employees will naturally be satisfied.

Second, the theories also assume that the task of any reward and performance management system is to identify standard satisfaction strategies that can be applied in any context (e.g. all jobs can be redesigned or enriched). However, as it is difficult
to predict when certain needs become important, it can be argued that the application of standardised solutions is neither possible nor desirable.

Hence, the content theories of job satisfaction identify what satisfies human beings. Two of the content theories discussed, Maslow’s and Herzberg’s, assume first that needs can be subdivided into higher and lower order needs, and second, that healthy and well-adjusted employees will aspire to the fulfilment of higher order needs once lower order needs have been adequately satisfied. All four of the content theories discussed maintain an individualist conception of satisfaction and employee social contribution and belonging to employee achievement and self-actualisation (Mullins, 2010).

3.4.2 Process Theories of Job Satisfaction

Another approach to job satisfaction is the ‘process theories’. Process (or cognitive) theories of job satisfaction emphasise the differences in employees’ needs and the cognitive processes that create these differences (David and Andrzej, 2010).

The major process theories of job satisfaction to be discussed are Equity theory, Job Characteristics theory, Porter and Lawler’s Expectancy theory and Goal Setting theory.

3.4.2.1 Equity theory

Equity theory was first developed in 1963 by John Adams. This theory of satisfaction aims to explain the way that employees agree a fair rate for the job. Adams says that employees compare what they contribute to the employment relationship and what they receive from it in return. Contributions include effort, skills, training, development and seniority, while returns are pay, fringe benefits, recognition, status, and promotion.

Employees compare their contribution and returns with those of other employees and, if dissatisfied by the comparison, will reduce their effort, seek a pay rise or promotion, or attempt to reconcile their dissatisfaction either by rationalising the differences in contribution and return between themselves and others as being fair or by selecting another reference group to compare themselves against (Adams, 1963).
According to Robbins (2005) equity theory demonstrates that employees are concerned not only with the total reward package they get but how this compares with what others who are in a similar position receive. In addition, empirical research on this theory shows that employees are motivated by a sense of distributive justice; that is, employees are more motivated where they perceive rewards to be fairly distributed between them. Robbins (2005) further studied how employees responded to others being paid more or less than themselves and found that they will do one of six things:

a) Employees will maximise returns that they value (because these are what are most important);

b) They will minimise contributions that require effort and change;

c) They will resist changes that are a strong challenge to their self-concept and self esteem;

d) They will resist changing themselves more than they will resist reconsidering the equity of others’ contribution and returns;

e) They will quit their jobs only when they perceive there to be a very high level of inequity and when they can find no other means of reducing the sense of unfairness. If the inequity is felt less strongly, absenteeism results;

f) Once the employee has established a sense of what is fair, this viewpoint becomes stable over time and part of the employee’s sense of security.

In support, Mullins (2010) recommended that pay must pass the felt fair principle. Employees have standards for what constitutes fair payment that are shared unconsciously among the work population of any given organisation.

When an employee assesses his or her pay against that of another employee, that employee’s pay must be in line with what is thought to be a fair rate for the job, and the employee must be perceived by others as capable of performing the job.

In summary, the equity theory of job satisfaction predicts that employees will make different assessments about the equity of their rewards at work. It is a theory about how groups are satisfied in so far as it assumes employee satisfaction is fundamental,
connected with judgements about the equity with which other comparable employees or reference groups are treated.

3.4.2.2 Job characteristics theory

Job characteristics theory of job satisfaction was first introduced by Hackman and Oldham (1975) who recognised that “certain aspects of the job are inherently satisfying for most employees and they may perceive and respond to the same stimuli differently” (Anthony et al., 1999:88). They, therefore, recommend three conditions for an employee to be satisfied.

a) The employee must have knowledge of the results of his or her work; otherwise it will be difficult to be emotionally influenced by the outcomes;

b) The employee must experience responsibility for the results of work and should be allowed to take initiative, feel pride in the results when they do well, and feel concern when goals are not achieved; and

c) The employee must experience work as being meaningful.

Hackman and Oldham (1975) argue that, when all these factors are present, strong internal work satisfaction will develop and is likely to persist. Their view is that satisfaction at work has more to do with the design of tasks and jobs than it has to do with employee dispositions. The authors also propose the five job characteristics that lead employees to experience their work as being meaningful, possessing responsibility, and enabling knowledge of results. These are skill variety, task identity, task significance, autonomy and feedback from the job (Robbins, 2005).

The first three lead to experiencing work as meaningful. The fourth, autonomy, leads to experiencing responsibility for outcomes of the work; and the fifth leads to knowing the actual results of the work.

Skill variety is related to the number of different activities performed by an employee that involves a range of skills and talents. Task identity, on the other hand, is related to the fact that a piece of work can be identified and involves completing an entire work from the beginning to the end. Lastly, task significant is related to the degree to
which the job has a substantial impact on the lives of other people, whether those people are in the immediate organisation or in the world at large (Spector, 1997).

Autonomy, in a contextualised meaning, refers to the degree to which a job provided substantial freedom, independence and discretion to the employee in scheduling and deciding how to carry it out (Armstrong and Stephens 1996). As autonomy increases, employees will feel more responsible for their work (Mullins, 2002). Relating to this, knowledge of results comes through job feedback, either from employees or via a machine. The feedback must be directly linked to the job the employee is doing. Employees’ differences are important in determining how each employee is satisfied by his or her work (Robbins, 2005).

3.4.2.3 Porter and Lawler’s expectancy theory

According to Mullins (2010) Victor Vroom’s book *Work and Motivation* is regarded by many as a landmark in the field of motivation and job satisfaction. He further argues that this theory assumes that human behaviour is goal-directed and that work will be more satisfying when it provides the opportunity for goal attainment and needs satisfaction.

In 1964 Vroom developed what is known as expectancy theory, in which satisfaction is a function of each employee’s expectation that his or her behaviour will result in outcomes that have psychological value. In addition, this theory was also developed to explain how employees can be satisfied when they have different values and priorities for rewards. The theory’s recommendation for a leader is that work should be designed so that effective performance leads to the kind of outcomes desired by employees.

Based on this theory employee’s satisfaction could be a function of three things: the attractiveness of the rewards; performance-to-reward expectancy; and effort-to-performance expectancy (Spector, 2008).

First, the perceived attractiveness of the rewards: Satisfaction to apply effort is inspired by the view of desired rewards. Employees should value the intrinsic or extrinsic rewards in order to be satisfied when achieving their task. Those who are
satisfied by intrinsic rewards, such as challenging job assignments, will be satisfied by the work itself more than will employees who are primarily satisfied by extrinsic rewards, such as money.

Second, performance-to-reward: This is the employee’s expectation that, if the desired performance is achieved, then the desired rewards will be obtained. For example, if the employee’s pay is linked to the financial performance of the organisation through a profit-sharing system and if the organisation consistently makes low profits, then the profit-sharing element of the reward system will not be very satisfying.

Third, effort-to-performance expectancy: Employees will make the necessary effort only when they believe there is a reasonable probability of achieving the target performance. For example, when working in a small team, the employee may believe his or her effort is likely to have a direct impact on the group. However, when the same employee is asked to help improve the overall profits of a whole organisation, which employs many thousands, this employee may feel that his or her contribution won’t make a significant difference to the organisation results.

In conclusion, this theory recognised that the perceived attractiveness of the extrinsic and intrinsic rewards offered by the organisation will depend on how much employees value them. It says that effort to performance will be moderated by ability, traits and perceptions of role, and the level of effort applied will depend on the employee’s ability, training, and role perceptions. In turn, performance to reward expectancies will be moderated by a sense of equity and a perception that the rewards are allocated fairly. If employees believe some employees or groups have obtained an unfair proportion of the reward, then the aggrieved employees will be less satisfied and less motivated to perform to the level required in the future (Mullins, 2010).

3.4.2.4 Goal setting theory

The goal setting theory was first introduced by Locke (1965) and based on the assumption that performance is caused by the employee’s intention to perform, therefore employees with higher goals will do better than employees with lower goals. If employees know precisely what they want to do, or are expected to do, they will perform better than ones whose goals are vague. In other words, there is a positive
relationship between the accuracy of the goals set, the difficulty of achieving the goals and performance (Robbins, 2005).

Heery and Noon (2001) anticipated that aiming towards attaining a goal is a significant source of job satisfaction. In supporting this, Robbins et al. (2003) further argue that the goal setting theory stems from the notion that the behaviour of employees can be changed by influencing their goals and targets. In support, add that employees are satisfied if they are aware of what needs to be done in achieving a specific goal, irrespective of the difficulties they might encounter in doing so.

Nel et al. (2004:12) note four general principles to elicit high performance and increase satisfaction in terms of the goal setting theory: a) “goals should be challenging but attainable; b) goals should be specific rather than vague; c) employees should be involved in the process, setting their own goals; and d) goals should be measurable in terms clearly understood by employees”. In support, Robbins (2005) further states that employees will perform better if they get continuous feedback in terms of how well they are progressing toward their goals. Furthermore, he adds that continuous feedback will also identify possible discrepancies that might hamper the attainment of goals.

Goal-based theory emphasises the importance of feedback in order:

a) to increase the employee’ feeling of achievement; b) to increase the sense of personal responsibility for the work; c) to reduce uncertainty; and d) to refine performance (Robbins, 2005). Therefore, in the workplace, the value of goal setting is enhanced by the provision of adequate, timely feedback. However, many organisations do not systematically provide for line supervisors to communicate feedback on performance to employees. This may be for many reasons, such as leadership behaviour, protection of power bases or the information system not providing data for management function. However, supervisors have to maintain a careful balance in providing feedback: too little can be satisfying, but too much can be perceived as indicating a lack of trust or respect (Robbins, 2005).
3.4.2.5 Criticisms of process theories of job satisfaction

Mullins (2007) argues that the key criticism of process theories is that they tend to assume that when making choices employees do not have complete knowledge of the possible results of their behavioural options, and are not normally aware of the full range of options available to them. Another weak assumption of process theories is that employees have a comprehensive scale of values with which they might evaluate the value of the various outcomes they are able to identify.

3.4.3 Conclusion on Job Satisfaction Theories

As can be observed from the above discussion on the theoretical frameworks offered in the literature, job satisfaction is a concept based on the premise that the happiest employee is also the most productive one. Many variables make a difference in the levels of job satisfaction experienced by employees; some variables are found within the organisation, some within the framework of the job itself, and others are inherent in each employee’s character and personality.

Both theories (content and process) can help organisations and leaders understand how to better satisfy their employees. The content theories, for example, concerning what satisfies employees, show the importance of satisfying higher and lower-order needs. It was believed by Maslow, and later by Herzberg, that the hierarchy of need specified universal needs that are consistent across different national cultures.

McClelland’s needs theory, on the other hand, argues strongly for the influence of culture when it says that a high need for achievement is brought about through upbringing. It is vital, he argues that employees be inculcated with these achievement values from an early age.

Process theories of job satisfaction, on the other hand, are considered to be helpful to leaders and organisations in reminding them that they must take account of the differences between employees, and the reward system must be capable of catering for employees’ different needs and perceptions. Hackman and Oldham’s theory of job satisfaction is a useful version of expectancy theory because it prescribes five specific areas of work organisation to which leadership should attend and to which they often
can attend in practice. Their theory concentrates attention on designing jobs so that improved processes of employee satisfaction are more likely to result.

In considering any theory of job satisfaction, whether content or process oriented, the changing values and adaptations must be taken into account. It is understandable that job satisfaction involves matching employee’s needs, values and expectations to what the job offers and business, therefore needs to know how satisfied their employees are in order to be able to retain them, and improve the quality of their services (Mullins, 2007; John et al, 2010).

3.5 DIMENSIONS OF JOB SATISFACTION

According to Bass (2008); Mullins (2010) there is some doubt whether job satisfaction consists of a single dimension or a number of separate dimensions, as the level of job satisfaction may be affected by a wide range of variables relating to employees themselves (e.g., demographic), organisational or environmental factors:

a) Demographic factors can affect the level of job satisfaction of employees and may include: age, gender, marital status, number of dependents, educational attainment, occupational level and tenure;

b) Organisational or work environment factors, on the other hand, can also affect the level of job satisfaction and are determined by conditions that are beyond the control of the employee.

3.5.1 Organisational factors

The organisational factors or work environment factors include the pay and benefits, nature of work, promotion opportunities, supervision, co-workers, working conditions, nature of work, contingent rewards and communication.

3.5.1.1 Pay and fringe benefits

Pay refers to the amount of financial compensation received for a particular job, which includes competitive pay, a fair pay system, benefits such as retirement, medical and life insurance, compensation, rewards and paid vacation time which are seen to be the most significant variables in explaining job satisfaction (Robbins et al.,
The correlation between job satisfaction and pay is reported to be low. For example, Spector (1985) found a correlation of 0.17 between job satisfaction and pay. In assessing this small correlation, Spector (1997) further argues that pay itself has a low effect on job satisfaction.

In their study of public sector organisations, Sweeney and McFarlin (2005) concluded that pay levels affect job satisfaction, reporting that those public employees that compared their salaries with those of private sector employees experienced lower levels of job satisfaction. Such findings are largely consistent with the idea that most employees are socialised in a society where money, benefits and security are generally sought after and are often used to gauge the importance or the worth of a person. Thus, the greater the financial reward, the less worry employees have concerning their financial state, thereby enhancing their impression of their self-worth to the organisation and to society in general.

Today, in some organisations, salary is paid according to performance. In these kinds of organisations, employees perceive that the thoughts of management regarding them are relative to the amount of salary they earn. Additional bonuses also have a positive role on job satisfaction at least as much as salaries (Martin, 2006).

### 3.5.1.2 Nature of work

Generally, the kind of work that satisfies the needs of employees is work that provides them with opportunities to use their skills and abilities, the perceived importance of the job and challenge and variety of the work (Spector, 2008). Other factors that affect job satisfaction in relation to the nature of the job are volume of work, responsibility, autonomy and complexity (Sharma and Bhaskar, 1991). Saal and Knight (2000) postulate that the single most important influence on an employee’s job satisfaction comes from the nature of the work assigned to him or her by the organisation. They maintain that if the job entails adequate variety, challenge, discretion and scope for using one’s own abilities and skills, the employee conducting the task is likely to experience job satisfaction. In support, Robbins (2000) argues that employees tend to prefer jobs that present them with opportunities to execute their competencies on a variety of tasks and that are mentally stimulating. In addition, Lacey (2001) states that employees are more satisfied with the work itself when they engage in tasks that are
mentally and physically stimulating. Furthermore, Luthans (2002) argues that positive or negative attitudes toward the work itself depend on whether the job is intellectually challenging, personally interesting or boring. He further adds that employees usually perform their task to the best of their ability when the job offers, among other things, feedback, autonomy, and interesting and challenging opportunities.

Culpin and Wright (2004) support this view by adding that interesting and challenging tasks enable employees to become what they are capable of becoming and help them to gain a sense of recognition and of self-fulfillment.

3.5.1.3 Promotion opportunities

The component of promotion refers to the necessity that employees have a clear career path within the organisation and the presence of a career planning programme that enhances the abilities of the employee (Robbins, 1998). He adds that employee development represents the degree to which organisational culture provides employee with growth paths that include advancement opportunities, and training and development of new skills that may be needed in order to enhance their ability in accomplishing their tasks in appropriate and efficient ways.

Manfred (2005) supports this view by arguing that it would satisfy employees if there is certain knowledge that there is a possibility for promotion and increase in salary, especially if quick and frequent promotions are part of the organisation’s culture. This would affect job satisfaction positively. However, it is necessary that the employees are competent and deserve such promotion. This is because employees who get promoted undeservedly negatively affect other employees’ motivation. The reason is related to the fact that promotion needs greater responsibility and tasks of a more complex nature, for which the employees may consider themselves unprepared.

In this regard, Drafke and Kossen (2002) proposed that, if employees perceive the promotion policy as unfair, but do not desire to be promoted, they may still perceive that promotion provides employees with greater opportunities for personal growth, more responsibilities and also increased social status. In support, Bajpai and Srivastava (2004) postulate that many employees experience job satisfaction when they believe that their future prospects are good. This may translate into opportunities
for advancement and growth in their current workplace, or enhanced chances of finding alternative employment. They maintain that, if employees feel they have limited opportunities for job advancement, their job satisfaction may decrease.

3.5.1.4 Supervision

The nature of the supervision provided can also have a significant impact on job satisfaction (Spector, 1997; Mullins, 2007; Sharaf et al., 2008). Employee satisfaction increases when the immediate supervisor leader is understanding, friendly, supportive, offers praise for good performance, listens to their opinions and ideas, meets the higher order needs, encourages involvement in the decision making process and shows personal interest in them, which in return enhances their feeling of control and achievement (Robbins 1998).

Other studies have shown that employees who have positive interactions with their immediate supervisors are generally more satisfied at work (Koustelios et al., 2003; Smucker et al., 2004; Murphy, 2007). In support, Wech (2004) argued that a leader’s leadership behaviour strongly affects the development of trust in relationships with employees. He further adds that leaders whose leadership behaviour emphasises consideration and concern for employees (i.e. transformational leaders) generally have more satisfied employees than leaders focusing on tasks and output (i.e. transactional leaders). Egan and Kadushin (2004) support this view by adding that employees working with supervisors/leaders displaying transformational leadership behaviour experienced higher levels of job satisfaction compared to those who had leaders who exhibited transactional or laissez-faire leadership behaviour.

Luthans (2006) argues that there seem to be four dimensions of supervision that may influence the level of job satisfaction among employees.

The first dimension has to do with the extent to which supervisors concern themselves with the welfare of their employees. Research by Sharaf et al. (2008) found that employees’ job satisfaction is increased if the supervisor is emotionally supportive.

The second dimension has to do with the extent to which employees participate in the decision making process that affect their jobs. Research by Egan and Kadushin (2004)
found a positive relationship between leadership behaviour that encourages involvement and engagement in decision-making and job satisfaction.

The third dimension of supervision which is directly related to job satisfaction is the employees’ perception of whether or not they matter to their direct supervisor and their organisation.

The fourth dimension of supervision problems related to job satisfaction is appreciation or criticism. According to McAfee et al. (1995) appreciation or criticism given by supervisors to employees before or after a task is performed is a factor that can affect an employee’s motivation and satisfaction. It is necessary that organisations and leaders appreciate employees’ jobs and express their satisfaction and appreciation.

3.5.1.5 Co-workers

This refers to the type and quality of interaction and relationship that employees experienced with their co-workers and immediate supervisors.

According to Mullins (2007), an increasingly important issue affecting job satisfaction and efficiency is the nature of the work environment and workplace facilities. He, for example, argues that an inspirational workplace will result in inspired workers and he draws attention to the importance for work performance of the atmosphere, quality and style of building and offices. In supporting, Spector (2008) argues that if an individual’s co-workers are kind and helpful to each other, this kind of environment is a factor that can affect the level of job satisfaction. Even if the employees did not like their work, they enjoy their work life because of the fact that they like their colleagues.

Findings of a survey conducted by Madison (2000) on more than 2,100 women occupying the most demanding jobs indicated that those participants who lacked support from their co-workers and supervisors were more likely to suffer from job dissatisfaction. Furthermore, Luthans (2002) adds that an employee’s co-workers, the group they belong to and the culture to which an employee is exposed, all have the potential to influence job satisfaction. Moreover, whatever one’s situation, the more
you can work closely with co-workers to achieve common goals, the more satisfying your work will be (Kreitner, 1995; Johns, 1996; Spector, 2008).

### 3.5.1.6 Operating conditions

Operating conditions are another factor that has an impact on the employee’s job satisfaction (Luthans, 2002). This factor examines employee satisfaction or dissatisfaction with the physical workplace, procedures and rules, safety conditions, and demands generated by leadership on the output of employees, such as required overtime and working to the point at which mental and physical problems develop (Spector, 2000; Mullins, 2002). These conditions include appropriate equipment to carry out the task, suitable restrooms, drinks and food at workplace, and the ability to take breaks when they feel the need (Robbins, 2005).

The level of job satisfaction as determined by the working environment is crucial to an organisation’s capability to attract and maintain well qualified personnel (Spector, 1997). Although employees have little control over the physical side of their work environments, they can and should appreciate the good factors that exist. For example, working in a fancy headquarters building or new industrial park can produce feelings of satisfaction. To most employees, the psychological environment is more important than the physical. Those who work under relaxed conditions, where high stress and high productivity periods are alleviated by fun, will appreciate their good fortune. Those who work in an environment where everyone is supportive and understanding will also have a feeling of satisfaction (Spector, 2000).

In support, a study was conducted by the Chartered Management Institute in 2003 on the UK leaders’ attitudes to and experiences of their physical working environment. The study was undertaken amongst a random sample of 4,000 leaders across all levels and sectors and size of organisations. Topics addressed included hours worked, commuting and travel, flexible working, the existing and preferred layout of offices and the use of new technology. Concerns were expressed about the need for more quiet areas, under-equipped meeting rooms, a lack of adequate meeting space, and offices not making a good impression on clients and visitors. Nearly half of those surveyed would relinquish one week’s annual leave for a better office and 25 %
would forgo £1,000 in salary or private medical insurance for a significantly upgraded workplace.

### 3.5.1.7 Contingent rewards and recognition

Another factor that related to job satisfaction is the extent to which employees perceive that they are being treated fairly (Ali et al., 2009).

Employee award and acknowledgment is not just a pleasant gesture to do for employees, which in reality is a message instrument that strengthens and rewards the most significant outcomes people produce for your organisation and it also provide a source of job satisfaction to the employees. When one can distinguish employees efficiently, one strengthens, with the individually selected means of gratitude, the performance and behaviours you most desire to see employees do again. An effectual worker credit system is simple, instant, and tremendously supporting (Mullins, 2007; John et al., 2010).

It should be noted that award is a great form of motivation that keeps the employees moral high and intact to work better for the company and to enhance the organisational performance in more effective and efficient manner. In order to award the employees it is very important to consider the several factors and to design the award plan while considering those factors and elements. As all directors know, employee awards are a significant part of place of work fulfilment. Employees who sense as though they are waged for their labours tend to work harder and improved. However, deciding the right items and dealing out them in the right manner is necessary to making business gifts work (Bacharach, 2004).

According to Spector (2008) rewards leaders intended to give to their employees can be classified into two categories: some awards are related to the performance and some are related to the attention and dedication towards work.

In case of performance rewards, organisations and leaders need to offer employees some financial award so that they can feel better and facilitated in their lives. On the other hand, there is the class of dedication and recognition rewards. In such types of award it is important for the organisation to give some honourable gifts to the
employees so that they can feel themselves highly respected, appreciated and appraised in the organisational environment. Second, when deciding employee rewards, is the way in which the awards are dealt with. If one just grasps his or her employee in the hall and provides him or her with an award or a present, it will not denote much. But, if one recompenses the employee in a more individual way, such as by discontinuing by his or her counter, one will create a better feeling (Spector, 2008).

Recognition, on the other hand, can also play a very important role in satisfying employees.

According to Robbins (1998) recognition can be considered as the psychic reward for doing an excellent job. Many dedicated and talented employees leave their professions when they do not receive the recognition and appreciation they feel they have earned. To some, recognition and appreciation are a primary source of satisfaction, and can be more important than monetary rewards, and this can come from many sources, including management, co-workers, customers and associates.

Employees want policies, regulations and systems that they perceive to be fair as these will probably result in an increase in overall job satisfaction. In this context, Johns (1996) distinguishes between distributive recognition and procedural recognition.

Distributive recognition is the perceived recognition of the actual decisions made in an organisation. In support, Morris (2004) argues that, if employees perceive that decisions are often made in a fair manner, they are likely to express satisfaction with their jobs. Procedural recognition, on the other hand, occurs when the processes to determine work outcomes/decisions are perceived to be reasonable.

Furthermore, Robbins (2005) argues that the relationship between awareness of recognition and job satisfaction is very strong. Hence, leaders in organisations can provide recognition to their employees by, for example, sitting with them having informal talks, spending time with them in the form of a combine dinner or else in other activities, like asking about their families and other important aspects related to their personal life. In addition, leaders can enhance the level of recognition by letting the employees contribute in the decision making process so that they feel that their
ideas and opinions are essential and important for the organisational growth and development. Moreover, an increase in salaries, benefits and compensation both on a periodic basis as well as on special occasions, should be provided to the employees along with making sure that the work content is interesting, challenging, and motivating, so that employees do not consider their jobs meaningless and tedious.

3.5.1.8 Communication

According to Robbins (2005:26) communication can be defined as an “informing of information process” (verbally or in writing), used by leaders to all employees, as well as the listening process whereby leaders listen to employees’ problems and accept advice from all members of the organisation. A growing body of evidence suggests that employees’ satisfaction and their identification with their organisation are critically dependent on effective communication. This evidence has moved internal communications to the centre of the progressive organisation’s strategy. In addition, organisations and their communication personnel have recognised that effective communication relates directly to the employees’ ability, motivation and commitment on the job (Spector, 1997).

In support, a survey by Goris et al. (2000) has further validated the importance of organisational communication. Their research examined the relationship between an organisation’s communication policy and its shareholders’ returns. The results showed that organisations with the highest levels of efficient communication experienced a 26% total return to shareholders from 1998 to 2002, compared to a 15% return experienced by companies that communicated less efficiently. Their later studies in 2005-2006 not only confirm the earlier findings but also go a step further by showing effective communication to be a leading indicator of an organisation’s financial performance.

According to Putti and Tong (2002) there are five dimensions to measure employees’ perceived satisfaction with communication within organisations:

a) Communication environment: This includes the extent to which communication in the organisation motivates and stimulates employees to meet organisational goals and
helps them identify with the organisation. This aspect includes measures of whether or not employees’ attitudes towards communication are healthy in the organisation.

b) Supervisory communication: This refers to the upward and downward aspects of communicating with supervisors. Three of the principle aspects comprise the extent to which a supervisor is open to initiatives, the extent to which the supervisor pays attention and the extent to which supervision is offered in solving job-related issues.

c) Organisational integration: This revolves around the degree to which an employee receives information about their immediate work environment and includes both information received by employees and their opportunities to participate in the organisation.

d) Organisational perspective: This measures the satisfaction with information about the organisation as a whole, such as its goals and performance, notification of changes and financial standing.

e) Personal feedback: This includes the degree to which employees feel that their efforts are recognised and appreciated, their leaders understand their problems and the criteria by which they are being judged are fair.

As has been shown, employees’ satisfaction with the amount of information available to them may enhance their commitment to an organisation. Such commitment exists because satisfaction with information encourages a sense of belonging and identification with the values and objective of the organisation. Hence, communication satisfaction can be considered as an important measure of the ability of an organisation to use communication as a commitment-enhancing mechanism (Putti and Tong, 2002). Furthermore, having effective communication skills, transformational leaders tend to have higher agreement on the strategic goals of the organisation. They voluntarily help their employees and prevent the occurrence of work-related problems, which ultimately enhances job satisfaction among employees. They turn out to be further committed as well as have less dissatisfaction and turnover intentions (Berson et al., 2004).
3.5.2 Demographic Determinants of Job Satisfaction

The second sets of factors that may affect the level of job satisfaction among employees in any organisation are the demographic or personal factors (Spector, 1997).

Friday et al. (2004) for example, argue that demographic variables or personal determinants of job satisfaction, such as gender, age, educational level, marital status, number of dependents, occupational level, and tenure, are expected to have important effects on the level of job satisfaction. In support, Spector (2008) in his study found that the employees’ experiences related to the work environment as well as to non-work influences, such as family life, may affect the expectations and needs of the employees in relation to work, therefore the demographic information and the personal backgrounds of the employees are important to understand and evaluate different dimensions of job satisfaction.

The following sections discuss the relationship between job satisfaction and the demographic variables:

3.5.2.1 Gender

Gender has received a great deal of attention in job satisfaction studies. A study conducted by Murray and Atkinson (2000) investigating gender differences in determinants of job satisfaction reflected that females attach more importance to social factors, while males place greater value on pay, advancement and other extrinsic aspects. In support, Tang and Talpade (2001) maintain that there is a significant difference between males and females in terms of job dimensions impacting on job satisfaction. Their study found that men tend to have higher satisfaction with remuneration in relation to females, while females tended to have higher satisfaction with co-workers than males.

Another study undertaken by Clark and Oswald (1996) postulated that there is a definite existence of gender discrimination in the British labour market. Men and women differ both in terms of the types of job that they do as well as their personal characteristics (e.g., men have different qualifications and work longer hours than
women). Also men and women value work for different reasons: an example being that female employees find that the most important aspect of working is the work itself, as compared to their male counterparts who find pay the most important aspect of working. Other findings of a survey conducted by Robbins et al. (2003) looking at issues affecting women in the South African workforce indicated a similar situation. Most of the respondents revealed that they were satisfied with their jobs.

Spector (2008) criticised that the empirical studies conducted to test the relationship between job satisfaction and gender compared male and female samples from different job categories. In other words, for example, the male participants subject to research were working in a power plant, while the female participants subject working as sales staff.

3.5.2.2 Age

It is generally understood that job satisfaction increases linearly with age (Spector, 2000). Many studies have examined the relationship between age and the level of job satisfaction. Drafke and Kossen (2002) argue that older employees are generally happier with their jobs than younger employees, while employees who are more experienced in their jobs are more highly satisfied than those who are less experienced.

In support, Mullins (2002) stated that job satisfaction typically increases with age as older employees have more work experience and generally have a more realistic view of work and life in comparison to their younger counterparts. Furthermore, Blood et al. (2002) argued that there are several reasons for the variance in job satisfaction between older and younger employees. Their view is that younger employees are generally more dissatisfied than older employees because they demand more than their jobs can provide. They postulate that older employees possess more seniority and work experience enabling them to move easily into more rewarding and satisfying jobs. In support, Oshagbemi (2003) argues that job satisfaction increases with age and work experience. He adds that older employees may have jobs that use their skills better, work under better job conditions, benefit from advancements and promotions, and appreciate fringe benefits more than younger, less experienced employees.
3.5.2.3 Marital status

Research has consistently found that employees who are married or have partners had more job satisfaction than those who were single or living alone. This is because married employees have emotional and mental support from their partners (Robbins et al., 2003). This view is supported by Kuo (2004) who stated that an investigation of the level of job satisfaction amongst IT personnel working in Taiwan’s petrochemical industries found that marital status was highly related to intrinsic and overall satisfaction. He reported that the results of the study indicated that married employees experienced higher levels of job satisfaction in comparison to that of single employees.

3.5.2.4 Number of dependents

Research concerning this relationship between job satisfaction and number of dependents is limited. Nevertheless, Robbins (2005) argues that there is strong evidence suggesting a positive relationship between the number of dependents and job satisfaction. This implies that the higher the number of dependents an employee has, the higher the job satisfaction is likely to be. A possible explanation could be that employees with more children are likely to be older and have held their job for longer. They might therefore have adapted to their work situation, thereby increasing the level of their job satisfaction.

3.5.2.5 Educational level

Studies conducted on the relationship between the level of education and job satisfaction showed no consistent pattern (Spector, 1997).

Some research highlights a positive correlation between job satisfaction and educational level (Ting, 1997; Loscocco, 2000). The reason for this is that employees with higher education have more opportunities for work that they find stimulating and they can use skills which are more challenging and creative. However, other studies have shown that education has a slight negative relationship with job satisfaction; the higher the level of formal education, the more likely an employee is to be more dissatisfied with the job. In support, Kh Metle (2003) postulates that one explanation
of this is that better educated personnel have higher expectations and believe that their work should provide greater fulfilment and responsibility.

Furthermore, an investigation by Crossman and Abou-Zaki (2003) in the Lebanese banking sector found that no statistically significant relationship existed between job satisfaction and education ($p = 0.094$). Although the relationship was not significant, their research found that a relationship between job satisfaction and education existed.

Transformational leadership attaches importance to the improvement of education levels of employees with its intellectual stimulation component. Therefore, having educated personal will not effect their job satisfaction in an environment which is led by a transformational leader. Transformational leadership requires continued development and improvement. A transformational leader will increase the education level of those who are said to be well educated and provide the necessary environment in which they can work better (Bass et al., 2006).

3.5.2.6 Tenure

Oshagbemi (2003:56) refers to tenure as the “number of years an employee has spent working” which as a variable may be considered as having significant impact on job satisfaction.

Research conducted by Mottaz (1988) amongst nurses in the United States of America found a significant increase in job satisfaction with length of time on the job. Sarker et al. (2003) support this view by indicating that employees with longer service may experience higher satisfaction levels because the job matches their personal needs.

In this regard, Oshagbemi (2003) add that employees with long service tend to adjust their work values to the conditions of the workplace, resulting in greater job satisfaction. In addition, Mumford (2004)) provides a more nuanced reading of the situation, as he found tenure to have a U-shaped relationship with job satisfaction. In this respect he maintains that employee’ satisfaction declines within the first year of employment and remains low for several years, after which it increases. He maintains that employees expectations are high at the time of appointment, but when these expectations are not met the resultant effect leads to a drop in job satisfaction.
As the employee becomes more mature and experienced, the initial expectations decline to a more realistic level, thereby making such expectations more attainable, coinciding with increased job satisfaction. In support, Crossman and Abou-Zaki (2003) argue that early job satisfaction wanes unless employees receive evidence of progress and growth. After a few years on the job, discouragement is common, often being brought on by the feeling that advancement in the company is too low. Job satisfaction appears to increase after a number of years of experience and to improve steadily thereafter.

Contrary to this, Sarker et al. (2003) state that longer tenure in a job may lead to tedium and lower levels of job satisfaction. Similarly, Spector (2008) maintains that longer tenure does not necessarily lead to increased levels of job satisfaction.

In general, job satisfaction tends to increase with employees’ experience. During the initial stage of employment, new employees tend to be satisfied with their jobs. This period involves the stimulation and challenge of developing skill and abilities and the work may seem attractive just because it is new.

3.5.2.7 Occupational level

A similarly straightforward determination of job satisfaction can be observed regarding different job levels or grades. Oshagbemi (2003) highlights that those who are in a supervisory or intermediate position are more satisfied than those who are in non-supervisory positions.

Few studies have attempted to investigate the relationship between employees’ occupational level and corresponding levels of job satisfaction. However, according to Saal and Knight (2000) the limited research available suggests that employees who hold higher level jobs are more satisfied than those who hold lower level positions.

Several other researchers also found support for a positive correlation between job level and satisfaction. Smither (1994) for example, states that job satisfaction tends to be lower among those in jobs characterised by hot or dangerous conditions, which is more characteristic of a lower level nature. It seems, therefore, that job level is a reliable predictor of job satisfaction; more specifically, employees in higher level jobs
have greater satisfaction than lower level employees. In support, Analoui (2000) conducting research on senior leaders in the Romanian public sector, found that hygiene factors such as salary, supervision and working conditions were not perceived as the sole contributing factors for a decision to change job and move to the private sector. The research identified that senior leaders stayed in their job despite financial problems simply because they liked their job and because they had the opportunity to maximise learning, knowledge, skills, competence and self development.

3.6 JOB SATISFACTION AND LEADERSHIP BEHAVIOUR

As mentioned in the previous chapter, in all situations an effective leader can have functional influence on his or her employees. The leader can provide strategic direction and vision to employees and can engage in satisfaction, motivation and coaching behaviour, which can assist in solving work-related problems.

The reactions of employees to their leaders will usually depend on the characteristics of the employees as well as on the characteristics of the leaders. Employee job satisfaction is influenced by the internal organisation environment, which comprises organisational climate, leadership types along with personnel relationships. The quality of the leader-employee relationship or the lack thereof - has a great influence on the employee’s self-esteem and job satisfaction (Mullins, 2007).

Gumusluoglu et al, (2009) argued that it is stressful for employees to work by means of a leader who has a hostile and unsupportive behaviour. If employees are not capable of figuring out how to perform the work by themselves they will prefer a leader who will offer adequate guidance and instructions. Negative leader-employee relations reduce productivity as well as increase absenteeism and the turnover to the organisation can be quite high. Furthermore, the leader can obtain resources for task completion and can interpret and enforce organisational policies. Therefore, many research findings indicate that satisfaction with leadership is one of the most significant predictors and elements of overall job satisfaction (Rauktis, 1994).

Glisson and Durick (2000) argue that the results of the studies that examined leadership and its relationship to job satisfaction of employees in human service organisations highlight that leadership is an important factor in creating a positive
organisational environment conducive to high morale and commitment. Furthermore, they found satisfaction with leadership to be significantly associated with social workers’ job satisfaction. They further argue that, of the different dimensions of job satisfaction such as work, recognition, working conditions and co-workers, most can be influenced by or are related to leadership behaviour.

Chu and Hsuan-Wei (2003) support this view by indicating that there is a significant relationship between leadership behaviour and job satisfaction. They found that transformational leadership behaviour in particular significantly influences job satisfaction among employees in service organisations.

An earlier study by Griffin et al. (2001) maintains that employee consideration and intellectual stimulation leadership behaviour are positively related to employee job satisfaction. However, Bartolo and Furlonger (2000) also found that a change in the level of leadership support was a significant predictor of changes in the level of employees’ job satisfaction; this is because a team leader is expected to have a certain influence and control in the job structure, work allocation, etc. Furthermore, a competent leader can make use of effective rewards, praise and recognition, effort through job re-design, job enrichment or other strategies for improving employees’ satisfaction. Finally, an effective leader can create and maintain a good working environment in a team.

In conclusion, organisations all over the world are deeply concerned with means of understanding, searching as well as developing leadership. Regardless of the type of organisation, leadership is discerned to play a vital role in establishing high satisfied and performing teams. Therefore, leaders are facing greater challenges than ever before due to the increased environmental complexity and also the changing nature of the organisation. Historical account shows that leaders have to have the ability to draw out changes in relation by means of environmental demands.

Furthermore, the current era not only demands having a competitive edge as well as sustained profitability, but also the maintenance of ethical standards, complying by means of civic commitments and establishing a safe along with equitable work environment, leadership became one of the critical elements in enhancing organisational presentation. Being responsible for the development and also execution
of strategic organisational decisions, leaders have to acquire, develop and deploy organisational resources optimally in order to bring out the best products in addition to services in the best interest of stakeholders. In short, effective leadership is the main cause of competitive advantage for any kind of organisation (Bennett, 2009; John et al., 2010).

3.7 CONSEQUENCES OF JOB SATISFACTION

Job satisfaction influences many other organisational variables. These include not only work variables, such as productivity, but also personal or non-work variables such as absenteeism, health and satisfaction with life. This section briefly discusses the potential effect of job satisfaction on different variables.

3.7.1 Productivity

When it come to productivity, job satisfaction comes from two sources: a) the happiness that comes from competing with other employees, even if you don’t always win; and b) knowing that you are doing your best or exceeding your own standards or expectations (Spector, 2008). In addition, many employees gain satisfaction from turning out a good day’s work and enjoy a good feeling heading home after a competitive and productive day (Robbins et al., 2003).

It has been argued that an increase in job satisfaction increases employee productivity and performance (Wright and Cropanzano, 1997; Shikdar and Das, 2003). If an organisation does not create the conditions for a minimal level of job satisfaction, the outcomes may be deterioration in productivity, increased employee turnover and absenteeism (McKenna, 2000). In support, Robbins et al. (2003) argue that a leader’s interest in job satisfaction tends to centre on its effect on employees’ productivity, assuming that a satisfied employee will be a productive one.

Furthermore, a large body of research postulates that job satisfaction has a positive effect on productivity; however, this correlation is rather modest (Robbins, 2005). He concluded that productivity is more likely to lead to satisfaction than the other way around. Hence, if employees do a good job (productivity), they intrinsically feel good
about it. In addition, higher productivity could lead to an increase in rewards, pay level and promotion and high moral, which are all sources of job satisfaction.

3.7.2 Life Satisfaction

As regards satisfaction from life, this concern for an employee’s family, clear identification of work time limits and meeting family-related needs such as care giving (Cooper and Locke, 2000). Three hypotheses have been put forward about the relationship between job and life satisfaction (Spector, 1997; Cooper; Locke, 2000). The spill-over hypothesis suggests that job experiences spill over into life and vice versa. Problems at home can affect satisfaction at work and problems at work can affect home life.

In terms of the segmentation hypothesis, employees divided their lives, and satisfaction in one area of life has little to do with satisfaction in another area. The compensation hypothesis states that employees will compensate for a dissatisfying job by seeking fulfilment in non-work life and vice versa.

3.7.3 Physical and Psychological Health

Spector (1997) states that employees who dislike their jobs could experience negative health effects that are either psychological or physical. On the other hand, Luthans (2002) argues that employees with high levels of job satisfaction tend to experience better mental and physical health.

3.7.4 Turnover

A number of studies strongly support the view that employees’ turnover is inversely related to job satisfaction (Robbins et al., 2003).

According to French (2003) a high employee turnover rate is often prevalent in an environment where employees are highly dissatisfied. Greenberg and Baron (2003) postulate that employees lacking job satisfaction often tend to withdraw from situations and environments as a means of dealing with their dissatisfaction.

McKenna (2000) concluded that employees who are satisfied with their jobs are less likely to leave the organisation than ones who are dissatisfied. The main form of
employees’ withdrawal is turnover. By not reporting for duty or by resigning to seek a new job, employees could be expressing their dissatisfaction with their jobs or attempting to escape from the unpleasant aspects they may be experiencing.

Furthermore, Spector (2008) found a moderate relationship between job satisfaction and employee turnover, which indicates that dissatisfied employees are more likely to quit their jobs than satisfied ones. During periods of low unemployment and high opportunity more dissatisfied employees will quit and the satisfaction-turnover correlation will be higher. In good economic times, dissatisfaction leads employees to seek other employment, whereas satisfaction causes them to remain. In poor economic times, both satisfied and dissatisfied employees quit in equal numbers.

In general, employees leave their professions for reasons other than mere job satisfaction, such as finding better paying jobs, to return to education, or to pursue other personal interests. When jobs are plentiful, job satisfaction is a prominent consideration in turnover decisions. When jobs are scarce, considerations such as salary level, security and future prospects come into play (Mullins, 2010).

3.7.5 Absenteeism

Nel et al. (2004:548) maintain that “absenteeism is regarded as withdrawal behaviour when it is used as a way to escape an undesirable working environment”. Research indicates that job satisfaction levels are related to absenteeism. Luthans (2006) for example, conducted a study on the relationship between satisfaction and absenteeism which indicates an inverse relationship between the two variables. Thus, when satisfaction is high, absenteeism tends to be low. The converse indicates that when satisfaction is low, absenteeism tends to be high. However, other findings of a study undertaken by McKenna (2000) found the association between job satisfaction and absenteeism to be moderate. In support, Martin (2006) argued that the moderate relationship between these variables could be attributed to factors such as liberal sick leave policies, whereby employees are indirectly encouraged to take time off. They further argue that the relationship between job satisfaction and absenteeism can be moderated by the importance of the job to employees, the opportunity to use a variety of skills in the job and the existence of good relationships with employees and leaders.
3.8 SURVEY OF THE EMPIRICAL RESEARCH ON JOB SATISFACTION

The relationship between the employee and job satisfaction has been intensively researched since the beginning of the previous century (Greenberg and Baron, 2003; Luthans, 2006; Spector, 2008). The link between job satisfaction and direct performance and productivity is found to be clear despite the fact that the direction of casual relationship between employee performance, productivity and job satisfaction is disputable. This means whether satisfied employees are productive employees or vice versa (Kim and Garman, 2004; Mullins, 2007).

In a study on the effects of organisational communication on job satisfaction and motivation, Burton et al. (1977) illustrate that ‘role clarity’ problems lead to stress, tension, anxiety, dissatisfaction, turnover, lack of job interest and less innovation. They also indicate that different workers from different working environments have varying degrees of role clarity needs. In the realm of the work itself, most employees want: work that is personally interesting, significant and challenging; success or a sense of accomplishment or progress; growth; responsibility; autonomy; role clarity; feedback concerning performance; and freedom from physical strain and drudgery.

With respect to pay, employees want: fairness (in relation to what comparable others are getting); enough money to meet expenses; competitive fringe benefits; and security. In the realm of promotions, employees want: fairness; clarity (as to how the promotion system works); and availability if they want a promotion. As to working conditions, most employees prefer: convenient location and hours; safe and attractive physical surroundings; and equipment and resources that facilitate work accomplishment. Employees are preferred who share similar values and facilitate work accomplishment. They like supervisors who are: considerate, honest, fair, and competent, who recognise and reward good performance, and who allow some participation in decision-making. Finally, they like organisations which show a basic respect for employees and employees’ welfare (values), and which are competent (i.e. have a clear sense of direction, are managed effectively, and put out a good product).

An empirical study to show the effects of: a) providing discretion (the freedom to choose production techniques/methods) and outcome feedback (information regarding whether a standard was met) on individual satisfaction; and b) providing discretion
and both outcome feedback and process feedback (information concerning the effectiveness of the work method used) on their productivity and job satisfaction; indicating that: a) providing discretion and outcome feedback alone does not improve employee satisfaction significantly; and b) providing employees with discretion and both outcome and process feedback results in statistically significant improvements in productivity and job satisfaction (McAfee et al., 1995).

Moon (2000) conducted extensive reviews of the theoretical and empirical work done to identify if there are correlations between job satisfaction and organisational commitment. He maintained that job satisfaction and organisational commitment are important because they have, in turn, been associated with other positive organisational outcomes.

Moon (2000) cites other authors who assert that employees who are more satisfied with their jobs are also absent less and less likely to leave (Carsten and Spector, 1987); and they are more likely to display organisational citizenship behaviour and to be satisfied with their lives overall (Judge and Watanabe, 1993). Employees who are more committed are less likely to intend to leave their jobs (Mathieu and Zajac, 1990); less likely to experience stress (Begley and Czajka, 1993); and more likely to perform well (Mathieu and Zajac, 1995).

In support, Kirkman and Shapiro (2001) conducted extensive reviews of the theoretical and empirical work done on job satisfaction and organisational commitment. Their findings supported a substantial linkage between satisfaction and commitment, further supporting previous research findings of existing relationships between these variables. Satisfied employees’ tended to be more productive, creative and committed to their organisations. Other reviews of literature suggested positive and negative correlations in regards to consequences associated with job satisfaction. For example, employees tended to be less aggressive and defensive when job satisfaction levels were high versus more complaints, hostility and aggression associated with lower levels of job satisfaction (Chen and Spector, 1992).

A study by Glen (2003) of the IT industry reveals an important relationship between job satisfaction and motivation. He asks the question: How important is job satisfaction anyway? He pronounces that he has never been captivated by the idea of
leaders making job satisfaction a high-priority goal. Of course, he says good leaders want their employees to be reasonably happy, but how important is it, really, that they be satisfied? He cites a few reasons for his scepticism:

a) He believes it is not possible to satisfy employees completely. Employees are always restless and ambitious; b) He also believes it is probably not desirable to satisfy employees, because satisfaction does not guarantee productivity; c) The variety of different things we use to measure job satisfaction distracts from what's really necessary and distorts the actual state of our organisations.

Glen has observed that there are certain things that are essential for the employee’s happiness: reasonable pay, good relationships and belief that the future holds more of the same. Instead, he proposes that we should look at the employee’s motivation, which he believes has much more of a direct impact on what they can achieve than their satisfaction does and is also much more important for collective success.

Another empirical study, by Azghloul et al. (2008), is on job satisfaction and its impact on the nurses leaving the King Khalid Hospital in Najran, Saudi Arabia. The researcher investigated the major aspects of the organisational climate that have an influence on job satisfaction among the nurses, with the main objective to assess the level of job satisfaction in the said hospital. The research problem was justified by the shortage of nurses in many hospitals. The research employed experimental and correlational design methodologies. The study population comprised of all the nurses working in King Khalid Hospital at the time of the study. The survey involved the use of a questionnaire to collect data about the relationship between job satisfaction and the decision by nurses to leave the hospital.

The study revealed that job satisfaction is made up of two parts: intrinsic and extrinsic factors. The intrinsic factors identified were personal achievements, sense of achievement, and prestige. The extrinsic factors identified were salary levels and fringe benefits, working conditions, leadership behaviour and availability of resources. In addition, the study further found out that the extrinsic factors (as identified above) had a high influence on employees’ levels of job satisfaction, with salary scales and leadership behaviour scoring highly on the most critical factors. Most of the respondents were highly dissatisfied with the leadership behaviour used in
the hospital. The findings demonstrated that the most prominent factors that influenced the respondents’ decision to leave the hospital were workload, salary, job description, motivational system, nurses welfare, autonomy in decision making, growth opportunities, working environment, perceived leadership behaviour and recognition for work done. 82% of the respondents identified poor working conditions and failure to recognise their achievements as the key indicators of low job satisfaction and the subsequent decision to leave the hospital.

The correlation between perceived leadership behaviour and the nurses’ decision to leave the hospital was very strong. There was also a strong correlation between the respondents’ age and job satisfaction, with younger nurses showing little satisfaction with their jobs. The research further identified those differences to leave the hospital varied by hours worked per week, educational level, practice role, gender and practice activity. All in all, this research study showed that both the intrinsic and extrinsic factors and related work values have a great impact upon job satisfaction and as such the intention to leave the hospital and work stress were very high as the nurses’ morale was very low and decreasing.

A piece of research based on Herzberg’s two-factor theory of job satisfaction supports that job satisfaction is an important factor not only for employees but for organisations as well. For example, a research survey by Grant et al. (2010) on large bank leaders found that bank tellers were very dissatisfied with their jobs. They stated that their jobs were boring and that they felt they were unable to participate in the decision making process, even of small decisions, without the approval of their leaders.

In this case, the leaders of the bank decided to re-design the teller’s tasks to increase the level of job satisfaction. New tasks were added to provide variety and the use of a broad range of skills. In addition to their check cashing, deposit and loan payment tasks, they were trained to handle commercial and traveller’s cheques and post payments on line. The tellers were also given more autonomy in their roles: they were given decision-making responsibilities. As a result, it was found that job satisfaction had increased.
This survey was taken six months later and it was found that not only were the tellers more satisfied with their role but they were also more committed to the organisation. Finally, during employee or leader evaluations, it was found that there was an increase in performance and productivity by the tellers and that the job satisfaction provided by the job redesign had effects lasting at least four years (Grant et al., 2010).

3.9 CONCLUSION

This chapter introduced the concept of job satisfaction through its conceptual definition, the importance of it and also by highlighting the different theories relating to job satisfaction. Furthermore, it sought to provide an overview of the literature pertaining to job satisfaction in relation to organisational and personal determinants.

From the literature review it is evident that job satisfaction as a subject has been extensively researched and is of significant importance to employees and organisations alike. In this regard, the literature concludes that job satisfactions has an impact on the physical and psychological health of employees and on productivity, performance turnover and absenteeism, and organisations are better off when they provide employees with a recognition level that leads them to feel satisfied.

The survey in this chapter also argued that job satisfaction or dissatisfaction is a complex concept which can be brought about by many factors. Some factors are within employees themselves and they have direct or an indirect control or influence over them. Some factors are outside the employees and they may not have a direct or indirect control or influence over them.

All in all, job satisfaction turns out to be a crucial impetus for the outcome of the employees’ job performance, productivity and the performance of economies as a whole. Hence, a high level of job satisfaction should be a goal for organisations, as well as a topic on the agenda for labour market policy related regulation and deregulation activities that concern standard, non-standard, and self-employment (Lawler, 2003; Spector, 2008; Mullins, 2010).
In providing the case for the discussion in this and the previous chapter, the next chapter renders a general introduction to the Libyan business environment and culture, but also provides a specific introductory discussion on the petrochemical industry and the companies chosen as a case for this study.
Chapter 4

AN INTRODUCTION TO LIBYAN ECONOMY, MANAGEMENT STYLE AND THE PETROCHEMICAL INDUSTRY

4.1 INTRODUCTION

This chapter aims to provide the broad context about Libya including its geography, population, history, health, and political system. It, then, discusses the country economic, culture, leadership and communications aspects in Libya organisations.

In order to contextualising the research, this chapter also provides an overview of petrochemical industry in Libya, paying particular attention to two of the biggest oil production and gas processing companies in the country, Ras Lanuf Oil and Gas Processing Company (Rasco) and Harouge Oil Operations Company (Harouge) as these two companies are investigated in terms of the leadership in this study. Joint ventures and training are also reviewed in order to understand how these concepts are associated with the petrochemical industry in this country.

As an introduction, Libya lies on southern coast of Mediterranean Sea in North Africa and covers an area of 1,775,500 sq. km (Economic Intelligence Unit, 2010). It is the third largest country in Africa, after Sudan and Algeria. The population is six million and its market is growing at a rapid pace. Islam is adhered as mainly the only religion in the country and majority of population are Sunni Muslim. The official language is Arabic; however, English and Italian are also used because of the colonial heritage (IMF, 2010).

In terms of health, the infant mortality rate is 5 deaths per 1,000 live births, while life expectancy at birth for the total population is 74.5 years, 72 years of age for males and 77 years of age for females. The literacy rate is the highest in North Africa; over 82% of the population can read and write (World Bank Indicator, 2010).
Libya's political system is based on the philosophy of Colonel Gadhafi’s Green Book, which blends socialist and Islamic theories. According to the principles of the Green Book, Libya is a grass-roots democracy, with local People’s Congresses and Committees constituting the basic instrument of government. However, at the beginning of 2011 the country had been going through a political turmoil with political unrest in most of the country which result in regime change.

It should be noted that Berber tribes were the first inhabitants, while Arabs later moved to the region. Prior to the First World War, at a time when the Ottoman Empire was in retreat, Tripoli was occupied by Italian troops in 1911. However, it was not until 1934 that the three regions of Tripoli, Cyrenaica and Tripolitania finally came under full Italian control. This created a strong historical link between the two countries. It shows the past records of the country to demonstrate the way the historical events happened and how the country faced against several trouble conditions in those times.

4.2 ECONOMIC OVERVIEW OF LIBYA

Libyan economy has demonstrated very good performance in particular after the lifting of the political sanctions, as the country makes an effort to improve in its economic position within global arena. The strong and robust exchange rate and monetary policies makes the country stand at the top position in macro-economic terms. The growth in the economy is at an appreciable rate as World Bank suggests that the country is among developing countries of ‘upper middle income’ (Anon, 2008). This has been helped by strong oil and gas prices since 2002 and the lifting of international sanctions in 1999: the seven-year period of U.N. sanctions initiated in 1992 is reported to have cost Libya US$26bn in petrochemical revenues (Economic Intelligence Unit, 2010).

The major contributor to the country’s wealth comes from exports of oil and gas, the revenues of which accrue to the state. Libya’s proven oil and gas reserves are impressive: 30bn barrels of oil and 70-80trl cubic feet of gas as of early 2010 (Oil and Gas Journal, 2010). However, these reserves are probably substantially understated because of the extended hiatus in multinational oil company exploration and development activities. The low Libyan operating cost profile, its light, sweet oil,
abundant natural gas reserves and ready access to European markets makes Libya, at least from a technical standpoint, one of the industry’s most attractive production areas (Economic Intelligence Unit, 2010).

The petrochemical revenues allow Libya to invest heavily in health, education, and agriculture. The authorities are making efforts to diversify the economy away from its reliance on petrochemical to ensure a more balanced economy by investing in petrochemicals, iron, aluminum and steel. However, this has often through state subsidies. Although Libya’s approach is slow towards growth and development, the efforts are appreciable at present instance. The country stands at 83rd position in the Global Competitiveness Report (Omran and Rajeev, 2006).

However, it should be noted that the business and productive environment is weak, requiring serious attention. There had been several failures in this area including in 2005 when the National Economic Strategy (NES) was launched under the Monitor Group. The project was designed to address the main factors that curtail business growth in the country. Thereafter, Libyan Economic Development Board (LEDB) was established to focus on the business priorities to improve economic position of the country. The use of cluster development, improvement in human capacity and partnerships with foreign countries helped in the formulation of better strategies. For encouragement of business and development, the LEDB offers various programmes by providing support for capital investment to help entrepreneurs utilize their potential for growth and thereby boost the development of the country and improve the living standard. The LEDB has a great potential to improve the welfare of country’s economic position.

Education is considered as an area which can help improve the economic position of any country. Libya has a strong history in terms of developing its education system and relating the education programmes to practical learning in order to prepare students for the job market and therefore boost the economy.

In terms of economic development, infrastructure deficiencies are now being addressed on a large scale with the installation of a railway system, a gas distribution network and, most prominently, the US$30bn Great Man Made River (GMR) project
designed to deliver sub-Saharan water resources to the inhabited northern areas and to irrigate arable land to raise agricultural production.

4.3 AN INTRODUCTION TO THE LIBYAN CULTURE

Hofstede (2001:65) defines culture as, “the belief system and value orientations that influence customs, norms, practices, and social institutions, including psychological process (language, care taking practice) and organisations, media, educational system)”.

In the context of Libya, culture refers to the way of life of the Libyan people. While Libyan culture is generalized as Arab culture, Arab nations differ in their culture and beliefs because of the differences in economic, historical and social backgrounds. As Hofstede’s generalisation indicates, Arab nations rank higher in terms of femininity, power, distance, community, paternalism and fatalism among others (Twati and Gammack, 2007). Generally fitting into this description, the Libyan culture closely resembles that of the neighboring states of the Maghreb, and its citizens perceive themselves a part of the vast community of Arabs. Having been invaded by Arabs, Romans, Turks as well as Italians, Libya has had a wide range of influences on the development of its culture.

As in all Arab countries culture is strongly influenced by the Islamic religion, which plays a vital role in the organisation and everyday life of communities as well as interpersonal relationships. To this end, Islam guides management in organisations towards achieving individual obligations in the groups within the organisation. In addition to the determining role of religion, Libya, as with other Arab nations, emphasises the essence of interpersonal relations and strength in kinship. Therefore, family ties, affiliation in ideologies, sectarianism, aside from academic credentials have a very high impact on the decisions of leaders in promotion and recruitment (Kamoche and Debrah, 2004).

4.4 CULTURE AND COMMUNICATION IN LIBYAN ORGANISATIONS

The cultural and religious norms teach respect for hard work in the work place based on its virtues, and therefore interpersonal relationships are considered important at
work. As a result, strong relationships are encouraged with the leadership and fellow employees. These relationships, within and outside work, aid in achieving the goal of successful communication among the stakeholders.

The culture of Islam teaches to respect non-Muslims, non-Libyans and persons from other communities as well. Peace and tranquility, besides social relationships, are some of the virtues that the culture of Arabs perceives important. Initiating and maintaining relationships that are characterised by respect to strangers is a characteristic considered essential in Libyan culture. The communication involved in the social relationships is applied in the decision making and performance of evaluations in organisations. The aforementioned values are specially maintained and encouraged. Therefore, Islam as a religion is the major determinant when it comes to the culture of Libya and, hence, communication style in organisations and among employees (Hanky, 2004).

Due to the prevailing Libyan culture, in organisations there is a high degree of masculinity, as opposed to femininity, low power proximity, uncertainty avoidance, and low personal consideration (Jandt, 2004). This has negative impact on the way the staff in organisations communicates, which also has impact also on decision-making.

Studies carried out, among others, by Jackson (2002); Hanky (2004); Leat and El-Kot (2007) argue that the Libyan culture is traditional and heavily influenced by Islam. Thus, when it comes to female-male interactions the culture is very strict, which impacts organisations in Libya.

Proximity is an issue to be put in check especially when it comes to personal space. Gender verbal and non-verbal communications can backfire easily. In addition, opposite sex communications are required to be transparent and thus cannot be carried out in enclosures when it comes to the work place. In Islam, whatever a person does in the workplace, and indeed anywhere, is considered to be before the eyes of Allah and therefore, one is answerable to Him, which helps for individual discipline. This at the same time can work as a source of motivation, as praising Allah can thus be achieved through hard work at the companies where one is placed. Lastly, as part of the Libyan culture, direct delivery is utilised whenever good news are transmitted in companies while an indirect approach applies to negative message delivery.
Due to the western influence there are hierarchies in Libyan companies and as mentioned earlier respect is an important element in Libyan culture. Therefore, differentiation of high positioned staff and low level workers is also clearly evident. Formal titles, such as ‘Sir’ and ‘Madam’, are commonly used with the leaders of companies. Furthermore, because of the power differential top management greatly discourage employees from giving advice, feedback and opinions on how to handle given tasks. Practicing of these forms of communication is seen as negative by the leadership of companies in Libya (Abubaker, 2007).

4.5 LEADERSHIP IN THE CONTEXT OF LIBYAN CULTURE

In understanding the nature of leadership at micro and macro level, it is important to see the sociology and the anthropology of a society which is shaped under various historical forces. In Libya, hence, prior to independence sheikhs of the various main tribal groups controlled the leadership in the countryside. Religious figures and rich families performed a similar role in the cities. After the independence a monarchical system was introduced, which depended upon the lines of traditional authority and patronage thereby maintaining social inequalities in Libyan society.

The discovery of oil in 1959 led to a major change in the political and economic development of Libya, which helped the poor find a way out of poverty, which otherwise was impossible in traditional society. Technocrats taking part in the petrochemical industry started to pose challenges to the grip and influence of traditional leadership, which had relied on the inheritance of leadership. Profitable careers arose and impoverished families found employment in the military. In the process, people migrated to cities in search of work. Young people broke out of the traditional system by marrying across tribes. All these resulted in threatening the perpetuation of the old order.

Institutions came up as a result of the witnessed change in Libya. From 1969 onwards, the ideology of nationalism was promoted to replace the old system of tribal loyalties. Libya was divided into zones of administration that did not take account of the old tribal borders.
The traditional factors of wealth, lineage and piety were replaced by social as well as educational progress. The basis, thus, shifted to become centred on individual competence (Ham, 2007).

In modern times, the nation of Libya is closely associated with the leadership of the leader Gadhafi, and his self-styled revolutionary government, which have ruled the country since the overthrow of the monarchy in 1969. According to Vandewalle (2009), the regime has relied on an all-encompassing management approach that has mitigated the chances for fine-tuning the economy. However, the government has had to face hardships due to multilateral UN and bilateral US sanctions and diplomatic isolation (which management to be lifted after political negotiations (Vandewalle, 2009). It is expected that while the political transformation of the country, the administration and leadership changes are bound to happen.

Gadhafi’s leadership style was often described as charismatic. The concept of charismatic leadership plays an important part in Bass Part’s’ (1985) being transformational leadership. The form of charismatic leadership taken in Libya differs from the type of transformational leadership described in Bass and Avolio’s (1994) revised version of the theory, in that it has a strong element of authoritarianism. Gadhafi’s approach had more in common with Howell’s ‘personalised’ charismatic leader, whose need for unquestioning trust, obedience and submission creates dependency and conformity, as opposed to the ‘socialised’ charismatic, who develops and stimulates followers by providing greater empowerment and autonomy. In the Libyan culture, this type of leadership also exhibited strong elements of transactional leadership in that it led people to be dependent on directions from those in authority. Thus, contingent reward and management-by-exception provided clear ways of directing followers who are influenced by a higher power and could not perform except under his guidance.

While social integration is not considered as an aspect of either transactional or transformational leadership in Bass and Avolio’s theory, however, given the important role it plays in Libyan culture, social integration inevitably has a major influence on Libyan working life. For example, cooperation and coordination of
workers is not achieved by just bringing them together, but involves creating harmony among the group members.

Social integration is one of the major factors, which affects employees’ job satisfaction, and thus can be a reason to remain or quit a particular job, which is not just between the leader and his or her group but also between the members of the group themselves. It follows that leadership concepts derived from research carried out in Western countries may need redefinition before they can be applied with any degree of confidence in a different cultural context, such as Libya.

4.6 AN OVERVIEW OF THE PETROCHEMICAL INDUSTRY

The preceding sections provide an overview of the Libyan society, culture, economy and leadership issues with the objective of contextualising the study. This section, however, focuses on the petrochemical industry which is the essential subject matter and case study in this research.

The petrochemical industry is considered to be the most important industry in Libya, representing the backbone of the economy. Due to its importance, the government has prioritised its promotion since the discovery of oil and gas. Furthermore, the state took the control of the industry from foreign companies in order to gain greater control of the revenues in 1975 (Wallace and Wilkinson, 2008).

The Libyan economy relies on the petrochemical industry’s revenues with around 95% of its exports coming from the industry, and 25% of the Libyan GDP is accounted for by the oil and gas exports, while 75% of the wages of the public sector are met from petrochemical earnings (Economic Intelligence Unit, 2010). Libya is currently the second biggest oil and gas producer in the African continent and one of Europe’s largest providers of oil. The country produces an average 1.8m barrels of oil each day and the government plans to increase this to 3.0 m barrels per day by 2015 (Energy Information Administration, 2010).

It should be noted that much of the country remains unexplored in terms of oil reserves. Nevertheless, oil reserves are estimated at around 30bn barrels, while gas
reserves are largely unexploited and unexplored and could be as much as 70-80 trl cubic feet (Oil and Gas Journal, 2010).

Downstream activities in the petrochemical industry include refining and petrochemicals. There are three oil refineries in the country, the biggest of which is run by Rasco Company. Further refineries are planned, in order to optimize the sector’s potential. The main centres for the petrochemical industry are at Marsa al Brega and Ras Lanuf where the production of urea, ammonia, ethylene, polyethylene and methanol takes place. Although the plants are only able to utilize 76% of their potential, the output is more than sufficient to meet the demands of the domestic market (NOC 2010). However, there is still scope to build foreign markets thereby attracting foreign currency, which would strengthen economic growth.

Libya’s National Oil Corporation (NOC) was established on 12 November 1970 under the law No.10/1979 of the General Secretariat of the General People’s Congress, for carrying out the objectives of the development system in the area of petrochemical industry (NOC, 2010). The NOC support the national economy via increasing, upgrading, developing and exploiting the oil and gas reserves, as well as operating and investing in those reserves, including joint ventures and participation agreements with other foreign companies and corporations undertaking similar operations (NOC, 2010).

The NOC carries out its functions as laid down in the laws and regulations through a number of subsidiary companies (Table 4.1), such as Rasco processes oil and gas, Harouge oil operations Company which produces oil, Waha Oil Company conducts exploration and production of oil and gas, the Sirte Oil Company carries out the exploration and processing of oil and gas, the Zueitina Oil Company and the Arabian Gulf Oil Company both drill and pump crude oil, as well as carry out exploration and production processes (Data Monitor, 2009).

Furthermore, the NOC manages and supervises, via its specialised companies a number of refineries, petrochemical plants and their connected units and facilities (Oleynik et al., 2005). Additionally, the NOC undertakes a number of joint ventures with foreign production; exploration and specialised petrochemical service companies, which are depicted in Table 4.1.
Table 4.1 The National Oil Corporation and its Affiliated Companies

<table>
<thead>
<tr>
<th>Companies owned by NOC</th>
<th>Joint Venture Companies with NOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ras Lanuf Oil and Gas Processing Company</td>
<td>Harouge Oil Operations Company</td>
</tr>
<tr>
<td>Arabian Gulf Oil Company</td>
<td>Eni Oil Company</td>
</tr>
<tr>
<td>Sirte Oil and Gas Production &amp; Processing Co</td>
<td>Repsol Oil Operations Company</td>
</tr>
<tr>
<td>Zueitina Oil Company</td>
<td>Lasmo Grand Magber Ltd.</td>
</tr>
<tr>
<td>Waha Oil Company</td>
<td>Eni Gas Company</td>
</tr>
<tr>
<td>Zawia Oil Refinery</td>
<td>International Petroleum Libya Ltd.</td>
</tr>
<tr>
<td>Brega Petroleum Marketing Company</td>
<td>Total/ Fina/ Elf Company</td>
</tr>
<tr>
<td>National Drilling Company</td>
<td>Wintershall AG Company</td>
</tr>
<tr>
<td>Jowfe Oil Technology Company</td>
<td></td>
</tr>
<tr>
<td>Hamada Pipeline company</td>
<td></td>
</tr>
<tr>
<td>National Oil Fields and Terminal Catering Co</td>
<td></td>
</tr>
</tbody>
</table>

*Source: Annual Report of the National Oil Corporation (2010)*

4.6.1 Joint Ventures in the Petrochemical Industry

A joint venture is considered as a larger group in which two entities come together to share their resources to manage the operational tasks of their business, thus resulting in better performance (Craig, 2005; John *et al.*, 2006). Therefore, in such business style, business growth comes through the joint venture. As the petrochemical industry requires huge investment, making it difficult for a single entity to operate independently, and therefore joint ventures are a strong business model in the sector. In such business entities, organisations can use each others’ resources and utilise the synergy created to improve performance. For example, for a country such as Libya, which lacks qualified human resources, joint ventures can help sidestep this issue. It is for this reason that the subsidiary of NOC, Harouge oil Operations Company, has a joint venture with Petro Ex-Canada (Company website, 2010). Furthermore, joint ventures can deliver much-needed technology and knowledge to help in modernising the country’s petrochemical infrastructure.

The essential condition for companies interested in forming a joint venture with the NOC is that the majority of the joint company’s board of directors, as well as its director, must be Libyan (US Foreign Commercial Service and U.S. Department of State, 2006). Certain joint venture agreements may be termed ‘negotiated nationalisation’ in the sense that the NOC is a 50% partner of the existing concession and concluded joint venture agreements on new areas whereby it shared both financial
burdens and benefits equally. The NOC participates in the management via equal numbers of members on the management committee (Townsend, 2001).

4.6.2 Training in the Petrochemical Industry

The Libyan petrochemical industry has been working tirelessly to attract state of the art technology and knowledge because of the importance for developing the industry. In this context, training, in most of Libya’s petrochemical Companies, is viewed as an essential factor in the development of the country. Thus, Libya considers that the training of its personnel by foreign partners is a key factor for gaining new knowledge. It is believed that a successful transfer of leadership skills and technology requires good planning and the training of individuals. Hence, several foreign companies have been encouraged to provide training opportunities for Libyans, both in the technical and managerial areas. Therefore, there has been a sharp increase in educational exchange programs, and supplies and facilities related to institute administration (US Foreign Commercial Service and U.S. Department of State, 2009).

Wallace and Wilkinson (2008) argue that Libya has the highest number of professional and academically trained and qualified individuals compared with neighbouring North African countries. This is mainly attributed to the substantial educational and training programmes that the country has undertaken, which involve sending large number of trainees for short and long courses, as well as for postgraduate studies, to various countries abroad, especially to western countries. The aim of this strategy is to increase the number of adequately qualified professionals, as well as to bring new knowledge and technology to this industry.

The NOC provides high quality training and development programmes for its employees. There are many educational and training centres around the country, such as the Petroleum Training and Qualifying Institute and the Petroleum Training Centre, which contain state of the art technology. The aim of these training centres is to supply local industry with the latest educational programmes, ranging from advanced technical and managerial training programmes to higher academic courses. Moreover, these programmes are intended to increase the level of skill and effectiveness of the manpower, both technically and administratively. This guarantees an understanding
and adaptation of technological developments, techniques and systems used in the petrochemical industry at an international level (Oleynik et al., 2005).

Training courses are usually run by foreign and national experts. In addition, many training courses are taken abroad in order to develop qualified individuals in such profession as technical, administration and accounting. The annual training plan for NOC’s companies (internally and externally) costs about £30 millions for approximately 4,500 employees (80% or 3600 employees trained internally and 20% or 900 trained externally) (NOC, 2010). For the local training, the NOC has established a number of training centres throughout the country to develop the skills and knowledge of its manpower. These centres include: the Centre of Administrative and Technical Development of the NOC, the Oil Institute for Training and Development and Azzawyia Training Centre, which are conducting several specified training activities domestically such as drilling, maintenance, supervision, production, management and finance. These programs clearly describe the role that the employees play in managing the operational and leadership tasks of organisations in this industry.

4.7 RAS LANUF OIL AND GAS PROCESSING COMPANY

Libya’s major industrial zone is at Ras Lanuf, which is the site of the country’s petrochemical complex, is composed of a refinery plant, an ethylene plant, polyethylene plants, utilities facilities, and a harbour which is located inside the complex for exporting the output. The first phase of the complex was built in 1987. The production levels began to rise in 1989 and by 1993/94 all the units were running around 85% of the set capacity. The capacity is 330,000 tons/year (t/y) of ethylene, 171,000 t/y of propylene, 135,000 t/y of butane and 300,000 t/y of pyrolysis gasoline.

The second phase was finished in 1994 and involved projects of US$600m worth; however, Uhde of Germany, which was awarded the contract in 1992, had the contract terminated the following year. This phase had scheduled capacities of 68,000 t/y of propylene, 160,000 t/y of pelletised polyethylene and 52,000 ethylene glycol (Rasco Annual Report, 2010).

On the other hand, the NOC has been working to spend around US$1.900m to develop Ras Lanuf refinery. This development project includes adding butadiene,
butane-1, methyl ether, tert-amyl methyl ether and iso-octane units to the available petrochemicals complex at Ras Lanuf (Middle East Economic Digest, 2009).

As depicted in Figure 4.1., there are 24 different departments in this complex, and as can be seen from Table 4.2., the company has 3,821 employees, where the co-workers represents 91% of the total workforce, the first line managers (supervisors) represents 6%, the middle line manager (division heads) represented 2.2% and the top line managers (departments managers general managers and consultants) represents 0.06% of the Company total workforce.
Figure 4.1 Rasco Company’ Organisational Chart

Source: Rasco (2010)

Note: G: general; Dept: Department.
<table>
<thead>
<tr>
<th>Management Committee Office</th>
<th>Co-Workers</th>
<th>F.L.M</th>
<th>M.L.M</th>
<th>T.L.M</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Internal Audit Unit</td>
<td>13</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2. Legal and Contracts Unit</td>
<td>10</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>3. Loss Prevention Unit</td>
<td>376</td>
<td>13</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>4. Quality Unit</td>
<td>42</td>
<td>9</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>5. Tripoli Office</td>
<td>39</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>6. Benghazi Office</td>
<td>35</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>515</strong></td>
<td><strong>30</strong></td>
<td><strong>13</strong></td>
<td><strong>6</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>General Manpower Department</th>
<th>Co-Workers</th>
<th>F.L.M</th>
<th>M.L.M</th>
<th>T.L.M</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Training Unit</td>
<td>33</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>2. Personal Affairs Unit</td>
<td>56</td>
<td>10</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>3. General Affairs Unit</td>
<td>15</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>4. Service Unit</td>
<td>441</td>
<td>18</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>545</strong></td>
<td><strong>33</strong></td>
<td><strong>13</strong></td>
<td><strong>4</strong></td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>General Finance Department</th>
<th>Co-Workers</th>
<th>F.L.M</th>
<th>M.L.M</th>
<th>T.L.M</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Finance Unit</td>
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<td>12</td>
<td>4</td>
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</tr>
<tr>
<td>2. Cost Accounting Unit</td>
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<td>4</td>
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<tr>
<td>3. Marketing Unit</td>
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</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>100</strong></td>
<td><strong>20</strong></td>
<td><strong>9</strong></td>
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<table>
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<tr>
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<th>T.L.M</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Planning and Data Unit</td>
<td>136</td>
<td>9</td>
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<td><strong>Subtotal</strong></td>
<td><strong>183</strong></td>
<td><strong>13</strong></td>
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<table>
<thead>
<tr>
<th>General Technical Department</th>
<th>Co-Workers</th>
<th>F.L.M</th>
<th>M.L.M</th>
<th>T.L.M</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Technical Services Unit</td>
<td>201</td>
<td>6</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>2. Maintenance Service Unit</td>
<td>280</td>
<td>15</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>3. Engineering Unit</td>
<td>35</td>
<td>4</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>4. Material Unit</td>
<td>146</td>
<td>18</td>
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<tr>
<td><strong>Subtotal</strong></td>
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<td><strong>43</strong></td>
<td><strong>15</strong></td>
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</table>

<table>
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<tr>
<th>General Operation Department</th>
<th>Co-Workers</th>
<th>F.L.M</th>
<th>M.L.M</th>
<th>T.L.M</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Ethylene Plant</td>
<td>296</td>
<td>20</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>2. Polyethylene Plant</td>
<td>245</td>
<td>22</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>3. Maintenance Services Unit</td>
<td>350</td>
<td>20</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>4. Utilities Unit</td>
<td>348</td>
<td>14</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>5. Harbour Unit</td>
<td>237</td>
<td>16</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>1476</strong></td>
<td><strong>92</strong></td>
<td><strong>31</strong></td>
<td><strong>5</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3481</strong></td>
<td><strong>231</strong></td>
<td><strong>85</strong></td>
<td><strong>24</strong></td>
</tr>
</tbody>
</table>

**Total workforce: 3821**

*Source:* Rasco Company (2010)

*Note:* F.L.M: First Level Manager; M.L.M: Middle Level Manager; T.L.M: Top Level Manager.
4.8 Harouge Oil Operations Company

The origins of Harouge oil operations can be traced back to 1955, the year that Mobil Oil began its exploration in Libya. Due to the large investment involved in this technology Mobil Oil signed a contract with the German company Gelesenburg (Harouge Oil and Gas) to share its production rights. Today, Harouge oil operations company’s operates in a joint venture with Petro-Canada, which has been involved in the petrochemical industry in Libya for over 40 years. The company explores and produces petroleum in eight concessions covering 20 fields, most of which are onshore in the Sirte basin. The joint venture makes the company one of Libya’s largest oil producers: a total of 790m barrels of oil have been extracted between 1981 and 2009 (Harouge Annual Report, 2010).

The company has equity in the Ras Lanuf Terminal, which is located in the Gulf of Sirte in the north of Libya about 650km east of the capital, Tripoli. The port services an average of 15 tankers a month, while handling more than 480,000 barrels of oil a day (Harouge Annual Report, 2010). Harouge oil operations Company employs 1,600 individuals spread across offices in Tripoli and Benghazi, the oil fields in Amal, Ghani, Jofra, Tibisti and En Naga, and the terminal at Ras Lanuf.

4.8.1. Fields and Terminals

The company’s operations are as follows:

a) The port of Ras Lanuf on the Gulf of Sirte on the Mediterranean, 650km east of Tripoli, started operations in 1964. The terminal consists of the administrative offices, an industrial area, a residential area and a control centre. The Ras Lanuf tank farm is some 5km inshore from the coastline. There are three main pipelines and 13 oil storage tanks with a combined capacity of 6.5m barrels of oil. These are situated around 100m above sea level affording a natural flow to the port.

b) The Amal concession, the largest and most important of the company’s oilfields, is located in the Sirte basin covering an area measuring approximately 35km by 120km.
The field includes 8 different reservoirs, which range from a minimum depth of 2,300ft to over 12,000ft, presenting a significant challenge for the extraction of the oil.

c) The Tebisti field is located in the middle of the Sirte basin surrounded by oilfields operated by other companies. It covers an area of about 3,000 sq km. Exploration started in 1960 in concession 13 and commenced producing oil in 1964 to reach 70,000 barrels of oil per day by 1965.

d) The Ghani field sweet oil reserve was discovered in January 1978, while the Ghani main station was built and commissioned in 1980. Production was initiated in 1980 at which time it had estimated reserves of 500,000 barrels.

e) The Jofra field, previously known as Hofra, started to produce oil in 1963 at a rate of 10,000 barrels a day. Total current production is obtained from the Mabruk, Thalith and Kalash reservoirs.

Regarding to the organisation structure of the company, as can be seen in Figure 4.3., there are 22 different departments in this complex. In terms of workforce, as depicted in Table 4.3., the company employs a total workforce of 1,600 individuals, of which 92.5% is co-workers represents, 4% is the first line managers (supervisors), 2.18% is the middle line manger (division heads) and the top line managers (departments managers general managers and consultants) represents 1.3% of the Company total workforce.
Figure 4.3  Harouge Oil Operations Company’ Organisational Chart

Source: Harouge Oil Operations Company (2010)

Note: G: general; Tec: Technical; Tech: Technology; Adm: Administration.
Table 4.3 Distribution of the Harouge Workforce According to Departments

<table>
<thead>
<tr>
<th>Management Committee Office</th>
<th>Co-Workers</th>
<th>F.L.M</th>
<th>M.L.M</th>
<th>T.L.M</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Internal Audit Unit</td>
<td>25</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2. Legal and Contracts Unit</td>
<td>33</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>3. Loss Prevention and Environment Unit</td>
<td>138</td>
<td>5</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>4. Planning Unit</td>
<td>28</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>224</strong></td>
<td><strong>11</strong></td>
<td><strong>5</strong></td>
<td><strong>4</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Finance and Administration Department</th>
<th>Co-Workers</th>
<th>F.L.M</th>
<th>M.L.M</th>
<th>T.L.M</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Financial Unit</td>
<td>29</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>2. Employee Relations Unit</td>
<td>53</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>3. Materials Unit</td>
<td>44</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>4. Training Unit</td>
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<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>151</strong></td>
<td><strong>10</strong></td>
<td><strong>6</strong></td>
<td><strong>3</strong></td>
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</table>

<table>
<thead>
<tr>
<th>General Services Department</th>
<th>Co-Workers</th>
<th>F.L.M</th>
<th>M.L.M</th>
<th>T.L.M</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Transportation Unit</td>
<td>33</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2. Services Unit</td>
<td>120</td>
<td>5</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>3. Aviation Unit</td>
<td>68</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>4. Benghazi Office</td>
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<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>253</strong></td>
<td><strong>11</strong></td>
<td><strong>6</strong></td>
<td><strong>4</strong></td>
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</table>

<table>
<thead>
<tr>
<th>Operations Department</th>
<th>Co-Workers</th>
<th>F.L.M</th>
<th>M.L.M</th>
<th>T.L.M</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Operations Unit</td>
<td>148</td>
<td>5</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>2. Maintenance Unit</td>
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<td>2</td>
<td>1</td>
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<td><strong>Subtotal</strong></td>
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<table>
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<tr>
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<th>Co-Workers</th>
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<th>M.L.M</th>
<th>T.L.M</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. General Engineering Unit</td>
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<td>2</td>
<td>1</td>
</tr>
<tr>
<td>2. Reservoir and Production Unit</td>
<td>160</td>
<td>5</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>3. Drilling Unit</td>
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<td>4</td>
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<td>1</td>
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<tr>
<td><strong>Subtotal</strong></td>
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<td><strong>7</strong></td>
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</table>

<table>
<thead>
<tr>
<th>Technical Services Department</th>
<th>Co-Workers</th>
<th>F.L.M</th>
<th>M.L.M</th>
<th>T.L.M</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Information Technology Unit</td>
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<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2. Information Management Unit</td>
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<td>1</td>
<td>1</td>
</tr>
<tr>
<td>3. Communication Unit</td>
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<td>1</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
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<td><strong>3</strong></td>
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<table>
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<tr>
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<th>M.L.M</th>
<th>T.L.M</th>
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</thead>
<tbody>
<tr>
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<td>2</td>
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</tr>
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<td>2. Geophysics Unit</td>
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<td>2</td>
<td>2</td>
<td>1</td>
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<tr>
<td><strong>Subtotal</strong></td>
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<td><strong>5</strong></td>
<td><strong>4</strong></td>
<td><strong>2</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1480</strong></td>
<td><strong>64</strong></td>
<td><strong>35</strong></td>
<td><strong>21</strong></td>
</tr>
</tbody>
</table>

Total workforce: 1600

Source: Harouge Oil Operations Company (2010)

Note: F.L.M: First Level Manager; M.L.M: Middle Level Manager; T.L.M: Top Level Manager.
4.9 CONCLUSION

As the discussion in this chapter indicates, Libya is a late development list country based on oil resources in generating income and wealth in the country. Due to the internal and external factors, the development of the country could not be achieved in a short period of time despite the available capital formation generated through oil.

As discussed, the Libyan culture has been highly influenced by Islam; as all the population of Libya are Muslims, and hence Islam plays a significant role in community life in the country and also on personal relationships. It affects the managerial behaviours of the individuals in organisation and the decision making process by each and every individual in relation to their everyday life. In addition to religion, the Arabic culture should also be considered as an important determinant factor. It should, however, be noted that through Eurocentric paradigm, Libyan culture is considered as traditional in its approach.

Libyan culture is considered by academics such as Yousef (2001), Twati and Gammack (2007), Vandewalle (2009) a high context culture as opposed to low context usually found in the first world nations. The nation has also moved from the traditional leadership which was tribal based and monarchical. Technocrats, as in Libya, have challenged this traditional leadership, especially since the discovery of oil and gas.

The discovery of oil and gas in Libya has resulted in the country becoming of growing global importance. After years of occupying a marginal position in the world economy, Libya was able to emerge as a significant economic player with substantial potential and as a possible role model for economic and social development. However, the lack of expertise and financial resources meant that the joint venture became a popular method in most industries in Libya, particularly in the petrochemical industry, owing the substantial benefits it offers, such as access to modern technology and knowledge.

International sanctions slowed the development of the petrochemical industry, but since these were lifted the industry has been able to take advantage of access to modern industrial practices to the benefit of the economy of the country.
After this introductory chapter into Libyan economy, management and petrochemical industry, next chapter focuses on the research methodology, the research design, and the research procedure followed. Thus, this chapter helps to relate the technical aspect of the research to the context. In concluding, this chapter is expected to help to contextualise the empirical results in the later chapter through Libyan cultural context.
Chapter 5

RESEARCH DESIGN AND METHODOLOGY

5.1 INTRODUCTION

Research is essentially the process of examining and finding answers to a problem after a systematic study and analysis of the situational aspects (Locke et al., 2004; Walliman, 2005; Cooper and Schindler, 2006). The word ‘research’ is mainly used to demonstrate a large number of activities and actions, such as collecting a substantial amount of information, delving into esoteric theories and collecting outstanding new insights (Maylor and Blackmon, 2005). This is very much related to the subject matter of this research.

Leaders in organisations continuously engage themselves in studying and analysing issues and thus are involved in some form of research activity as they make decisions to solve problems. Sometimes they make poor decisions and the problem persist, and on occasions they make such enormous mistakes that the organisation gets stuck in more complicated problems (Walliam, 2005).

Since this research studies people and their activities, it captures leadership behaviours as perceived by the employees working in two petrochemical companies, Rasco Oil and Gas Processing Company and Harouge Oil Operations Company; the leadership behaviours (transformational, transactional and lassiez-faire) as practiced by these companies’ leaders; and the impact of these leadership behaviours on the level of job satisfaction of employees in these two companies. However, despite the different definitions of the term ‘research’, there are similarities in terms of procedures and objectives. Sekaran, (2003:5) for example, defines research as “an organised, systematic, data-based critical, objective, scientific inquiry or investigation into a specific problem undertaken with the purpose of finding answers or solutions to it”. Creswell, (2003:65) refers to similar issues as “any organised inquiry that is carried out in order to provide information that can be used to solve problems”.

The difficulty of measuring constructs such as leadership behaviour and job satisfaction makes an examination of methodological issues particularly important.
This chapter presents all the steps that were conducted in order to achieve the objectives for the study. The previous chapters presented the theoretical framework of the study as a whole. In this chapter, the research design and the method of carrying out the study are explained in greater detail. The chapter further explains the population of the study, the research instruments employed and their validity and reliability, data analysis, the procedures followed and the method of data analysis. Ethical considerations and confidentiality aspects are also addressed.

5.2 RESEARCH QUESTIONS AND HYPOTHESES

The general aim of this study is to explore the relationship between perceived leadership behaviours (transformational, transactional and lassiez-faire) exhibited by Rasco’s and Harouge’s leaders and the impact of these behaviours on the level of job satisfaction of their employees. After identifying the research process in the preceding sections, this section provides the constructed hypothesis in making the research operational. The following six research questions (RQ) and six associated null hypotheses ($H_0$) have been created to address this aim:

**RQ1.** As perceived by the employees of Rasco and Harouge, what kind of leadership behaviour is adopted by the leaders of these two companies?

**$H_01$.** The leadership behaviour adopted by the two companies’ leaders is not transformational, transactional or lassiez-faire.

**RQ2.** Do Rasco’s and Harouge’s employees perceive their leaders’ leadership behaviour as transformational, transactional or lassiez-faire?

**$H_02$.** The leadership behaviour perceived by the two companies’ employees is not transformational leadership.

**RQ3.** Is there any significant difference in the perceived leadership behaviours and job satisfaction between the two companies’ employees?

**$H_03$.** There is no significant relationship between the perceived leadership behaviours and job satisfaction between the two companies’ employees.
**RQ4.** What is the level of job satisfaction of the two companies’ employees and is there any significant difference in employees’ job satisfaction levels between the two companies?

**H₀⁴.** The level of job satisfaction of the two companies’ employees is low, and there is slightly difference in the level of the job satisfaction between the two companies’ employees.

**RQ5.** How far do the employees’ demographic characteristics such as gender, age, marital status, number of dependents, educational attainment, job classification, job grade, and tenure influence their perceived leadership behaviour to job satisfaction?

**H₀⁵.** There will be no significant differences in the job satisfaction of employees in the two companies based on their demographic characteristics, namely, gender, age, marital status, number of dependents, educational attainment, job classification, job grade, and tenure.

**RQ6.** How far do job satisfaction extrinsic factors such as working conditions, communication, co-workers, fairness, supervision, promotion, and pay influence their perceived leadership behaviour to job satisfaction?

**H₀⁶.** There will be no significant relationship between work conditions, supervision, co-workers, fairness, promotion, and pay with job satisfaction amongst employees in the two companies.

### 5.3 RESEARCH NATURE AND DESIGN

Research comes in a number of forms and the contributors to scientific research have different views regarding types of research. Depending on the nature of the research, some divide the types of research into basic and applied research. Others divide research, into empirical research and theoretical research, according to the methods that have been used to conduct the research.

*Empirical research* refers to research based on or guided by the results of observation or experiment only. It relates to reaching a conclusion based on the experiments and observation made by the researcher from the facts and figures collected. A large amount of academic research conducted today is based on empirical techniques which holds true for the physical and natural worlds, as well as the social world. The
rationale behind this bias for empiricism is a philosophical assumption that evidence, as opposed to thought or discourse, is required to make a satisfactory claim to add to the body of knowledge (Remenyi et al., 1998).

*Theoretical research* is the study of research based on others’ observations and previous theories. A research theorist studies the subject through the writings of others and through discourse with informed individuals who can comment on the subject area, usually without any direct involvement in the observation of behaviour and the collection of actual evidence (Remenyi et al., 1998).

The theorist then reflects on these ideas and uses his or her intellectual capabilities to construct a new or different view of the situation, which sometimes may be regarded as a new theory. At the end of the theorist’s work, conclusions are also drawn and a claim is made that the researcher has added to the body of knowledge. Research can also be classified on the basis of the structure of the problem to be solved into exploratory, descriptive and casual research (Silverman, 2005).

An *exploratory research* design is used when, for example, the research problem is badly understood. The variables of the problem are not known and it is the lack of this knowledge which makes it difficult for the researcher to conduct his or her research. Exploratory research explores the parameters of the problems in order to identify what should be measured and how best to undertake a study.

As to the *descriptive research* design, its objective is to portray an accurate profile of individuals, events or situations (Saunders et al., 2007). This research method is used when the problem is structured and well understood. In descriptive research the researcher is aware of one of the variables of the problem which makes it easier for him or her to solve the problem. The researcher is aware of the goal to be achieved which gives him or her certain direction to conduct the research.

Another research design is *causal research*; here the problems are also well structured. However, in contrast to descriptive research, the researcher is additionally confronted with ‘cause-and-effect’ problems. The emphasis is laid on studying a situation or a problem in order to explain the relationships between variables (Saunders et al., 2007).
Reflecting the research categories, it can be concluded that the research in this study is very much an explorative research as there is no material available on the subject matter in the cases studied, and hence it is the aim of this study to reveal all these.

As regards to the research design, there are large number of research designs and methods from which a researcher can choose. However, the selection of a proper research design depends mainly on the nature of the aim and objectives, as well as the questions that the study seeks to answer (De Vaus, 2001).

Choosing an appropriate research design is very important as it is considered to be the main element in conducting the study. This is because it essentially works to organise the study’s aim and objectives, rational and conditions, as well as the nature of the information and the data required for carrying out the study. Yin, (2003: 20) confirms this view by stating that:

“Selecting a research design is a key decision for research planning, for the design serves as the architectural blueprint of a research project. It ensures that the data collection and analysis activities used to conduct the study are tied adequately to the research questions and that the complete agenda will be addressed”

According to Zikmund (2003) a research design has two meanings. First, a research design can be defined as the preparation of any systematic research from the first to the last step. It is, thus, a plan to direct the researcher in gathering, analysing and interpreting observed data. Very often this process is described as research management or planning. A second and more specific definition of a research design is that it is a specification of the most relevant operations to be performed in order to test specific hypothesis under given conditions.

Sekaran (2003) argues that research studies in general can be divided into ‘exploratory’ or ‘descriptive’ studies. She further argues that the nature of the study, whether it is exploratory or descriptive, depends on the level of understanding the research topic has advanced. The design decision become more accurate as we proceed from the exploratory stage where is to explore new areas of organisational research, to the descriptive stage where we try to describe certain characteristics of the phenomenon on which interest centres. A case study, which is an examination of
studies done in other similar organisational situations, is also a method of solving problems, or for understanding phenomena of interest and generating further information in that area (Kyburz-Graber, 2004).

An exploratory study is the preliminary study of an unfamiliar problem about which the researcher is not quite familiar. It is carried out to gain a degree of familiarity required to intelligently generate new ideas or to formulate a research problem. In addition, this method of research needs to be carried out quickly and without too much expense. Therefore, such research relies primarily on a review of the available literature and secondary sources of data (Babbie, 2004).

A descriptive study is a fact finding investigation carried out with the objective of ascertaining and describing some aspect of the subject or area under study as it exists at present. This kind of study concentrates on collecting a detailed field data of things as they exist, with limited stress on analysis. The analysis in this type of study consists mostly of ordering and classifying variables rather than finding relationships between different variables (Charmoz, 2005).

A case study is also considered as part of the main research design. According to Yin, (2003:123) a case study is “an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident”. A case study relates to an in-depth observation of a situation or a place. As defined by Welman et al. (2005:145) a case study is “an extensive study, description and analysis of a person, group, or organisation from which theory can be derived or by which theory can be tested”. Furthermore, a case study helps to give a greater and deeper understanding of the problem at hand due to the relationship built between the researcher and the organisation being researched over a period of time.

As regards to the advantages of a case study, this method of research provides first hand and complete information of the issue as it involves direct observation of a variety of aspects, unlike other data collection methods such as surveys. A large sample size need not be taken. As to the disadvantages of a case study, the results of the case study can be biased at times. The researcher’s own beliefs about the issue can influence his or her direction of the findings and conclusions. In addition, since the
researcher spends a lot of time observing and interacting with the respondents, the respondents may influence the researcher’s viewpoint. In general, case studies are also expensive and time consuming.

In terms of research design, this research is a survey-based explorative case study of an empirical nature. Firstly, it is a case study as it focuses on two large petrochemical companies in Libya. Secondly, collecting primary data through a survey method means that it is survey based. Thirdly, the methodology used is empirical. Lastly, this study aims to explore the nature of the leadership prevailing in the Libyan petrochemical industry, and hence it is also an explorative study.

5.4 RESEARCH PROCESS

Figure 5.1 below provides a diagrammatic explanation of the research process followed in this study.

Figure 5.1: Research Process
5.5 RESEARCH METHODOLOGY

The term methodology in its original and proper usage refers to “the systematic and logical study of the principles guiding scientific and philosophical investigation” (Ghauri et al., 2002: 425). It also refers to the selection of such methods, in advance of an investigation, that are considered likely to be appropriate and successful (Cooper and Schindler, 2006).

However, Silverman (2005) argues that methodology should mean the study of methods, but is often used simply to mean ‘method’, as in the ‘methodology of social science’. If there is a subject then there is a method of investigation to be determined by it. However, there may be more than one method used to solve a research problem, and in this case it is possible to speak of methodology as a discipline which attempts to describe the method which best achieves the required result. In short, methodology is a system of explicit rules and procedures on which research is based and against which claims of knowledge are evaluated (Blumberg et al., 2005).

Research methodology can mainly be classified into two: qualitative and quantitative research. Since the framework of this study is related to analysing the perceptions and opinions of the participants in relation to social reality (which in this case is leadership related and satisfaction related issues), this research is constructed according to qualitative methodology. In other words, the philosophical nature of this study indicates that it is a qualitative research methodology based study, as it approaches the subject matter through an understanding of the participants. It is also the case that this research establishes relationships between variables and tests them through the socially constructed opinions and perceptions explored and explained.

5.6 RESEARCH METHOD: DATA COLLECTION METHODS

According to Sekaran (2003) data collection in the research design is a challenge to the social science researcher because of people’s rational, historic and normative characteristics. The application of a valid measuring instrument to different groups under different circumstances is required to lead to the same observations. The choice of data collection methods depends on the facilities available, the degree of accuracy
required, the expertise of the researcher, the time span of the study, and other costs and resources associated with and available for data gathering.

5.6.1 Research Method Approaches

Research method related approaches can be categorised as qualitative and quantitative, which are both similar and different in a number of ways (Blaikie, 2000).

In this regard Walliman (2005) argues that the two methods are similar on the ground that both approaches require a definition of problems, statement of research questions, collection and analysis of data. In addition, Locke et al. (2004) state that theory is used in both quantitative and qualitative methods, but in different ways: qualitative research may develop theories after generating a hypothesis while quantitative research tests theories.

5.6.1.1 Qualitative research methods

Qualitative research is often based on techniques of data collection which are flexible and sensitive to the social context in which data is produced. It uses methods of analysis and explanation-building that involves an understanding of complexity, detail and context (Berg, 2007).

According to Silverman (2005) qualitative research provides the dominant instrument for research in business and management topics, including management and marketing. It is one of the two major approaches to research methodology in social sciences today and is a body of research techniques which seeks insights through loosely structured, mainly verbal data rather than measurements. Silverman further argues that qualitative research is sometimes said to have as its goal an understanding of the sample studied, rather than generalising from the sample to the population.

5.6.1.2 Quantitative research methods

According to McMillan and James (2001) quantitative research is one of the research methodologies which relies heavily on numbers in reporting results, sampling and provision of estimated instrument, reliability and validity. In addition, Babbie (2004)
asserts that central to the quantitative research method is the investigation and understanding of the relationship between variables.

Since this study is looking at the relationship between leadership behaviours and job satisfaction, this method was considered to be the most suitable for the realisation of the aim of the study.

As the researcher’s intention was to avoid interfering with the two companies’ activities during the study, the quantitative survey method was found to be the most appropriate. The quantitative method is also considered appropriate because it uses the survey in collecting data from a wide area by selecting a representative sample of a large population compared to the qualitative method which uses a case study, selecting a few individuals or phenomena, which in most cases will not represent the entire population. Therefore, the researcher believes that the quantitative method is an effective method to collect the necessary data for this research as it reflects the various leadership behaviours the leaders practice, and the impact of these behaviours on the level of the job satisfaction of the employees in the two companies under investigation.

Coupled with this is the argument that the quantitative research method is in line with scientific principles, which is believed to be the most appropriate way to obtain accurate information through the use of instruments. In other words, the quantitative research method to a large extent reduces the chances of personal biases affecting the phenomena under study as it allows minimal interaction between the researcher and the subjects.

5.6.1.3 Advantages and disadvantages

Both qualitative and quantitative research methods look for reliability and objectivity. Those who favour quantitative methods rely on statistical techniques aided by computational algorithms and software packages, whilst qualitative researchers view transcripts, interview recordings, notes of focus groups or participant research. It is important to recognise the advantages and disadvantage of both types of research methods. In addition, quantitative methods have an objective approach, where data is controlled and measured, to address the gathering of evidences to determine the
causes of behaviour. Furthermore, qualitative methods view data from another’s perspective and in so doing attempt to find understanding and meaning (Flick, 2002; Cramer, 2003; Berg, 2007).

In contrast, quantitative researchers try to identify and separate particular variables covered within the study structure; they search for correlation and relationships between variables. Qualitative researchers have a more holistic approach and will study documents and case histories and carry out observations and interviews. Their data is collected within the context of its natural occurrence (Maxwell, 2005; Silverman, 2005; Henn et al., 2006).

A quantitative-descriptive research design was used in this study to examine the relationship between the leadership behaviours (transformational, transactional and lassiez-faire) and job satisfaction of employees in Rasco and Harouge companies. The central line of the enquiry is an examination of the leadership behaviours adopted by the two companies’ leaders and how far these behaviours could be correlated with the level of job satisfaction of their employees. Furthermore, the moderating effect of the employees’ demographic variables to the relationship between leadership behaviours and job satisfaction were explored.

The following data collection procedures were followed:

a) A covering letter was prepared explaining the aim of the research, the confidentiality of the responses and instructions for completion. (Please refer to Appendix A).

b) A demographic questionnaire was drawn up containing questions on the variables: gender; age; marital status; number of dependents; job grade; job classification; educational level; and tenure.

c) A Multifactor Leadership Questionnaire (MLQ) was sent to leaders with two to fifteen employees.

d) Both the leaders and their employees were asked to complete the questionnaire anonymously and return them directly to the researcher.
e) MLQ comprises a leader questionnaire and rater questionnaires. The leaders who received the questionnaires were instructed to complete the leader questionnaire themselves and distribute the rater questionnaire to their employees.

f) JSS questionnaires were given only to the employees of the relevant leaders to complete in order to measure their level of job satisfaction. They were also asked to return the questionnaire directly to the researcher.

The following paragraphs discuss the different data collection methods.

5.6.2 Collecting Primary Data

Primary data are the “information obtained firsthand by the researcher that has specific application to the current research problem” (Malhotra et al., 2002: 120). In other words, the primary data are gathered for the purpose of carrying out the current research task and with a certain purpose in mind (Hair et al., 2003). The data set is not owned by anyone else other than the researcher.

It should be noted that primary data depend heavily on the ability of the researcher to determine the context in which the data are best collected (Henn et al., 2006). Primary data can be gathered by several techniques. This choice of method depends on the reason for the research, the resources on hand and the abilities and skills of the researcher (Kumar, 2005). However, primary data are made up of material that the researcher gathers, such as the results of questionnaires and interviews, organised observations, surveys, information from archives, and case studies.

It should be mentioned that this type of data can also be very hard to gain access to. Therefore, the unexpected limitations and difficulties may influence or even obstruct competent data collection (Ghauri and Gronhaug, 2002).

5.6.2.1 Interview

Interviewing is a commonly used method of collecting information from people, and it is considered to be the most widely applied method for gathering information and collecting large amounts of data very rapidly (Thomas, 2003; Miller and Brewer, 2003; Punch, 2005; Kumar, 2005; Blumerg et al., 2005). Furthermore, “interviews are associated with both positive and phenomenological methodologies. They are a
method of collecting data in which selected participants are asked questions in order to find out what they do, think or feel. Interviews make it easy to compare answers and may be face-to-face, voice-to-voice or screen-to-screen; conducted with individuals or a group of individuals” (Collis and Hussey, 2003:167).

Interviews can be generally classified into structured and unstructured interviews. Structured interviews involve tight control over the format of the questions and answers. In essence the structure interview is like a questionnaire which is administrated face to face with a respondent. The researcher has a predetermined list of questions, to which the respondent to offer limited option responses (Miller and Salkind, 2002).

In contrast, unstructured interviews are informal and used to find our comprehensive area of concern in more detail (Welman et al., 2005). It is more evolving in nature as the questions depend upon the interviewees’ responses. Initially the interviewer does have a number of planned questions in mind but they can be melded depending upon the responses. The strength of the unstructured interviews is the almost complete freedom they provide in terms of content and structure (Kumar, 2005).

It should be noted that due to the nature of this research, interview was not considered as a useful method for data collection.

5.6.2.2 Observation

Individuals can be observed in their work environment or in the lab setting and their activities and behaviours or other areas of interest can be noted and recorded (Saunders et al., 2007). Apart from the activities performed by the employees under study, their movements, work behaviour, the statements made and meetings conducted by them, their facial expressions of joy, anger, and other emotions, and body language can be observed. Other environmental factors such as layout, workflow patterns, the closeness of the seating arrangements, and so on can also be noted. In addition, the data obtained through observation as they normally occur are generally more reliable and free from respondent bias. It is also easy to notice the consequence. For this method of data collection it is necessary for the observer to be physically present (unless a camera or another mechanical system can capture the
events of interest). This method of collecting data is not only slow, but also boring and expensive; also observers have to be trained in what and how to observe, and ways to avoid observer bias. It should also be noted that since this research is quantitative research, observation was not used as a method for data collection.

### 5.6.2.3 Questionnaires: Quantitative method

Social science research often utilizes questionnaire as one of the main data gathering process. According to Sekaran (2003: 210) “a questionnaire is a performulated written set of questions which respondents record their answers, usually within rather closely defined alternatives”. Due to the aim of the study, this research mainly utilizes questionnaire for data collection purpose. This is rationalized in the following sections and therefore questionnaire-related issues are discussed in detail in the following sections. Questionnaires can be administrated personally, mailed to the respondents or electronically distributed, and it is less costly than interviewing a vast number of respondents. Questionnaires also secure participants’ anonymity (Dessler, 2000).

#### 5.6.2.3.1 Types of questionnaires

Collis and Hussey (2003:173) define a questionnaire as “a list of carefully structured questions, chosen after considerable testing, with a view to eliciting reliable responses from a chosen sample. The aim is to find out what a selected group of participants do, think or feel”

Sekaran (2003) states that questionnaire can be categorized into main groups. The first group is called self-administrated questionnaire; these are often completed by the respondents. This type of questionnaire is delivered and returned via three main methods: online questionnaire (where the e-mail or internet can be used); postal questionnaire (questionnaire are posted and returned via post); and delivered and collection questionnaire (questionnaires are handed in and picked up personally). The second group is called interviewer-administrated questionnaire and is divided into two essential categories. The first category includes the telephone questionnaire, which involves contacting the respondents and administrating the questionnaire over the phone. The second category is termed the structured interview, which involves interviewing respondents face to face, employing questionnaires.
There are advantages and disadvantages of the questionnaire, which will be discussed next.

5.6.2.3.2 Advantages and disadvantages of questionnaire method

Questionnaire is the best technique for collecting data when dealing with a survey that is confined to a local area. This method of data collection ensures a high response rate within a short period of time.

Using this method also gives the researcher the chance to introduce the research topic and motivates the individual participant in the survey. Another advantage associated with the questionnaire is that it is less expensive in term of costs and less time consuming than interviewing, and it requires fewer skills to administer than to conduct interviews (Sekaran, 2003). A related advantage of mail survey questionnaires is that they can reach inaccessible areas. When people to be surveyed are spread geographically, a questionnaire may be the obvious method for making contact since interviews could well be expensive and impractical.

Major advantages of this method are the low cost of data collection when compared with interview surveys and the low cost of processing. When dealing with respondents who request complete confidentiality when answering the questions, the mail questionnaire is again the best method.

Using the mail survey will also result in the elimination of the major problem associated with interview survey, namely, interviewer error and bias (Collis and Hussey, 2003). In addition, a mail questionnaire allows for more time when questions need consideration rather than an immediate answer, especially if the answer requires the consultation of documents. Moreover, the mail questionnaire is considered to be least demanding in terms of its implementations, such as staffing requirements, compared with all other methods (Oppenheim, 2000).

In contrast there are some disadvantages attached to the mail questionnaire. The mail questionnaire can be used as an instrument for data collection only when the question are straightforward enough to be comprehended solely on the basis of printed instruction and definitions (Sekaran, 2003). Another disadvantage is the low response
rate in general. For many mail questionnaire surveys, the response rates are much lower than for personal interviews. As no personal contact is involved, mail questionnaires have difficulty in coping with boring questions and non-response items, and there is no opportunity to correct misunderstanding or to offer explanation or help (Oppenheim, 2000).

The response rate is very important in any survey and it is the proportion of replies to a number of questionnaires that really matters, not just numbers. One must also be careful not to overload a questionnaire with too many complicated questions. Each respondent can look through the whole of the questionnaire before even answering the first question, and if it seems too complicated, then the response may well be lost altogether. Also, in reading through all the questions, the respondent may read into the whole questionnaire certain implications that were never intended.

There are times when the method most appropriate to achieve the objectives of a study cannot be used because of constraints such as a lack of resources and or required skills (Saunders et al., 2007). However, it was found that the questionnaire technique was most appropriate to the research questions and objectives because it provided an efficient way of collecting responses from a large sample prior to quantitative analysis.

Collis and Hussey (2003) maintain that using a questionnaire, as a research method is advantageous in the sense that it generates results that can be readily generalised to the target population from which the sample was drawn. A questionnaire can also help to gain insight into the leadership behaviours of the leaders and the level of job satisfaction that exists among the employees in the two companies under investigation. Therefore, this research utilised close-ended questions as a style of questionnaire. In addition, the Likert scale formatting based on five categories for MLQ and six categories for JSS were utilised.

5.6.3 Secondary Data

Secondary data are information that have been previously gathered for some reason other than the problem at hand (Hakim, 2000; Zikmund, 2003). In addition, secondary data are obligatory for most organisational research. This includes information
collected by somebody other than the researcher carrying out the present research (Sharp et al., 2002; Sekaran, 2003).

It is absolutely essential that secondary data be gathered first, as these can provide helpful background information that can be used to define the research, develop goals, and determine the right methodology (Polonsky and Waller, 2005). Blumberg et al. (2005) confirm that data from secondary sources give outstanding background information about the research area as well as many excellent leads. They assist the researcher to decide what should be done and can be available source of hypotheses.

In the present research, extensive literature was reviewed on the relatively new concepts of transformational, transactional and lassiez-faire leadership behaviours and job satisfaction. Documentary secondary data, such journals, books, business reports, national government reports, studies of organisations, publications of various organisations and institutions regarding their industry and historical studies concerning the development of certain disciplines or problem areas were the main focus. It was necessary that the data met the following criteria: contemporary, written in English and, most importantly, it concerned the three factors of leadership behaviours (transformational, transactional and lassiez-faire) and job satisfaction.

For this study the researcher found literature available at Durham University Library, in conjunction with the library’s on-line system giving access to the internet, particularly useful when conducting the secondary research. Furthermore, the researcher consulted several other libraries, including the libraries of Teesside University, Newcastle upon Tyne University and London Business School, in order to explore what had been published on leadership behaviours and job satisfaction. The publications included a large number of textbooks, journals and articles covering the area of research which had to be reviewed. Consequently, it became obvious that much research had been conducted in this topic.

Furthermore, as the study examines the relationship between leadership behaviours and their impact on the level of job satisfaction, it was necessary to review some issues relating to this topic, such as the administrative regulations, motivation policies, joint venture agreements’ conditions and rules in the country itself. It is for this reason that the researcher visited the National Oil Corporation (NOC), which is
responsible for the Libyan petrochemical industry, in order to acquire a clear understanding of the rules and regulations governing these aspects.

5.7 ADMINISTERING THE QUESTIONNAIRE

This section brings together of the various aspects of conducting questionnaire for this particular research by identifying the details of the administration process.

5.7.1 Sample Size

Leary (2004:118) defines sampling as: “the process by which a researcher selects a sample of participants for a study from the population of interest.”

The purpose of sampling is to enable researchers to estimate some unknown characteristic of the population. Three factors are required to specify sample size: a) variance or heterogeneity of the population; b) magnitude of acceptable error; and c) confidence level (Zikmund, 2003).

The sample for this study is drawn from a population of 5,421 full-time employees, 3,821 from Rasco (state owned) and 1,600 from Harouge (joint venture with Petro Ex-Canada). The companies were chosen on a simple probability basis out of a nine state owned companies and eight joint venture companies constituting the sub-population.

5.7.2 Sampling Frame

As defined by Zikmund (2003:373) “a sampling frame is the list of elements from which the sample may be drawn”. For this study, the sampling frame comprised leaders and the followers in the companies in question: 70 or 20% of the 340 leaders, and 280 or 8% of the 3481 followers at Rasco Company, and 40 or 33% of the 120 leaders and 110 or 7% of the 1480 followers for Harouge Company.

5.7.3 Administering the Questionnaire

Rasco and Harouge companies were chosen because they were the key, largest petrochemical companies in Libya and also because they had long investment experience in the Libyan market. In addition, the companies selected employed a large number of local personnel. Different levels (head of departments, managers,
division heads, supervisors, co-workers) and various department and administrations (such as, information technology systems, maintenance, drilling, engineering, materials, services, training, personal affairs and financial management (see tables 6.2, 6.3) in each company were targeted in order to include in the survey the entire workforce and to guarantee that any finding were based on data coming from as wide a range as possible of parties concerned.

Large numbers of the questionnaires were personally distributed and collected, while some of the questionnaires were delivered via the assistance of some friends working for the two companies under investigation who had a good internal relationship with many important personnel in the two companies. They were given certain instruction before they started the distribution processes in order to make sure that the all the questionnaires were distributed to various levels and departments in the companies targeted.

The questionnaire process conducted in July 2009 and takes around two months for the researcher to accumulate and compile the data in the respective localities of the companies concerned. The study generated an 86.12% response rate (96 % for Rasco and 76.25% for Harouge), which is mean that the quantitative data may be generalised to other companies in this industry. The questionnaire were collected and checked for completion and then analysed.

5.7.4 Translation of the Questionnaire

The main version of the questionnaire was designed in English. Before distributing the first questionnaire to the local personnel, it was necessary to translate it into Arabic as it was intended to be answered by Libyans and the level of their English was not such as to allow them to understand and answer the questions in English. Therefore, the researcher took great pains in order to produce the most accurate translation and one that was understandable, taking into consideration such matters as lexical meaning (the exact meaning of individual words), grammar and syntax (the correct use of language), and experiential meaning. To ensure this, the translation process was conducted by a translation agency in Libya and further checked and reviewed by specialised staff members from Al-Tahadi University in Libya (the researcher’s sponsor for his PhD programme) in order to ensure that all the terminology,
vocabulary and language used in the English edition were translated in a way easily comprehensible to the Libyan respondents (Please refer to Appendix F).

5.8 RESEARCH METHOD: QUESTIONNAIRE DESIGN

For the purpose of this study a quantitative methodology was employed and structured questionnaire was used as the data collection method. The data gathering techniques used included a Demographic Questionnaire, MLQ and the JSS. (Please refer to Appendices B, C, and D respectively for the sample of questionnaire forms).

These data collecting instruments are explained in great detail below.

5.8.1 Demographic Questionnaire

A self-developed questionnaire was used to obtain demographic information relevant to the sample. Participants in the two companies were asked to provide information with regard to their age, gender, marital status, number of dependents, occupational class, highest educational level obtained, job grade, and years of service employed.

5.8.2 Multifactor Leadership Questionnaire (MLQ)

After the extensive review of the literature on leadership presented in chapter two, it was argued that the full range leadership (transformational, transactional and lassiez-faire) theory is an appropriate theoretical construct of leadership for this research (Bass et al., 2006).

The development, rationale, description, administration, interpretation, validity and reliability of the MLQ as well as the reason for choosing it are discussed below.

5.8.2.1 Development

The MLQ was initially developed by Bass (1985) of the Centre for Leadership Studies at Binghamton University of America. There have been several revisions to the MLQ since 1985; the previous models fell short of explaining a ‘full-range’ of leadership behaviours. The full range model of leadership was developed to broaden the range of leadership behaviours (Avolio and Bass, 1991). Consequently, the MLQ was
considered to be the most common and widely used instrument to assess the full range of leadership behaviours.

5.8.2.2 Rationale

The MLQ was developed to expand the scope of leadership measured in surveys. This paradigm builds on earlier leadership models such as autocratic versus democratic, directive versus participative and task versus relationship oriented leadership (Bass and Avolio, 2006).

In addition, the MLQ represents a broad range of leadership behaviours, and differentiates between ineffective and effective leaders. It also focuses on individual behaviours observed by associates at an organisational level that transform individuals and organisations (Bass, 2008).

5.8.2.3 Description and interpretation

The newly revised version of MLQ questionnaire was used for this research study in effort to capture a broader range of leadership behaviours including transformational, transactional and lassiez-faire leadership (Northouse, 2004; Avolio and Bass, 2006).

The MLQ has been revised several times over the past three decades to address the criticism surrounding its components factors, such as the instability of MLQ factors and multicollinearity among transformational leadership scales (Bass, 2008).

An extensive testing with the use of various statistical methods was performed by the original instrument developers and to add and delete items, which led to the development of the current MLQ version (Antonakis et al., 2003; Bass and Avolio, 2006).

The MLQ contains 45 descriptive items, and uses a 5 point 0-4 Likert scale. The anchors used to evaluate the MLQ factors are presented as follows: 0 = not at all, 1 = once in awhile, 2 = sometimes, 3 = fairly often, and 4 = frequently, if not always (Avolio and Bass, 2006). Thirty six items represent nine leadership factors and nine
items assess three leadership outcomes scales. MLQ constructs and their descriptions are presented in Table 5.1.

**Table 5.1 Leadership Constructs (Transformational and Transactional) and Descriptions Relating to the Specific Construct in the MLQ**

<table>
<thead>
<tr>
<th>Leadership Construct</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Idealised Influence (Behaviour and Attributes)</td>
<td>Leaders exhibiting idealised influence leadership behaviour are admired, respected, and trusted. They shares risks with followers and are reliable in conduct with underlying ethics and values</td>
</tr>
<tr>
<td>Inspirational Motivation</td>
<td>Inspirational motivational leaders behave in ways that inspire those around them by providing meaning and challenge to their follower’s work. They encourages them to think about attractive future, which they can ultimately imagine for themselves</td>
</tr>
<tr>
<td>Intellectual Stimulation</td>
<td>These leaders stimulate their followers’ effort to be inventive and creative by questioning assumptions, reframing problems, and approaching old situations in new ways</td>
</tr>
<tr>
<td>Individual Consideration</td>
<td>Individual considerations’ leaders pay attention to each follower’s need for achievement and growth by acting as a coach or adviser. Individual differences in terms of needs and desires are recognised</td>
</tr>
<tr>
<td>Contingent Reward</td>
<td>Transactional contingent reward leadership simplifies expectations and suggest appreciation when goals and objectives are achieved. The clarification of goals and providing of recognition once goals are achieved should result in followers achieving expected levels of job satisfaction and performance</td>
</tr>
<tr>
<td>Management-by-Exception (Active)</td>
<td>The leader specifies the standards for compliance, as well as what constitutes ineffective performance, and may punish followers for being out of compliance with those standards</td>
</tr>
<tr>
<td>Management-by-Exception (Passive)</td>
<td>Another form of management-by-exception leadership is more passive and &quot;reactive&quot;: it does not respond to situations and problems systematically. These leaders most of the times do not intervene in any interactions with their followers in the working day activities</td>
</tr>
<tr>
<td>Laissez-Faire Leadership (Avoidant Behaviour)</td>
<td>Laissez-faire leadership behaviour is similar to passive behaviour. Both have negative impacts on followers. Accordingly, both behaviours can be grouped together as 'passive-avoidant leadership'</td>
</tr>
<tr>
<td>Satisfaction with leadership behaviour</td>
<td>Transformational, transactional and lassiez-faire leadership behaviours are related to the success of the followers. Success is measured with the MLQ by how satisfied followers are with their leader's methods of working with others</td>
</tr>
</tbody>
</table>

*Source: Compiled from Avolio and Bass (1991); Antonakis et al., (2003) and Bass (2008)*
For the purpose of this study, 45 items were used. These items represent and measure the key aspects of transformational, transactional and laissez-faire leadership constructs, and satisfaction as an outcome of leadership behaviours. Scores below 1 indicate a non leadership or laissez-faire behaviour; scores of 2.5 and below indicate a transactional leadership behaviour, namely, constructive transactions, management by exception (passive and active) and corrective transactions (contingent reward); and scores of 3 and above indicate transformational leadership behaviour, namely, intellectual stimulation, idealised influence, inspirational motivation and individual consideration (Bass and Avolio, 1997).

Each component or dimension has four items linked to it in the questionnaire by which it is assessed. Averaging the responses of the items concerned scores each component or dimensions. The MLQ scales scores are average scores for the items on the scale. If an item is left blank, the total for the scale is divided by the number of items answered (Avolio et al., 2004).

The MLQ consists of two versions; one for the leader to complete, and one for the raters or followers of the leaders to complete. The leaders complete a questionnaire describing their own leadership behaviour, whilst the raters (followers) complete a questionnaire regarding the leadership behaviour of their specific leaders. These two versions consist of exactly the same statements, except that they are written from different perspectives. These two versions are known as the ‘leader version’ and ‘rater version’ respectively.

In this research, leader versions were completed by supervisors, division heads, department’s managers, general managers, and consultants in the sample. Between 2 and 15 rater versions of the MLQ were completed by their followers, depending on the number of followers reporting to the relevant supervisor division headed, manager, general manager and consultant. The leader respondents were asked to complete the MLQ leader version by scoring each individual question on a scale from 0 to 4. Similarly the rater respondents were asked to complete the MLQ rater version by scoring each individual question on a scale from 0 to 4.

5.8.2.4 Reliability and validity of the MLQ
Reliability “is the extent to which a measuring instrument produces consistent results if repeated measurements are made” (Malhotra et al., 2002: 56). The MLQ offers such a measure; it is based on an elegant conceptual framework and it is confirmed by rigorous research, is easy to use and is widely known in various leadership literatures (Antonakis et al., 2003; Avolio and Bass, 2004). The current version of MLQ is a valid and reliable instrument that can adequately measure the full-range leadership theory (Antonakis et al., 2003).

Since leadership is a multidimensional construct, Bass and Avolio (2006) suggest that the MLQ will never account for all possible leadership dimensions. However, it serves as a foundation for further research and understanding of new models of leadership. The coefficient alpha reliability coefficient for the MLQ rater form scales yield a range of 0.71 to 0.96, using Spearman Brown’s reliability formula.

The test-retest reliability for MLQ survey over a six-month period was computed for the factor scales using data collected on 33 middle-to-upper-level leaders employed by a Fortune 500 firm for the MLQ. The test-retest reliabilities ranged from 0.44 to 0.74 for the self-rating and 0.53 to 0.85 for the ratings of others. In addition, Bass and Avolio (2004) point out that the reliabilities reported possibly underestimated the true test-retest reliabilities of the scales, since the group of leaders used in the analysis did receive team development and individual training during the six-month interval.

The validity of the MLQ is consistent with MLQ (rater version survey). There are generally high and positive correlations among the five transformational leadership scales, and between contingent reward and each of the five transformational leadership scales. The average inter-correlation among the five transformational scales is 0.83 versus 0.71 for the five transformational scales with ratings of contingent reward leadership (Avolio et al., 1995).

This provides evidence supporting the scales of transformational leadership as comprising a higher order construct than transactional leadership of contingent reward. A high correlation between transformational scales and contingent reward, a transactional scale, is expected because all are active, positive forms of leadership demonstrated consistently by leaders.
In summary, the MLQ has been used extensively in various organisations and industries, which have demonstrated stable reliability results. Thus, its administration at all levels across production and service organisations. Given this record of reliability and validity the researcher felt confident and justified in utilising the MLQ in this research study.

5.8.2.5 Motivation for using the MLQ

It was decided to use the MLQ because the range of ineffective and effective leadership behaviour in the MLQ. MLQ is a broader than other leadership surveys commonly in use. Therefore, this measuring instrument is more suitable for administrating all levels of organisations and across different types of organisations, as well as predicting leader behaviour (Bass, 2008). The full range of leadership behaviours as measured by the MLQ implies that every leader displays frequency of the transformational, transactional and laissez-faire behaviours, but each leader’s profile involves more of one and less of the other.

5.8.2.6 Advantages of MLQ

The following considers the advantages of the MLQ as raised by Bass and Avolio (2000).

The MLQ represents an effort to capture a broad range of leadership behaviours from laissez-faire to idealised leadership, while also differentiating ineffective from effective leaders. It is also focuses on individual behaviours observed by associates at any organisational level that transform employees and organisations. The questionnaire also assesses leadership behaviours that motivate and satisfy employees to achieve agreed upon and expected levels of performance and productivity.

At the ineffective end of the range, the MLQ assesses perceptions of leadership behaviours that represent avoidance of responsibility and action. This is named laissez-faire leadership. At the most effective end of the range, the MLQ assesses perceptions of leadership behaviours that generate the higher order of developed and performance effects. This is named transformational leadership.
The MLQ can also be used for ratings of leaders from employees or direct reports in any organisation or industry. In addition, considerable evidence has been accumulated indicating that the MLQ factors can be universally applied across cultures. It should be noted that even clients or customers can serve as sources of MLQ ratings. Furthermore, another principal advantage of the MLQ over other leadership surveys is its emphasis on development. The survey includes items that measure a leader’s effect on both the personal and intellectual development of self and others.

The model points to a leader’s performance on a range of leadership behaviours and to the directions he or she may pursue to be a more effective leader. Perhaps most important, the full range model links each leadership behaviours to the expected level of job satisfaction and performance outcomes, which is supported by a large number of studies (Dum et al., 2002; Bass et al., 2006).

As with any leadership survey, there will always be some limitations. The main criticism running through a large amount of studies using the MLQ is that the self-perception of the leaders answering the questionnaire may be different from the judgement of the leaders’ employees regarding them. A mechanism to address this concern is not included in the testing of the MLQ. The reason for this is, as would be expected, employees estimations of their leaders’ qualities fall lower than those of the leaders’ themselves (Bass et al., 2006).

In a study by Avolio et al. (1999) the possibility that MLQ scores are biased by social desirability, that leaders will rate themselves as leaders based on what they perceive the more desirable answers to be, is looked into. The conclusion reached in his study is to the negative, that social desirability does not many bias score; nonetheless, it is still a concern for testers.

In the specific case of the present study, the employees’ satisfaction might have played a part in determining the leaders’ quality of leadership. This lack of a more sound system of objectivity in the present sample does not threaten the study’s internal validity; however, it might threaten the study’s external validity or generalsability to other samples and populations (Lievens et al., 2001).
While other studies have used the MLQ, Maher (2004) examines the validity and reliability of the instrument and found the MLQ to be the current best instrument for measuring full range of leadership theory. It is her recommendation that all tests be continually advanced to reduce the psychometric limitations and allow for other instruments beyond the MLQ to jointly assess leadership.

### 5.8.3 Job Satisfaction Questionnaire

In fulfilling the research aims of this study, job satisfaction questionnaire was also conducted. Spector (2000) argues that measuring job satisfaction is difficult as it is an abstract personal cognition that exists only in an individual’s mind.

To measure job satisfaction, one must have a conceptual understanding of the construct in order to decide what indirect factors to measure. Since there is no single agreed upon definition of job satisfaction and no widely accepted theory to explain it, it is no surprise that there is also no general consensus on the best way to measure job satisfaction (Spector, 1997).

The most basic forms of measurement might include an interview, or a workplace observation; however, most researchers choose for questionnaires as a more objective and in-depth survey instrument (Spector, 2008).

Questionnaires are easily distributed, have less room for bias, have increased likelihood of confidentiality, and require much less time and money than one-on-one interviews (Pedhazur and Schmelkin, 1991; Silverman, 2005).

The most widely cited survey instruments found in the literature include:

a) Job Descriptive Index (JDI)

b) Minnesota Satisfaction Questionnaire (MSQ)

c) Job Diagnostic Survey (JDS)

d) Job-In-General Scale (JIG)

e) Job Satisfaction Survey (JSS).
5.8.3.1 Job Descriptive Index

The Job Descriptive Index (JDI) was created by Smith et al. (1969) and is the most popular measure of job satisfaction. It measures five components of job satisfaction: promotion opportunities, pay, work environment, supervision and co-workers. According to Cooper and Locke (2000: 172), the JDI is “reliable and has an impressive array of validation evidence behind it”.

5.8.3.2 Minnesota Satisfaction Questionnaire

Another popular job satisfaction scale is the Minnesota Satisfaction Questionnaire (MSQ) which was developed by Weiss et al. (1967). Robbins (2005) states that the MSQ has the advantage of adaptability in that both long and short forms are available. It also makes provision for faceted as well as overall measures.

5.8.3.3 Job Diagnostic Survey

The Job Diagnostic Survey (JDS) was developed by Hackman and Oldham (1975) to study the effects of job characteristics on employees (Spector, 1997; 2000). The JDS covers several areas of job satisfaction such as growth, pay, security, social, supervisor and global satisfaction.

5.8.3.4 Job-In-General Scale

The Job-In-General Scale (JIG) has been designed to measure overall job satisfaction rather than facets. According to Spector (1997:18) “overall job satisfaction is not the sum of individual facets; it should rather be managed by using a general scale like the JIG”.

5.8.3.5 Job Satisfaction Survey

Literature suggests the best measurement of job satisfaction is the Job Satisfaction Survey (JSS) (Bryman, 2004; Robbins, 2005; Mullins, 2007). This tool has been heavily researched since the 1980s and remains a highly effective as well as valid and reliable tool.
Vroom et al. (1988) regard the JSS as one of the more cautiously constructed measures of job satisfaction in existence. The demographic pairings in the JSS were hourly workers vs. salaried workers; male vs. female; and leadership vs. non-leadership. The longevity and refinement of the JSS since the 1980s has strengthened its validity as well as reliability.

The second survey instrument employed in this study is therefore the JSS. The description, rationale for inclusion, interpretation, validity and reliability of the JSS as well as the motivation for using it are discussed below.

5.8.3.5.1 Description

Spector (1985) developed the JSS which is based on Herzberg’s two-factor theory of job satisfaction, with the objective of developing a tool for measuring job satisfaction. This was accomplished by using attitude scale construction techniques with summated (Likert) rating scales.

Spector’s method for developing the JSS is presented in this section. The statements in this survey are categorised according to a set of nine subscales composed of similar statements in each respective subscale. These nine subscales are: a) pay satisfaction; b) promotion satisfaction; c) supervision satisfaction; d) fringe benefits satisfaction; e) contingent rewards satisfaction; f) operating conditions satisfaction; g) co-workers satisfaction; h) nature of work satisfaction; and i) communication satisfaction. An example of survey items from the JSS is presented in Table 5.2.
<table>
<thead>
<tr>
<th>Facet</th>
<th>Item no</th>
<th>Item Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pay Satisfaction</td>
<td>1</td>
<td>I feel I am being paid a fair amount for the work I do</td>
</tr>
<tr>
<td></td>
<td>10r</td>
<td>Raises are too few and far between</td>
</tr>
<tr>
<td></td>
<td>19r</td>
<td>I feel I am being paid a fair amount for the work I do</td>
</tr>
<tr>
<td></td>
<td>28</td>
<td>I feel satisfied with my chances for salary increases</td>
</tr>
<tr>
<td>Promotion Satisfaction</td>
<td>2r</td>
<td>There is really too little chance for promotion on my job</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>Those who do well on the job stand a fair chance of being promoted</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>Employees get ahead as fast here as they do in other organisations</td>
</tr>
<tr>
<td>Supervision Satisfaction</td>
<td>3</td>
<td>I am satisfied with my chances for promotion</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>My supervisor is quite competent in doing his or her job</td>
</tr>
<tr>
<td></td>
<td>12r</td>
<td>My supervisor is unfair to me</td>
</tr>
<tr>
<td></td>
<td>21r</td>
<td>My supervisor shows too little interest in the feelings of employees</td>
</tr>
<tr>
<td>Fringe Benefits Satisfaction</td>
<td>4r</td>
<td>I am not satisfied with the benefits I receive</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>The benefits we receive are as good as most other organisations offer</td>
</tr>
<tr>
<td></td>
<td>22</td>
<td>The benefit package we have is equitable</td>
</tr>
<tr>
<td></td>
<td>29r</td>
<td>There are benefits we do not have which we should have</td>
</tr>
<tr>
<td>Contingent Rewards Satisfaction</td>
<td>5</td>
<td>When I do a good job, I receive the recognition for it that I should receive</td>
</tr>
<tr>
<td></td>
<td>14r</td>
<td>I do not feel that the work I do is appreciated</td>
</tr>
<tr>
<td></td>
<td>23r</td>
<td>There are few rewards for those who work here</td>
</tr>
<tr>
<td></td>
<td>32r</td>
<td>I don't feel my efforts are rewarded the way they should be</td>
</tr>
<tr>
<td>Operating Conditions Satisfaction</td>
<td>6r</td>
<td>Many of our rules and procedures make doing a good job difficult</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>My efforts to do a good job are seldom blocked by red tape</td>
</tr>
<tr>
<td></td>
<td>24r</td>
<td>I have too much to do at work</td>
</tr>
<tr>
<td></td>
<td>31r</td>
<td>I have too much paperwork</td>
</tr>
<tr>
<td>Co-Workers Satisfaction</td>
<td>7</td>
<td>I like the employees I work with</td>
</tr>
<tr>
<td></td>
<td>16r</td>
<td>I find I have to work harder at my job because of the incompetence of employees I work with</td>
</tr>
<tr>
<td></td>
<td>25</td>
<td>I enjoy my co-workers</td>
</tr>
<tr>
<td></td>
<td>34r</td>
<td>There is too much bickering and fighting at work</td>
</tr>
<tr>
<td>Nature of Work Satisfaction</td>
<td>8r</td>
<td>I sometimes feel my job is meaningless</td>
</tr>
<tr>
<td></td>
<td>17</td>
<td>I like doing the things I do at work</td>
</tr>
<tr>
<td></td>
<td>27</td>
<td>I feel a sense of pride in doing my job</td>
</tr>
<tr>
<td></td>
<td>35</td>
<td>My job is enjoyable</td>
</tr>
<tr>
<td>Communication Satisfaction</td>
<td>9</td>
<td>Communications seem good within this organisation</td>
</tr>
<tr>
<td></td>
<td>18r</td>
<td>The goals of this organisation are not clear to me</td>
</tr>
<tr>
<td></td>
<td>26r</td>
<td>I often feel that I do not know what is going on with the organisation</td>
</tr>
<tr>
<td></td>
<td>36r</td>
<td>Work assignments are not fully explained</td>
</tr>
</tbody>
</table>

*Note: Numbers with r are reverse coded*

*Source: Spector (1997)*
5.8.3.5.2 Rationale for inclusion of the JSS

JSS is specifically designed for the public sector and non-profit organisations although it is also applicable to other organisations (Spector, 2000). The scale is intended to cover major aspects of job satisfaction with subscales that are clearly different in the content. The development of the JSS was predicted on the hypothesis that job satisfaction represents an affective or attitudinal response to a job. It is also designed to give an overall attitude score as a combination of individual facets (Mullins, 2007).

5.8.3.5.3 Interpretation

In order to measure the various scores, the individual items need to be summed together. The answers to the JSS items are numbered from 1 to 6. Respondents can therefore have a score from 1 to 6 for each item. Items might be worded negatively or positively. A negatively worded item indicates dissatisfaction, while positively worded item is one for which agreement indicates job satisfaction. Thus, respondents who agree with positively worded items and disagree with negatively worded items will have high scores representing satisfaction. Respondents who disagree with positively worded items and agree with negatively worded items will have low scores representing job dissatisfaction (Spector, 1997). In order to accurately score the responses, the negatively worded item responses need to be reversed. After the items have been reversed, the numbered responses for the appropriate items are summed. The total satisfaction score is the sum of all thirty-six items (Spector, 1997).

5.8.3.5.4 Validity of the JSS

Validity refers to whether the measuring instrument measures what it is supposed to (Bless and Higson-Smith, 1995). With regard to the validity of the JSS, five of the subscales, namely, pay, promotion, supervision, co-workers and nature of work, correlate well with corresponding subscales of Smith et al.’s (1969) Job Description Index (JDI). These correlations range from 0.61 to 0.80 for supervision (Spector, 1997).
The JSS also correlates with a number of scales and variables associated with other job satisfaction scales, including job characteristics as assessed by the Job Diagnostic Survey (JDS), age, organisational level, absenteeism, organisational commitment, leadership practices, intention to quit the job and turnover (Spector, 2000).

5.8.3.5.5 Reliability of JSS

In the study by Spector (1997) a sample of 3067 individuals completed the JSS and the coefficient alphas ranged from 0.60 for the co-worker subscale to 0.91 for the total scale. According to Bryman (2004) the accepted minimum standard for internal consistency is 0.80, thus implying that the co-worker subscale is somewhat lower than expected. Secondly, the test-retest reflects the reliability of the scale. The reliabilities varied from 0.37 to 0.74.

5.8.3.5.6 Motivation for using the JSS

Taking into account the items and subscales that needed to be measured in this study, the researcher regarded the JSS as the most suitable measure of job satisfaction. Moreover, the content of the scale was applicable for the study. JSS is also chosen because of the norms available and the internal consistency.

Spector (2000) used a sample size of 25,321. The mean for each area, as well as the total score, were available. Norms were also available for the public sector where the sample size was 15,666. The internal consistency (coefficient alpha) for the total score was 0.91. Individual consistency is also considered when selecting this instrument; the supervision facet has a reliability of 0.82. This is particularly important because it is the area most related to this study.

5.9 QUESTIONNAIRE DATA PROCESSING: VARIABLES AND MEASUREMENT

Statistical analysis is used by the researcher to help make sense out of the observations that have been collected. In this study, the Statistical Package for Social Sciences (SPSS) version 17.0 was utilised to compute descriptive and inferential statistics following the methods described in detail by Field (2009).
As the researcher had no experience of using the SPSS package, it was necessary to study several sources related to the package, as well as to look for training courses in order to use this program effectively. Therefore, the researcher joined a training course in Quantitative Research Methods organised by Dr Mehmet Asutay at the School of Government and International Affairs, Durham University, and delivered by Dr Ercument Aksak from Durham University’s Business School. This course lasted for eight sessions from 25 October 2009 to 17 February 2010, and covered numerous topics, such as defining, entering, editing data and methods of analysing data, saving and printing data, selecting and running commands from the menus, examining, saving, printing results, creating new variables and selecting cases. Consequently, all the data collected from the respondents at the Rasco and Harouge companies using the JSS and MLQ were aggregated into one SPSS file. The first stage of statistical analysis using SPSS required the measurement levels of named variables to be specified as quantitative (scale or interval) or categorical (ordinal or nominal). The operational levels of the variables also needed to be defined as dependent or independent (Field, 2009).

5.9.1 Definition of Variables

All the data collected from the respondents at the two companies were aggregated into one SPSS data file. The first stage of statistical analysis using SPSS required the measurement levels of named variables to be specified as quantitative (scale or interval) or categorical (ordinal or nominal). The operational levels of the variables also needed to be defined as dependent (DV) or independent (IV) for purposes of statistical analysis (Field, 2009).

The dependent variables (DVs) collected using the MLQ constructs which include idealized influence behaviour (IIB), idealised influence attribute (IIA), inspirational motivation (IM), intellectual stimulation (IS), individual consideration (IC), contingent reward (CR), management by exception active (MbE) and Management by exception Passive (MbE). Job Satisfaction Survey (JSS) consisted of measurements of specified constructs of job satisfaction which include: pay satisfaction (PSAT), promotion satisfaction (PROSAT), supervision satisfaction (SUPSAT), fringe benefits satisfaction (FRISAT), contingent rewards satisfaction (CORSAT), operating
conditions satisfaction (OPCSAT), co-workers satisfaction (COSAT), and communications satisfaction (COMMSAT) based on Likert type scales, all of which were scored in the same logical direction from low to high (Tables 5.3 and 5.4).

The JSS required 18 of the 36 items to be reverse scored for this reason. Likert type scales are not strictly measured at the scale/interval level (e.g., a response coded as 4 is not exactly four times greater than a response coded as 1).

Although considered to be controversial by some statisticians, numerically coded responses based on Likert type scales are commonly analyzed by social scientists if they are measured at the scale/interval level, so that parametric statistics such as the mean, standard deviation, t tests, analysis of variance (ANOVA), correlation, and regression are applicable. It is assumed that the intervals between each point on a Likert-scale are approximately equal for the purposes of statistical analysis (Tabachnik and Fidell, 2007).

The independent variables (IVs) consisted of demographic characteristics describing mutually exclusive groups of respondents (Table 5.5). The six nominal variables consisted of qualitative characteristics (Respondent, Company, Gender, Marital Status, Educational Qualifications, and Job classification) that could not be ranked into a logical numerical order. Each attribute was coded with a number in the SPSS data editor, but only as a convenient label for purposes of statistical analysis. The numbers assigned to each attribute did not represent their relative ranks in a hierarchy. The four ordinal variables (Age, Number of dependents, Job Grade, and Tenure) consisted of groups of characteristics that could be ranked into a logical numerical order, but the interval between each level of the numerical code was not necessary equal.
Table 5.3 Quantitative Variables Measured at the Scale or Interval Level Concerning Specified Leadership Constructs in the MLQ

<table>
<thead>
<tr>
<th>Construct</th>
<th>SPSS variable name</th>
<th>Item No.</th>
<th>Construct</th>
<th>SPSS variable name</th>
<th>Item No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transformational: Idealised Influence</td>
<td>IIB</td>
<td>6</td>
<td>Transactional: Management by Exception (Active)</td>
<td>MbE Active</td>
<td>4</td>
</tr>
<tr>
<td>(Behaviour)</td>
<td></td>
<td>14</td>
<td></td>
<td></td>
<td>22</td>
</tr>
<tr>
<td></td>
<td></td>
<td>23</td>
<td></td>
<td></td>
<td>24</td>
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<tr>
<td></td>
<td></td>
<td>34</td>
<td></td>
<td></td>
<td>27</td>
</tr>
<tr>
<td>Transformational: Idealised Influence</td>
<td>IIA</td>
<td>10</td>
<td>Transactional: Management by Exception (Passive)</td>
<td>MbE Passive</td>
<td>3</td>
</tr>
<tr>
<td>(Attributed)</td>
<td></td>
<td>18</td>
<td></td>
<td></td>
<td>12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>21</td>
<td></td>
<td></td>
<td>17</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25</td>
<td></td>
<td></td>
<td>20</td>
</tr>
<tr>
<td>Transformational: Inspirational</td>
<td>IM</td>
<td>9</td>
<td>Non-leadership: Laisses-Faire</td>
<td>LF</td>
<td>5</td>
</tr>
<tr>
<td>Motivation</td>
<td></td>
<td>13</td>
<td></td>
<td></td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
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<td>28</td>
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<td></td>
<td></td>
<td>36</td>
<td></td>
<td></td>
<td>33</td>
</tr>
<tr>
<td>Transformational: Intellectual</td>
<td>IS</td>
<td>2</td>
<td>Satisfaction with leadership</td>
<td>SAT</td>
<td>38</td>
</tr>
<tr>
<td>Stimulation</td>
<td></td>
<td>8</td>
<td></td>
<td></td>
<td>41</td>
</tr>
<tr>
<td></td>
<td></td>
<td>30</td>
<td>Extra effort</td>
<td>EE</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>42</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Effectiveness</td>
<td>EF</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>40</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>45</td>
</tr>
<tr>
<td>Transformational: Individual</td>
<td>IC</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consideration</td>
<td></td>
<td>19</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>31</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transactional: Contingent Reward</td>
<td>CR</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>11</td>
<td></td>
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<td></td>
<td>16</td>
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<tr>
<td></td>
<td></td>
<td>35</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*The items in each construct are scored in one logical direction using a 4 point scale (0 = Not at all, 1 = Once in a while; 2 = Sometimes; 3 = Fairly Often; 4 = Frequently, if not always).

Source: Data analysis
Table 5.4 Quantitative Dependent Variables (DV) Measured at the Scale/Interval Level Concerning Specified Constructs Concerning Job Satisfaction in JSS

<table>
<thead>
<tr>
<th>Construct</th>
<th>SPSS variable name</th>
<th>Item No. a</th>
<th>Item Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pay satisfaction</td>
<td>PSAT</td>
<td>1</td>
<td>I feel I am being paid a fair amount for the work I do</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10r</td>
<td>Raises are too few and far between</td>
</tr>
<tr>
<td></td>
<td></td>
<td>19r</td>
<td>I feel I am being paid a fair amount for the work I do</td>
</tr>
<tr>
<td></td>
<td></td>
<td>28</td>
<td>I feel satisfied with my chances for salary increases</td>
</tr>
<tr>
<td>Promotion satisfaction</td>
<td>PROSAT</td>
<td>2r</td>
<td>There is really too little chance for promotion on my job</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11</td>
<td>Those who do well on the job stand a fair chance of being promoted</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20</td>
<td>People get ahead as fast here as they do in other places</td>
</tr>
<tr>
<td></td>
<td></td>
<td>33</td>
<td>I am satisfied with my chances for promotion</td>
</tr>
<tr>
<td>Supervision satisfaction</td>
<td>SUPSAT</td>
<td>3</td>
<td>My supervisor is quite competent in doing his or her job</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12r</td>
<td>My supervisor is unfair to me</td>
</tr>
<tr>
<td></td>
<td></td>
<td>21r</td>
<td>My supervisor shows too little interest in the feelings of subordinates</td>
</tr>
<tr>
<td></td>
<td></td>
<td>30</td>
<td>I like my supervisor</td>
</tr>
<tr>
<td>Fringe benefits satisfaction</td>
<td>FRISAT</td>
<td>4r</td>
<td>I am not satisfied with the benefits I receive</td>
</tr>
<tr>
<td></td>
<td></td>
<td>13</td>
<td>The benefits we receive are as good as most other organisations offer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>22</td>
<td>The benefit package we have is equitable</td>
</tr>
<tr>
<td></td>
<td></td>
<td>29r</td>
<td>There are benefits we do not have which we should have</td>
</tr>
<tr>
<td>Contingent rewards satisfaction</td>
<td>CORSAT</td>
<td>5</td>
<td>When I do a good job, I receive the recognition for it that I should receive</td>
</tr>
<tr>
<td></td>
<td></td>
<td>14r</td>
<td>I do not feel that the work I do is appreciated</td>
</tr>
<tr>
<td></td>
<td></td>
<td>23r</td>
<td>There are few rewards for those who work here</td>
</tr>
<tr>
<td></td>
<td></td>
<td>32r</td>
<td>I don't feel my efforts are rewarded the way they should be</td>
</tr>
<tr>
<td>Operating conditions satisfaction</td>
<td>OPCSAT</td>
<td>6r</td>
<td>Many of our rules and procedures make doing a good job difficult</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15</td>
<td>My efforts to do a good job are seldom blocked by red tape</td>
</tr>
<tr>
<td></td>
<td></td>
<td>24r</td>
<td>I have too much to do at work</td>
</tr>
<tr>
<td></td>
<td></td>
<td>31r</td>
<td>I have too much paperwork</td>
</tr>
<tr>
<td>Co-workers satisfaction</td>
<td>COWSAT</td>
<td>7</td>
<td>I like the people I work with</td>
</tr>
<tr>
<td></td>
<td></td>
<td>16r</td>
<td>I find I have to work harder at my job because of the incompetence of people I work with</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25</td>
<td>I enjoy my co-workers</td>
</tr>
<tr>
<td>Nature of work satisfaction</td>
<td>NATSAT</td>
<td>8r</td>
<td>I sometimes feel my job is meaningless</td>
</tr>
<tr>
<td></td>
<td></td>
<td>17</td>
<td>I like doing the things I do at work</td>
</tr>
<tr>
<td></td>
<td></td>
<td>27</td>
<td>I feel a sense of pride in doing my job</td>
</tr>
<tr>
<td></td>
<td></td>
<td>35</td>
<td>My job is enjoyable</td>
</tr>
<tr>
<td>Communication satisfaction</td>
<td>COMMSAT</td>
<td>9</td>
<td>Communications seem good within this organisation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>18r</td>
<td>The goals of this organisation are not clear to me</td>
</tr>
<tr>
<td></td>
<td></td>
<td>26r</td>
<td>I often feel that I do not know what is going on with the organisation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>36r</td>
<td>Work assignments are not fully explained</td>
</tr>
</tbody>
</table>

The items denoted with “r” are reverse coded so that each construct is scored in one logical direction using a 6 point scale (1 = Disagree very much; 2 = Disagree moderately; 3 = Disagree slightly; 4 = Agree slightly; 5 = Agree moderately; 6 = Agree very much)

Source: Data analysis
The demographic variables consisted of characteristics describing mutually exclusive groups of respondents (Table 5.5).

**Table 5.5 Variables Measured at the Nominal or Ordinal Level to Describe the Demographic Characteristics of the Respondents, and to Classify them into Mutually Exclusive Groups for Purposes of Statistical Analysis**

<table>
<thead>
<tr>
<th>Variable</th>
<th>SPSS variable name</th>
<th>Level</th>
<th>Numerical code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company</td>
<td>COMPANY</td>
<td>Nominal</td>
<td>1 = Rasco</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 = Harouge</td>
</tr>
<tr>
<td>Respondent</td>
<td>RESPONDENT</td>
<td>Nominal</td>
<td>1 = Rater (employee) at Rasco</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 = Leader at Rasco</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3 = Rater (employee) at Harouge</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4 = Leader at Harouge</td>
</tr>
<tr>
<td>Age</td>
<td>AGE</td>
<td>Ordinal</td>
<td>20 &lt; 21 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>21 = 21-30 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>31 = 31-40 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>41 = 41-50 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>51 = 51-60 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>61 &gt; 60 years</td>
</tr>
<tr>
<td>Gender</td>
<td>G</td>
<td>Nominal</td>
<td>5 = Male</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>6 = Female</td>
</tr>
<tr>
<td>Marital status</td>
<td>MS</td>
<td>Nominal</td>
<td>3 = Single</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4 = Married</td>
</tr>
<tr>
<td>Number of dependents</td>
<td>ND</td>
<td>Ordinal</td>
<td>1 = 1 dependent</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 = 2 dependents</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3 = 3 dependents</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4 = 4 dependents</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5 = 5 dependents</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>6 &gt; 5 dependents</td>
</tr>
<tr>
<td>Educational qualifications</td>
<td>EDQ</td>
<td>Nominal</td>
<td>7 = Diploma</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>8 = Bachelor’s degree</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>9 = Master’s degree</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>10 = Doctorate</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>11 = Other</td>
</tr>
<tr>
<td>Job classification</td>
<td>JC</td>
<td>Nominal</td>
<td>12 = Consultant</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>13 = General Manager</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>14 = Manager</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>15 = Head of Division</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>16 = Supervisor</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>17 = Co-worker</td>
</tr>
<tr>
<td>Job Grade</td>
<td>JG</td>
<td>Ordinal</td>
<td>18 = Grade 6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>19 = Grade 7</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>20 = Grade 8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>21 = Grade 9</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>22 = Grade 10</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>23 = Grade 11</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>24 = Grade 12</td>
</tr>
<tr>
<td>Tenure</td>
<td>T</td>
<td>Ordinal</td>
<td>25 &lt; 1 year</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>26 = 1-5 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>27 = 6-10 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>28 = 11-15 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>29 = 16-20 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>30 &gt; 20 years</td>
</tr>
</tbody>
</table>

*Source: Data analysis*
The six nominal variables consisted of qualitative characteristics (company, gender, marital status, educational qualifications, and job classification) that could not be ranked into a logical numerical order. Each attribute was coded with a number in the SPSS data editor, but only as a convenient label for purposes of statistical analysis. The numbers assigned to each attribute did not represent their relative ranks in a hierarchy. The four ordinal variables (age, number of dependents, job grade, and tenure) consisted of groups of characteristics that could be ranked into a logical numerical order, but the interval between each level of the numerical code was not necessary equal.

5.10 DATA ANALYSIS METHODS: DESCRIPTIVE AND INFERENTIAL STATISTICS

In analysing the data collected for this study, quantitative methods in the form of descriptive and inferential statistics were utilised. While descriptive statistics were used to summarise and categorise data, inferential statistical techniques were utilised to make inferences about populations based upon the analysis of data collected from samples. The inferential statistics were based on null hypotheses, i.e. statements indicating no relationships existed between variables. A null hypothesis predicts that the results of an inferential test are not significant (implying that the data happened only by chance as a result of random variation). The general decision rule was to reject a null hypothesis if the probability (p value) of the appropriate inferential test statistic was less than the prescribed significance level denoted by the symbol \( \alpha \). The conventional significance level used by most researchers is \( \alpha = 0.05 \) which was generally applied in this study. If \( p \leq 0.05 \) then the results were interpreted as statistically significant, but if \( p > 0.05 \) the results were interpreted as not statistically significant. The use of \( \alpha = 0.05 \) implied a ‘1 in 20 chance’ of making a Type I error, i.e. falsely rejecting the null hypothesis when it is, in fact, true.

The results of the inferential tests were interpreted assuming that statistical significance and scientific significance are not equivalent.

The issue of statistical versus scientific significance must be considered with respect to the controversy concerning whether or not the use of null hypothesis significance tests can be justified. Some statisticians assert that null hypothesis significance tests are meaningless and should be banned (Hunter, 1997; Kline, 2004).
It is argued that dichotomous decisions based upon whether or not the $p$ value of an inferential test statistic is less than or greater than a pre-determined level such as $\alpha = 0.05$ may indicate whether the observed data deviate from that which might be expected by chance, but they provide no useful information whatsoever about the scientific significance, practical implications, and meaningfulness of observed data in reality.

The American Psychological Association (APA)’s Task Force on Statistical Inference (Wilkinson, 1999), however, did not support such views, but instead recommended that researchers should always provide effect size estimates when reporting $p$ values for null hypothesis significance tests.

This study supported the APA recommendation, so the effect sizes, indicating the proportion(s) of the variance in the dependent variable(s) explained by the variance in the independent variable(s), were computed and reported. Higher scientific significance was accredited to results with a large effect size. The conventional distinction between ‘small’, ‘medium’ and ‘large’ categories of effect size defined by Cohen (1992) based on the values of $\eta^2$ (for $t$ tests and ANOVA) $R^2$ (for correlation and regression analysis) and Cramer’s $V$ coefficient (for $\chi^2$ analysis) were applied in this study.

5.10.1 Mean and Standard Deviation

The mean and standard deviation are descriptive statistics. The mean defines the central tendency of a variable, and the standard deviation provides a measure of the dispersion of a normally distributed variable either side of the mean value (Hussey and Hussey, 1997).

Means and standard deviations were computed to summarize the information collected using the MLQ and JSS. The normality of the variables was checked visually by constructing frequency distribution histograms and comparing their shapes against bell-shaped curves.
5.10.2 $Z$ and $t$ tests

$Z$ and $t$ tests are based on the null hypothesis that two mean values are equal. The $z$ test statistic is justified if the population standard deviation is known, whilst the $t$ test statistic is applicable if only the sample standard deviation is known.

$Z$ tests were used in this study to compare the responses to the MLQ against the published MLQ norms (assuming the norms were based on population data). The $t$ tests were used to compare mean values based on the data collected from the samples of respondents recruited for this study. The decision rule was to reject the null hypothesis if the $p$ value of the $z$ or $t$ test statistic was $\leq 0.05$.

5.10.3 Analysis of Variance (ANOVA)

According to Tredoux and Durrheim (2002:254) “ANOVA is used to test for differences between the means of more than two groups, and can be used in designs with more than one independent variable”. The null hypothesis is that the means of each group are equal. In the present study, one-way ANOVA (with one independent variable) and multi-factorial ANOVA (with two or more independent variables) were utilised to test for differences between the means of normally distributed dependent variables with respect to the influence of mutually exclusive groups of respondents classified according to their demographic characteristics. The decision rule was to reject the null hypothesis if the $p$ value of the $F$ statistic was $\leq 0.05$. ANOVA only determines if there is an overall difference between three or more means, but does not determine if two means are different. Post hoc multiple comparison tests between pairs of means within independent variables containing more than two groups were therefore applied (Field, 2009).

5.10.4 Multiple Regression Analysis

Multiple regression analysis (MRA) is a multivariate statistical technique that is used for studying the relationship between a single dependent variable and several independent variables (Chatfield, 1993). It provides a method to predict the changes in the dependent variable in response to changes in more than one independent variable. Hence, it allows the researcher to determine the relative importance of each predictor as well as to ascertain the collective contribution of the independent variables (Sekaran, 2003).

MRA was applied to construct statistical models of the form as in the below equation:
Equation 5.1: \( Y = \beta_0 + \beta_1 X_2 + \beta_2 X_2 \ldots \beta_n X_n \pm \epsilon \)

Where \( y \) = the predicted average value of the dependent variable; \( \beta_0 \) = the intercept (the theoretical predicted value of the dependent variable when all the independent variables are zero); \( \beta_1 \ldots \beta_n \) = the partial regression coefficients for independent variables \( X_1 \ldots X_n \); \( n \) = the total number of predictor variable, \( \epsilon \) = residual error.

The null hypotheses were tested that the \( \beta \) coefficients were not significantly different from zero and that \( R^2 \) did not explain a substantive proportion of the variance in the dependent variable using \( t \) test and ANOVA \( F \) statistics (Tabachnik and Fidell, 2007). The decision rule was to reject the null hypothesis if the \( p \) values of the test statistics were \( \leq 0.05 \).

5.10.5 Correlation Analysis

Multiple Linear Regression (MLR) assumes linearity between a quantitative dependent variable and the independent or predictor variables. Linearity implies that the average change in the dependent variable associated with a unit change in a predictor variable is constant. Pearson’s correlation coefficients were used to test for linearity between quantitative variables. The coefficients range in magnitude from \(-1\) to \(+1\). The decision rule was to reject the null hypothesis of zero correlation if the \( p \) value of Pearson’s correlation coefficient \( r \) was \( \leq 0.05 \).

A significant zero order correlation between two variables does not axiomatically imply a meaningful relationship between them, since the correlation may be confounded by the influence of a third variable, termed a mediating variable. The mediating variable is the common cause or mediator of the zero-order correlation.

Partial correlation analysis is the most appropriate method to identify mediating variables (Tabachnik and Fidell, 2007). The partial correlation coefficient measures the strength of the relationship between two variables when the influence of the mediating variable is removed or controlled. Partial correlation analysis was performed in this study to determine if any correlative relationships between two variables were confounded by a mediating variable. The decision rule was to conclude that a variable was acting as a mediator if the partial regression coefficient declined substantially towards zero relative to the zero order correlation coefficient.
It should be noted that Pearson’s correlation analysis is not applicable to categorical variables. \( \chi^2 \) tests for association were performed and Cramer’s \( V \) coefficients were computed to determine if categorical variables (e.g., age groups, job grades, and job classifications) were associated. The decision rule was to reject the null hypothesis of no association if the \( p \) value of the \( \chi^2 \) statistic was \( \leq 0.05 \).

**5.10.6 Exploratory Factor Analysis**

In further exploring and analysing the data, Exploratory Factor Analysis (EFA) was performed using the ‘Dimension Reduction’ facility in SPSS to condense the data matrix constructed from the responses to the JSS classified into respondents (in the rows) and response variables (in the columns) into a smaller number of hypothetical dimensions, conventionally called factors (Tabachnik and Fidell, 2007). The factors were derived from sub-sets of inter-correlated variables which explained specified proportions of the variance in the correlation matrix. The main reason for using EFA was to screen the data for variables that could subsequently be used as reliably measured independent variables to represent job satisfaction in MLR.

Several methods can be used to perform EFA (e.g., principal components and maximum likelihood) and there are several types of rotations that can be done after the initial extraction of factors.

In this study, the factors were extracted using principal components and varimax rotation. Varimax is the most common rotation option because it maximises the variance of the squared loadings of each factor on each variable, which has the effect of widely differentiating the variables with respect to the factor loadings.

Using varimax rotation, each factor usually has either a large or a small loading on each variable and the factor solution is generally easy to interpret (Tabachnik and Fidell, 2007). The loadings represented correlation coefficients between the factors and the variables, so their possible values ranged from -1 to +1. EFA aims to generate hypotheses rather than test them, so the loadings were not associated with \( p \) values and significance levels. The commonly used subjective convention was followed that variables with high factor loadings (\( \geq 0.45 \)) were considered to contribute
significantly to a factor, whilst variables with low loadings (< 0.45) were considered to contribute little or nothing of significance to a factor.

5.10.7 Multiple Discriminant Analysis

In providing sophisticated analysis, Multiple Discriminant Analysis (MDA) was also conducted, with the aim of constructing a predictive model of the group membership of individuals based on two or more predictor variables. The predictor variables are used to construct discriminant functions, which distinguish between two or more groups (Tabachnik and Fidell, 2007).

The purpose of using MDA in this study was to identify the most important predictor variables that distinguished between two groups of employees, specifically those with low levels of job satisfaction and those with high levels of job satisfaction, measured using the JSS. Wilk’s $\lambda$ statistic was used to test the null hypothesis that the discriminant function was not a significant predictor of group membership. The decision rule was to reject the null hypothesis of no association if the p value of the $\lambda$ statistic was $\leq 0.05$.

Standardised canonical correlation coefficients were interpreted to identify the most important predictor variables that discriminated between low and high levels of job satisfaction, after controlling for partial correlations with other variables. The convention that variables with canonical correlation coefficients $< 0.3$ did not contribute much of significance to the discriminant function was applied.

5.10.8 Tests for Theoretical Assumptions

The data analysis methods used in this study, such as $t$ tests, ANOVA, MRA, correlation analysis, EFA, MLR and MDA, are parametric statistics that theoretically assume normally distributed variables. Nevertheless, they are relatively robust in the face of skewed distributions, particularly if the sample sizes are relatively large, as in this study (Tabachnik and Fidell, 2007). Parametric tests are, however, very sensitive to outliers, i.e., extremely large or small values isolated at the left or right hand tails of the frequency distributions. Outliers may be the results of measurement errors or they may represent very unusual cases that deviate excessively from the norm. The inclusion of outliers may bias the results of null hypothesis significance tests to such
an extent that their interpretation is compromised. For this reason, Tabachnik and Fidell (2007) recommend that data must always be screened prior to statistical analysis to determine if outliers are present. Accordingly, each variable in Table 6.1 and 6.2 was screened to identify any variables with $Z$ scores $>\pm 3.0$ (i.e. $>\pm 3$ standard deviations away from the mean).

The $t$ tests, ANOVA and regression analysis assume homogeneity of variance (i.e., the variability in the dependent variable should be equal with respect to each independent variable). If heteroscedasticity or non-homogeneity of variance occurs, then the standard errors are biased, so that the results of hypothesis tests and confidence intervals may be invalid.

Levene’s test was utilised to test the null hypothesis of homogeneity of variance when using $t$ tests and ANOVA in this study. Two types of independent samples $t$ test are available in SPSS, one assumes equal variances in each group, and the other does not (Field, 2009). The equality of variances was checked using Levene’s test. If the $p$ value of Levene’s test statistic was $\leq 0.05$ then the variances were assumed to be unequal. If the $p$ value of Levene’s test statistic was $> 0.05$ then the variances were assumed to be equal.

The appropriate $p$ value for the $t$ test was reported, depending upon the results of Levene’s test. When using one-way ANOVA, Welch’s correction was applied to compensate for unequal variances (Field, 2009).

If the variances were unequal when using multi-factorial ANOVA, then the prescribed significance level was reduced from the conventional $\alpha = 0.05$ down to $\alpha = 0.025$ in order to compensate for the influence of unequal variances on magnitude of the $F$ test statistic (Field, 2009). SPSS does not support a formal statistical test for homogeneity of variance in regression, but it can be tested graphically (Field, 2009). Hence, scatter plots of the residuals versus the predicted values were constructed. Consequently, homogeneity of variance was concluded if the residuals were randomly and relatively evenly scattered around their mean (zero) value. If the scatter plots displayed a definite geometric pattern (e.g., a line, curve, cloud, diamond, or wedge shape) indicating that the variance varied systematically with respect to the predicted values, then non-homogeneity of variance was concluded.
The independent variables in a multiple regression model should not be collinear, *i.e.*, strongly correlated with each other. Collinearity increases the values of the standard errors, which biases the significance levels of the regression coefficients. Consequently, the regression coefficients of collinear predictor variables may not be statistically significant even when they are linearly related to the dependent variable and even if the $R^2$ and $F$ statistics are significant. Collinearity was checked for the purposes of this study using variance inflation factor (VIF) statistics. A threshold VIF statistic of $\geq 3.3$ was applied to indicate collinearity (Tabachnik and Fidell, 2007).

Factor Analysis and Discriminant Analysis have numerous assumptions (Tabachnik and Fidell, 2007). They are most effective when the sample size is high. The rule of thumb is a minimum of about 20 cases for each variable. This study complied with the sample size requirement, assuming the data for the two companies were combined.

Categorical variables (*e.g.* age, gender, job grade, and job classification) cannot be used in EFA or MDA. The variables should ideally be normally distributed and measured at the scale or interval level, although some ordinal variables were used in this study. Deviations from normality are not as serious as the inclusion of outliers, and consequently all outliers were excluded prior to analysis. However, the variables should not be very highly correlated with another (*e.g.* with Pearson’s $r$ coefficients $> 0.8$) otherwise there may be no unique discriminant or factor solutions.

### 5.11 ETHICAL CONSIDERATIONS

Similar to any other research, this research has some ethical considerations as well. According to De Vos *et al.* (2005:57) the term ethics means “preferences that influence behaviour in human relations”. Ethics is mostly associated with morality and deals with issues of right and wrong among groups, societies or communities. It is therefore important that everyone involved in research should be aware of ethical concerns (Babbie, 2004). This section briefly outlines some of the broadly agreed-upon norms in ethical research.

In doing so, it explains the most important aspects of ethical research and how these aspects were put into operation in the current research study. Throughout the process
of data collection the problem of persuading participants to co-operate with the researcher is ever present.

According to Bless and Higson-Smith (1995:74) the ethical rights of a participant are: the “right to privacy; participation is voluntary; anonymity; and confidentiality”. They further argue that participation in research often disrupts the subject’s regular activities and can possibly assault the person’s privacy. Furthermore, participants should not be subjected to research of such a nature unless they have agreed to it.

With respect to confidentiality, participants must be assured that the data will only be used for the stated purposes of the research and that no other person will have access to the research data (Babbie, 2004). In an effort to ensure confidentiality, all names and addresses should be removed from all questionnaires and replaced with identification numbers (Babbie and Mouton, 2001).

In terms of the present study, the leaders requested that their names and the names of their employees to be excluded from the study, and that a policy of confidentiality be adhered to. All completed questionnaires were coded and names of respondents were erased to ensure this. The relevant employees were very forthcoming with confidential information and assistance, and it was agreed that the research data would be used solely for the purpose of the research. In addition, an agreement was reached with the two companies’ Human Resource’ Managers that no information would be made public without their prior consent, and after they had been provided with the opportunity to view the findings of this research.

5.12 CONCLUSION

This chapter has sought to raise a number of important issues that surround the research methods used. It began by defining the term ‘research’, indicating that research is the process of discovering and analysing information in order to answer a question about a certain problem. This chapter further discussed quantitative and qualitative research and showed that quantitative research uses statistical technique programs as tool for obtaining findings and results.
Data are collected from two main sources, secondary and primary. For this research primary data collected through two sets of questionnaires which offer information not otherwise obtainable and accessible to the searcher. Therefore, researching primary data is multifaceted and demands much effort. An overview of the data collection method was then given. Each of the two instruments, MLQ and JSS used in this research, as well as their reliability and validity, were then discussed in detail, and the statistical analysis of hypotheses was highlighted. Also included within this chapter were the ethical considerations that needed to be taken into account when doing the actual research and data gathering.

The previous chapters discussed the theoretical background of the research topic, and this chapter discusses the research process and methods of obtaining both the relevant information and the subsequent results. The following chapter will present the results obtained from the analysis conducted in an attempt to test the research hypothesis.
Chapter 6

LEADERSHIP BEHAVIOURS AND THEIR IMPACT ON
JOB SATISFACTION IN LIBYAN PETROCHEMICAL
INDUSTRY: EMPIRICAL DATA ANALYSIS

6.1 INTRODUCTION

This chapter focuses on the results obtained, based on the empirical analyses conducted to test the research hypotheses. The descriptive statistics calculated for the sample are provided in the following sections. That is, the data relating to the variables included in the study as collected by the two measuring instruments, the Multifactor Leadership Questionnaire (MLQ) and the Job Satisfaction Survey (JSS) are summarised by calculations of the descriptive measures. In this manner, the properties of the observed data clearly emerge and an overall picture thereof is obtained. The descriptive and inferential statistics generated for the conjectured relationships are presented and discussed.

6.2 DESCRIPTIVE STATISTICAL ANALYSIS

Tables 6.1 to 6.3 describe the response rates with respect to the companies and departments in which the respondents worked.

Table 6.1 Total Survey Response Rates for the Two Companies

<table>
<thead>
<tr>
<th></th>
<th>Rasco</th>
<th></th>
<th>Harouge</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Leaders</td>
<td>Raters</td>
<td>Total</td>
<td>Leaders</td>
</tr>
<tr>
<td>Population</td>
<td>340</td>
<td>3481</td>
<td>3821</td>
<td>120</td>
</tr>
<tr>
<td>Sample</td>
<td>70</td>
<td>280</td>
<td>350</td>
<td>40</td>
</tr>
<tr>
<td>Responses Returned</td>
<td>70</td>
<td>271</td>
<td>341</td>
<td>35</td>
</tr>
<tr>
<td>Responses Completed</td>
<td>68</td>
<td>266</td>
<td>334</td>
<td>29</td>
</tr>
<tr>
<td>Response Rates</td>
<td>97%</td>
<td>95%</td>
<td>96%</td>
<td>72.5%</td>
</tr>
</tbody>
</table>

Source: Data analysis
Table 6.2 Survey Response and Rates from Harouge Company’s Departments

<table>
<thead>
<tr>
<th>Management Committee Office</th>
<th>Followers</th>
<th>Leaders</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sent</td>
<td>Returned</td>
</tr>
<tr>
<td>1. Internal Audit Unit</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>2. Legal and Contracts Unit</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>3. Loss Prevention Unit</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>4. Planning Unit</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Finance and Administration Dept</td>
<td>Followers</td>
<td>Leaders</td>
</tr>
<tr>
<td></td>
<td>Sent</td>
<td>Returned</td>
</tr>
<tr>
<td>1. Training Unit</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>2. Employee Relations Unit</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>3. Materials Unit</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>General Services Department</td>
<td>Followers</td>
<td>Leaders</td>
</tr>
<tr>
<td></td>
<td>Sent</td>
<td>Returned</td>
</tr>
<tr>
<td>1. Transportation Unit</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>2. Services Unit</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>3. Aviation Unit</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>4. Benghazi Office Unit</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Operations Department</td>
<td>Followers</td>
<td>Leaders</td>
</tr>
<tr>
<td></td>
<td>Sent</td>
<td>Returned</td>
</tr>
<tr>
<td>1. Operations Unit</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>2. Maintenance Unit</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>Engineering Department</td>
<td>Followers</td>
<td>Leaders</td>
</tr>
<tr>
<td></td>
<td>Sent</td>
<td>Returned</td>
</tr>
<tr>
<td>1. General Engineering Unit</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>2. Reservoir and Production Unit</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>3. Drilling Unit</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Technical Services Department</td>
<td>Followers</td>
<td>Leaders</td>
</tr>
<tr>
<td></td>
<td>Sent</td>
<td>Returned</td>
</tr>
<tr>
<td>1. Information Technology Unit</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>2. Archive and Information Unit</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>3. Communication Unit</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Exploration Department</td>
<td>Followers</td>
<td>Leaders</td>
</tr>
<tr>
<td></td>
<td>Sent</td>
<td>Returned</td>
</tr>
<tr>
<td>1. Geology Unit</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>2. Geophysics Unit</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>TOTAL</td>
<td>110</td>
<td>88</td>
</tr>
</tbody>
</table>

Note: Dept: Department.

Source: Data analysis
Table 6.3 Survey Response Rates from RASCO Company’s Departments

| Management Committee Office | Followers |  | Leaders |  |
|-----------------------------|-----------|--------------------------------|-----------|
|                             | Sent      | Returned | %        | Sent      | Returned | %    |
| 1. Internal Audit Unit      | 2         | 2        | 100      | 1         | 1        | 100  |
| 2. Legal and Contracts Unit | 1         | 1        | 100      | 1         | 1        | 100  |
| 3. Loss Prevention Unit     | 12        | 10       | 83       | 4         | 3        | 75   |
| 4. Quality Unit             | 4         | 3        | 75       | 2         | 2        | 100  |
| 5. Tripoli Office           | 4         | 4        | 100      | 1         | 1        | 100  |
| 6. Benghazi Office          | 3         | 3        | 100      | 1         | 1        | 100  |

| General Manpower Department | Followers |  | Leaders |  |
|-----------------------------|-----------|--------------------------------|-----------|
|                             | Sent      | Returned | %        | Sent      | Returned | %    |
| 1. Training Unit            | 3         | 3        | 100      | 2         | 2        | 100  |
| 2. Personal Affairs Unit    | 5         | 4        | 80       | 2         | 2        | 100  |
| 3. General Affairs Unit     | 2         | 2        | 100      | 1         | 1        | 100  |
| 4. Service Unit             | 20        | 20       | 100      | 8         | 8        | 100  |

| General Finance Department  | Followers |  | Leaders |  |
|-----------------------------|-----------|--------------------------------|-----------|
|                             | Sent      | Returned | %        | Sent      | Returned | %    |
| 1. Finance Unit             | 5         | 5        | 100      | 4         | 4        | 100  |
| 2. Cost Accounting Unit     | 3         | 3        | 100      | 3         | 3        | 100  |
| 3. Marketing Unit           | 1         | 1        | 100      | 1         | 1        | 100  |

| General Products and Data Dept | Followers |  | Leaders |  |
|--------------------------------|-----------|--------------------------------|-----------|
|                               | Sent      | Returned | %        | Sent      | Returned | %    |
| 1. Planning and Data Unit     | 10        | 9        | 90       | 3         | 2        | 66   |
| 2. Project Unit               | 4         | 4        | 100      | 1         | 1        | 100  |

| General Technical Affairs Dept | Followers |  | Leaders |  |
|--------------------------------|-----------|--------------------------------|-----------|
|                               | Sent      | Returned | %        | Sent      | Returned | %    |
| 1. Technical Services Unit    | 20        | 19       | 95       | 3         | 3        | 100  |
| 2. Maintenance Services Unit  | 25        | 24       | 96       | 3         | 3        | 100  |
| 3. Engineering Unit           | 3         | 3        | 100      | 1         | 1        | 100  |
| 4. Material Unit              | 14        | 13       | 92       | 3         | 2        | 66   |

| General Operation Department | Followers |  | Leaders |  |
|------------------------------|-----------|--------------------------------|-----------|
|                             | Sent      | Returned | %        | Sent      | Returned | %    |
| 1. Ethylene Plant            | 26        | 25       | 96       | 5         | 5        | 100  |
| 2. Polyethylene Plant        | 24        | 23       | 95       | 6         | 6        | 100  |
| 3. Maintenance Unit          | 35        | 33       | 94       | 5         | 5        | 100  |
| 4. Utilities Unit            | 34        | 33       | 97       | 5         | 5        | 100  |
| 5. Harbour Unit              | 20        | 19       | 95       | 5         | 5        | 100  |

| TOTAL                        | Sent      | Returned | %        | Sent      | Returned | %    |
|------------------------------|-----------|--------------------------------|-----------|
|                              | 280       | 266      | 95       | 70        | 68       | 97   |

Note: Dept: Department; Info: Information.

Source: Data analysis
6.2.1 Response Rates

Each individual selected in the sample was delivered a questionnaire. Responses were received and checked for partially-completed questionnaires. For Rasco Company, of the 70 leaders surveyed in the sample, 68 completed the questionnaires and have been included in the analysis, amounting to a response rate of approximately 97% (Table 6.1). Of the 280 raters surveyed in the sample, 266 completed the questionnaire and have been included in the analysis, representing a response rate of 95%. Finally, the total sample size including leaders and their corresponding raters was 334, amounting to a total response rate of approximately 96%.

For Harouge, of the 40 leaders surveyed in the sample, 29 completed the questionnaires and have been included in the analysis, amounting to a response rate of approximately 72.5%. Of 110 raters surveyed in the sample, 88 completed the questionnaire and have been included in the analysis, amounting to a response rate of 80%. Finally, the total sample size including leaders and their corresponding rates equals 117, amounting to a total response rate of approximately 76%.

6.2.2 Demographic Questionnaire

This section outlines the descriptive statistics of the respondents, specifically their age, gender, marital status, number of dependents, educational qualifications, job classification, job grade, and tenure. Descriptive statistics, in the form of frequencies and percentages, are presented for each of the demographic variables.

6.2.2.1 Age

At both Rasco and Harouge Companies, the majority of the respondents were in the 21 to 40 year-old age groups (Table 6.4). For Rasco Company, from the frequency distribution in table 6.4 it can be seen as the largest minority of the individuals in the sample; 157 or 47% fall into the age category 21 to 30. This is followed by the 31 to 40 year age category, into which 65 or 19% of the respondents fall. 44 or 13% of respondents are between 41 to 50 years of age; 28 or 8% are less than 20 years; 21 or 6% are over 60 years; 19 or 5% are between 51 to 60 years, while only 28 or 8% of the respondents indicated that they are younger than 20 years of age.
Table 6.4 Demographic Distribution According to Age

<table>
<thead>
<tr>
<th>Age</th>
<th>Rasco Frequency</th>
<th>Rasco Percentage</th>
<th>Harouge Frequency</th>
<th>Harouge Percentage</th>
<th>Overall Frequency</th>
<th>Overall Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 20</td>
<td>28</td>
<td>8.38%</td>
<td>15</td>
<td>12.8%</td>
<td>43</td>
<td>9.53%</td>
</tr>
<tr>
<td>21-30</td>
<td>157</td>
<td>47%</td>
<td>24</td>
<td>20.5%</td>
<td>181</td>
<td>40.1%</td>
</tr>
<tr>
<td>31-40</td>
<td>65</td>
<td>19.4%</td>
<td>33</td>
<td>28.2%</td>
<td>98</td>
<td>21.72%</td>
</tr>
<tr>
<td>41-50</td>
<td>44</td>
<td>13.17%</td>
<td>30</td>
<td>25.6%</td>
<td>74</td>
<td>16.4%</td>
</tr>
<tr>
<td>51-60</td>
<td>19</td>
<td>5.68%</td>
<td>10</td>
<td>8.54%</td>
<td>29</td>
<td>6.43%</td>
</tr>
<tr>
<td>&gt; 61</td>
<td>21</td>
<td>6.28%</td>
<td>05</td>
<td>4.2%</td>
<td>26</td>
<td>5.76%</td>
</tr>
</tbody>
</table>

Source: Data analysis

For Harouge Company the majority; 33 or 28% of the respondents are between 31 and 40 years of age; 30 or 26% are between 41 and 50 years; 24 or 20% are between 21 to 30; 15 or 13% are less than 20 years; 10 or 8.5% are between 51 to 60 years; and 5 or 4% are over 60 years of age. The results indicate a relatively young sample of subject, indicating that the two companies employ a younger workforce. However, it has to be borne in mind that the sample was selected using a non-probability sampling procedure. Consequently, it is possible that the older age categories are under-represented as a result of selection bias.

6.2.2.2 Gender

The majority of the respondents at Rasco Company were male; specifically, 320 or 96% were male, whereas only 14 or 4% were female (Table 6.5). At the Harouge Company, the majority of the respondents; 107 or 91%, were also male, whilst only 10 or 9% were female. The difference in gender representation may reflect the true differences in the populations.

Table 6.5 Demographic Distribution According to Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Rasco Frequency</th>
<th>Rasco Percentage</th>
<th>Harouge Frequency</th>
<th>Harouge Percentage</th>
<th>Overall Frequency</th>
<th>Overall Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>320</td>
<td>95.8%</td>
<td>107</td>
<td>91.46%</td>
<td>427</td>
<td>94.6%</td>
</tr>
<tr>
<td>Female</td>
<td>14</td>
<td>4.20%</td>
<td>10</td>
<td>8.54%</td>
<td>24</td>
<td>5.4%</td>
</tr>
</tbody>
</table>

Source: Data analysis

The gender difference is due to the nature of the work as employees are expected to deal with heavy equipment and operate in a very hard-working environment, since many sites are situated in the desert. Furthermore, most of the employees in these sites
have to stay away from home for a month or more before returning to their families for short breaks.

6.2.2.3 Marital Status

At both companies, about three quarters of the respondents were married whilst about one quarter were single (Table 6.6). For Rasco company respondents; 237 or 71% are married, and 97 or 29% are single. For Harouge Company; 90 or 77% of the respondents are married and 27 or 23% are single.

Table 6.6 Demographic Distribution According to Marital Status

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Rasco</th>
<th>Harouge</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percentage</td>
<td>Frequency</td>
</tr>
<tr>
<td>Single</td>
<td>97</td>
<td>29%</td>
<td>27</td>
</tr>
<tr>
<td>Married</td>
<td>237</td>
<td>71%</td>
<td>90</td>
</tr>
</tbody>
</table>

Source: Data analysis

6.2.2.4 Number of Dependents

The majority of the respondents at both Rasco Company and Harouge Company had between 2 and 5 dependents (Table 6.7).

Table 6.7 Demographic Distribution According to the Number of Dependents

<table>
<thead>
<tr>
<th>No of Dependents</th>
<th>Rasco</th>
<th>Harouge</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percentage</td>
<td>Frequency</td>
</tr>
<tr>
<td>1</td>
<td>44</td>
<td>13.17%</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>90</td>
<td>27%</td>
<td>23</td>
</tr>
<tr>
<td>3</td>
<td>56</td>
<td>16.76%</td>
<td>30</td>
</tr>
<tr>
<td>4</td>
<td>88</td>
<td>26.3%</td>
<td>37</td>
</tr>
<tr>
<td>5</td>
<td>35</td>
<td>10.47%</td>
<td>10</td>
</tr>
<tr>
<td>5&gt;</td>
<td>21</td>
<td>6.30%</td>
<td>07</td>
</tr>
</tbody>
</table>

Source: Data analysis

For Rasco respondents; 90 or 27% have 2 dependents, whilst 26% or 88 have 4 dependents; 56 respondents or 17% have 3 dependents; 44 or 13% have 1 dependent; 35 or 10% have 5 dependents, while 21 or 6% have more than 5 dependents. For Harouge respondents; 37 or 32% have 4 dependents; whilst 26% or 30 have 3 dependents; 23 respondents or 20% have 2 dependents; 10 respondents or 8% have 1 dependent; and the same percentage, 8%, of respondents have 5 dependents, while the remaining 7 respondents; or 6%, have more than 5 dependents.
6.2.2.5 Educational Qualifications

At both the Rasco Company and the Harouge Company the respondents’ educational attainment was mainly to Diploma or Bachelor degree level (Table 6.8).

For Rasco Company; the respondents’ educational attainment was mainly in diploma level, 205 respondents; or 61%; Bachelor degree level was 108 or 32%. The rest of the respondents; 21 or 6% held some other higher qualification, such as a Master’s degree 11 or 3% or a doctorate degree 3 or 1%; while the remaining have earned another educational qualifications, such as secondary and primary levels.

Table 6.8 Demographic Distribution According to Educational Qualifications

<table>
<thead>
<tr>
<th>Education</th>
<th>Rasco Frequency</th>
<th>Rasco Percentage</th>
<th>Harouge Frequency</th>
<th>Harouge Percentage</th>
<th>Overall Frequency</th>
<th>Overall Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diploma</td>
<td>205</td>
<td>61.38%</td>
<td>56</td>
<td>48%</td>
<td>261</td>
<td>57.88%</td>
</tr>
<tr>
<td>Degree</td>
<td>108</td>
<td>32.34%</td>
<td>36</td>
<td>31%</td>
<td>144</td>
<td>31.93%</td>
</tr>
<tr>
<td>Masters</td>
<td>11</td>
<td>3.29%</td>
<td>14</td>
<td>12%</td>
<td>25</td>
<td>5.54%</td>
</tr>
<tr>
<td>PhD</td>
<td>03</td>
<td>0.9%</td>
<td>03</td>
<td>2.5%</td>
<td>6</td>
<td>1.33%</td>
</tr>
<tr>
<td>Others</td>
<td>07</td>
<td>2.09%</td>
<td>08</td>
<td>6.5%</td>
<td>15</td>
<td>3.3%</td>
</tr>
</tbody>
</table>

Source: Data analysis

For Harouge Company, 56 or 48% have a diploma level; Bachelor’s degree level is held by 36 or 31%; and of the remaining, 25 or 19% respondents; 14 hold Master's degrees, 3 hold Doctoral degrees and 9 hold lower qualifications, such as primary and secondary levels. This indicates that the majority of the two companies’ employees have earned an educational level of Diploma and Bachelor’s degrees, with 57% and 31% respectively.

6.2.2.6 Job Classification

266 or 80% of the respondents at Rasco were non-managerial or followers. At Harouge, 88 or 75% of the respondents had non-managerial positions. The remainder were consultants, managers, and heads of division or supervisors (Table 6.9).
Table 6.9 Demographic Distribution According to Job Classification

<table>
<thead>
<tr>
<th>Job Classification</th>
<th>Rasco</th>
<th>Harouge</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percentage</td>
<td>Frequency</td>
</tr>
<tr>
<td>Consultant</td>
<td>2</td>
<td>0.6%</td>
<td>01</td>
</tr>
<tr>
<td>G. Manager</td>
<td>4</td>
<td>1.19%</td>
<td>01</td>
</tr>
<tr>
<td>Manager</td>
<td>08</td>
<td>2.4%</td>
<td>03</td>
</tr>
<tr>
<td>Div. Head</td>
<td>19</td>
<td>5.67%</td>
<td>09</td>
</tr>
<tr>
<td>Supervisor</td>
<td>35</td>
<td>10.5%</td>
<td>15</td>
</tr>
<tr>
<td>Co-worker</td>
<td>266</td>
<td>79.64%</td>
<td>88</td>
</tr>
</tbody>
</table>

*Note: G: General; Div, Division*

Source: Data analysis

6.2.2.7 Job Grade

The highest proportions of respondents were in job grades 6 to 8; and the proportions declined between grades 9 and 11 (Table 6.10). For Rasco respondents 122 respondents or 36.5% are at job grade 8; 53 respondents or 15.86% are at grade 9; 35 respondents or 10.49% are at grade 6; 33 respondents or 9.8% are at grade 10; and the remaining 9 and 5 respondents or 2.69% and 1.49% are at grades 11 and 12 respectively.

Table: 6.10 Demographic Distribution According to Job Grade

<table>
<thead>
<tr>
<th>Job Grade</th>
<th>Rasco</th>
<th>Harouge</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percentage</td>
<td>Frequency</td>
</tr>
<tr>
<td>6</td>
<td>35</td>
<td>10.49%</td>
<td>45</td>
</tr>
<tr>
<td>7</td>
<td>77</td>
<td>23%</td>
<td>30</td>
</tr>
<tr>
<td>8</td>
<td>122</td>
<td>36.53%</td>
<td>15</td>
</tr>
<tr>
<td>9</td>
<td>53</td>
<td>15.86%</td>
<td>10</td>
</tr>
<tr>
<td>10</td>
<td>33</td>
<td>9.88%</td>
<td>06</td>
</tr>
<tr>
<td>11</td>
<td>9</td>
<td>2.69%</td>
<td>07</td>
</tr>
<tr>
<td>12</td>
<td>5</td>
<td>1.50%</td>
<td>04</td>
</tr>
</tbody>
</table>

*Source: Data analysis*

For the second company Harouge, as indicated in the above (Table 6.10), 15 respondents or 12.82% are at grade 8; 30 respondents; or 25.64% of the surveyed respondents are at grade 7; 45 respondents or 38.45% are at grade 6; and 10 respondents or 8.55% are at grade 9; and the remaining 6, 7 and 4 respondents or 5.14%; 5.98% and 3.42% are at grades 10, 11 and 12 respectively. It should be taken explained that the hierarchy of the job grade classification goes from 6 upward (the bigger the number, the higher the job grade).

198
6.2.2.8 Tenure

The majority of respondents at both the Rasco Company and Harouge Company had worked at their company for between 1 and 15 years (Table 6.11). Approximately 71.6% of the respondents at the two companies had served for a period of 6 years or more, so it may be concluded that the sample represents a highly tenured group of respondents. For Rasco, table 6.11 shows that 89 or 27% of the sample fall in the 11 to 15 years service group; 81 or 24% have worked for the company between 6 to 10 years; 68 or 20% have worked between 1 and 5 years; 55 or 16% have worked there between 16 and 20 years; 26 or 8% have worked over 20 years; while 15 or 4.5% have served less than one year at the organisation.

Table: 6.11 Demographic Distributions According to Tenure

<table>
<thead>
<tr>
<th>Tenure</th>
<th>Rasco</th>
<th></th>
<th>Harouge</th>
<th></th>
<th>Overall</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percentage</td>
<td>Frequency</td>
<td>Percentage</td>
<td>Frequency</td>
<td>Percentage</td>
</tr>
<tr>
<td>&lt;1</td>
<td>15</td>
<td>4.5%</td>
<td>05</td>
<td>4%</td>
<td>20</td>
<td>4.4%</td>
</tr>
<tr>
<td>1-5</td>
<td>68</td>
<td>20%</td>
<td>31</td>
<td>26%</td>
<td>99</td>
<td>21.9%</td>
</tr>
<tr>
<td>6-10</td>
<td>81</td>
<td>24%</td>
<td>18</td>
<td>15.3%</td>
<td>99</td>
<td>21.9%</td>
</tr>
<tr>
<td>11-15</td>
<td>89</td>
<td>27%</td>
<td>36</td>
<td>30.7%</td>
<td>125</td>
<td>27.7%</td>
</tr>
<tr>
<td>16-20</td>
<td>55</td>
<td>16.4%</td>
<td>11</td>
<td>9.4%</td>
<td>66</td>
<td>14.6%</td>
</tr>
<tr>
<td>&gt;21</td>
<td>26</td>
<td>7.7%</td>
<td>16</td>
<td>14.6%</td>
<td>42</td>
<td>9.5%</td>
</tr>
</tbody>
</table>

Source: Data analysis

For Harouge; 36 or 30.7% of the respondents have worked there for between 11 and 15 years; 31 or 26% have worked there for between 1 and 5 years; 18 or 15.3% have worked there for between 6 and 10 years; 16 or 14.6% have worked there for over 21 years; 11 or 9.4% have worked there for between 16 and 20 years and the remaining 5 respondents, or 4% of the sample, have served less than one year at the company.
6.3 INFERENTIAL STATISTICAL ANALYSIS

The following section addresses the results obtained for the inferential statistics to determine the relationship between transformational, transactional and laissez-faire leadership behaviours and job satisfaction, and the relationship between demographical characteristics, job satisfaction, and the said leadership behaviours and to determine which factors explain the variance in both job satisfaction and the above mentioned leadership behaviours in the two companies under examination.

6.3.1 Comparison of Leadership Behaviour against MLQ Norms Perceived by Employees at Harouge and Rasco Companies

The scores for all the constructs in the leadership behaviour scales perceived by the 88 employees at Harouge Company and the 266 at Rasco Company were approximately normally distributed, indicated by the bell-shaped frequency distribution figure (Figures 6.1 and 6.2). Parametric statistics were appropriate, and no outliers were identified. Directional z tests were used to compare the MLQ norms against the sample mean scores awarded by the employees. The z distribution was justified by assuming that the MLQ standard deviation was equivalent to the population standard deviation σ.

The null hypothesis of the z test was that μ₂, the Harouge or Rasco Company (sample) mean score, was equal to μ₁, the MLQ (population) mean score. The directional alternative hypotheses were μ₂ < μ₁ or μ₂ > μ₁. The mean transformational leadership behaviour scores at both Harouge and Rasco Companies were significantly less than the MLQ norms, as indicated by p values < 0.001 for the one-tailed z test statistics. The mean transactional (management by exception) and laissez-faire leadership scores at both Harouge and Rasco Companies were significantly greater than the MLQ norms, as indicated by p < 0.001. Contingent reward behaviour was not significantly different from the MLQ norm, as indicated by p > 0.05 (Table 6.12).
Figure 6.1 Frequency Distributions of the Scores for the Constructs in the Leadership Scales Perceived by Employees at Harouge

Figure 6.2 Frequency Distributions of the Scores for the Constructs in the Leadership Scales Perceived by Employees at Rasco

Note: (IIB) Idealised Influence (Behaviour); (IIA) Idealised Influence (Attributed); (IM) Inspirational Motivation; (IS) Intellectual Stimulation; (IC) Individual Consideration; (TRANSFORM) Transformational; (CR) Contingent Reward; (Mb-EA) Management by Exception (Active); (Mb-EP) Management by Exception (Passive); (TRANSACT) Transactional.
Table 6.12 Comparison of the Mean Leadership Behaviour Scores Perceived by Employees at Harouge and Rasco against the MLQ Norms

<table>
<thead>
<tr>
<th>Scale</th>
<th>Construct</th>
<th>Harouge</th>
<th>MLQ Norms</th>
<th>Z test statistic</th>
<th>p value ($\mu_2 &lt; \mu_1$)</th>
<th>p value ($\mu_2 &gt; \mu_1$)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Sample size $N$</td>
<td>Sample mean $\mu_2$</td>
<td>Population SD $\sigma$</td>
<td>Population mean $\mu_1$</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transformational</td>
<td>IIA</td>
<td>88</td>
<td>2.11</td>
<td>0.80</td>
<td>2.97</td>
<td>-10.08</td>
</tr>
<tr>
<td></td>
<td>IIB</td>
<td>88</td>
<td>2.21</td>
<td>0.78</td>
<td>2.75</td>
<td>-6.49</td>
</tr>
<tr>
<td></td>
<td>IM</td>
<td>88</td>
<td>2.09</td>
<td>0.78</td>
<td>2.97</td>
<td>-10.58</td>
</tr>
<tr>
<td></td>
<td>IS</td>
<td>88</td>
<td>2.04</td>
<td>0.75</td>
<td>2.78</td>
<td>-9.26</td>
</tr>
<tr>
<td></td>
<td>IC</td>
<td>88</td>
<td>1.91</td>
<td>0.85</td>
<td>2.83</td>
<td>-10.15</td>
</tr>
<tr>
<td>Transactional</td>
<td>CR</td>
<td>88</td>
<td>2.02</td>
<td>0.80</td>
<td>2.88</td>
<td>-10.08</td>
</tr>
<tr>
<td></td>
<td>M –EA</td>
<td>88</td>
<td>1.88</td>
<td>0.97</td>
<td>1.62</td>
<td>2.51</td>
</tr>
<tr>
<td></td>
<td>M –EP</td>
<td>88</td>
<td>1.49</td>
<td>0.81</td>
<td>1.00</td>
<td>5.67</td>
</tr>
<tr>
<td></td>
<td>LF</td>
<td>88</td>
<td>1.64</td>
<td>0.70</td>
<td>0.64</td>
<td>13.40</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rasco</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sample size $N$</td>
<td>Sample mean $\mu_2$</td>
<td>Population SD $\sigma$</td>
<td>Population mean $\mu_1$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transformational</td>
<td>IIA</td>
<td>266</td>
<td>2.29</td>
<td>0.80</td>
<td>2.97</td>
<td>-13.86</td>
</tr>
<tr>
<td></td>
<td>IIB</td>
<td>266</td>
<td>2.11</td>
<td>0.78</td>
<td>2.75</td>
<td>-13.38</td>
</tr>
<tr>
<td></td>
<td>IM</td>
<td>266</td>
<td>2.21</td>
<td>0.78</td>
<td>2.97</td>
<td>-15.89</td>
</tr>
<tr>
<td></td>
<td>IS</td>
<td>266</td>
<td>2.16</td>
<td>0.75</td>
<td>2.78</td>
<td>-13.48</td>
</tr>
<tr>
<td></td>
<td>IC</td>
<td>266</td>
<td>2.00</td>
<td>0.85</td>
<td>2.83</td>
<td>-15.93</td>
</tr>
<tr>
<td>Transactional</td>
<td>CR</td>
<td>266</td>
<td>2.19</td>
<td>0.80</td>
<td>2.26</td>
<td>-1.43</td>
</tr>
<tr>
<td></td>
<td>MEA</td>
<td>266</td>
<td>2.09</td>
<td>0.97</td>
<td>1.62</td>
<td>7.90</td>
</tr>
<tr>
<td></td>
<td>ME P</td>
<td>266</td>
<td>1.60</td>
<td>0.81</td>
<td>1.00</td>
<td>12.08</td>
</tr>
<tr>
<td></td>
<td>LF</td>
<td>266</td>
<td>1.75</td>
<td>0.70</td>
<td>0.64</td>
<td>25.86</td>
</tr>
</tbody>
</table>

* Significant at $\alpha = 0.05$

Source: Data analysis

The evidence leads to the conclusion that the transformational leadership behaviours at both Harouge and Rasco were less than the MLQ norms, whilst transactional and/or laissez-faire behaviours were equal to or greater than the MLQ norms.

6.3.2 Comparison of Leadership Behaviour against MLQ Norms Perceived By Leaders at Harouge and Rasco

The scores for all the constructs in the leadership behaviour scales, as perceived by the 29 leaders at Harouge and 68 at Rasco, were approximately normally distributed, as indicated by their bell-shaped frequency distribution Figure (Figures 6.3 and 6.4).

Parametric statistics were justified and no outliers were identified. Directional z tests were used to compare the MLQ norm scores against the sample mean scores awarded by the leaders.
Figure 6.3 Frequency Distributions of the Scores for the Constructs in the Leadership Scales Perceived by Leaders at Harouge

Figure 6.4 Frequency Distributions of the Scores for the Constructs in the Leadership Scales Perceived by Leaders at Rasco

Note: (IIA) Idealised Influence (Attributed); (IIB) Idealised Influence (Behaviour); (IM) Inspirational Motivation.; (IS) Intellectual Stimulation; (IC) Individual Consideration; (TRANSFORM) transformational; (CR) Contingent Reward; (Mb-EA) Management by Exception (Active); (Mb-EP) Management by Exception (Passive); (TRANSACT) transactional; (LF) Laissez-Faire.
The hypotheses for the z tests were the same as those applied for the employees. The mean transactional (management by exception) and laissez-faire leadership scores at both Harouge and Rasco were significantly greater than the MLQ norms, indicated \( p < .001 \), whilst contingent reward behaviour was not significantly different from the MLQ norm, as indicated by \( p > 0.05 \) (Table 6.13). In these respects the perceptions of the leaders were the same as those of the employees (Table 6.12).

The leaders at both companies differed from the employees with respect to their perceptions of transformational behaviour. At Harouge (with the exception of inspirational motivation, which was less than the MLQ norm there were no significant differences between the perceived transformational behaviours of the leaders and the MLQ norms, as indicated by \( p > 0.05 \) (Table 6.13). At Rasco, the \( p \) values > 0.05 for the \( z \) statistics (Table 6.13) indicated that the leaders perceived that idealised influence (behavioural) and individual consideration was equal to the MLQ norms; however, the \( p \) values < 0.05 for the \( z \) statistics indicated that idealised influence (attributed), inspirational motivation, and intellectual stimulation at Rasco were significantly lower than the MLQ norms.

**Table 6.13 Comparison of the Mean Leadership Behaviour Scores Perceived By Leaders at Harouge and Rasco against the MLQ Norms**

<table>
<thead>
<tr>
<th>Scale</th>
<th>Construct</th>
<th>Harouge</th>
<th>MLQ Norms</th>
<th>Z test statistic</th>
<th>( p ) value ( (\mu_2 &lt; \mu_1) )</th>
<th>( p ) value ( (\mu_2 &gt; \mu_1) )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transformati</td>
<td>IIA</td>
<td>29 2.81 0.80 2.97 -1.08 0.141 0.859</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IIB</td>
<td>29 2.65 0.78 2.75 -0.69 0.245 0.755</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IM</td>
<td>29 2.51 0.78 2.97 -3.18 0.001* 0.999</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IS</td>
<td>29 2.68 0.75 2.78 -0.72 0.236 0.764</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IC</td>
<td>29 2.71 0.85 2.83 -0.76 0.224 0.776</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transactio</td>
<td>CR</td>
<td>29 2.66 0.80 2.88 -1.48 0.069 0.931</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>M -EA</td>
<td>29 2.27 0.97 1.62 3.61 1.000 0.000*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>M-EP</td>
<td>29 1.28 0.81 1.00 1.86 0.969 0.000*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LF</td>
<td>29 2.07 0.70 0.64 11.00 1.000 0.000*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Scale</th>
<th>Construct</th>
<th>Harouge</th>
<th>MLQ Norms</th>
<th>Z test statistic</th>
<th>( p ) value ( (\mu_2 &lt; \mu_1) )</th>
<th>( p ) value ( (\mu_2 &gt; \mu_1) )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transformati</td>
<td>IIA</td>
<td>68 2.76 0.80 2.97 -2.16 0.015* 0.985</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IIB</td>
<td>68 2.66 0.78 2.75 -0.95 0.171 0.829</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IM</td>
<td>68 2.65 0.78 2.97 -3.38 0.000* 1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IS</td>
<td>68 2.50 0.75 2.78 -3.08 0.001* 0.999</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IC</td>
<td>68 2.76 0.85 2.83 -0.68 0.249 0.751</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transactio</td>
<td>CR</td>
<td>68 2.65 0.80 2.88 -2.37 0.009* 0.991</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>M -EA</td>
<td>68 2.39 0.97 1.62 6.55 1.000 0.000*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>M-EP</td>
<td>68 1.38 0.81 1.00 3.87 1.000 0.000*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LF</td>
<td>68 1.88 0.70 0.64 14.61 1.000 0.000*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Significant at \( \alpha = 0.05 \)
The evidence leads to the conclusion that the leaders perceived that transactional and/or laissez-faire behaviours were mainly equal to or greater than the MLQ norms. At Harouge, the leaders perceived that most types of transformational behaviour were equal to the MLQ norms, whereas at Rasco, the transformational types of behaviour were equal to or less than the MLQ norms. The perceptions of the leaders were not consistent with the employees with respect to transformational behaviour.

6.3.3 Comparison of the Different Types of Leadership Behaviours at Harouge and Rasco

The mean scores’ ± 95% confidence intervals for transformational, transactional, and laissez-faire leadership behaviours awarded by leaders and employees at Harouge and Rasco are compared in Figure 6.5.

Figure 6.5 Comparison of Mean Scores’ ± 95% Confidence Intervals Awarded by Leaders (L) and Followers (F) for Perceived Transformational (Transform), Transactional (Transact) and Laissez-Faire (LF) Leadership Behaviours at Harouge and Rasco

The trends are; a) the mean scores were highest for transformational behaviour, lower for transactional behaviour and least for laissez-faire behaviour; b) the leaders consistently awarded higher scores than the employees; and c) the mean scores are consistently higher at Harouge than at Rasco. Multi-factorial ANOVA was used to test the null hypothesis that the mean scores were equal with respect to the leaders and the employees at the two companies. The \( p \) value for the rejection of the null
hypothesis was reduced from $\alpha = 0.05$ to $\alpha = 0.025$ since the variances in each group were not equal, as indicated by Levene’s statistic $= 7.216$ $p < 0.001$.

Multi-factorial ANOVA in the absence of interactions (Table 6.14) confirmed the trends in Figure 6.5. The mean scores varied significantly with respect to the three types of leadership behaviour at $p < 0.025$, and the effect size indicated by $\eta^2 = 0.123$ was moderate. The mean scores also varied significantly with respect to both the companies (Harouge and Rasco) and the respondents (leaders and followers) at $p < 0.025$, although the effect sizes indicated by $\eta^2 < 0.01$ were relatively small.

### Table 6.14 Results of Multi-Factorial ANOVA

<table>
<thead>
<tr>
<th>Source of variance</th>
<th>Type III Sum of Squares</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>$F$ statistic</th>
<th>$p$ value</th>
<th>Effect size $\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behaviour types</td>
<td>51.332</td>
<td>2</td>
<td>25.666</td>
<td>94.715</td>
<td>0.000*</td>
<td>0.123</td>
</tr>
<tr>
<td>Companies</td>
<td>1.834</td>
<td>1</td>
<td>1.834</td>
<td>6.769</td>
<td>0.009*</td>
<td>0.005</td>
</tr>
<tr>
<td>Respondents</td>
<td>22.941</td>
<td>1</td>
<td>22.941</td>
<td>84.657</td>
<td>0.000*</td>
<td>0.059</td>
</tr>
<tr>
<td>Error</td>
<td>365.286</td>
<td>1348</td>
<td>0.271</td>
<td></td>
<td></td>
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<td>Total</td>
<td>5835.355</td>
<td>1353</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

* Significant at $\alpha = 0.05$

**Source:** Data analysis

### 6.3.4 Comparison of Overall Job Satisfaction Levels of Employees at Harouge and Rasco Measured Using the JSS

The employees’ overall job satisfaction scores obtained using the JSS and visualised by bell-shape figures, were approximately normally distributed at both Harouge (Figure 6.6) and Rasco (Figure 6.7). It can be seen that the mode of the frequency distribution at Rasco was located to the right of that at Harouge, reflecting higher levels of job satisfaction at Rasco. Two extreme outliers were identified in the overall job satisfaction scores (one case from Harouge and one case from Rasco) and these were excluded from statistical analysis to avoid biased results.

The mean overall job satisfaction score of 87 employees at Harouge (excluding one outlier) = 25.09 (SD = 1.87), and that of 265 employees at Rasco (excluding one outlier) = 27.78 (SD = 2.19). The null hypothesis of equality of means was tested with an independent sample $t$ test assuming equal variances. The assumption of equal variances was confirmed by Levene’s statistic $= 2.305$ $p = 0.130$. The alternative hypothesis was that the mean overall job satisfaction
satisfaction score at Rasco was higher than that at Harouge. The null hypothesis was rejected, indicated by $t = 9.997 \ p < 0.001$. The effect size indicated by $\eta^2 = 0.222$ was substantial.

Figure 6.6 Frequency Distribution of Overall Job Satisfaction (TOTSAT) Reported by Employees at Harouge Measured Using JSS

![Histogram of TOTSAT at Harouge](image)

Evidence is provided to conclude that the mean level of overall job satisfaction at Rasco, as measured using the JSS, was significantly higher than that at Harouge.

Figure 6.7 Frequency Distribution of Overall Job Satisfaction (TOTSAT) Reported by Employees at Rasco Measured Using JSS

![Histogram of TOTSAT at Rasco](image)
Overall job satisfaction (TOTSAT) was a composite score, calculated by obtaining the summating of the scores for the nine dimensions of job satisfaction (pay satisfaction (PSAT), promotion satisfaction (PROMSAT), supervision satisfaction (SUPSAT), fringe benefits satisfaction (FRISAT), contingent rewards satisfaction (CORSAT), operating satisfaction (OPCSAT), co-workers satisfaction (COSAT), nature of work satisfaction (NATSAT) and communication satisfaction (COMMSAT) as measured using the JSS. It is pertinent to determine which of these dimensions distinguished the differences between job satisfaction levels at Harouge and Rasco. The nine dimensions of the employees’ job satisfaction scores which comprised overall satisfaction, as visualised by bell-shape figures, were approximately normally distributed at both Harouge (Figure 6.8) and Rasco (Figure 6.9), justifying the use of parametric statistics.

The multi-dimensional nature of job satisfaction was indicated by the results of correlation analysis (Table 6.15). The Pearson’s correlation coefficients indicating linear relationships between the nine dimensions were low, ranging from 0.000 to 0.261, and reflected very low effect sizes ($r^2 < 6.8\%$). Of the 36 cells in the correlation matrix, only 12 contained correlation coefficients that were significant at $\alpha = 0.05$.

Since the nine dimensions of job satisfaction were not highly inter-correlated, it was not justifiable to use multivariate analysis of variance (MANOVA) to compare the levels of job satisfaction in each company. The null hypothesis of equality of means for each dimension of job satisfaction with respect to the two companies was tested using directional independent sample $t$ tests assuming equal or unequal variances. The assumption of equal variances was checked using Levene’s test (Table 6.16). The alternative hypothesis was that the mean level of job satisfaction score at Rasco was higher than that at Harouge.
Figure 6.8 Frequency Distributions of Nine Dimensions of Job Satisfaction Reported by Employees at Harouge Measured Using JSS

Figure 6.9 Frequency Distributions of Nine Dimensions of Job Satisfaction Reported by Employees at Rasco Measured Using JSS

Note: (PSAT) pay satisfaction; (PROSAT) promotion satisfaction; (SUPSAT) supervision satisfaction; (FRISAT) Fringe benefits satisfaction; (CORSAT) Contingent rewards satisfaction; (OPCSAT) operation conditions satisfaction; (COWSAT) co-workers satisfaction; (NATSAT) nature of work satisfaction; (COMMSAT) communication satisfaction.
Table 6.15 Correlation Matrix (Pearson’s Correlation Coefficients) between Nine Dimensions of Job Satisfaction Measured Using the JSS at Harouge and Rasco

<table>
<thead>
<tr>
<th>Satisfaction</th>
<th>Pay</th>
<th>Prom</th>
<th>Supervision</th>
<th>Fringe benefits</th>
<th>Contingency reward</th>
<th>Operating conditions</th>
<th>Co-workers</th>
<th>Nature of work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promotion</td>
<td>0.116*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervision</td>
<td>0.061</td>
<td>0.051</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fringe benefits</td>
<td>-0.009</td>
<td>0.072</td>
<td>0.096</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contingency reward</td>
<td>0.111*</td>
<td>0.137*</td>
<td>0.172*</td>
<td>0.261*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating conditions</td>
<td>-0.208*</td>
<td>-0.231*</td>
<td>0.011</td>
<td>0.164*</td>
<td>-0.052</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Co-worker</td>
<td>0.024</td>
<td>0.092</td>
<td>0.132*</td>
<td>0.034</td>
<td>0.072</td>
<td>-0.071</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nature of work</td>
<td>-0.088</td>
<td>0.000</td>
<td>0.083</td>
<td>0.038</td>
<td>0.104</td>
<td>0.113*</td>
<td>0.123*</td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>0.066</td>
<td>0.070</td>
<td>0.068</td>
<td>0.177*</td>
<td>0.108*</td>
<td>0.054</td>
<td>0.027</td>
<td>-0.050</td>
</tr>
</tbody>
</table>

* Significant at α = 0.05. Note: Prom: Promotion.

Table 6.16 Comparison of Mean Levels of Nine Dimensions of the Job Satisfaction of Employees Measured Using the JSS at Harouge and Rasco

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Company</th>
<th>Mean</th>
<th>SD</th>
<th>Levene’s statistic</th>
<th>p value</th>
<th>t statistic</th>
<th>p value (Rasco &gt; Harouge)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pay satisfaction</td>
<td>Harouge</td>
<td>2.87</td>
<td>0.45</td>
<td>5.132</td>
<td>0.024</td>
<td>6.457</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>Rasco</td>
<td>2.48</td>
<td>0.59</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Promotion satisfaction</td>
<td>Harouge</td>
<td>2.54</td>
<td>0.57</td>
<td>0.424</td>
<td>0.515a</td>
<td>3.201</td>
<td>0.999</td>
</tr>
<tr>
<td></td>
<td>Rasco</td>
<td>2.32</td>
<td>0.54</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervision satisfaction</td>
<td>Harouge</td>
<td>3.57</td>
<td>0.62</td>
<td>5.256</td>
<td>0.022b</td>
<td>-2.792</td>
<td>0.003*</td>
</tr>
<tr>
<td></td>
<td>Rasco</td>
<td>3.80</td>
<td>0.78</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fringe benefits satisfaction</td>
<td>Harouge</td>
<td>2.26</td>
<td>0.45</td>
<td>16.398</td>
<td>0.000b</td>
<td>-7.331</td>
<td>0.000*</td>
</tr>
<tr>
<td></td>
<td>Rasco</td>
<td>2.72</td>
<td>0.67</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contingency reward satisfaction</td>
<td>Harouge</td>
<td>2.21</td>
<td>0.50</td>
<td>1.800</td>
<td>0.181a</td>
<td>-4.549</td>
<td>0.000*</td>
</tr>
<tr>
<td></td>
<td>Rasco</td>
<td>2.53</td>
<td>0.58</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating conditions satisfaction</td>
<td>Harouge</td>
<td>2.72</td>
<td>0.57</td>
<td>3.316</td>
<td>0.069a</td>
<td>-15.130</td>
<td>0.000*</td>
</tr>
<tr>
<td></td>
<td>Rasco</td>
<td>4.00</td>
<td>0.72</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Co-workers satisfaction</td>
<td>Harouge</td>
<td>3.51</td>
<td>0.69</td>
<td>0.091</td>
<td>0.763a</td>
<td>-0.849</td>
<td>0.198</td>
</tr>
<tr>
<td></td>
<td>Rasco</td>
<td>3.58</td>
<td>0.68</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nature of work satisfaction</td>
<td>Harouge</td>
<td>2.70</td>
<td>0.58</td>
<td>11.704</td>
<td>0.001b</td>
<td>-9.548</td>
<td>0.000*</td>
</tr>
<tr>
<td></td>
<td>Rasco</td>
<td>3.45</td>
<td>0.79</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication satisfaction</td>
<td>Harouge</td>
<td>2.72</td>
<td>0.56</td>
<td>7.860</td>
<td>0.005b</td>
<td>-2.187</td>
<td>0.015*</td>
</tr>
<tr>
<td></td>
<td>Rasco</td>
<td>2.88</td>
<td>0.69</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Significant at α = 0.05  a Assumes equal variances  b Assumes variances are not equal
Evidence was provided to reject the null hypothesis with respect to six dimensions of job satisfaction. The \( p \) values < 0.05 for the \( t \) test statistics indicated that the mean levels of supervision satisfaction, fringe benefit satisfaction, contingency reward satisfaction, operating conditions satisfaction, nature of work satisfaction, and communication satisfaction were significantly higher at Rasco than at Harouge (Table 6.16).

**6.3.5 Comparison of Overall Job Satisfaction Levels of Employees at Harouge and Rasco Measured as an Outcome of Leadership Behaviours using the MLQ**

In addition to the JSS, the MLQ also measured levels of job satisfaction expressed in terms of the outcomes to leadership behaviours. The employees’ job satisfaction obtained using the MLQ, visualised by bell-shape figures, were approximately normally distributed at both Harouge (Figure 6.10) and Rasco (Figure 6.11), with two outliers. Parametric statistics were therefore justified, excluding the outliers. It can be seen that the shapes of the frequency distributions at Rasco and Harouge were similar, reflecting similar levels of job satisfaction as outcomes of leadership behaviours at both companies.

**Figure 6.10 Frequency Distribution of Job Satisfaction (SAT) of Employees at Harouge as the Outcome of Leadership Behaviours Measured Using MLQ**
The mean job satisfaction outcome score of 87 employees at Harouge (excluding one outlier) = 2.06 (SD = 0.76), whilst that of 265 employees at Rasco (excluding one outlier), was slightly higher, at 2.11 (SD = 0.89). The null hypothesis of equality of means was tested with an independent sample t test, assuming equal variances.

The assumption of equal variances was confirmed by Levene’s statistic = 0.529 $p = 0.075$. The alternative hypothesis was that the mean overall job satisfaction score at Rasco was higher than that at Harouge. The null hypothesis was not rejected, as indicated by $t = 0.529$ $p = 0.298$. The effect size indicated by $\eta^2 = 0.001$ was negligible (Table 6.17).

The evidence shows that the mean level of job satisfaction at Rasco, as measured as an outcome of leadership behaviours using the MLQ, was not significantly higher than that at Harouge.

The MLQ norm for job satisfaction, measured as an outcome of leadership behaviours = 3.11 (SD = 0.84). Directional z tests were used to compare the MLQ norm against the sample mean scores for job satisfaction awarded by the employees at Harouge and Rasco. The z distribution was justified assuming that the MLQ standard deviation was equivalent to the population standard deviation $\sigma$. 

212
Evidence is provided to support the conclusion that the mean levels of job satisfaction as an outcome of leadership behaviours at both Harouge and Rasco were significantly less than the MLQ norm, as indicated by \( p < 0.001 \) for the \( z \) test statistics (Table 6.17).

Table 6.17 Comparison of the Mean Job Satisfaction Scores Reported by Employees at Harouge and Rasco against the MLQ Norm

<table>
<thead>
<tr>
<th>Construct</th>
<th>Company</th>
<th>Sample</th>
<th>MLQ Norm</th>
<th>( Z ) test statistic</th>
<th>( p ) value (( \mu_2 &lt; \mu_1 ))</th>
<th>( p ) value (( \mu_2 &gt; \mu_1 ))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job satisfaction outcome</td>
<td>Harouge</td>
<td>87</td>
<td>2.06</td>
<td>0.84</td>
<td>3.11</td>
<td>-11.66</td>
</tr>
<tr>
<td></td>
<td>Rasco</td>
<td>265</td>
<td>2.11</td>
<td></td>
<td>-19.38</td>
<td>0.000*</td>
</tr>
</tbody>
</table>

* Significant at \( \alpha = 0.05 \)

6.3.6 The Relationships between the Perceived Transactional and Transformational Behaviours of the Leaders and the Employees’ Job Satisfaction

The overall job satisfaction distributions for the employees recorded at Harouge and Rasco (Figures 6.6 and 6.7) were divided at the mean values to create two groups of employees for each company, *i.e.*, those with scores below the mean (below average satisfaction) and those with scores above the mean (above average satisfaction). Multiple Discriminant Analysis (MDA) was performed to determine if group membership could be distinguished using the constructs of transformational and transactional leadership behaviour with respect to job satisfaction. A multiple discriminant function model that was statistically significant at \( \alpha = 0.05 \), was constructed based on the combined data from Harouge and Rasco. The statistical significance of this model was indicated by Wilks’ \( \lambda = 0.972 \), \( \chi^2 = 9.478 \) \( p = 0.024 \).

The leadership behaviours that discriminated significantly between the two groups, indicated by standardised canonical discriminant function coefficients of 0.969 and 0.672 respectively, were intellectual stimulation and individual consideration. No other leadership behaviours could be included in the model, since their standardised canonical discriminant coefficients (< 0.3) did not contribute significantly to the multiple discriminant function.

The implication of this is that the employees who reported above-average levels of job satisfaction worked with leaders who mainly displayed the two transformational behaviours of intellectual stimulation and individual consideration.

The importance of intellectual stimulation and individual consideration as predictors of job satisfaction was also confirmed by use of multiple regression analysis. The best-fitting linear equation to predict the job satisfaction scores of the employees was:
Equation 6.1: \( Y = 0.186 + 0.527 \, X_1 + 0.403 \, X_2 \)

Where \( Y = \) job satisfaction, \( X_1 = \) intellectual stimulation, \( X_2 = \) individual consideration. No other predictors variables were found to be significant at \( \alpha = 0.05 \).

This model implies that job satisfaction increased by 0.527 with respect to a unit increase in intellectual stimulation and by 0.403 with respect to a unit increase in individual consideration. This model explained a significant proportion of the variance in job satisfaction, indicated the ANOVA statistics, \( F = 115.567 \, p < 0.001 \).

The \( t \) tests indicated that the partial regression coefficients for the two independent variables were significantly different from zero at \( \alpha = 0.05 \), but that the intercept was not significantly different from zero (Table 6.18).

**Table 6.18 Multiple Regression Model to Predict Overall Job Satisfaction**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Regression Coefficients</th>
<th>( t ) test statistic</th>
<th>( p ) value</th>
<th>Adjusted ( R^2 )</th>
<th>ANOVA ( F ) statistic</th>
<th>( p ) value</th>
<th>( VIF )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.186</td>
<td>1.396</td>
<td>0.164</td>
<td>0.395</td>
<td>115.567</td>
<td>0.000*</td>
<td>1.180</td>
</tr>
<tr>
<td>Intellectual</td>
<td>0.527</td>
<td>9.969</td>
<td>0.000*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>stimulation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual</td>
<td>0.403</td>
<td>5.672</td>
<td>0.000*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>consideration</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Significant at \( \alpha = 0.05 \)

The adjusted \( R^2 \) value indicated that 39.5% of the variance in job satisfaction was explained by the model, a substantial effect size. The variance inflation factor (\( VIF \)) = 1.180 indicated a negligible collinearity between the dependent variables.

The zero order Pearson’s correlation coefficient \( r = 0.567 \) between job satisfaction and intellectual stimulation was reduced to the partial correlation coefficient = 0.471 when individual consideration was controlled. The zero order correlation coefficient between job satisfaction and individual consideration \( r = 0.477 \) was reduced to the partial correlation coefficient \( r = 0.336 \) when intellectual stimulation was controlled.

Since there was no evidence for collinearity, and the partial correlation coefficients did not decline substantially towards zero relative to the zero order coefficients, it is assumed that intellectual stimulation and individual consideration influenced job satisfaction independently, and there were no mediating variables.
The distribution of the model’s residuals was skewed, violating the assumption of residual normality. The residuals were not randomly and evenly distributed around their mean (zero) value, violating the assumption of homogeneity of variance (Figure 6.12).

Figure 6.12 Distribution of Residuals for the Model to Predict Job Satisfaction

The implications of this are that confidence limits cannot be fitted to predict job satisfaction, so the model cannot be used to accurately and precisely compute job satisfaction levels from intellectual stimulation and individual consideration.

6.3.7 The Relationships between Demographic Variables and Leadership Behaviours Perceived by Employees

The relationships between the leadership behaviours perceived by the employees and a range of independent demographic variables (characteristics of the employees) were explored using multi-factorial ANOVA.
The dependent variables were the two companies (Harouge or Rasco), three job grades (on a four point scale from 6 to 9), marital status (single or married), and educational qualification (Diploma or Bachelor’s degree).

Age-group, job classification, and tenure were all significantly associated with job grades, as indicated by the results of \( \chi^2 \) contingency table tests. The null hypotheses that job grades were not associated with other demographic variables were rejected, as indicated by \( p \) values < 0.001 for Pearson’s \( \chi^2 \) statistics and Cramer’s \( V \) coefficients \( \geq 0.5 \), reflecting substantial correlations between the variables (Table 6.19).

Since job classification, age, and tenure were strongly associated with job grades they were not included as independent variables corresponding to mutually exclusive non-interacting groups in the multi-factorial ANOVA model. Job grade was considered to represent job classification, age, and tenure for the purposes of ANOVA. Gender was not included because the number of females was too small relative to the number of males, and unequal group sizes may generate biased results when using ANOVA.

Table 6.19 Associations between Job Grades and other Categorical Variables

<table>
<thead>
<tr>
<th>Categorical variable</th>
<th>( \chi^2 ) statistic</th>
<th>( p ) value</th>
<th>Cramer’s ( V ) coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job classification</td>
<td>257.276</td>
<td>0.000*</td>
<td>0.5</td>
</tr>
<tr>
<td>Age group</td>
<td>267.362</td>
<td>0.000*</td>
<td>0.5</td>
</tr>
<tr>
<td>Tenure</td>
<td>355.739</td>
<td>0.000*</td>
<td>0.58</td>
</tr>
</tbody>
</table>

* Significant at \( \alpha = 0.05 \)

The MLQ variables include, Transformational behaviour variables, (Idealised Influence (Behaviour); Idealised Influence (Attributed); Inspirational Motivation; Intellectual Stimulation; Individual Consideration. Transactional behaviour variables (Contingent Reward; Management by Exception (Active); Management by Exception (Passive) and Lassiez-faire behaviour were composite scores, obtained by averaging the specified groups of item scores.

Multi-factorial ANOVA was performed to test the null hypothesis that the mean scores for transformational leadership behaviour awarded by the employees did not vary with respect to demographic variables. Equal variances in each group were assumed, as justified by the calculation of Levene’s statistic = 1.527 \( p = 0.088 \).
The trends visualised in Figure 6.13 were that; a) employees in job grade 6 awarded the highest scores, and the scores generally declined with respect to job grade; b) the mean scores were consistently higher at Rasco than at Harouge.

In the absence of interactions between independent variables, the mean scores awarded for transformational leadership behaviour varied significantly with respect to the two companies and the three job grades, with \( p < 0.05 \), confirming the trends in Figure 6.13. However the effect sizes reflected by \( \eta^2 < 0.06 \) were small. The mean scores did not vary significantly with respect to marital status, the number of dependents or educational qualifications (Table 6.20).

Multi-factorial ANOVA was also performed to test the null hypothesis that the mean scores for transactional leadership behaviour awarded by the employees did not vary with respect to demographic variables. Equal variances in each group were assumed, as justified by the interpretation of Levene’s statistic = 1.434 \( p = 0.123 \).

**Figure 6.13 Mean Scores ± 95% Confidence Intervals for Transformational Leadership Behaviour Perceived by Employees at Harouge and Rasco**

The trends visualised in Figure 6.14 were that; a) employees in job grade 6 awarded the highest scores for transactional behaviour, whilst the scores generally declined for higher grades; b) the mean scores were consistently higher at Rasco than at Harouge.
Table 6.20 Multi-factorial ANOVA to Determine the Influence of the Demographic Characteristics of Employees on Perceived Transformational Leadership Behaviour

<table>
<thead>
<tr>
<th>Source of variance</th>
<th>Type III Sum of Squares</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>$F$ statistic</th>
<th>$p$ value</th>
<th>Effect size $\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Companies</td>
<td>1.381</td>
<td>1</td>
<td>1.381</td>
<td>6.375</td>
<td>0.012*</td>
<td>0.019</td>
</tr>
<tr>
<td>Job grades</td>
<td>4.455</td>
<td>3</td>
<td>1.485</td>
<td>6.853</td>
<td>0.000*</td>
<td>0.058</td>
</tr>
<tr>
<td>Marital status</td>
<td>0.243</td>
<td>1</td>
<td>0.243</td>
<td>1.121</td>
<td>0.290</td>
<td>0.003</td>
</tr>
<tr>
<td>Number of dependents</td>
<td>0.966</td>
<td>3</td>
<td>0.322</td>
<td>1.486</td>
<td>0.218</td>
<td>0.013</td>
</tr>
<tr>
<td>Educational qualification</td>
<td>0.819</td>
<td>1</td>
<td>0.819</td>
<td>3.778</td>
<td>0.053</td>
<td>0.011</td>
</tr>
</tbody>
</table>

*Significant at $\alpha = 0.05$

In the absence of interactions the mean scores awarded for transformational leadership behaviour varied significantly with respect to the two companies and the three job grades at $p < 0.05$, confirming the trends visualised in Figure 6.14; however, the effect sizes reflected by $\eta^2 < 0.06$ were small, indicating that the results may not have any practical implications. The mean scores for transactional behaviour did not vary significantly with respect to marital status, the number of dependents or educational qualifications (Table 6.21).

Figure 6.14 Mean Scores ± 95% Confidence Intervals for Transactional Leadership Behaviour Perceived by Employees at Harouge and Rasco
Table 6.21 Multi-Factorial ANOVA to Determine the Influence of the Demographic Characteristics of Employees on Perceived Transactional Leadership Behaviour

<table>
<thead>
<tr>
<th>Source of variance</th>
<th>Type III Sum of Squares</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F statistic</th>
<th>p value</th>
<th>Effect size η²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Companies</td>
<td>1.872</td>
<td>1</td>
<td>1.872</td>
<td>12.031</td>
<td>0.001*</td>
<td>0.035</td>
</tr>
<tr>
<td>Job grades</td>
<td>1.536</td>
<td>3</td>
<td>0.512</td>
<td>3.289</td>
<td>0.021*</td>
<td>0.029</td>
</tr>
<tr>
<td>Marital status</td>
<td>0.193</td>
<td>1</td>
<td>0.193</td>
<td>1.243</td>
<td>0.266</td>
<td>0.004</td>
</tr>
<tr>
<td>Number of dependents</td>
<td>0.208</td>
<td>3</td>
<td>0.069</td>
<td>0.446</td>
<td>0.721</td>
<td>0.004</td>
</tr>
<tr>
<td>Educational qualification</td>
<td>0.043</td>
<td>1</td>
<td>0.043</td>
<td>0.277</td>
<td>0.599</td>
<td>0.001</td>
</tr>
</tbody>
</table>

* Significant at α = 0.05

A multi-factorial ANOVA was also performed to test the null hypothesis that the mean scores for laissez-faire leadership behaviour awarded by the employees did not vary with respect to demographic variables (Table 6.22). Equal variances in each group were assumed, as justified by the interpretation of Levene’s statistic = 1.219 p = 0.251.

In the absence of interactions the mean scores awarded for transformational leadership behaviour did not vary significantly at α = 0.05 with respect to both companies, the three job grades, marital status, the number of dependents and educational qualifications, and the η² values < 0.02 reflected very small effect sizes.

Table 6.22 Multi-factorial ANOVA to Determine the Influence of the Demographic Characteristics of Employees on Laissez-Faire Leadership Behaviour

<table>
<thead>
<tr>
<th>Source of variance</th>
<th>Type III Sum of Squares</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F statistic</th>
<th>p value</th>
<th>Effect size η²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Companies</td>
<td>0.357</td>
<td>1</td>
<td>0.357</td>
<td>0.861</td>
<td>0.354</td>
<td>0.003</td>
</tr>
<tr>
<td>Job grades</td>
<td>0.648</td>
<td>3</td>
<td>0.216</td>
<td>0.521</td>
<td>0.668</td>
<td>0.005</td>
</tr>
<tr>
<td>Marital status</td>
<td>0.082</td>
<td>1</td>
<td>0.082</td>
<td>0.197</td>
<td>0.657</td>
<td>0.001</td>
</tr>
<tr>
<td>Number of dependents</td>
<td>2.563</td>
<td>3</td>
<td>0.854</td>
<td>2.058</td>
<td>0.106</td>
<td>0.018</td>
</tr>
<tr>
<td>Educational qualification</td>
<td>0.068</td>
<td>1</td>
<td>0.068</td>
<td>0.165</td>
<td>0.685</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Evidence is provided to justify the conclusion that the transformational and transactional behaviours of the leaders, as perceived by the employees, varies significantly with respect to
the characteristics of their employment (the two companies and the four job grades). Employees at Rasco generally reported higher levels of transformational and transactional behaviour than at Harouge. Employees in job grade 6 generally reported higher levels of transformational and transactional behaviour than higher job grades at both companies; however the personal characteristics of the respondents (marital status, number of dependents, and educational qualification) had no significant influence on their perceptions of transformational or transactional leadership behaviours. No demographic variables were found to significantly influence the Employees’ perceptions of laissez-faire (non-leadership) behaviour.

It can conclude that since the mean level of overall job satisfaction at Rasco was significantly higher than at Harouge and that a relationship between leadership behaviour and job satisfaction can be inferred. Higher levels of job satisfaction at Rasco were associated with higher levels of transformational and transactional leadership behaviours; conversely, lower levels of job satisfaction at Harouge were associated with lower levels of transformational and transactional leadership behaviours.

6.3.8 The Relationship between Different Dimensions of Job Satisfaction Measured Using the JSS and MLQ

The JSS measured job satisfaction in terms of nine dimensions, some of which were significantly inter-correlated with each other at $\alpha = 0.05$, as indicated by the correlation matrix (Table 6.15). The implications of the inter-correlations were that none of the nine dimensions could be considered as discrete independent variables for inclusion in a multiple regression model. Collinearity violates the assumptions of regression and may bias the magnitudes of the standard errors; therefore, factor analysis was applied to determine if the nine measured dimensions of job satisfaction could be reduced into fewer dimensions. Factor analysis facilitated the identification of groups of inter-correlated variables that could be combined in order to avoid collinearity. Factor analysis was also performed using principal component analysis.

Varimax rotation was applied to maximise the separation of variables between the factors extracted from the correlation matrix. The total number of factors extracted was based on eigenvalues $> 1.0$. The factor solution is presented in Table 6.23.
Table 6.23 Factor Analysis using Job Satisfaction Constructs measured with the JSS

| Variable                        | SPSS variable name | Factor solution |
|--------------------------------|--------------------|----------------|----------------|
|                                |                    | Factor 1 Loading | Factor 2 Loading | Factor 3 Loading |
| Pay satisfaction               | PSAT               | 0.614           |                |                |
| Operating conditions satisfaction | OPCSAT           | -0.750          |                |                |
| Promotion satisfaction         | PROSAT             | 0.581           |                |                |
| Fringe benefits satisfaction   | FRISAT             |                | 0.739          |                |
| Communication satisfaction     | COMMSAT            |                | 0.631          |                |
| Contingency reward satisfaction| CORSAT             |                |                | 0.546          |
| Nature of work satisfaction    | NATSAT             |                |                | 0.682          |
| Co-worker satisfaction         | COWSAT             |                |                | 0.635          |
| Supervision satisfaction       | SUPSAT             |                |                | 0.482          |

Three factors with eigenvalues > 1.0 explained 46.6% of the variance in the correlation matrix. The heaviest factor loadings, > 0.45, were used to distinguish between the three dimensions. Factor 1, explaining 16.3% of the variance, comprised operating conditions, pay and promotion satisfaction. Factor 2, explaining 15.9% of the variance, comprised fringe benefits, communication and contingency reward satisfaction. Factor 3, explaining 14.4% of the variance, comprised nature of work, co-worker and supervision satisfaction.

The values of the groups of variables that comprised each of the three extracted dimensions of job satisfaction (measured using the JSS) were summated, to construct three new composite variables, named SATFAC1, SATFAC2, and SATFAC3 (Table 6.24). SATFAC1 = OPCSAT + PSAT + PROSAT. SATFAC2 = FRISAT + COMMSAT + CORSAT. SATFAC3 = NATSAT + COWSAT + SUPSAT.

The factor variables SATFAC1, SATFAC2, and SATFAC3 were then used as independent variables to predict the levels of the dependent variable, the job satisfaction level (measured as the outcome of leadership behaviour by the employees of Harouge and Rasco with the MLQ, by means of multiple regression analysis.

Since job satisfaction levels may vary with respect to the company and the job grade, the two companies and the ordinal job grades were also included as independent
categorical variables. The best-fitting linear equation to predict the job satisfaction scores of the employees measured using the MLQ (Table 6.24) was:

**Equation 6.2** \( Y = 2.857 + 0.169 X_1 - 0.166 X_2 - 0.005 X_3 + 0.048 X_4 + 10^{-5} X_5 \)

Where \( Y = \) job satisfaction, \( X_1 = \) Company (0 = Harouge, 1 = Rasco), \( X_2 = \) job grade (on a scale from 1 to 6); \( X_3, X_4, \) and \( X_5 = \) SATFAC1, SATFAC2, and SATFAC3, respectively.

The model in Table 6.24 implies that job satisfaction increased by 0.169 when the company was Rasco and decreased by 0.166 with respect to a unit increase in job grade. Unit increases in SATFAC1, SATFAC2, and SATFAC3 caused job satisfaction to decrease by -0.005, 0.048, and 10-5 respectively. This model explained a significant proportion of the variance in job satisfaction at \( \alpha = 0.05 \), as indicated in the ANOVA statistics, \( F = 2.303 \ p = 0.044 \).

The R2 value, however, indicated a low effect size of only 1.8%. The \( t \) tests indicated that the partial regression coefficients for the intercept and job grade were significantly different from zero at \( \alpha = 0.05 \); however, the other partial regression coefficients were not significantly different from zero (Table 6.24).

**Table 6.24 Multiple Regression Model to Predict Job Satisfaction As an Outcome of Leadership Behaviour Measured Using the MLQ**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Regression Coefficients ( \beta )</th>
<th>( t ) test statistic</th>
<th>( p ) value</th>
<th>Adjusted ( R^2 )</th>
<th>ANOVA ( F ) statistic</th>
<th>( p ) value</th>
<th>( VIF )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>2.857</td>
<td>4.231</td>
<td>0.000*</td>
<td>0.018</td>
<td>2.303*</td>
<td>0.044*</td>
<td></td>
</tr>
<tr>
<td>Company</td>
<td>0.169</td>
<td>1.300</td>
<td>0.195</td>
<td></td>
<td></td>
<td></td>
<td>1.552</td>
</tr>
<tr>
<td>Job Grade</td>
<td>-0.166</td>
<td>-3.076</td>
<td>0.002*</td>
<td></td>
<td></td>
<td></td>
<td>1.241</td>
</tr>
<tr>
<td>SATFAC1</td>
<td>-0.005</td>
<td>-1.04</td>
<td>0.917</td>
<td></td>
<td></td>
<td></td>
<td>1.108</td>
</tr>
<tr>
<td>SATFAC2</td>
<td>0.048</td>
<td>1.286</td>
<td>0.199</td>
<td></td>
<td></td>
<td></td>
<td>1.129</td>
</tr>
<tr>
<td>SATFAC3</td>
<td>( 10^{-5} )</td>
<td>0.003</td>
<td>0.998</td>
<td></td>
<td></td>
<td></td>
<td>1.116</td>
</tr>
</tbody>
</table>

* Significant at \( \alpha = 0.05 \)

The implication of this is that job grade is the only significant predictor of job satisfaction measured as an outcome of leadership behaviours using the MLQ. The company, and the dimensions of job satisfaction measured using the JSS are not significant predictors at \( \alpha = 0.05 \). The low effect size indicates that the model does not have significant practical implications.
As an alternative to MLR, Exploratory Factor Analysis was used to determine if job satisfaction, measured as an outcome of leadership behaviour using the MLQ could be included within a factor solution alongside job satisfaction constructs measured with the JSS. A factor solution was constructed containing 4 factors which explained 52.2% of the variance in the correlation matrix (Table 6.25).

Factor 1, explaining 14.7% of the variance, comprised operating conditions, pay and promotion satisfaction. Factor 2, explaining 14.5% of the variance, comprised fringe benefits, communication, and contingency reward satisfaction. Factor 3, explaining 12.8% of the variance, comprised nature of work, co-worker and supervision satisfaction. Job satisfaction measured as the outcome of leadership behaviours using the MLQ was, however, alone in Factor 4 comprising 10.2% of the variance (Table 6.25).

Table 6.25 Factor Analysis Using Job Satisfaction Constructs Measured with the JSS plus Job Satisfaction Measured as an Outcome to Leadership Behaviours with the MLQ

<table>
<thead>
<tr>
<th>Variable</th>
<th>Factor solution</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Factor 1 Loading</td>
</tr>
<tr>
<td>Operating conditions satisfaction</td>
<td>-0.752</td>
</tr>
<tr>
<td>Promotion satisfaction</td>
<td>0.593</td>
</tr>
<tr>
<td>Pay satisfaction</td>
<td>0.583</td>
</tr>
<tr>
<td>Fringe benefits satisfaction</td>
<td>0.740</td>
</tr>
<tr>
<td>Contingency reward satisfaction</td>
<td>0.600</td>
</tr>
<tr>
<td>Communication satisfaction</td>
<td>0.580</td>
</tr>
<tr>
<td>Nature of work satisfaction</td>
<td></td>
</tr>
<tr>
<td>Co-workers satisfaction</td>
<td></td>
</tr>
<tr>
<td>Supervision satisfaction</td>
<td></td>
</tr>
<tr>
<td>Job satisfaction (outcome of leadership behaviours)</td>
<td></td>
</tr>
</tbody>
</table>

Factor analysis provided statistical evidence to justify the conclusion that job satisfaction, measured as an outcome of leadership behaviour using the MLQ could not be included within a factor solution alongside job satisfaction constructs measured with the JSS. It is apparent that the MLQ measures different dimensions of job satisfaction to the JSS.
6.3.9 The Relationships between the Demographic Characteristics and the Combined Responses of the Employees at Harouge and Rasco to the MLQ and JSS

Further statistical analysis was performed to address RQ5: How far do the employees’ demographic characteristics influence their perceived leadership behaviour to job satisfaction? This analysis used the combined responses to the MLQ and the JSS obtained from both Harouge and Rasco.

Multi-factorial analysis of variance was used to test the null hypotheses that four independent variables or factors representing the demographic characteristics of the respondents (qualifications, job classification, job grade, and tenure) had no main or interactional effects on twelve dependent variables (the nine dimensions of job satisfaction and the three leadership variables, i.e. transformational, transactional, and laissez-faire).

In order to ensure adequate sample sizes within each cell of the multi-factorial ANOVA design matrix, the independent variables had to be collapsed into fewer categories than those listed in Table 5.5 (as shown in Table 6.26). If a larger number of categories had been used then the sample sizes in some cells of the design matrix would be very small, including zero, which would compromise the results.

<table>
<thead>
<tr>
<th>ANOVA</th>
<th>Dependent variable</th>
<th>Independent variables (Factors)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pay satisfaction</td>
<td>Educational qualification:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 = Diploma</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 = Degree</td>
</tr>
<tr>
<td>2</td>
<td>Promotion satisfaction</td>
<td>Job classification:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 = Managerial (Manager, Consultant, Head of Division)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 = Supervisor</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 = Co-worker</td>
</tr>
<tr>
<td>3</td>
<td>Supervision satisfaction</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Fringe benefits satisfaction</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Contingent rewards satisfaction</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Operating conditions satisfaction</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Co-workers satisfaction</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Nature of work satisfaction</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Communication satisfaction</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Total job satisfaction</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Transformational leadership</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Transactional leadership</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Laissez-faire leadership</td>
<td></td>
</tr>
</tbody>
</table>

Thirteen ANOVAs were performed (one for each dependent variable) using the combined responses to the MLQ and JSS obtained from both Harouge and Rasco.
Multivariate outliers for two cases were excluded. The decision rule was to reject the null hypotheses if the \( p \) values of the \( F \) statistics were < 0.01. The threshold significance level \( \alpha \) was reduced from 0.05 to 0.01 to take into account violations of the assumption of homogeneity of variance indicated by the results of Levene’s test and the chance of increased Type I errors due to multiple hypothesis tests being performed at the same time on one set of data (Tabachnik and Fidell, 2007). No significant interactions were found at \( \alpha = 0.01 \), so all the interaction terms were excluded from the ANOVA tables.

### 6.3.9.1 Pay satisfaction (PAYSAT)

The variances of the PAYSAT scores in each category were not equal, as indicated by Levene’s statistic = 2.288, \( p = 0.027 \).

Educational qualification, job grade, job classification and tenure had no significant effects on pay satisfaction at \( \alpha = 0.01 \). The effect sizes reflected by \( \eta^2 \leq 0.01 \) were negligible (Table 6.27).

#### Table 6.27 Results of Multi-Factorial ANOVA on PAYSAT

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>( F ) statistic</th>
<th>( p ) value</th>
<th>Effect size ( \eta^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification</td>
<td>0.326</td>
<td>1</td>
<td>0.326</td>
<td>0.988</td>
<td>0.321</td>
<td>0.00</td>
</tr>
<tr>
<td>Job Grade</td>
<td>0.969</td>
<td>1</td>
<td>0.969</td>
<td>2.940</td>
<td>0.087</td>
<td>0.01</td>
</tr>
<tr>
<td>Job Classification</td>
<td>0.710</td>
<td>2</td>
<td>0.355</td>
<td>1.078</td>
<td>0.342</td>
<td>0.01</td>
</tr>
<tr>
<td>Tenure</td>
<td>0.066</td>
<td>1</td>
<td>0.066</td>
<td>0.202</td>
<td>0.654</td>
<td>0.00</td>
</tr>
</tbody>
</table>

### 6.3.9.2 Promotion satisfaction (PROSAT)

The variances of the PROSAT scores in each category were equal, as indicated by Levene’s statistic = 0.485, \( p = 0.846 \). Educational qualification, job grade, job classification, and tenure had no significant effects on promotion satisfaction at \( \alpha = 0.01 \) and the effect sizes reflected by \( \eta^2 \leq 0.01 \) were negligible (Table 6.28).
Table 6.28 Results of Multi-factorial ANOVA on PROSAT

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F statistic</th>
<th>P value</th>
<th>Effect size $\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification</td>
<td>0.109</td>
<td>1</td>
<td>0.109</td>
<td>0.355</td>
<td>0.552</td>
<td>0.00</td>
</tr>
<tr>
<td>Job Grade</td>
<td>0.362</td>
<td>1</td>
<td>0.362</td>
<td>1.175</td>
<td>0.279</td>
<td>0.00</td>
</tr>
<tr>
<td>Job Classification</td>
<td>0.701</td>
<td>2</td>
<td>0.350</td>
<td>1.139</td>
<td>0.321</td>
<td>0.01</td>
</tr>
<tr>
<td>Tenure</td>
<td>0.547</td>
<td>1</td>
<td>0.547</td>
<td>1.778</td>
<td>0.183</td>
<td>0.01</td>
</tr>
</tbody>
</table>

6.3.9.3 Supervision satisfaction (SUPSAT)

The variances in the SUPSAT scores in each category were not equal, as indicated by Levene’s statistic = 3.344, $p = 0.004$. The mean supervision satisfaction varied significantly with respect to job classification at $\alpha = 0.01$; however, the effect size reflected by $\eta^2 = 0.04$ was small (Table 6.29).

Table 6.29 Results of Multi-factorial ANOVA on SUPSAT

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F statistic</th>
<th>P value</th>
<th>Effect size $\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification</td>
<td>0.620</td>
<td>1</td>
<td>0.620</td>
<td>1.229</td>
<td>0.268</td>
<td>0.00</td>
</tr>
<tr>
<td>Job Grade</td>
<td>1.707</td>
<td>1</td>
<td>1.707</td>
<td>3.384</td>
<td>0.067</td>
<td>0.01</td>
</tr>
<tr>
<td>Job Classification</td>
<td>7.494</td>
<td>2</td>
<td>3.747</td>
<td>7.429</td>
<td>0.001*</td>
<td>0.04</td>
</tr>
<tr>
<td>Tenure</td>
<td>2.406</td>
<td>1</td>
<td>2.406</td>
<td>4.771</td>
<td>0.030</td>
<td>0.01</td>
</tr>
</tbody>
</table>

* Significant at $\alpha = 0.01$

The trend visualised in Figure 6.15 was that respondents in managerial positions reported higher mean levels of supervision satisfaction than supervisors and co-workers.

**Figure 6.15 Comparison of mean SUPSAT scores ± 95% confidence intervals with respect to job classification**
6.3.9.4 Fringe benefits satisfaction (FRISAT)
The variances in the FRISAT scores in each category were equal, as indicated by Levene’s statistic = 1.257, $p = 0.271$. Educational qualification, job grade, job classification and tenure had no significant effects on fringe benefits satisfaction at $\alpha = 0.01$. The effect sizes indicated by $\eta^2 \leq 0.02$ were very small (Table 6.30).

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>$F$ statistic</th>
<th>$p$ value</th>
<th>Effect size $\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification</td>
<td>0.089</td>
<td>1</td>
<td>0.089</td>
<td>0.210</td>
<td>0.647</td>
<td>0.00</td>
</tr>
<tr>
<td>Job Grade</td>
<td>2.079</td>
<td>1</td>
<td>2.079</td>
<td>4.893</td>
<td>0.028</td>
<td>0.01</td>
</tr>
<tr>
<td>Job Classification</td>
<td>2.391</td>
<td>2</td>
<td>1.196</td>
<td>2.814</td>
<td>0.061</td>
<td>0.02</td>
</tr>
<tr>
<td>Tenure</td>
<td>0.206</td>
<td>1</td>
<td>0.206</td>
<td>0.486</td>
<td>0.486</td>
<td>0.00</td>
</tr>
</tbody>
</table>

6.3.9.5 Contingent rewards satisfaction (CORSAT)
The variances of the CORSAT scores in each category were equal indicated by Levene’s statistic = 1.273, $p = 0.263$. Educational qualification, job grade, job classification and tenure had no significant effects on contingent rewards satisfaction at $\alpha = 0.01$. The effect sizes reflected by $\eta^2 \leq 0.005$ were negligible (Table 6.31).

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>$F$ statistic</th>
<th>$p$ value</th>
<th>Effect size $\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification</td>
<td>0.631</td>
<td>1</td>
<td>0.631</td>
<td>1.865</td>
<td>0.173</td>
<td>0.01</td>
</tr>
<tr>
<td>Job Grade</td>
<td>0.231</td>
<td>1</td>
<td>0.231</td>
<td>0.682</td>
<td>0.410</td>
<td>0.00</td>
</tr>
<tr>
<td>Job Classification</td>
<td>0.583</td>
<td>2</td>
<td>0.291</td>
<td>0.861</td>
<td>0.424</td>
<td>0.01</td>
</tr>
<tr>
<td>Tenure</td>
<td>0.354</td>
<td>1</td>
<td>0.354</td>
<td>1.045</td>
<td>0.307</td>
<td>0.00</td>
</tr>
</tbody>
</table>

6.3.9.6 Operating conditions satisfaction (OPCSAT)
The variances in the OPCSAT scores in each category were equal, as indicated by Levene’s statistic = 2.284, $p = 0.028$. Job grade had a significant effect on operating conditions satisfaction at $\alpha = 0.01$, but the effect size, reflected by $\eta^2 = 0.07$, was small (Table 6.32).
## Table 6.32 Results of Multi-factorial ANOVA on OPCSAT

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F statistic</th>
<th>p value</th>
<th>Effect size $\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification</td>
<td>1.949</td>
<td>1</td>
<td>1.949</td>
<td>2.870</td>
<td>0.091</td>
<td>0.01</td>
</tr>
<tr>
<td>Job Grade</td>
<td>17.569</td>
<td>1</td>
<td>17.569</td>
<td>25.874</td>
<td>0.000*</td>
<td>0.07</td>
</tr>
<tr>
<td>Job Classification</td>
<td>0.854</td>
<td>2</td>
<td>0.427</td>
<td>0.629</td>
<td>0.534</td>
<td>0.00</td>
</tr>
<tr>
<td>Tenure</td>
<td>0.217</td>
<td>1</td>
<td>0.217</td>
<td>0.319</td>
<td>0.572</td>
<td>0.00</td>
</tr>
</tbody>
</table>

* Significant at $\alpha = 0.01$

The trend visualised in Figure 6.16 was that respondents in job grades 8-9 reported higher levels of operating conditions satisfaction than those in job grades 6-7.

**Figure 6.16 Comparison of mean OPCSAT scores ± 95% confidence intervals with respect to job grade**

![Figure 6.16 Comparison of mean OPCSAT scores ± 95% confidence intervals with respect to job grade](image)

### 6.3.9.7 Co-workers satisfaction (COWSAT)

The variances in the COWSAT scores in each category were not equal, as indicated by Levene’s statistic = 2.162, $p = 0.037$. Job classification had a marginally significant effect on co-workers satisfaction at $\alpha = 0.01$, but the effect size reflected by $\eta^2 = 0.03$ was small (Table 6.33).
Table 6.33 Results of Multi-factorial ANOVA on COWSAT

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F statistic</th>
<th>p value</th>
<th>Effect size η²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification</td>
<td>0.208</td>
<td>1</td>
<td>0.208</td>
<td>0.455</td>
<td>0.500</td>
<td>0.00</td>
</tr>
<tr>
<td>Job Grade</td>
<td>0.236</td>
<td>1</td>
<td>0.236</td>
<td>0.517</td>
<td>0.473</td>
<td>0.00</td>
</tr>
<tr>
<td>Job Classification</td>
<td>4.170</td>
<td>2</td>
<td>2.085</td>
<td>4.558</td>
<td>0.011*</td>
<td>0.03</td>
</tr>
<tr>
<td>Tenure</td>
<td>0.938</td>
<td>1</td>
<td>0.938</td>
<td>2.051</td>
<td>0.153</td>
<td>0.01</td>
</tr>
</tbody>
</table>

* Significant at α = 0.01

The trend visualised in Figure 6.17 was that respondents in managerial positions reported higher levels of co-worker satisfaction than supervisors and co-workers.

Figure 6.17 Comparison of mean COWSAT scores ± 95% confidence intervals with respect to job grade

6.3.9.8 Nature of work satisfaction (NATSAT)

The variances in the NATSAT scores in each category were equal, as indicated by Levene’s statistic = 1.106, p = 0.359. Job grade had a significant effect on nature of work satisfaction at α = 0.01 but the effect size reflected by η² = 0.02 was small (Table 6.34).
Table 6.34 Results of Multi-factorial ANOVA on NATSAT

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F statistic</th>
<th>p value</th>
<th>Effect Size η²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification</td>
<td>0.008</td>
<td>1</td>
<td>0.008</td>
<td>0.014</td>
<td>0.908</td>
<td>0.00</td>
</tr>
<tr>
<td>Job Grade</td>
<td>4.962</td>
<td>1</td>
<td>4.962</td>
<td>8.547</td>
<td>0.004*</td>
<td>0.02</td>
</tr>
<tr>
<td>Job Classification</td>
<td>2.438</td>
<td>2</td>
<td>1.219</td>
<td>2.100</td>
<td>0.124</td>
<td>0.01</td>
</tr>
<tr>
<td>Tenure</td>
<td>0.632</td>
<td>1</td>
<td>0.632</td>
<td>1.089</td>
<td>0.297</td>
<td>0.00</td>
</tr>
</tbody>
</table>

* Significant at α = 0.01

The trend visualised in Figure 6.18 was that respondents in job grades 8-9 reported higher levels of nature of work satisfaction than those in job grades 6-7.

Figure 6.18 Comparison of mean NATSAT scores ± 95% confidence intervals with respect to job classification

6.3.9.9 Communication satisfaction (COMMSAT)

The variances in the COMMSAT scores in each category were equal, as indicated by Levene’s statistic = 1.765, p = 0.093. Educational qualification, job grade, job classification and tenure had no significant effects on communication satisfaction at α = 0.01. The effect sizes reflected by η² ≤ 0.005 were negligible (Table 6.35).
Table 6.35 Results of Multi-factorial ANOVA on COMMSAT

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F statistic</th>
<th>p value</th>
<th>Effect Size η²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification</td>
<td>0.094</td>
<td>1</td>
<td>0.094</td>
<td>0.214</td>
<td>0.644</td>
<td>0.001</td>
</tr>
<tr>
<td>Job Grade</td>
<td>0.015</td>
<td>1</td>
<td>0.015</td>
<td>0.035</td>
<td>0.851</td>
<td>0.000</td>
</tr>
<tr>
<td>Job Classification</td>
<td>0.907</td>
<td>2</td>
<td>0.453</td>
<td>1.035</td>
<td>0.356</td>
<td>0.006</td>
</tr>
<tr>
<td>Tenure</td>
<td>0.315</td>
<td>1</td>
<td>0.315</td>
<td>0.719</td>
<td>0.397</td>
<td>0.002</td>
</tr>
</tbody>
</table>

6.3.9.10 Total job satisfaction (TOTSAT)

The variances in the TOTSAT scores in each category were not equal, as indicated by Levene’s statistic = 2.590, \( p = 0.013 \). The mean total job satisfaction varied significantly with respect to job grade and tenure at \( \alpha = 0.01 \); however, the effect sizes, reflected by \( \eta^2 < 0.06 \), were small (Table 6.36).

Table 6.36 Results of Multi-factorial ANOVA on TOTSAT

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F statistic</th>
<th>p value</th>
<th>Effect size η²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification</td>
<td>16.990</td>
<td>1</td>
<td>16.990</td>
<td>3.068</td>
<td>0.081</td>
<td>0.009</td>
</tr>
<tr>
<td>Job Grade</td>
<td>131.835</td>
<td>1</td>
<td>131.835</td>
<td>23.808</td>
<td>0.000*</td>
<td>0.064</td>
</tr>
<tr>
<td>Job Classification</td>
<td>26.837</td>
<td>2</td>
<td>13.418</td>
<td>2.423</td>
<td>0.090</td>
<td>0.014</td>
</tr>
<tr>
<td>Tenure</td>
<td>93.781</td>
<td>1</td>
<td>93.781</td>
<td>16.936</td>
<td>0.000*</td>
<td>0.047</td>
</tr>
</tbody>
</table>

* Significant at \( \alpha = 0.01 \)

The trends visualised in Figure 6.19 were that; a) employees in job grades 6 to 7 reported lower mean levels of total job satisfaction than those in job grades 8 to 9, and b) the mean total satisfaction scores were greater for those with less than 10 years tenure.
6.3.9.11 Transformational leadership (TRANSFORM)

The variances in the TRANSFORM scores in each category were equal, as indicated by Levene’s statistic = 1.688, \( p = 0.111 \). Job classification had a significant effect on the mean transformational leaderships scores at \( \alpha = 0.01 \), but the effect size reflected by \( \eta^2 = 0.11 \) was small (Table 6.37).

**Table 6.37 Results of Multi-factorial ANOVA on TRANSFORM**

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>( F ) statistic</th>
<th>( p ) value</th>
<th>Effect size ( \eta^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification</td>
<td>0.081</td>
<td>1</td>
<td>0.081</td>
<td>0.360</td>
<td>0.549</td>
<td>0.00</td>
</tr>
<tr>
<td>Job Grade</td>
<td>0.081</td>
<td>1</td>
<td>0.081</td>
<td>0.362</td>
<td>0.548</td>
<td>0.00</td>
</tr>
<tr>
<td>Job Classification</td>
<td>9.467</td>
<td>2</td>
<td>4.733</td>
<td>21.015</td>
<td>0.000*</td>
<td>0.11</td>
</tr>
<tr>
<td>Tenure</td>
<td>0.000</td>
<td>1</td>
<td>0.000</td>
<td>0.002</td>
<td>0.965</td>
<td>0.00</td>
</tr>
</tbody>
</table>

* Significant at \( \alpha = 0.05 \)

The trend visualised in Figure 6.20 was that respondents in managerial positions reported higher levels of transformational leadership behaviour than supervisors and co-workers.
6.3.9.12 Transactional leadership (TRANSACT)

The variances in the TRANSACT scores in each category were equal, as indicated by Levene’s statistic = 1.168, \( p = 0.320 \). Job classification had a significant effect on the mean transactional leadership scores at \( \alpha = 0.01 \), but the effect size, as reflected by \( \eta^2 = 0.06 \), was small (Table 6.38).

Table 6.38 Results of Multi-factorial ANOVA on TRANSACT

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F statistic</th>
<th>p value</th>
<th>Effect Size ( \eta^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification</td>
<td>0.139</td>
<td>1</td>
<td>0.139</td>
<td>0.846</td>
<td>0.358</td>
<td>0.00</td>
</tr>
<tr>
<td>Job Grade</td>
<td>0.385</td>
<td>1</td>
<td>0.385</td>
<td>2.337</td>
<td>0.127</td>
<td>0.01</td>
</tr>
<tr>
<td>Job Classification</td>
<td>3.638</td>
<td>2</td>
<td>1.819</td>
<td>11.034</td>
<td>0.000*</td>
<td>0.06</td>
</tr>
<tr>
<td>Tenure</td>
<td>0.222</td>
<td>1</td>
<td>0.222</td>
<td>1.347</td>
<td>0.247</td>
<td>0.01</td>
</tr>
</tbody>
</table>

* Significant at \( \alpha = 0.01 \)

The trend visualised in Figure 6.21 was that respondents in managerial positions reported higher levels of transactional leadership behaviour than supervisors and co-workers.
Figure 6.21 Comparison of mean TRANSACT scores ± 95% confidence intervals with respect to job classification

<table>
<thead>
<tr>
<th>Job Classification</th>
<th>Mean TRANSACT</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managerial</td>
<td>2.3</td>
<td>(2.0, 2.6)</td>
</tr>
<tr>
<td>Supervisor</td>
<td>2.0</td>
<td>(1.7, 2.3)</td>
</tr>
<tr>
<td>Co-worker</td>
<td>1.6</td>
<td>(1.3, 1.9)</td>
</tr>
</tbody>
</table>

6.3.9.13 Laissez-Faire leadership (LF)

The variances in the LF scores in each category were equal, as indicated by Levene’s statistic = 1.343, \( p = 0.229 \). Job classification had a significant effect on the mean Laissez-Faire scores at \( \alpha = 0.01 \), but the effect size, as reflected by \( \eta^2 = 0.05 \), was small (Table 6.39).

**Table 6.39 Results of Multi-factorial ANOVA on LF**

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F statistic</th>
<th>p value</th>
<th>Effect Size ( \eta^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification</td>
<td>0.040</td>
<td>1</td>
<td>0.040</td>
<td>0.099</td>
<td>0.753</td>
<td>0.00</td>
</tr>
<tr>
<td>Job Grade</td>
<td>1.718</td>
<td>1</td>
<td>1.718</td>
<td>4.220</td>
<td>0.041</td>
<td>0.01</td>
</tr>
<tr>
<td>Job Classification</td>
<td>7.182</td>
<td>2</td>
<td>3.591</td>
<td>8.818</td>
<td>0.000*</td>
<td>0.05</td>
</tr>
<tr>
<td>Tenure</td>
<td>0.001</td>
<td>1</td>
<td>0.001</td>
<td>0.003</td>
<td>0.956</td>
<td>0.00</td>
</tr>
</tbody>
</table>

* Significant at \( \alpha = 0.01 \)

The trend visualised in Figure 6.22 was that respondents in managerial and supervisory positions reported higher levels of laissez-faire leadership behaviour than their employees.
Figure 6.22 Comparison of mean LF scores ± 95% confidence intervals with respect to job classification
6.4 SUMMARY

The research into leadership behaviours and their impact on the level of job satisfaction in Libyan petrochemical industry had significant positive response from both management and employees levels. The overall response from the sample entities, Rasco and Harouge, was overwhelming with averagely more that 86% of the targeted sample from the two companies offering their feedback.

Of the two identified companies, there was a varied degree of response. The Rasco Company for example, reported an overall response rate of 96% with the leaders’ response recorded at 97% while that of raters lagged at 95%. Harouge on the other hand had more responses in percentage from raters 80% as compared to that 72.5% of leaders. Variations were equivalently notable among leaders and raters with some departments in each company having higher percentage responses from leaders than raters while others reported higher responses from raters.

Analysis of respondents in terms of factors such as age, gender, marital status among other factors also yielded useful statistics. Review of respondents by age revealed individuals in their twenties to have formed a majority of the respondents and half of respondents in both companies having been bellow thirty years old. Gender review also expressed male to have formed the majority of the respondents with an average percentage of about 95% of the sample population, which indicates the nature of labour force in these companies. Similarly, both companies recorded higher percentages of respondents as being married compared to the single category that formed an overall of less than 30%. Other characteristics of the respondents such as their number of dependants, educational qualifications, job classification, and job grade among others also expressed similar trends of similarities in the two companies.

Inferential statistics analysis with respect to the two companies similarly represented similarity in trends of results. Scores, according to employees, with respect to transformational leadership in both companies revealed lower values in the sample statistics as compared to population data. Results over transactional and laissez-faire leaderships on the contrary reported higher mean statistics as compared to population values in both companies. Though a slight difference was notable between responses from leaders and employees with respect to leadership styles, leaders’ responses in the
two different companies yielded similar opinion among themselves. The general opinion of both leaders and employees over preference of leadership styles is also independently consistent. Employees in both companies had same rationale that was different from that which was common among leaders in the two companies.

Deviation was however noted in job satisfaction as employees in Rasco reported higher level of job satisfaction. A review of the general satisfaction of employees with respect to leadership on the contrary revealed uniformity in the two companies thus identifying difference in aspects in the companies. Review of employee satisfaction with respect to leadership behaviour is also commonly identified to be dominant leadership behaviours in the company.

The empirical analysis also depicts that employees’ perception over transformational leadership behaviour depended majorly on job grade, while no significant correlation was realised over transactional and laissez-faire leadership behaviours. MLQ however identifies more factors to affect job satisfaction. Demographic characteristics were further identified as non contributors to job satisfaction.
Chapter 7

CONTEXTUALISING THE FINDINGS, PRACTICAL SIGNIFICANCE AND IMPLICATIONS

7.1 INTRODUCTION

This chapter aims at providing an interpretative discussion on the findings of the study and their implications with the objective of providing further meaning through an interpretative approach. In doing so, this chapter is organised in three sections: a) summary of the study findings; b) a discussion around the research questions; c) the practical significance and implications of the results by contextualising the results of this study in the available body of knowledge, including key issues relating the Herzberg’s two-factor theory of job satisfaction and theories concerning leadership behaviours (transformational, transactional and laissez-faire).

7.2 SUMMARY OF FINDINGS: HYPOTHESES TESTING

In order to explore the relationship between the perceived transformational, transactional and laissez-faire leadership behaviours and the level of job satisfaction, six hypotheses were created. The findings of these hypotheses are summarised below.

With respect to H₀₁: (The leadership behaviour adopted by the two companies’ leaders is neither transformational nor transactional). It is concluded that the observed transformational behaviours at Harouge Company and Rasco Company were less than the MLQ norms, where transactional and laissez-faire leadership behaviour were equal or greater than the MLQ norms. This implies that the null hypothesis is rejected. The statistical evidence based on z tests indicates that the leadership behaviours adopted by the two companies’ leaders were highly transactional and laissez-faire than transformational.

With respect to H₀₂: (A statistically significant relationship does not exist between leadership behaviour and employee overall satisfaction levels within the two companies) it is concluded
that the null hypothesis can be rejected. Multiple Discriminant Analysis indicates that the transformational leadership behaviours that discriminated significantly between employees with below average and above average levels of job satisfaction were intellectual stimulation and individual consideration.

No other leadership behaviours were included in the discriminant model. The implications of the findings are that the employees who reported above average levels of job satisfaction worked with leaders who mainly displayed the two transformational behaviours of intellectual stimulation and individual consideration. Evidence for rejection of the null hypothesis also came from the construction of the Multiple Liner Regression (MLR) equation:

\[
Y = 0.186 + 0.527 X_1 + 0.404 X_2
\]

Where \( Y \) = job satisfaction, \( X_1 \) = intellectual stimulation, \( X_2 \) = individual consideration.

With respect to \( H_03: \) (There is no significant difference in the perceived leadership behaviours and job satisfaction between the two companies’ employees) it is concluded that the null hypothesis can be rejected. The conclusion, based on the use of analysis of variance (ANOVA), was that the mean level of overall job satisfaction was significantly higher at Rasco than at Harouge. A relationship between leadership behaviours and job satisfaction was also found, as significantly higher levels of job satisfaction at Rasco were associated with significantly higher levels of transformational, transactional and laissez-faire leadership behaviours. Conversely significantly lower levels of job satisfaction at Harouge were associated with significantly lower levels of transformational, transactional and laissez-faire leadership behaviours.

With respect to \( H_04: \) (The level of job satisfaction of the two companies’ employees is low, and there is a slight difference in the level of the job satisfaction between the two companies’ employees), it is concluded that the null hypothesis can be rejected.

Significantly higher levels of job satisfaction were recorded at Rasco than at Harouge. However, the level of job satisfaction recorded as the outcome of leadership behaviour at both companies (Rasco and Harouge), was below the MLQ norm. It is inferred, therefore, that the level of job satisfaction was relatively low at Rasco and Harouge compared to industry norms.

With respect to \( H_05: \) (there will be no significant differences in the job satisfaction of employees in the two companies (Rasco and Harouge), based on their demographic
characteristics, namely, gender, age, marital status, number of dependents, educational attainment, job classification, job grade, and tenure), it is concluded that the null hypothesis is rejected with respect to the job grade.

The best fitting linear equation to predict the job satisfaction scores of the employees was:

Equation 7.2: \[ Y = 0.2 \cdot 857 + 0.169 X_1 - 0.166 X_2 - 0.005 X_3 + 0.048 X_4 + 10^{-5} X_5 \]

Where \( Y \) = job satisfaction as the outcome of leadership behaviours, measured using the MLQ (Form 5X-Short), \( X_1 \) = Company (0 = Harouge, 1 = Rasco), \( X_2 \) = job grade; \( X_3, X_4, \) and \( X_5 \) = composite variables extracted using Factor Analysis to define different dimensions of job satisfaction measured using the Job Satisfaction Survey (JSS).

The conclusion was different when multi-factorial analysis of variance was used to test the null hypotheses that four factors representing the demographic characteristics of the respondents (qualification, job classification, job grade, and tenure) had no main or interaction effects on twelve dependent variables (nine dimensions of job satisfaction and three leadership variables transformational, transactional and laissez-faire).

The trends highlighted were that respondents in job grades 6 to 7 reported lower mean levels of total job satisfaction than those in job grades 8 to 9 and the mean total satisfaction scores were greater for those with less than 10 years tenure. In addition, respondents in managerial positions reported higher mean levels of supervisory and co-workers satisfaction than did supervisors and co-workers. Moreover, respondents in job grades 8 to 9 reported higher levels of operating conditions satisfaction and nature of work satisfaction than those in job grades 6 to 7. Furthermore, respondents in managerial positions reported higher levels of transformational and transactional leadership behaviour than did supervisors and co-workers.

With respect to H\(_0\)6: (There will be no significant relationship between work conditions, supervision, co-workers, fairness, promotion, and pay with job satisfaction amongst employees in the two companies). There is insufficient evidence to reject the null hypothesis. In the regression model defined above, the variables \( X_3, X_4, \) and \( X_5 \) were not significantly different from zero. It was not possible to predict job satisfaction (as the outcome of leadership behaviours measured using the MLQ using the variables which defined the different dimensions of job satisfaction (measured
using the JSS). Factor Analysis provided statistical evidence to conclude that job satisfaction, measured as an outcome of leadership behaviour using the MLQ could not be included within a factor solution alongside job satisfaction constructs measured with the JSS. It is apparent that job satisfaction is a highly multi-dimensional issue and that the JSS measured a different dimension of job satisfaction than did the MLQ.

7.3 DISCUSSING THE RESULTS: THROUGH RESEARCH QUESTIONS AN INTERPRETATIVE APPROACH

The Chapter six presents extensive empirical findings; and the previous section presented the results of hypothesis testing. This section aims using the general findings but importantly the findings from the hypothesis testing section to discuss the results in an interpretative manner by responding to the main research questions identified in Chapter one. Such a level analysis provides a structured approach to reaching conclusion in the end of the study.

It should be noted with confidence that the findings regarding leadership behaviours of Rasco and Harouge leaders that are predictive of employees’ job satisfaction may be applicable to the general population of administrators at Libya petrochemical industry, although caution should be employed before generalising the results of this study to other populations.

This confidence is based on the many empirical studies that confirm that transformational leadership has a major impact on employees’ job satisfaction, in comparison to transactional and laissez-faire leadership (Bass, 1985; Howell and Avolio, 1993; Bass et al., 2006; Northouse, 2007; Avolio et al., 2009).

Furthermore, a review of leadership studies on military, government, and organisational leaders suggests that the relationships between job satisfactions are stronger between employees’ job satisfaction and transformational leadership than with transactional and laissez-faire leadership behaviours (Lowe et al., 1996; Peterson et al., 2003; Mullins, 2007; Bertocci, 2009).

This study supports previous research findings regarding the correlation between transformational leadership sub-scales and the dependent variables of job satisfaction.
The transformational model was more predictive than either the transactional and laissez-faire models for all three dependent variables.

The following section discusses the research questions with direct reference to the results of the inferential statistical tests performed on the responses to the MLQ and JSS. In doing so, it attempts to provide an interpretative discussion to give further meaning to the findings.

7.3.1 Reflecting on the Type of Observed Leadership Behaviours

The first research question was “As perceived by the subordinates of Rasco and Harouge, what kind of leadership behaviour is adopted by the leaders of these two companies?”

Statistical evidence obtained using inferential tests on the responses to the MLQ indicated that the mean levels of transformational leadership behaviours perceived by the employees of both Harouge and Rasco were significantly less than those expected relative to published MLQ population norms. The mean of transactional (management by exception; Passive and active) and laissez-faire leadership scores at both Harouge and Rasco were equal or greater than the MLQ norms, indicated by \( p < 0.001 \). However, contingent reward behaviour was not significantly different from the MLQ norm, indicated by \( p > 0.05 \).

Evidence is provided to conclude that the leaders of the two companies as perceived by their employees are demonstrating transactional and laissez-faire leadership behaviours more often than the transformational leadership behaviour.

This can be interpreted as the level of transformational leadership behaviour, specifically the two dimensions; (individual consideration and intellectual stimulation) adopted by the leaders of the two companies (Rasco and Harouge), as evidenced by statistical significance are in a direct relation with the level of job satisfaction of their employees. Hence, there is sufficient evidence, to conclude that the reason behind the low level of job satisfaction among the two companies’ employees is strongly associated with the low level of transformational leadership behaviour exhibited by their immediate leaders.
7.3.2 Reflecting on the Leadership Behaviours and Overall Job Satisfaction

The second question was “Do Rasco’s and Harouge’s employees perceive their leaders’ leadership behaviour as transformational, transactional or laissez-faire, and what is the relationship between these perceptions and the employees’ overall job satisfaction?”

The trends obtained from the responses to the MLQ were: a) the mean scores were highest for transformational behaviour, less for transactional behaviour and least for laissez-faire behaviour; b) the leaders consistently awarded higher scores for leadership behaviours than did the employees. The employees were divided into two categories, based on their responses to the JSS; those with below average levels of overall job satisfaction; and those with above average levels of overall job satisfaction.

A discriminant function model was constructed which explained that the employees who reported above average levels of overall job satisfaction worked with leaders who displayed two dimensions of transformational behaviours, specifically intellectual stimulation and individual consideration. No other dimensions of leadership behaviours were significant predictors of overall job satisfaction in the discriminant model. Use of a multiple regression model confirms that the overall job satisfaction of employees increased in relation to an increase in the two transformational leadership behaviours identified in the discriminant function model. The multiple regression model was defined by:

Equation 7.3: \[ Y = 0.186 + 0.527 X_1 + 0.404 X_2 \]

Where \( Y \) = the overall job satisfaction of the employees measured using the JSS; \( X_1 \) = the perceived intellectual stimulation of the leaders, measured using the MLQ; \( X_2 \) = the perceived individual consideration of the leader, measured using the MLQ.

Intellectual stimulation and individual consideration were not collinear. The adjusted \( R^2 \) value indicated that 39.5% of the variability in job satisfaction was explained by the model; a substantial effect size, implying the model may have practical, in addition to statistical, significance.

Comparison of the magnitudes of the standardised partial regression coefficients indicated that intellectual stimulation was a relatively more important predictor of overall job satisfaction than individual consideration. Multiple regression analysis did not identify any other dimensions of leadership behaviour as statistically significant predictors of overall job satisfaction.
The standardized partial regression coefficients in a multiple regression model provide an indication of the relative level of importance of each independent variable as a predictor of the dependent variable. For example, the equation to predict job satisfaction was:

Equation 7.4: \( Y = 0.186 + 0.527X_1 + 0.404X_2 \)

Where \( Y \) = job satisfaction (dependent variable), \( X_1 \) = intellectual stimulation (first independent variable), \( X_2 \) = individual consideration (second independent variable).

This implies that intellectual stimulation (partial regression coefficient = 0.527) was a relatively more important predictor of job satisfaction than individual consideration (partial regression coefficient = 0.404).

Intellectual stimulation and individual consideration were identified as significant predictors of job satisfaction in the multiple regression analysis because their \( p \) values (based on the \( t \) test statistics) were less than 0.05. There were no other statistically significant predictors of job satisfaction, \( i.e., \) idealised influence behaviour, idealised influence attributed and inspirational motivation, since when they were entered into the multiple regression analysis, their \( p \) values (based on the \( t \) test statistics) were all greater than 0.05.

Evidence is provided to conclude that the two dimensions of transformational leadership behaviour (intellectual stimulation and individual consideration), are the most significant predictors of the level of job satisfaction. That means the employees of the two companies (Rasco and Harouge) are looking for leadership behaviours from their leaders that can support them, celebrate their achievements, paying more attention to their needs and help them to find solution to difficult work related problems that may have.

One possible solution to overcome these difficulties that the two companies’ administrators should emphasise the recruitment and hiring of leaders who demonstrate positive transformational leadership behaviour. In addition, they might consider that additional human resources are allocated to leadership development. Furthermore, administrators might consider hiring a system-wide leadership specialist to work with all levels of the two companies in the area of leadership development and organisational outcomes.
7.3.3 Reflecting on the Differences between Leadership Behaviours at Rasco and Harouge

The third research question was “Is there a significant difference in the perceived leadership behaviours and job satisfaction between the two companies’ employees?”

The answer to this question varied, depending on which instrument was used to measure job satisfaction. Although the mean scores for job satisfaction measured using the MLQ were consistently higher at Harouge than at Rasco, statistical evidence based on the use of inferential tests provided evidence to conclude that the mean level of job satisfaction at Rasco measured as an outcome of leadership behaviours was not significantly higher than that at Harouge. In contrast, the use of inferential tests indicated that the mean level of overall job satisfaction measured using the JSS was significantly higher at Rasco than at Harouge.

A correlation between leadership behaviours measured using the MLQ and overall job satisfaction measured using the JSS was found which provided an explanation for the significant difference between the mean levels of overall job satisfaction at the two companies. Significantly higher levels of overall job satisfaction at Rasco were associated with significantly higher levels of transformational, leadership behaviours. Conversely, significantly lower levels of job satisfaction at Harouge were associated with significantly lower levels of transformational leadership behaviours.

As the level of transformational leadership behaviour as perceived by the employees is greater in Rasco than in Harouge, and since the mean level of all job satisfaction also at Rasco was also significantly higher than at Harouge, a relationship between transformational leadership behaviour and job satisfaction can be inferred.

One possible explanation for the potential source of these differences is institutional in nature; namely, that job satisfaction varies across Rasco and Harouge companies because of inherent natural differences in key conditions which influence how employees evaluate their jobs. Such conditions may include the nature of the workplace environment, payment and promotional opportunities.

For example, it was observed in Harouge that most of the company’s employees (1,040 out of 1,600 or 65%) are situated in the middle of Libyan Desert where they have to stay away from their families for periods of five to six weeks before being able to take short breaks to visit them.
Such a difficult working environment, along with leaders exhibiting weak transformational leadership behaviour, leads them to be less satisfied than Rasco employees. In Rasco, 90% (3481 employees out of 3821) of the workforce live near their workplace in modern accommodation facilities provided by the company, which leads to more stable social lives than Harouge employees. In addition, salaries can also play a definite role in this respect, and they are higher in Rasco than in Harouge.

Moreover, the availability of the overseas and local training opportunities for employees in Rasco are greater than in Harouge, as the latter is a joint venture with a foreign company (Petro-Ex Canada), and training plans (externally and internally) for each year are very limited for those who are in technical professions, only being granted to 5% (80 out of 1,600 employees) of the company’s total workforce. However, this in Rasco the percentage is about 20% (770 out of 3,821 employees) of its workforce, meaning there are better chances to get training opportunities internally and externally and for technical and managerial professions as well.

Therefore, it can be concluded that the level of job satisfaction is a positive influence on perceived transformational leadership behaviours, especially the ‘intellectual stimulation’ and ‘individual consideration’ exhibited by the leaders, along with the other factors mentioned above (payment, training opportunities, etc.) As a result, the two companies’ employees were shown to be more satisfied in their current positions if they perceived their leaders to have transformational leadership qualities by excelling in their intellectual aspiration, setting the example for inventiveness and representing themselves as role models for their employees. On the other hand, job satisfaction level was negatively related to transactional and laissez-faire leadership behaviours; therefore, the two companies’ employees were shown to be less satisfied in their current positions if they perceived their leaders to be transactional leaders. It is obvious that all the above-mentioned factors contribute significantly to the level of job satisfaction among the two companies’ employees in their current positions.
7.3.4 Reflecting on the Differences between Job Satisfaction at Rasco and Harouge

The fourth research question was “What is the level of job satisfaction of the two companies’ (Rasco and Harouge) employees and is there any significant difference in employees’ job satisfaction levels between the two companies?”

Statistical evidence based on the use inferential tests indicated that the mean levels of job satisfaction recorded as the outcome of leadership behaviour using the MLQ at both companies was below that expected relative to the published MLQ population norms. It is inferred, therefore, that the levels of job satisfaction measured using the MLQ were relatively low at both Rasco and Harouge Companies indicated by $p < 0.001$ for the $z$ test statistics. Inferential tests provided evidence to conclude that the mean level of job satisfaction as the outcome of leadership behaviour of the subordinates was significantly higher at Rasco than at Harouge.

7.3.5 Discussing the Effects of Demographic Characteristics on Job Satisfaction

The fifth research question was “How far do the employees’ demographic characteristics such as gender, age, marital status, number of dependents, educational attainment, job classification, job grade, and tenure influence their perceptions of leadership behaviour to job satisfaction?”

There was a strong statistical association between job grade, job classification, age-group and tenure. Therefore it was difficult to discriminate between the separate effects of each of these factors. Multiple regression analysis did not identify gender, age, marital status, number of dependents, educational attainment, or job classification of the employees as significant predictors of job satisfaction.

It was found, however, that job grade was a statistically significant predictor of job satisfaction as the outcome of leadership behaviours. The best fitting linear model to predict the job satisfaction scores of the employees measured using the MLQ was:

Equation 7.5: $Y = 2.857 + 0.169 \times X_1 + 0.166 \times X_2$

Where $Y =$ job satisfaction as the outcome of leadership behaviours, measured using the MLQ, $X_1 =$ Company ($0 =$ Harouge, $1 =$ Rasco), $X_2 =$ job grade (on a scale from 6 to 9).
The relative magnitudes of the partial regression coefficients predicted that job satisfaction measured as the outcome of leadership behaviour using the MLQ was higher by 0.169 at Rasco than at Harouge, whilst job satisfaction increased by 0.166 for every unit increase in job grade.

Evidence to indicate that job grade was an important predictor of job satisfaction was also obtained using multi-factorial analysis of variance. The effects of four factors representing the demographic characteristics of the respondents (educational qualification, job classification, job grade, and tenure) on thirteen dependent variables (nine dimensions of job satisfaction, one dimension of total satisfaction, and three leadership variables, i.e. transformational, transactional, and laissez-faire) were tested. The responses to the JSS and MLQ did not vary significantly with respect to the educational qualifications of the employees.

The trends were that employees in job grades 6 to 7 reported significantly lower mean levels of overall job satisfaction than did employees in job grades 8 to 9. The reason for this could be due to the fact that employees in job grades 6 or 7 are at the beginning of their employment life and are near the bottom line of a company’s hierarchy or organisational structure; therefore, it is still early for them to demonstrate evidence of any job satisfaction, such as satisfaction with working conditions, nature of work, satisfaction with the relationship with their colleagues in the work place, satisfaction with pay issues and recognition from their leaders, etc. This may not appear until they move forward in their employment to reach the levels of their colleagues’ level in job grades 8 and 9, who must report significantly higher levels of operating conditions and nature of work satisfaction, as measured using the JSS, before they can anticipate any positive motivational opportunities from their leaders as a source of satisfaction.

Furthermore, the mean overall satisfaction scores as measured with the JSS were significantly higher for employees with less than 10 years tenure. Again, employees with less than 10 years of tenure are still in the middle of their employment and so this category still has a great chance to receive additional motivational opportunities, such as payment increases, overseas training opportunities, recognition and encouragement
from their immediate leaders and others in the company as they interact with others during their daily business operations.

All these expected opportunities will definitely lead them to be more optimistic about their employment in the future, and so they will experience higher levels of job satisfaction than those with more than 10 years tenure, as the level of job satisfaction for this category of employees will start to decline because they will not expect any further substantial improvements in their employment life.

Finally, respondents in managerial positions reported higher levels of transformational, transactional, and laissez-faire leadership behaviour, as measured using the MLQ, than their supervisors and co-workers did. This category of respondents-managerial position individuals, such as department managers, general managers, committee members and consultants are all at the apex of the two companies’ organisational structure pyramids, and by the nature of their positions they should be the most satisfied as they have many privileges including good salaries, flexible working schedules, recognition by peers and society, job security, health insurance, organisation titles, and opportunities for advanced training, which individuals in lower positions (supervisors and co-workers) do not have.

7.3.6 The Relationship between Job Satisfaction Measures: Using the JSS and MLQ

The sixth research question was “How far do job satisfaction extrinsic factors such as working conditions, communication, co-workers, fairness, supervision, promotion, and pay influence their perceived leadership behaviour to job satisfaction?”

Correlation and multiple regression analysis revealed that the levels of working conditions satisfaction, communication satisfaction, co-workers satisfaction, supervision satisfaction, promotion satisfaction, and pay satisfaction (measured using the JSS) were not significant predictors of job satisfaction as the outcome of leadership behaviours measured using the MLQ.

Factor analysis also provided evidence to conclude that job satisfaction, measured as an outcome of leadership behaviour using the MLQ did not load onto the same factors associated with the nine dimensions of job satisfaction measured using the JSS. It is concluded that job
satisfaction is a highly multi-dimensional concept and that the JSS appeared to measure different dimensions of job satisfaction compared to the MLQ.

7.4 PRACTICAL SIGNIFICANCE AND IMPLICATIONS

The focus of this study is the types of leadership behaviours observed in two companies, Rasco and Harouge. The study aims to determine whether or not the levels of job satisfaction experienced by the employees in these two companies (Rasco and Harouge), were related to their demographic characteristics, and/or to the leadership behaviours used in the two companies. The implications of the relationships between the levels of job satisfaction, and each of the demographic characteristics are discussed before the implications of the relationships between the levels of job satisfaction and leadership behaviours are considered.

7.4.1 Importance of Demographic Factors

According to (Spector, 1997; Friday et al., 2004) several demographic factors including gender, age, educational level, marital status, number of dependents, occupational level, and tenure may influence an individual’s level of job satisfaction. For this reason the respondents in this study were classified into mutually exclusive groups according to their demographic characteristics, thereafter the responses of each group to the JSS and MLQ were compared.

Ideally, when statistically comparing the responses of groups of individuals using inferential statistical tests such as regression and ANOVA, the group sizes should be balanced (i.e. approximately equal). If the sample size is approximately equal in each group, then the responses should be representative of each group, and there is little if any risk of a response bias towards one group. According to Tabachnik and Fidell (2007) the power of the statistical tests to reject the null hypotheses is also increased if the groups are balanced; however it was not possible to ensure that the groups’ sizes of respondents were equal in this study.
7.4.2 Gender

Several researchers have identified gender differences as determinants of job satisfaction (Murray and Atkinson, 1990; Clark and Oswald 1996; McKenna, 2000; Tang and Talpade, 2001; Robbins et al., 2003).

It was not possible to determine if the responses to the JSS and MLQ differed between males and female in this study because the majority of respondents (96% at Rasco and 91 % at Harouge) were male.

This gender imbalance was due to the nature of the work where the employees were expected to handle heavy equipment and operate in a hard-working environment, remaining away from home for protracted periods. Since the proportion of female respondents was very small, the group sizes with respect to gender were highly unbalanced. The sample of female respondents was not considered to be sufficiently representative to accurately test whether gender was a significant determinant of job satisfaction.

7.4.3 Marital Status

Several researchers have previously identified marital status as a determinant of job satisfaction (Cimete et al., 2003; Kuo and Chen, 2004) but no significant statistical relationships between marital status and job satisfaction were identified when the responses of married and single respondents at Rasco and Harouge to the JSS and MLQ were compared. The statistical analysis may, however, have been biased due to the unequal size of the groups. At both Rasco and Harouge, about three quarters of the respondents were married whilst only around one quarter were single. Consequently, the perceptions expressed in the responses were biased towards employees who were married.

7.4.4 Educational Level

Some researchers suggest a positive correlation between job satisfaction and educational level (Ting, 1997; Loscocco, 2000; Crossman and Abou-Zaki, 2003), whereas others (Rogers, 1991; Ting, 1997; Lambert et al., 2001) found no statistically significant relationship existed between job satisfaction and education. There was also
no evidence in this study to indicate a statistically significant relationship between educational level and job satisfaction when the responses of the respondents at Rasco and Harouge to the JSS and MLQ were compared. The statistical analysis may, however, have been biased due to the unequal sizes of the groups. At both Rasco and Harouge, about 60% of the respondents had achieved a Diploma qualification, about 30% a Bachelor’s Degree, and the remainder held a Master’s degree, doctorate or other qualification.

7.4.5 Age

According to Blood et al. (2002); Drafke and Kossen (2002); Greenberg and Baron, (2003); Oshagbemi, (2003); Okpara, (2004) older employees are generally happier with their jobs than younger employees.

In this study a strong statistical correlation between the ages, job grades, job classifications, and tenures of the respondents was identified. The older were the respondents, the higher were their job grades, job classifications, and tenures. Consequently it was difficult, if not impossible to distinguish clearly between the effects on job satisfaction of age, job grade, job classification and tenure. The statistical analysis to determine the effects of age on job satisfaction was biased due to the unequal sizes of the age-groups. At both Rasco and Harouge, over half of the respondents were aged 30 or under, whilst only about 12% were aged over 50.

7.4.6 Number of Dependents

Robbins (1989) suggests a positive relationship between the number of dependents and job satisfaction, although age could be a mediating variable, since older employees are more likely to have a greater number of dependents. The majority of the respondents at both Rasco Company and Harouge Company had between 2 and 5 dependents, but no statistically significant relationship between job satisfaction and the number of dependents was identified in this study.

7.4.7 Tenure

According to Mottaz (1988); Robbins et al. (2003); Sarkeret et al. (2003) that tenure and job satisfaction are positively related, in parallel to the relationship between age
and job satisfaction. It is possible that age may be a mediating variable, acting as a common cause of the correlation between tenure and job satisfaction.

Oshagbemi (2003) in contrast, maintains that employee satisfaction declines within the first year of employment, remains low for several years, after which it increases. However, Clark et al. (1996) suggest that longer tenure does not necessarily lead to increased levels of job satisfaction, which is consistent with the results of this study.

It was found that the mean overall satisfaction scores of employees at Rasco and Harouge measured with the JSS were significantly greater for employees with less than 10 years tenure, irrespective of their job grade. Consequently, overall job satisfaction was negatively related to years of tenure.

The statistical analysis was not biased due to the unequal sizes of the groups, because the six unequal sized tenure categories used in the JSS were collapsed into two equally sized groups. At both Rasco and Harouge, tenure of about half the respondents, with the higher level of job satisfaction, was less than 10 years and the tenure of the other half, with a lower level of overall job satisfaction were more than 10 years. The effect size, however, was very low, implying that the difference in the levels of job satisfaction with respect to tenure, although statistically significant at 0.05, may be too small to have any real practical significance or implications.

**7.4.8 Occupational Level**

Saal and Knight (2000); Crossman and Abou-Zaki (2003) suggest that employees who hold higher level jobs are more satisfied than those who hold lower level positions; however, relatively few studies have attempted to investigate the relationship between employees’ occupational levels and their corresponding levels of job satisfaction, providing a direction for this study.

Job grade was found to be a significant predictor of the combined job satisfaction scores of the employees at Rasco and Harouge measured using the MLQ.

The job satisfaction levels of employees measured as the outcome of leadership behaviour increased by 0.166 for every unit increase in job grade; however, although statistically significant, the effect size was very low, implying that the increase in job
satisfaction with respect to job grade may be too low to have any practical significance or implications.

Evidence to indicate that job satisfaction varied with respect to occupational level was also obtained by analysis of the responses to the JSS. Employees in job grades 6 to 7 reported significantly lower mean levels of overall job satisfaction than employees in job grades 8 to 9. In addition, respondents in managerial positions reported higher mean levels of supervision satisfaction and co-workers satisfaction than did supervisors and co-workers. Moreover, respondents in job grades 8 to 9 reported significantly higher levels of operating conditions satisfaction and nature of work satisfaction than those in job grades 6 to 7. The effect sizes were, however, small.

It is concluded that although statistically significant at $\alpha = 0.05$, the differences between the responses of the employees to the MLQ and JSS with respect to their occupational level may have limited practical significance or implications in reality.

### 7.4.9 The Relationship between Job Satisfaction and Leadership Behaviour

According to Bartolo and Furlonger (2000); Gilsson and Durick (2000); Rauktis (2000) satisfaction with leadership is one of the most significant predictors and elements of overall job satisfaction.

Different dimensions of job satisfaction such as work, recognition, working conditions and co-workers, are all considered to be influenced by or are related to leadership behaviours. Mullins (2002) asserts that transformational, transactional and laissez-faire leadership behaviours relate positively to job satisfaction.

According to Singer and Singer (1990) employees’ satisfaction and effective ratings were more highly correlated with transformational behaviour ratings than with transactional and laissez-faire behaviour ratings.

The results of this study, however, are consistent with this of Lowe et al. (1996) who find that perceived transformational leadership behaviour significantly influence the job satisfaction of employees. The results confirm the conclusions of numerous studies that perceive levels of transformational leadership behaviour are positively correlated with employees’ job satisfaction levels (Yukl, 2006).
Two types of statistical model were constructed in this study (a discriminant function model and a multiple regression model) to define the relationship between leadership behaviours measured using the MLQ and overall job satisfaction measured using the JSS at the Rasco and Harouge Companies. Both models, computed using different statistical methods, separately predicted that the employees who reported above average levels of overall job satisfaction worked with leaders who displayed higher levels of transformational behaviours, specifically intellectual stimulation and individual consideration. On the other hand, the employees who reported below average levels of overall job satisfaction worked with leaders who displayed lower levels of intellectual stimulation and individual consideration behaviours.

No other dimensions of transformational leadership behaviour (e.g. idealised influence and inspirational motivation) were found to be significant predictors of overall job satisfaction. In addition, no dimensions of transactional leadership or laissez-faire leadership behaviours were found to be statistically related to overall job satisfaction.

Intellectual stimulation results in employees’ efforts to be innovative and creative by questioning assumptions, re-framing problems, and approaching old situations in new ways. Individual consideration involves paying special attention to each employee’s needs for achievement and growth by acting as a coach or mentor. By means of their intellectual stimulation and individual consideration, some leaders at Rasco and Harouge may have provided strategic direction and vision to the employees who reported above average levels of overall job satisfaction in their responses to the JSS.

The intellectual stimulation and individual consideration of these leaders may have involved motivational and/or coaching behaviour, obtaining resources for task completion, including interpreting or enforcing organisational policies, and helping to solve the work-related problems of employees. On the other hand, the employees who reported below average levels of overall job satisfaction in the JSS may have worked with leaders who displayed less of these types of transformational behaviours.
7.4.10 Herzberg's Two-Factor Theory of Job Satisfaction

According to Herzberg’s two-factor theory of satisfaction, the needs of employees can be classified into two categories (Ivancerich and Matteson, 2002; Grobler et al., 2002; Spector, 2008; Mullins, 2010).

The first category includes satisfiers or motivating factors, which are high level needs, effective in producing a positive attitude, motivating an individual to superior performance and effort. Satisfiers include achievement, recognition, advancement, responsibility, and the work itself.

The second category includes dissatisfiers or hygiene factors, which are lower level needs, mainly describing the work environment, and serving primarily to prevent job dissatisfaction, but they have little effect on positive job attitudes. Dissatisfiers result in employee dissatisfaction if they are absent, and their presence is essential to maintain at least a minimal level of dissatisfaction. They include policies, administration, supervision, working conditions, interpersonal relations, salary, status, and job security.

A negative job environment creates conditions for hygiene factors and leads to dissatisfaction. Schermerhorn et al. (2000) asserts that leaders should attempt to eliminate dissatisfiers, whilst ensuring that satisfiers are built into the job content in order to maximise opportunities for job satisfaction.

Although Herzberg theory has been built through the theoretical vocabulary of American culture, The results of this study have significant practical implications with respect to testing Herzberg’s two-factor theory of job satisfaction demonstrating its suitability for relevance in different cultural to American culture, such as Libyan culture.

The results of this study have significance and practical implications with respect to testing Herzberg's two factor theory of job satisfaction. The construction of models related transformational behaviours to job satisfaction, and the use of factor analysis to classify different facets of job satisfaction at Rasco and Harouge were important in this respect. The identification of statistically significant relationships between
transformational behaviours and overall job satisfaction is consistent with Herzberg's two-factor theory.

It is proposed that the leaders at Rasco and Harouge who satisfied the higher level needs of their employees through the use of transformational leadership behaviours, specifically intellectual stimulation and individual consideration (considered to be satisfiers or motivating factors) promoted positive employee attitudes and consequently higher levels of job satisfaction. The converse is also proposed. Those leaders who did not satisfy the higher level needs of their employees through limited use of transformational leadership behaviours, were less able to motivate their employees by use of intellectual stimulation and individual consideration, resulting in negative employees attitudes and, consequently, lower levels of job satisfaction.

The classification of the responses to the JSS and MLQ into different dimensions using factor analysis was not, however, consistent with Herzberg's two-factor theory of job satisfaction. The responses to the MLQ and JSS could not simply be factored into two dimensions, one of which consisted of satisfiers and the other which consisted of dissatisfiers.

A factor solution was constructed containing four factors which explained 52.2% of the variance in the correlation matrix. Factor 1, explaining 14.7% of the variance, comprised operating conditions, pay and promotion satisfaction. Factor 2, explaining 14.5% of the variance, comprised fringe benefits, communication and contingency reward satisfaction. Factor 3, explaining 12.8% of the variance, comprised nature of work, and co-worker and supervision satisfaction.

Job satisfaction measured as the outcome of leadership behaviours using the MLQ was, however, separated alone in Factor 4 comprising 10.2% of the variance. Factor 1 loaded the satisfiers (e.g. operating conditions and promotion) in the same dimension as the dissatisfiers (e.g. pay). Factor 2 loaded the satisfiers (e.g. communication) in the same dimension as dissatisfiers (e.g. fringe benefits). Factor 3 loaded satisfiers (e.g. nature of work) in the same dimension as dissatisfiers (e.g. relationships with co-workers and supervisors).
Factor 4 isolated job satisfaction as an outcome of leadership behaviours measured using the MLQ as a completely separate factor from the other dimensions of job satisfaction measured using the JSS.

7.4.11 Transformational Leadership Theory

The results of this research are consistent with some of the concepts that underpin transformational leadership theory (Avolio, 1999).

This study focused on leadership as a process that occurs between employees and leaders at the Rasco and Harouge companies, impacting on various levels of employee job satisfaction. The analysis of leadership behaviour included not only the exchange of rewards but also the leaders’ attention to the needs of employees. Accordingly, the needs of employees at Harouge and Rasco, identified in terms of intellectual stimulation and individual consideration, operating as satisfiers or motivating factors, were found to be linked to higher levels of job satisfaction.

One criticism of transformational leadership theory is that transformational leadership is multi-dimensional and its different facets may overlap with similar conceptualisations of leadership, including transactional leadership (Bryman, 1992; Bass, 2002).

This study, however, clearly identified transformational leadership behaviours as statistically significant predictors of job satisfaction at the Rasco and Harouge Companies, over and above the effects of transactional and laissez-faire behaviours.

Mullins (2007) criticised transformational theory as having applications limited only to manual workers, and to those with largely unskilled jobs or whose work was uninteresting, repetitive and limit in scope. Such criticism cannot be applied to the results of this study, which did not study such workers in the Rasco and Harouge Companies. It is concluded that this study provides further support for the continuing relevance of transformational leadership theory.
7.5 CONCLUSION

As has been observed that the primary action of a transformational leadership is to introduce a vision within its workforce and push them towards attaining the defined vision. However, the transformational leaders put the goal in front of the team or workforce and work with them as employees or as part of the team in order to achieve that desired goals and objectives. They transfer their vision in the minds of their employees and lead them in the quest of attaining the goals and objectives. They in person exemplify their vision and also expand the mental state and state of mind in their followers to follow this vision of the prospect. Therefore, we can conclude the fact that high level employees interact with different people and they find themselves in different situations where they have to apply their leadership skills. This view is supported by the findings of this study which clearly identified that leadership behaviours and transformational leadership behaviours in particular as statistically significant predictors of employees’ attitude and approach and has a significant impact on the level of their job satisfaction over and above the effects of transactional and laissez-faire behaviours of the two companies analysed.
Chapter 8

CONCLUSION, LIMITATIONS AND RECOMMENDATIONS

8.1 CONCLUSION

This chapter aims to summarise the research process and the main results, and also aims to provide some recommendations for future research in relation to the limitations of the present study including unresolved problems and weaknesses.

This research study was conducted as a quantitative case study in order to investigate from a statistical basis the leadership characteristics of leaders as perceived by employees and how that perception relates to job satisfaction in their current position.

The research findings indicate a statistically significant relationship between transformational leadership dimensions, especially the two dimensions of individual consideration and intellectual stimulation behaviours, and employees’ job satisfaction levels within the two companies. The findings demonstrate that the leaders tend to be perceived by their employees as demonstrating transactional and laissez-faire leadership behaviour more often than transformational behaviour in the case of the two companies investigated. It should, however, be noted that the exercise of a degree of transformational leadership behaviour by leaders was much lower than employees’ expectations showed. There was also a significant association between the employees’ job satisfaction level (which is significantly higher in Rasco than at Harouge), and operation conditions, nature of work, fringe benefits, supervision and communication.

8.2 PRACTICAL RECOMMENDATIONS FOR THE DEVELOPMENT OF LEADERSHIP QUALITIES

The review of the literature, the findings of this study, and subsequent conclusions led the researcher to propose several recommendations for the two companies under investigation.
The following practical recommendations are not listed in order of importance. Order of importance might be determined by individual organisation and the situations they face. The following were considered to be the most significant.

a) The leaders in the two companies need to formulate a vision which can represent the common dreams or goals and shred pictures of the future that foster genuine commitment, rather than compliance to organisational goals and articulate this vision using inspirational language.

b) In today’s rapid progressing business environment and surroundings, where every organisation endeavours to curtail its cost by eliminating its business procedures, and hence in such a situation the leading behaviour, satisfaction, motivation, productivity, efficiency, commitment and performance of individuals are the most sensitive area which must be treated very carefully in order to maintain the high level of organisational productiveness and effectiveness. Hence, both companies (Rasco and Harouge) should focus on the adoption of newly invention and techniques to make their business process smooth and fast moving to meet these standards in order to maintain their competitive edge.

c) Leaders in Rasco and Harouge must engage in acts involving personal risk and sacrifice. The presence of socio-cultural and gender diversity that create social stress requires a strong vision to focus on mutual goals and provide a sense of security. Furthermore to gain the trust of their employees, the leaders have to act as role modules and showing total commitment to achieving organisational objectives.

d) Findings in this research show that the mean transformational leadership scores of the leaders in the two companies are, in general, perceived to be lower than the established MLQ norms (Bass and Avolio, 2000). Thus, the findings of this study support a need for training which focuses on transformational leadership behaviours that foster greater job satisfaction.

e) Extensive training in leadership-related workshops and seminars needs to be planned and conducted regularly. Effective training in transformational leadership needs to be based on theory of transformational leadership and specific actions plans in order to achieve the necessary leadership behaviours.
f) It is recommended that a key element in implementing leadership intervention is the use of a training programmes designed to extend beyond the actual training sessions. This would then mean collecting employee ratings of leaders’ transformational leadership behaviours at least one month prior to each leader-training session. These ratings should then be used in the training session as feedback to the leaders on the current use of transformational leadership behaviour. Employees rating of a leader’s transformational leadership behaviour should be collected and presented to the leaders.

The trainer would then draw the leaders’ attention to the discrepancies between employees rating and their self-rating of their leadership behaviour. Leaders would thus become aware of specific behaviours that led to the employee ratings. This type of training would result in the development of specific action plans for enhancing leader transformational leadership behaviour, thus emphasising the issue of personal feedback and goal setting.

g) Feedback sessions and follow-up workshops are also recommended. Feedback sessions are critical to the success of transformational leadership behaviour within the organisation.

Approximately six months after a workshop, employees’ ratings should be collected. In a second feedback session, leaders should be presented with the information that allows them to evaluate the effectiveness of their changes in behaviour. The purpose of the second feedback is critical for long-term success.

Firstly, it establishes the expectation for change. Participants are clearly told that changes are expected and will be measured. Secondly, the session can serve as a reinforcement session; that is to reinforce the changes that leaders seek to implement to enhance their transformational leadership behaviour. Lastly, the trainees and the trainers can evaluate the effectiveness of the programme.

Motivation in the work place is also likely to play a definite role that may affect the level of the job satisfaction of employees. According to Luthans (2006:123) “motivation is the process that arouses, energizes, directs, and sustains behaviour and job satisfaction. It is the process of inspiring employees to action and to achieve a
preferred task”. Mullins (2007) further argues that one way of inspiring employees is to employ effective motivation, which makes them more satisfied with and committed to their jobs and organisation.

According to Luthans (2002); Mullins (2007); Spector (2008) there are other incentives rather than money which can also serve as motivators that leaders in both companies should take into consideration:

a) Recognition: Different employees are motivated in different ways; for example, by desires for money, achievement, appreciation, responsibility or advancement. Leaders should not assume that what motivates them will motivate their employees.

b) Rewards: Leaders should praise employees’ achievements, giving them appropriate additional responsibilities, and providing them with opportunities for advancement, which will all help to motivate them and will help them to be more innovative as well (Spector, 2008).

c) Engagement: Those employees who are involved in the decision-making process about team projects are more likely to be confident and self motivated in achieving them, and to have developed a sense of ownership of them, than those who are not. Leaders can give such employees the scope to vary their methods, as well as the sequence and pace of their work, and by doing so encourage innovation (Mullins, 2007).

d) Reduce demotivation: Workplace demotivation is usually caused by overload or poor systems of work, and is signalled by high levels of absenteeism because of sickness and staff turnover. If these signs are apparent, leaders must remotivate their employees as quickly as possible. In this, using information from staff surveys can help to identify possible demotivators in their organisation (Luthans, 2002).

e) Improve leadership ability: Good leadership skills on the leaders’ parts will help to motivate their employees. Leaders should be good role models by treating their employees well, communicating with them, making sure their goals are clear, demonstrating their commitment and being available to listen to their problems (Mullins, 2007).
f) Review progress regularly: Leaders in both companies (Rasco and Harouge), should arrange regular meetings with their employees to determine their priorities, what help they need, what they like best or least about their jobs, what they do best or worst, and what changes they could make to make their jobs easier or better. In doing so, employees will determine how leaders are doing as a coach (Mullins, 2007).

g) Making tasks more pleasant: Efforts should be made to remove dull, tiresome and repetitive jobs to enable employees to use their full potential instead of saving their stamina. Employees will experience higher levels of job satisfaction when they have stimulating and exciting tasks which are not boring or tedious. They need jobs that will give them increased responsibility and little dependence. In addition, employees should be offered challenging tasks, be allowed to take part in projects they have an interest in, and be promoted when they deserve promotion (Luthans, 2002).

h) Match employees to jobs that fit their interests: It is good to combine employees with tasks that fit their interests; such a strategy will reduce absenteeism and employee turnover. Suitably placed workers will enhance job satisfaction and minimise any dissatisfaction among them (Mullins, 2007).

As has been shown, motivation is at the heart of good leadership and goes beyond praise for good work. For leaders in the two companies (Rasco and Harouge), it is imperative to understand what motivates the employees around them. It is necessary to discover the fundamental needs that employees have, as all employees have a need for a deep social connection and friendships. Furthermore, they must create the conditions in which their employees are motivated and understand that all staff members are individuals and must be treated differently according to their individual needs and capabilities. Therefore, the leaders in both companies should understand that acting as transformational leaders will increase their employees’ job satisfaction and motivation, and will be a positive strategy in the leadership development of the two companies.

8.3 LIMITATIONS OF THE STUDY

According to Hayes et al. (1992: 43) “all research methods have their limitations”. The present study is no exception. Therefore, it is crucial that well designed research
studies acknowledge the limitations of the study, so that the reader is aware of the possible lack of generalisation of finding to other studies.

This study was subject to the following limitations;

a) No attempt was made to ensure that the sample accurately and completely represented every member of the target population (*i.e.*, all leaders and employees at Rasco and Harouge Companies).

b) The investigator did not ensure through the use of random sampling that each member of the target population had an equal probability of being selected. A random sample would have ensured that the results of this study were not subject to selection bias, and would have satisfied the fundamental assumption all types of statistical analysis involving null hypothesis testing (Tabachnik and Fidell, 2007). Research using a convenience sample can be justified so long its limitations are understood.

c) The major limitation is that a convenience sampling does not necessarily generate results with external validity (*i.e.*, the results may be relevant only to the participants in the sample). The results cannot necessarily be generalised so that they apply to the target population as a whole. A convenience sample may be acceptable for research purposes if demographic information about the participants is known. If such information is available, then an assessment can be made as to whether or not the sample is completely representative of the target population (*i.e.*, that it represents employees from all or most sectors of the population, and not just a selective fraction).

d) It was found that the demographic characteristics of the respondents at Harouge and Rasco companies’ were unbalanced, particularly in terms of gender, age and marital status of the participants, which implied that comparisons of the responses to the JSS and the MLQ with respect to these variables were compromised.

e) The influence of ethnicity on job satisfaction, which was not considered in this study, including whether or not ethnic minorities feel that they are being discriminated against may also be worthy of consideration. It is, therefore, possible that the lower levels of job satisfaction at Rasco and Harouge could be related to factors other than
the leadership behaviours (e.g. ethnicity, role conflict and role ambiguity) which were not measured in this study.

f) It should be noted that leadership is a broad concept, with a wide variety of definitions and perspectives. There exist over 200 models of leadership with a wide variety of boundaries, concepts, construct validities, etc. (Bass, 2008). Though little agreement exists to what constitutes ‘leadership’, it is a core area of interest for developers of human resources. The researcher believes that the limitation of using a broad construct like leadership is outweighed by the possibility of acquiring additional knowledge in this domain.

g) The study, thus, is limited to the examination to transformational, transactional and laissez-faire leadership behaviours adopted by the two companies’ leaders. It does not examine other leadership theories.

h) The survey questionnaire was designed in English and then translated into Arabic. Although the translation process was done through a translation agency, minor problems with the translation occurred initially. An attempt to overcome this limitation was made by going through the translated parts with the translator and further reviewed and checked by specialised staff members from Al-Tahadi University in Libya (the researcher’s sponsor for his PhD programme) to make sure that no words were misunderstood.

i) The questionnaires were distributed to respondents from different backgrounds in various administrative and technical departments; as a result the level of understanding of the questions may have differed, as employees who worked in technical posts may not have had a complete knowledge as administrative post-holders and vice versa. Nevertheless, this was inevitable, as both groups had to answer the same questions.

j) Some of the information requested in the questionnaire was considered to be confidential by a number of respondents; as a result they felt unable to reveal certain information. In addition, for reasons of confidentiality some respondents were reluctant to answer the questionnaire without prior permission. This lengthy procedure
put an extra burden on the researcher to find relevant information that would substantiate the results.

k) The results of the survey in this study are predicated on the self-perceptions of the leaders regarding their leadership behaviours. It is possible that leaders might define themselves differently than their employees. Bass and Avolio (2000) recognise that there is a tendency among leaders to rate themselves as transformational to a higher degree as their employees perceive them to be. This difference may be as high as a 0.5 on a 0 to 5 Likert scale.

l) The extent of job satisfaction is measured as personal perception. The accuracy of such perceptions is a limiting factor (Kerlinger, 1986; Krug, 1989).

m) The study targets all jobs but does not ask respondents to state their specific job; therefore, the results do not show the effects of one’s job on outcomes. Therefore the relationship between leaders and employees might change according to the job involved. For instance, the operators of a power plant might need stronger teamwork than the sales staff. This should also be considered as an important factor to understand the relationship. However, gathering such micro level data has not been possible; as it requires unlimited efforts.

n) Although quantitative survey research is a practical approach over qualitative methods such as interviews and observations when investigating studies of this type. It is important to take note that there are measurement issues inherent in the use of self-report methods.

o) The present study’s sole reliance on empirical measures such as surveys may have been associated with a systematic error, and the established psychometric property of the standardised measures MLQ and JSS may limit the generalisability of the research findings (Block, 2003; Waltz et al., 2005).

The limitations discussed above represent the characteristics of a one-time study utilising a survey instrument to gather data. These limitations do not render the data gathered inaccurate or unnecessary; rather the limitations determine the need for
further research with the purpose of broadening the applicability of the findings of this study.

8.4 RECOMMENDATIONS FOR FURTHER RESEARCH

The main purpose of this study was to explore the relationship between perceived leadership behaviours (transformational, transactional and lassiez-faire) of the two companies’ leaders and the impact of these behaviours on the level of job satisfaction of their employees in their working places.

As this study was descriptive and co-relational in nature. The findings and the limitations associated with this study have led the researcher to propose several recommendations for further research.

The following were considered to be the most significant;

a) It is recommended that future studies on the relationship between job satisfaction and leadership behaviours should not use a convenience sample, but be based on stratified random sampling, in which the strata are gender, age, marital status, occupational level and tenure. The advantage of stratified random sampling is that it ensures that equal proportions of representative participants from different demographic groups are included. It also ensures that the group sizes are equal, which increases the power of statistical analysis to compare the responses and/or behaviours of specified groups (Tabachnik and Fidell, 2007).

b) The use of a random sample would also help to determine if the results of this study have external validity, whether they can be generalised to similar types of company, or if they only have local implications, restricted specifically to Rasco and Harouge. It is evident that more research is warranted to more clearly identify and discriminate between the different perceptions and dimensions of job satisfaction and how they relate to leadership behaviours.

c) There appears to be a need for further research in the field of organisational leadership and its relationship to job satisfaction. Although this study did identify support for transformational, transactional and lassiez-faire leadership theory, there remains a need for further research to support or refute these findings. Research of
this nature may assist personnel and operational leaders on all levels to be aware of the status of job satisfaction and allow them to pro-actively put mechanisms in place to enhance job satisfaction of employees and ultimately, improve their companies’ efficiency and effectiveness.

d) An extension of the research would be to include performance indicators and employees turnover rate in the interaction between perceived leadership behaviours and job satisfaction to determine the area of job satisfaction that mostly affects the reason for leaving the profession. Understanding the relationship between perceived leadership behaviours, performance, turnover rate and job satisfaction would broaden the theory and its implications for Rasco and Harouge Companies.

e) Another suggestion for further research in this area, is that researchers should also use a qualitative approach using full range of leadership theory (transformational, transactional and lassiez-faire) to explore the two companies’ employees’ level of job satisfaction. Qualitative research could therefore contribute significantly, not only by testing the finding of this study but also by providing a more depth picture of Rasco and Harouge leaders’ leadership behaviours. This could include interviews and observations to gather primary data to substantiate the findings from questionnaire survey, which was not possible for the present study due to time factor and importantly availability and willingness of the staff to participate in such an exercise.

f) As this research concentrated on petrochemical industry companies, it would be extremely important for such research to be conducted in other companies in other sectors in the country, such as manufacturing, services, banking and finance companies to get comprehensive data about leadership behaviours adopted by leaders and their impact on the level of job satisfaction in these industries. Furthermore, it would seem a logical continuation to make a comparative study between Libya and other Arab and Middle Eastern countries. It might be the case that other countries in the region may generate different results and benefits regarding leadership behaviour and its relation to job satisfaction, hence, such study deserves further investigation.
8.5 EPILOGUE

The overall findings of the study add to the retention literature by shedding new light on how the level of job satisfaction of individuals employed in Rasco and Harouge companies relates to their leaders’ leadership behaviours.

As the foundational and empirical chapters indicate, this study achieved its aim of defining and importantly in testing the transformational, transactional and laissez-faire leadership behaviours and their components, and job satisfaction and its dimensions. This study, therefore, made a valuable contribution to the field of leadership and job satisfaction through a particular case study. The vast numbers of theories in this field signify that the subject matter is an important issue for organisations and life itself.

All individuals possess values that guide their behaviour and explain their actions. If leaders want to influence employees, they should determine the most appropriate leadership behaviour and understand their own and their employees values. Leadership should use identified values and convert them into shared values in order to be successful, and lead the organisation to effectiveness and ultimately to survival. The data analysis from the questionnaires confirms this finding.

The influence of transformational, transactional and laissez-faire leadership on various aspects of dimension of employees’ job satisfaction is examined and determined. Since it is argued by Bass and Riggio (2006); Northouse, (2007); Bass (2008) that these leadership behaviours are not deemed to be mutually exclusive and that the same individual may vary his or her leadership behaviour over time and/or in different situations, this study finds that this is applicable in the context of Libya’s petrochemical industry.

In view of the above it could be inferred that the employee’s job satisfaction springs from that particular employee’s attitudes towards the job they do and the environment in which they do the work. Leadership behaviours and transformational leadership behaviour in particular can be considered as an essential factor in nurturing a good relationship between employees and their immediate supervisors. It is this relationship that determines how well an employee is satisfied with his job and also how committed they are in achieving their work objectives.
As Van Wart (2003) argue, for organisations, nationally and globally, it is imperative to identify and develop transformational leaders who are able to manage and drive organisational transformation, in order to absorb the ever increasing and continuously changing demands of the work environment and society.

The above picture requires that the new Libyan leadership, through the (National Oil Corporation (NOC) to come up with effective ways of improving its leaders’ leadership behaviours and skills and the general climate in it is organisations. The leaders’ broad knowledge of and the ability to apply leadership skills and behaviours are fundamental to creating, maintaining and sustaining a conducive, and encouraging climate for leading. Thus, the whole process of establishing a culture of learning and training starts with the leaders’ leadership skills to direct both leaders and employees, focus on the essence of administration and leadership, which would lead to the creation of a positive climate in this vital and fundamental industrial sector in the country. In addition, the new authorities should also consider the improvement of companies’ climate priority by giving thought to employees’ complaints with regard to conditions and circumstances of service and be active in building a culture of accountability in these organisations and ensure that these organisations are answerable for the general performance, efficiency, effectiveness, inspiration, stimulation, consideration, satisfaction and motivation of their employees.

It is hoped that this study can motivate such search in the case of Libyan public and private organisations.
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276


286


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289


293


APPENDICES

Appendix A: Cover Letter for Request Assistance with A Research Project.
Appendix B: Demographic Questionnaire.
Appendix C: Leadership Questionnaire, with Permission of Mind Garden, Inc.
Appendix D: Job Satisfaction Questionnaire, with Permission of Paul. Spector.
Appendix F: Arabic Translation of Questionnaire Forms.
APPENDIX A

Cover Letter for Request Assistance with a Research Project
Request for Assistance with a Research Project

Dear Sir / Madam

My name is Farag Ali Al-Sayah, and for my doctoral thesis I am conducting a study to explore the relationship between leadership behaviours (transformational, transactional and laissez-faire behaviours) and their impact on the level of job satisfaction in Libya’s public sector by conducting a case study on two petrochemical companies, namely Raslanuf Oil and Gas Processing Company (Rasco) and Harouge Oil Operations Company (Harouge).

Transformational leadership behaviour is a form of leadership behaviour in which the leader uses attributes such as charisma, intellectual stimulation, inspirational motivation, idealised influence and individualised consideration to motivate employees to perform beyond their normal levels of performance, which in turn positively impacts organisational performance. Transactional leadership behaviour, meanwhile, is a form of leadership that is largely based on an exchange between a leader and his or her employees using rewards and punishments to control behaviour.

Durham University and I would greatly appreciate it if you could please complete the attached questionnaires. Please be assured that all responses will remain confidential and that all respondents will remain strictly anonymous as only grouped data will be presented.

Given your busy schedule and because I realise that completing the questionnaire will add to an already stressful work day, I have kept the questionnaire short and it should not take you more than 15 minutes to complete.

I trust that the completion of my studies will afford me the opportunity to contribute towards creating a better work environment for all, for which your support in completing this questionnaire is essential.

Thank you for giving up your valuable time to assist in this research.

Yours Sincerely,
Farag Ali Mohamed Al-Sayah.
APPENDIX. B

Demographic Questionnaire
### DEMOGRAPHIC INFORMATION

Please mark your answer with (X).

<table>
<thead>
<tr>
<th>Gender</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Under 20</td>
<td>21 – 30</td>
</tr>
<tr>
<td>Marital Status</td>
<td>Single</td>
<td>Married</td>
</tr>
<tr>
<td>Number of dependents</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Educational Qualification</td>
<td>Diploma</td>
<td>Degree</td>
</tr>
<tr>
<td>Job Classification</td>
<td>Manager</td>
<td>Manager</td>
</tr>
</tbody>
</table>

If you are unsure which category, please state your occupation:

| Job Grade | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | Others |

How long have you been employed at this company:

| < 1 year | 1 – 5 | 6-10 | 11-15 | 16-20 | 21 or longer |

Please indicate the department in which you work:

| 1 | Training Unit | 8 | Marketing Unit | 15 | Utilities and Loading Unit |
| 2 | Admin Unit | 9 | Material Unit | 16 | Technical Services Unit |
| 3 | G. affairs Unit | 10 | Maint. Service Unit | 17 | Polyethylene plant Unit |
| 4 | Service Unit | 11 | Project Unit | 18 | Ethylene plant Unit |
| 5 | Finance Unit | 12 | Legal and Contracts Unit | 19 | Engineering Unit |
| 6 | Cost. A. Unit | 13 | Quality Unit | 20 | Programming and planning Unit |
| 7 | Safety Unit | 14 | Internal Audit Unit | 21 | Management Committee Office |
| 22 | Benghazi office | 23 | Tripoli office | 24 | |
APPENDIX. C

Leadership Questionnaire, with Permission of Mind Garden, Inc
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:

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
APPENDIX. D

Job Satisfaction Questionnaire, with Permission of Paul Spector
You have my permission to use the JSS in your research. You can find details on my website in the scales section.

Best,

Paul E. Spector
Department of Psychology
University of South Florida
Tampa, FL 33620
(813) 974-0357 Voice
(813) 974-4617 Fax
spector@shell.cas.usf.edu
website http://shell.cas.usf.edu/~spector

On Wed, 11 Feb 2009, ALSAYAH F.A. wrote:

> >
> > Dear, Dr
> > I am writing to request permission to use the Job Satisfaction Scales" as one of my survey instruments for my doctoral degree. I am completing my dissertation through Durham University . UK
> > The title of my proposed research is "The Relationship between Leadership Styles and Job Satisfaction".
> > If there is additional information you require, please contact me via
> > faragali@hotmail.com or by phone; 0044 7985726892
> > Thank you for your assistance with this request.
> > Sincerely, Farag Ali Al sayah
<table>
<thead>
<tr>
<th></th>
<th>JOB SATISFACTION SURVEY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PLEASE CIRCLE THE ONE NUMBER FOR EACH QUESTION THAT COMES CLOSEST TO REFLECTING YOUR OPINION ABOUT IT.</td>
</tr>
<tr>
<td>1</td>
<td>I feel I am being paid a fair amount for the work I do.</td>
</tr>
<tr>
<td>2</td>
<td>There is really too little chance for promotion on my job.</td>
</tr>
<tr>
<td>3</td>
<td>My supervisor is quite competent in doing his/her job.</td>
</tr>
<tr>
<td>4</td>
<td>I am not satisfied with the benefits I receive.</td>
</tr>
<tr>
<td>5</td>
<td>When I do a good job, I receive the recognition for it that I should receive.</td>
</tr>
<tr>
<td>6</td>
<td>Many of our rules and procedures make doing a good job difficult.</td>
</tr>
<tr>
<td>7</td>
<td>I like the people I work with.</td>
</tr>
<tr>
<td>8</td>
<td>I sometimes feel my job is meaningless.</td>
</tr>
<tr>
<td>9</td>
<td>Communications seem good within this organization.</td>
</tr>
<tr>
<td>10</td>
<td>Raises are too few and far between.</td>
</tr>
<tr>
<td>11</td>
<td>Those who do well on the job stand a fair chance of being promoted.</td>
</tr>
<tr>
<td>12</td>
<td>My supervisor is unfair to me.</td>
</tr>
<tr>
<td>13</td>
<td>The benefits we receive are as good as most other organizations offer.</td>
</tr>
<tr>
<td>14</td>
<td>I do not feel that the work I do is appreciated.</td>
</tr>
<tr>
<td>15</td>
<td>My efforts to do a good job are seldom blocked by red tape.</td>
</tr>
<tr>
<td>16</td>
<td>I find I have to work harder at my job because of the incompetence of people I work with.</td>
</tr>
<tr>
<td>17</td>
<td>I like doing the things I do at work.</td>
</tr>
<tr>
<td>18</td>
<td>The goals of this organization are not clear to me.</td>
</tr>
<tr>
<td></td>
<td>PLEASE CIRCLE THE ONE NUMBER FOR EACH QUESTION THAT COMES CLOSEST TO REFLECTING YOUR OPINION ABOUT IT.</td>
</tr>
<tr>
<td>---</td>
<td>-----------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>19</td>
<td>I feel unappreciated by the organization when I think about what they pay me.</td>
</tr>
<tr>
<td>20</td>
<td>People get ahead as fast here as they do in other places.</td>
</tr>
<tr>
<td>21</td>
<td>My supervisor shows too little interest in the feelings of subordinates.</td>
</tr>
<tr>
<td>22</td>
<td>The benefit package we have is equitable.</td>
</tr>
<tr>
<td>23</td>
<td>There are few rewards for those who work here.</td>
</tr>
<tr>
<td>24</td>
<td>I have too much to do at work.</td>
</tr>
<tr>
<td>25</td>
<td>I enjoy my coworkers.</td>
</tr>
<tr>
<td>26</td>
<td>I often feel that I do not know what is going on with the organization.</td>
</tr>
<tr>
<td>27</td>
<td>I feel a sense of pride in doing my job.</td>
</tr>
<tr>
<td>28</td>
<td>I feel satisfied with my chances for salary increases.</td>
</tr>
<tr>
<td>29</td>
<td>There are benefits we do not have which we should have.</td>
</tr>
<tr>
<td>30</td>
<td>I like my supervisor.</td>
</tr>
<tr>
<td>31</td>
<td>I have too much paperwork.</td>
</tr>
<tr>
<td>32</td>
<td>I don't feel my efforts are rewarded the way they should be.</td>
</tr>
<tr>
<td>33</td>
<td>I am satisfied with my chances for promotion.</td>
</tr>
<tr>
<td>34</td>
<td>There is too much bickering and fighting at work.</td>
</tr>
<tr>
<td>35</td>
<td>My job is enjoyable.</td>
</tr>
<tr>
<td>36</td>
<td>Work assignments are not fully explained.</td>
</tr>
</tbody>
</table>
APPENDIX. F

Arabic Translation of Questionnaire Forms
بسم الله الرحمن الرحيم

طلب مساعدة في دراسة بحثية

الأخوة و الأخوات

تحية طيبة وبعد

كما هو معلوم لدى الجميع بأن الحاجة لقادة ومدراء مؤهلين قيادياً وإدارياً قد أزدادت بتزايد التطور التقني وذلك من أجل مواجهة التحديات التي تواجهها المنظومات الاقتصادية عند قيامها بنشاطاتها في بيئة ذات طابع تنافسي. عليه فإن هذة الدراسة تهدف إلى تحديد العلاقة بين الأداءات الثقافية (النمط القيادة التحولي والنمط القيادي التبادلي) ومدى تأثير هذه الأنماط (إن وجد) على درجة الرضا الوظيفي لكل من موظفي (شركة رأس لانوف لتصنيع النفط والغاز وشركة الباروج للعمليات النفطية).

نأمل منكم التكرم بملء الاستبيان المرفق وذلك من أجل الحصول على بيانات قد تساهم في فهم العلاقة بين هذه المتغيرات.

شكركم على منحكم الثقة والوقت للمساعدة في إثراء نتائج هذا الدراسة.

والسلام عليكم ورحمة الله وبركاته

فرج على محمد السايح
مرشح لرتبة الإجازة الدقيقة (الدكتوراة)
جامعة درم (المملكة المتحدة)
2009.
استبيان المعلومات الشخصية

عنوان الدراسة: الأنماط القيادية ومدى تأثيرها على مستوى الرضا الوظيفي للأفراد

الهدف من الدراسة: تهدف هذه الدراسة إلى الوقوف على الأنماط القيادية التي تمارس من قبل المسئولين الإشرافية في كل من (شركة رأس لانوف لتصنيع النفط والغاز وشركة الهاروج للعمليات النفطية) ومدى تأثير هذه الأنماط (إن وجد) على مستوى الرضا الوظيفي لأفراد هاتين المؤسستين.

المعنيون بملء الاستبيان: أي موظف بغض النظر عن طبيعة عمله أو تصنيفه الوظيفي.

الغرض من معرفة هذه البيانات هو للمساعدة في تحليل عينة الدراسة وفق البنود المذكورة أدناه.

نأمل منك التفضل بتعبئة الاستبيان وذلك بحذف البيان غير المناسب.

الرجاء التأكد من أنك قد أجبت عن جميع الأسئلة

نشكر لك حسن تعاونك واهتمامك
والسلام عليكم ورحمة الله وبركاته

310
استبيان الرضاء الوظيفي

عنوان الدراسة: الأنماط القيادية ومدى تأثيرها على مستوى الرضاء الوظيفي

الهدف من الدراسة: تهدف هذه الدراسة إلى الوقوف على الأنماط القيادية التي تمارس من قبل المستويات الإشرافية في كل من شركة رأس روانف لتصنيع النفط والغاز و شركة الهاريج للعمليات النفطية ومدى تأثير هذه الأنماط (إن وجد) على مستوى الرضاء الوظيفي للأفراد داخل هاتين المؤسستين.

أخي الموظف/ أختي الموظفة

من البديهي إن جميع الموظفين يختلفون فيما بينهم من حيث احتياجاتهم وتوقعاتهم بما سوف يحصلون عليه من خلال حياتهم المهنية، كما نعلم أيضا بأن جل وظائف الحياة المهنية ليست مثالية في إرضاء وإشباع كافة رغبات وتطاعات الموظفين في أي مؤسسة.

عليه فكر في العمل الذي تقوم به حاليا لدى هذه المؤسسة ومن خلال استعراضك للجمل الوصفية المدرجة بالجدول المرفق حدد أي من الخيارات القريبة التي تعتقد بأنها هي الأقرب من حيث وجهة نظرك حيال هذا العمل.

هام جدا:

نأمل منك التفضل بالإجابة على جميع الأسئلة المطروحة بكل موضوعية وحياد وذلك لضمان الخروج بنتائج تعكس واقع الحال وتخدم أهداف الدراسة.

شكر لك حسن تعاونك وإهتمامك

والسلام عليكم ورحمة الله وبركاته
<table>
<thead>
<tr>
<th>أوافق بشدة</th>
<th>أوافق قليلا</th>
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</table>

الخيارات المقابلة للجمل الوصفية المبينة أدناه والتي تعتقد بأنها في مماثلة.
استبيان تحديد الأنماط القيادية لشاغلي الوظائف الإشرافية

عنوان الدراسة: الأنماط القيادية و مدى تأثيرها على مستوى الرضاء الوظيفي للأفراد

الهدف من الدراسة: تهدف هذه الدراسة إلى الوقوف على الأنماط القيادية التي تمارس من قبل المستويات الإشرافية في كل من (شركة رأس لانوف لتصنيع النفط والغاز وشركة الهاروج للعمليات النفطية) ومدى تأثير هذه الأنماط (إن وجد) على مستوى الرضاء الوظيفي للأفراد داخل هاتين المؤسستين.

المعنيون بملء الاستبيان: جميع شاغلي الوظائف الإشرافية.

أخي الموظف/ أختي الموظفة
تحية طيبة وبعد،

الأستبيان المرفق صمم لمساعدتك في وصف وتحديد نمطك أو سلوكك القيادي. أستعرض الجمل الوصفية حول الأنماط القيادية المبينة في الاستبيان المرفق وحدد أي من هذه الأنماط تتوافق ونملكي أو سلوكك القيادي.

توضيح:

الآخرون، الأفراد، الأشخاص، الجماعة: المقصود بهم الموظفين الذين هم تحت إشرافك.

المؤسسة: هي الشركة التي تعمل بها.

هام جداً:

نأمل منك التفضل بالإجابة عن جميع الأسئلة المطروحة بكل موضوعية وحيادية وذلك لضمان الخروج بنتائج تعكس واقع الحال وتخدم أهداف الدراسة.

شكر لك حسن تعاونك وإهتمامك.
والسلام عليكم ورحمة الله وبركاته

313
<table>
<thead>
<tr>
<th>مطلقة</th>
<th>مرة كل فترة</th>
<th>أحياناً</th>
<th>غالباً</th>
<th>مراراً إن لم يكن دامماً</th>
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اتم ملاحظات: إصدار إجنية واحدة فقط لكل نظام فيديو من الأدوار المدرجة بالجدول المبين أدناه:

1. اقدم المساعدة الأول في الأفراد مقابل جهودهم.
2. أعطي الأذاعات في الأمور والإجراءات المهمة حتى أدرك من أنها مناسبة.
3. لا تجعل التحليل الفضلاً حتى تصبح خطيرة.
4. إثر أي ظهور في الأمور المفيدة والأخطار والإحارات الخارجية عن المعاني.
5. لا تتبرج في الفضلاً الحساسة والممتعة.
6. ابتعد وأصبح عن طريق منهجي.
7. لا تواجه إعادة.
8. أبحث الأموال عن رؤية أتهاجت متدفعة عند حل المشاكل والقضايا.
9. أتحدث بغالب أمل عن المستقبل.
10. إعر النعوت بالفس في الأفراد بحكم ارتياحهم وتعاملهم معهم.
11. أقصي في مشاهد السماويات المقدمة على الأفراد وذلك لتفهم الأهداف المرجوة.
12. أبتعد حتى تندلع الأخطار والإحارات ثم أخذ القرار المناسب.
13. أحدث بحماس عندما يصبح انتاج.
14. أؤكد على أهمية وجود شيء إنجيئ للأهداف والوقت.
15. أثبت تحسناً في الإنتاج والتوهج.
16. أแปลก من المرشود المتوقع الذي سوف يلتقي الفرد عند تخفيفه للأهداف.
17. أطرز الفكر الفئ始め (إذا كان الشيء لتعلمه الصلاحي).
18. إقصى من صمالي الشكشة في سبيل صلابة المجموعة.
19. أجمل كل كلمة وخصب زملاً وساذر بذلك وليك مجرد ضم أفراد المجموعة.
20. أرى أن مشاكل يجب أن تكون مزمنة أو مستحثية قبل أن يتم التفكر في حلها.
21. أطمع مع الأشخاص بطريقة تولد وادي الاحترام.
22. أطرز كل إهتمامي في النظرة واتصال مع الشكشة والأعمال والتحديات.
23. أحدث في الأмагазине التناز وأنغمس المجالية والأدبية المرتبطة على اتخاذ القرارات.
24. أبتعد وافتق في كل الأخطار والتحديات.
25. أطرز الأفراد ونطالب بالوقت.
26. أطرز بعد النظر للتأقلم عند الأفراد.
27. أوجه اتياهي للأفراد عند إخفاءهم في تحقيق الأهداف والمعايير.
28. أترك وتتفاوض الأشياء الفارقات.
29. أخر من كل فرد له احتياجات وشروط وعلاقات وتضمن هذه بمجرد عزير.
30. أشجع الآخرين على النقل إلى الأسر ومشكلات من عدة زوايا وأتهاجت.
31. أساعد الآخرين في تحديدهم وتفوقهم.
32. أطرز فهم طريقة جديدة للنظر في تحقيق الأهداف والمهام.
33. الأثر الإلهي بأم الفقراء سوف يحتفل بها.
34. انته من الإرصاد والقضايا المشتركة.
35. أطرز عن الإرصاد واجب الإتصال والقضايا المشتركة.
36. أطرز عن الإرصاد واجب الإتصال والقضايا المشتركة.
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45. أطرز عن الإرصاد واجب الإتصال والقضايا المشتركة.
الرجاء التأكد من أنك قد أجبت عن جميع الأسئلة

استبيان تحديد الأنماط القيادية لشاغلي الوظائف الإشرافية من قبل مروسيهم

عنوان الدراسة: الأنماط القيادية و مدى تأثيرها على مستوى الرضاء الوظيفي للأفراد

الهدف من الدراسة: تهدف هذه الدراسة إلى الوقوف على الأنماط القيادية التي تمارس من قبل المستويات الإشرافية في كل من (شركة رأس لانوف لتصنيع النفط والغاز و شركة الباروج للعمليات النفطية) ومدى تأثير هذه الأنماط (إن وجد) على مستوى الرضاء الوظيفي للأفراد داخل هاتين المؤسستين.

المعنيون بمليء الاستبيان: المستخدمين الذين لايشغلون وظائف إشرافية.

أخي الموظف / أختي الموظفة

تحية طيبة وبعد.

الأستبيان المرفق صمم لمساعدتك في تحديد النمط أو السلوك القيادي المتبع من قبل رئيسك المباشر. أستعرض الجمل الوصفية للأنماط القيادية المدرجة بالجدول المرفق وأبيدي رأيك حول مدى إظهار رئيسك المباشر للسلوك أو النمط المذكور.

هام جداً

نأمل منك التفضل بالإجابة على جميع الأسئلة المطروحة بكل موضوعية وحياد وذلك لضمان الخروج بنتائج تعكس واقع الحال وتخدم أهداف الدراسة.

نشكر لك حسن تعاونك واهتمامك

والسلام عليكم ورحمة الله وبركاته
<table>
<thead>
<tr>
<th>المرات saber للافضل بالاختيار واحداً فقط لكل نص قيادي من الأماكن المدرجة بالجدول المبين أعلاه</th>
<th>استخدام TF-IDF للافضل بالاختيار واحداً فقط لكل نص قيادي من الأماكن المدرجة بالجدول المبين أعلاه</th>
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<tbody>
<tr>
<td>1</td>
<td>يوفر لي المساعدة والعون مجمل مجاهدي في العمل.</td>
</tr>
<tr>
<td>2</td>
<td>يبدع النظر في الأمور الحساسة ليتمكن من أنها متسقة.</td>
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<tr>
<td>3</td>
<td>يقبل التدخل لحل القضايا حتى تصبح خطيرة.</td>
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<tr>
<td>4</td>
<td>يركز التبكي على الأمور الغير عنقودية والأخطاء والانحرافات خارجة عن المعايير.</td>
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<tr>
<td>5</td>
<td>يتجنب التدخّل في القضايا الحساسة والمهمة.</td>
</tr>
<tr>
<td>6</td>
<td>يتحدى عن قيمه ومعتقداته ومبادئه.</td>
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<tr>
<td>7</td>
<td>لا يوجد عند الحاجة.</td>
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<td>8</td>
<td>يبحث الأمر من زوايا وتجامعات متعددة عند حل المشكلات والقضايا.</td>
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<td>9</td>
<td>يتحدى بقاء أمل عن المستقبل.</td>
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<td>10</td>
<td>ينجز لدي مكانته بالنص في تجديد نفسه وتابعي معه.</td>
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<td>11</td>
<td>ينضب سبب السلوكيات المطولة على الفرد وقد يكون ذلك من أجل تحقيق الهدف المراد.</td>
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<td>13</td>
<td>يتجنب بحاسة عن بحث تجربته.</td>
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<td>14</td>
<td>يكتب على مستوى وشمس قيادي تجاه الأهداف والاغراض.</td>
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<td>15</td>
<td>ينال جهاز في البداية والنجاح.</td>
</tr>
<tr>
<td>16</td>
<td>يتوسط المجموعة الموفوفة في حل المشكلات والقضايا.</td>
</tr>
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<td>17</td>
<td>ينجز لدى الفئة القادعة (أ. إذا كان الفي لم تصلح لمصلحة الجماعة.</td>
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<td>18</td>
<td>يضخس معيلاً المسك غير متين في المجموعة.</td>
</tr>
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<td>19</td>
<td>يظهر أن المشكل يجب أن تكون مزمة حتى يتم التفكير في حلها.</td>
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<td>20</td>
<td>يتعامل بطريقة نقد ونزيكوي الاحترام.</td>
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<td>يركز على اهتمامه على النظر في الشكاوي والأخطاء والاضطرابات.</td>
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<td>22</td>
<td>يأخذ الأخطاء في الاعتبارات الأيديية والمعينة عند إتخاذ القرارات.</td>
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<td>23</td>
<td>يجامع ويحوّل كل الأخطاء.</td>
</tr>
<tr>
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<td>يظهر اللغة والأعداد نفسه نفسه.</td>
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<td>25</td>
<td>يعزز بعد النظر للمستقبل.</td>
</tr>
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<td>يوجه أنتابه عند الفشل في تحقيق الأهداف والمعايير.</td>
</tr>
<tr>
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<td>يتحدى إتخاذ القرارات.</td>
</tr>
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<td>يجعل للأحترامات في مواقف عامة.</td>
</tr>
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<td>29</td>
<td>يتتبجي على النظر في مسائلة الأهداف والمشكلة من عدة زوايا واجتماعات.</td>
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<tr>
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<td>يعتني في القضايا والقضايا ولكي.</td>
</tr>
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<td>يقترح طريق جديد للنظر في تحقيق الأهداف والواجبات.</td>
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<td>يتأخر في الفصل في حل المشكلات والقضايا.</td>
</tr>
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<td>يركز على الإنسان في مسألة مقاومة.</td>
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<td>يركز على أهمية ووجود مشتركة بسلوكية والأهداف.</td>
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<td>يعبر عن الرغبة في العمل عندما الجمالي المتوقع والمتوافق.</td>
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<td>36</td>
<td>يتجنب اللغة بالأن اليابسة سوف يتم تحقيقها.</td>
</tr>
<tr>
<td>37</td>
<td>يبحث عن تبكيات من الفصول يحافظ مع أمهات الباحث.</td>
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<td>يستعمل أساليب قيادية مرنة.</td>
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<td>يساعدني على القيام بأعمال أكثر مما توقع.</td>
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<td>يعنى أن هناك أتشكل بالقرارات العليا بالوسيلة التي تعنى بها.</td>
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<td>41</td>
<td>يعمال مع مبناً غراسي.</td>
</tr>
<tr>
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<td>ينجز مدى الرغبة في النجاح.</td>
</tr>
<tr>
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<td>ينجز بشكل فعال بنسخته المؤسسة.</td>
</tr>
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<td>يشجعي للعمل بشكل أكثر حدة.</td>
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<tr>
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<td>يقوم ببناء مجموعة قيادة ونشاط.</td>
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