# THE RELATIONSHIP BETWEEN LEADERSHIP STYLES AND ORGANISATIONAL CLIMATE

by

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## DECLARATION

I, Madelein Cloete, student number 33836310, hereby declare that this dissertation titled, **"The relationship between leadership styles and organisational climate"**, is my own work, and that all sources that I have used or quoted have been indicated and acknowledged by means of complete references.


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20 April 2011

To Whom It May Concern:

**Declaration of Language Editing**: The relationship between leadership styles and organisational climate

This letter confirms that I have personally undertaken language editing of the dissertation "The relationship between leadership styles and organisational climate" written by **Madelein Cloete**.

I have corrected the language and it is my professional opinion that the language used in the document is suitable for submission.

Please feel free to contact me should you have any queries.

Regards,
Carol Saccaggi

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# ABSTRACT

## THE RELATIONSHIP BETWEEN LEADERSHIP STYLES AND ORGANISATIONAL CLIMATE

**by**

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**DEGREE:**     **MA (INDUSTRIAL PSYCHOLOGY)**

**DEPARTMENT:**     **INDUSTRIAL AND ORGANISATIONAL PSYCHOLOGY**

**SUPERVISOR:**     **MR H VON DER OHE**

This study explored the relationship between leadership styles and organisational climate by means of quantitative research. Data from an organisational climate survey was used during the analysis. The results indicate that there was a positive correlation (0,749 at the 0,01 level) between leadership styles and organisational climate, thus supporting the research hypothesis. A standard multiple regression analysis was conducted and three leadership styles were found to predict 55,6% of the variance in organisational climate. The Authoritative leadership style made the largest unique contribution to the variance in organisational climate. The interaction between biographical and organisational variables and leadership styles and organisational climate was studied by means of t-tests and ANOVAs. Although statistically significant differences were found, these terms were of little practical significance and the effect sizes were generally small. The study concludes with recommendations for Industrial and Organisational Psychology practices and further research.

## KEY TERMS

Leadership, management, leadership styles, organisational climate, organisational climate dimensions, quantitative research, correlation, standard multiple regression.

## KEY FOR SYMBOLS

The following symbols will be used throughout this document to indicate results of analysis:

α – Cronbach alpha

$d$ = Cohen's $d$ for effect size.

$df$ = degrees of freedom

$η^2$ = Eta squared for effect size

$F$ = F-statistic

$m$ = mean

n = number of cases/items

$p$ = significance

$r$ = correlation

$r^2$ = coefficient of determination (variance)

$sd$ = standard deviation

$t$ = t-test

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# CHAPTER 1: SCIENTIFIC ORIENTATION OF THE RESEARCH

## 1.1    INTRODUCTION AND BACKGROUND

Company management frequently use organisational culture and climate surveys as a way of gauging their employees' satisfaction and opinions regarding matters relating to the work environment. These surveys are administered and interpreted by specialists who use the results of the surveys to draw conclusions regarding the company's culture and climate.

The term organisational climate refers to a summarised perception of how an organisation deals with its employees and environments. Organisational climate thus develops specifically from internal factors and is primarily influenced by managers and leaders (Ostroff & Schmitt, 1993).

A study by Wallace, Hunt and Richards (1999) found a strong link between specific organisational climate items and a number of managerial values dimensions. The present study furthered this research by focusing on leadership styles within a specific organisation, and investigating the relationship between these leadership styles and the overall organisational climate. The study thus explored the relationship between leadership styles and various other dimensions of organisational climate. A need was identified within the field of Industrial Psychology for a scientifically based investigation of the relationship between leadership styles and organisational climate. These findings from such a study could then be generalised to other organisations in order to make valuable suggestions regarding the maintenance of a healthy organisational climate, which should theoretically lead to increased job satisfaction and success in organisations (Banerji & Krishnan, 2000; Bass & Avolio, 1994; Odom & Green, 2003).

## 1.2    RESEARCH QUESTION

This study investigated the relationship between leadership styles and organisational climate. The study's first goal thus involved determining whether a relationship exists between leadership styles and organisational climate. The second goal was to

investigate the nature of this relationship. Although both organisational climate and leadership styles have been studied extensively the relationship between leadership styles and organisational climate has not received much research attention. The research question for this study was: Is there a relationship between leadership styles and organisational climate in a private retail organisation?

## 1.3    AIMS OF THE STUDY

In order to address the research question the study's general aim was to determine the relationship between leadership styles and organisational climate. The literature aims were:

(1)    to explore the concepts of leadership and management;

(2)    to explore organisational climate; and

(3)    to explore the theoretical relationship link between leadership and organisational climate.

The empirical aims were:

(1)    to explore the dimensions measured by the survey;

(2)    to explore perceptions regarding leadership styles and organisational climate in organisation;

(3)    to explore the relationship between various leadership styles and organisational climate.

## 1.4    THE PARADIGM PERSPECTIVE

A paradigm is a collection of meta-theoretical, theoretical and methodological beliefs that impact on a specific discipline (Mouton & Marais, 1992). This study falls within the industrial psychology discipline of organisational psychology. Organisational climate and leadership styles are important variables within organisational psychology. This study made use of a behaviouristic psychological paradigm, which focuses on behavioural responses that follow mechanically as a result of stimuli. An example of this type of response could involve a supervisor/manager acting in a specific way towards an employee and the employee then responding mechanically to this stimulus. The specific behavioural models used in this study were the traditional

climate model (Field & Abelson, 1982) and a conceptual model known as the organisational climate model (Martins & Martins, 2001). The study also made use of the systems perspective, which involves functioning in relationships and relatedness (Avis, Pauw, & Van der Spuy, 2000; Bergh & Theron, 1999).

Various individuals' perceptions and opinions formed part of the meta-theoretical concepts used in this research. The study relied on a survey methodology and the data collected was thus very dependent on respondents' opinions and perceptions. The employees surveyed had diverse backgrounds and their interpretation of terms differed. In addition, incidents happening immediately prior to answering the survey questionnaire influenced the answers given.

The variables for this study were organisational climate and leadership styles, where organisational climate was the dependent variable and leadership styles was the independent variable. The dependent variable is defined as the effect (or outcome) in which the researcher is interested; while the independent variable is the presumed cause of this effect. Changes in the independent variable may lead to changes in the dependent variable (Rosnow & Rosenthal, 1996).

Organisational climate is defined as: "dealing with organisational characteristics which are perceived by individual employees, anything in the organisations which members interpret or attach meaning to in their attempt to make sense of the organisational environment" (Govender, 1998). Leadership is defined in terms of behaviour, traits, role relationships, influence, interaction patterns and administrative positions. Schein (1992) defines leadership as the ability to step outside the culture and start adaptive evolutionary change processes. This study hypothesised the existence of a relationship between leadership styles and organisational climate. This hypothesised relationship was explored through the use of various statistical techniques, which are discussed in section 1.6.5.

## 1.5   LITERATURE REVIEW

### 1.5.1  Leadership Styles

The independent variable in this study was leadership styles. The literature review presented in the next chapter provides a discussion of various aspects of leadership styles, including similarities between and linking of leadership and management, various management/leadership roles, skills and behaviour, different leadership approaches, theories and styles.

Institutions require people to turn their lifeless structures into dynamic functioning entities. Institutions can also only achieve their goals and objectives through effectively managing all available human, technical and financial resources. When managing people, managers (individuals in the organisational hierarchy who have followers or subordinates) need to possess leadership qualities in order to become leaders (Bass, 1990).

There are almost as many different definitions of leadership as there are researchers who have attempted to define the concept. Many of these definitions are ambiguous and are often blurred by various social influences. This ambiguity has resulted in a situation where the meaning of leadership is almost always derived from the nature of the institution in which it is found (Bass, 1990). Despite these difficulties there is sufficient similarity among definitions to allow a rough scheme of classification, which focuses on one or any combination of common factors. These factors include "the focus of group processes", "a matter of personality", "a matter of inducing compliance", "the exercise of influence", "a form of persuasion", "a power relation", "an instrument to achieve goals", "an effect of interaction" and "an initiation of structure" (Bass, 1990, p. 11).

Leadership is the result of many simultaneously interacting forces, which all have to be integrated by the leader in order to lead behavioural changes in his/her subordinates and the achievement of a predetermined outcome. It can thus be stated that the majority of tasks performed by a leader involve interaction with

subordinates and that it is therefore essential for every leader to develop a particular approach (or style) to leading in order to become efficient (Bass, 1985, 1990).

### 1.5.2. Organisational Climate

Organisational climate functioned as the dependent variable in this study. Organisational climate has been defined in many different ways (Litwin & Stringer, 1968) but most definitions tend to include three behavioural levels, namely the individual, the interpersonal and the organisational. In addition, the individual's frame of reference influences his/her perception of the nature of the climate (Cilliers & Kossuth, 2002). According to Hellriegel and Slocum (1974, p. 256) "organisational climate refers to a set of attributes which can be perceived about how a particular organisation and/or its subsystems deal with their members and environment". Gray (2001, p. 104) summed up organisational climate as: "what it feels like to work here". The literature review presented in this dissertation focuses on definitions of organisational climate, organisational climate models, perspectives on organisational climate and the dimensions of organisational climate. The paragraphs below provide a brief overview of some of the most commonly used organisational climate models.

The traditional organisational climate model developed by Field and Abelson (1982) focuses on various influences on organisational climate. These influences are labelled external (physical environment, socio-cultural environment), organisational (centralisation, configuration, formalisation, size, structure, technology, standardisation) and person (managerial behaviour, leadership pattern, rewards/controls). The influences determine the organisational climate, which in turn has an effect on the psychological climate and the cognitive map. The cognitive map then effects expectancies and job behaviours.

The conceptual model of organisational climate developed by Martins and Martins (2001) refers to inputs (human inputs, customer expectations, technology, financial inputs, environmental inputs) that influence the climate dimensions (task systems, job satisfaction, strategic focus). These climate dimensions have an influence on outcomes (productivity, satisfaction, transformation, profitability). Moran and Volkwein (1992) identified four perspectives on organisational climate, labelled structural, perceptual,

interactive and cultural perspectives. These perspectives link organisational climate to organisational culture, and thus suggesting that organisational culture has a direct influence on organisational climate. According to Aamodt (1999) organisational culture establishes workplace norms of appropriate behaviour (what is wrong or right) and defines roles and expectations for both managers and employees. Cilliers and Kossuth (2002) distinguish between organisational, interpersonal and individual dimensions involved in organisational climate. These dimensions are discussed in detail in chapter 3.

### 1.5.3  Theoretical Integration of Variables

The final section of the literature review involved a theoretical integration of the two variables of interest, leadership styles and organisational climate. This theoretical integration was based on a closed study of the various ways in which leadership styles are related to organisational climate and also involved consideration of all the relevant literature. The purpose of this theoretical integration was to ensure an exact understanding of the various concepts and to develop a theoretical interpretation of the relationship between leadership styles and organisational climate.

### 1.6    RESEARCH DESIGN AND METHOD

### 1.6.1  Research approach

The empirical study followed an ex post facto research design. A quantitative approach was used with a cross sectional survey design being followed. Non probability or convenience sampling was used to collect responses. The use of a survey methodology ensured that the employees responses were captured at a single point and time. This allowed for the results to be inferred to the population (the larger organisation).

### 1.6.2. Research participants

A total of 4549 employees employed by a private retail organisation consisting of seven national subsidiary companies completed the survey. Employees from branches located throughout South Africa participated in the survey. The

respondents represented all job levels in the organisation, including top management, senior management, and semi-skilled employees.

### 1.6.3  Measuring instrument

The survey questionnaire was developed by the Centre for Industrial and Organisation Psychology at UNISA (CIOP). The questionnaire was designed to determine an organisation's current state of functioning in terms of organisational climate dimensions. The survey enables work groups and management to identify strong and weak dimensions in order to plan and implement actions to improve the functioning of the weaker dimensions. The survey focuses on 13 organisational climate dimensions and includes 223 items. The internal consistency of the 13 dimensions ranges between 0,857 and 0,972 (Martins & Von der Ohe, 2003).

### 1.6.4  Research procedure

This study did not involve primary data collection. Instead, existing data was used for comparative analysis and study. During the initial data collection process the questionnaire was distributed to all branches for completion and a covering letter explaining the purpose of the survey was included with the questionnaire. A contact person in each branch assisted with the distribution and collection of the questionnaires. The respondents were assured that the data would be kept confidential and anonymous.

### 1.6.5  Statistical analysis

A number of statistical techniques were used to investigate various dimensions of the data. A Principal Component Analysis was conducted to explore factors measured by the questionnaire. Cronbach's alpha was calculated to determine internal consistency and descriptive statistics were used to describe the sample.

T-tests were used to explore differences in the perceptions of males and females concerning leadership styles and organisational climate. One-way ANOVAs were used to investigate differences between more than two groups. These ANOVAs were used to investigate the existence of different perceptions regarding leadership styles

and organisational climate within different subgroups (age, years of service, employment status, gender, race) of the sample.

Correlations were calculated to investigate the presence of relationships. Correlations and standard multiple regression analyses were used to explore the relationship between leadership styles and organisational climate. The standard multiple regression analyses determined the extent to which the different leadership styles predict organisational climate. Effect sizes were calculated to confirm the practical significance of the various statistical techniques.

## 1.7    CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

The study met its aim of determining the existence and nature of the relationship between leadership styles and organisational climate. The study's findings were related to organisational climate models and relevant literature. The limitations of the study were identified and recommendations for future research were made. These conclusions and limitations are all discussed in the final chapter of this dissertation.

## CHAPTER 2: LEADERSHIP STYLES

### 2.1 INTRODUCTION

The topics of leadership and leadership styles have received an abundance of research attention. Within organisations managers function on a variety of management levels and are usually involved in typical management activities such as planning, organising, controlling and leading. Managers thus have to fulfil many different roles, including that of monitor, negotiator, spokesman and leader. Managers require certain skills to perform these activities.

This chapter includes a discussion of both leadership and management. The literature differentiates between individuals who have management ability, individuals who have leadership ability and individuals who have both management and leadership abilities (Plunkett & Attner, 1994). Within this research study the concepts of leadership and management were linked as managers have leadership tasks and responsibilities. The study aimed to further explore the concept leadership styles. This exploration involved evaluating various definitions of leadership and investigating the approaches and theories of leadership that contribute to the various behaviours and styles of leaders. There is a small body of literature that suggests that leadership styles have a significant impact on organisational climate (Greyvenstein, 1982, Litwin & Stringer, 1968, Wallace, Hunt & Richards, 1999).

### 2.2 DEFINING MANAGEMENT STYLES

Management is defined as: "the process of setting and achieving goals through the execution of five basic management functions that use human, financial, material, and information resources" (Plunkett & Attner, 1994, p. 8). According to Longenecker and Pringle (1984) management is the process of acquiring and combining human, financial, and physical resources to attain the organisation's primary goal of producing a product or service desired by some segment of society. Smit and De J Cronje (1992) defined management as a process or series of activities that can give direction to an organisation's resources. Managing resources effectively in order to achieve objectives by being productive would enable an organisation to function optimally.

Bennett (1991) indicated that the term management style has two related meanings. The first meaning involves the demeanour that a specific manager adopts when dealing with subordinates; while the second meaning refers to the collective approach of the entire organisation's management in terms of factors such as leadership, participation, employee appraisal and control. A specific manager's management style depends on personal inclinations, training, experience and environmental factors. This management style affects managers' relations with their subordinates, group productivity and patterns of interaction amongst employees. In the macro-organisational sense (the second meaning of management style) management style helps determine formal structure, line and staff relationships. This includes factors such as whether the firm uses project teams, as well as the frequency and character of committee meetings. According to Bennett (1991), management style can thus be defined as the ambience towards employees displayed by an individual manager or by an entire management team.

Management style can also be defined as the way in which managers go about managing their tasks and responsibilities (Plunkett & Attner, 1994). A manager's style is thus impacted by factors such as personal attributes and attitudes, decision-making approach and ability, timing, scope of vision, prior commitments and creativity. Management is responsible for ensuring that an organisation achieves its objectives (Gordon & Cummins, 1979). Accomplishing this difficult task efficiently involves passing a lot of the effort to those at lower levels. Management style can thus also be defined as the complex set of behaviours and procedures required to accomplish this delegation. According to this definition management style is an indication of the extent and pattern of delegated authority in an organisation as seen through the eyes of the individuals to whom the authority is delegated.

Effective interpersonal communication forms an important part of managers' daily activities. Managers provide information, give commands and instructions and attempt to influence and persuade. The way in which managers communicate thus plays a crucial role in obtaining effective performance. According to communication theory (Gordon & Cummins, 1979) managers should use 'self-exposure' and 'feedback from colleagues' techniques to enlarge the area of common understanding between subordinates and management. However, in practice managers differ in

their ability and willingness to use these two techniques and this impact on their success in communicating (Gordon & Cummins, 1979).

Ivancevich and Matteson (1996) used these two communication techniques (self-exposure and feedback from colleagues) to identify four different managerial styles, which they named Type A, B, C and D. Type A managers use neither exposure nor feedback. They display anxiety and hostility and appear aloof and cold towards others. Type B managers desire satisfying relationships with their subordinates but are unable to express these desires. They therefore rely solely on feedback. Type C managers value their own ideas and opinions, but do not value the ideas and opinions of others. Type C managers thus have little need for feedback. Type D managers are secure in their position and feel free to expose their own feelings and to obtain feedback from others.

This section has provided an overview of the definitions of management styles. Different management styles are related to the foundation stones of management. These foundation stones form part of the everyday responsibilities of managers and are discussed in the next section.

## 2.3   FOUNDATION STONES OF MANAGEMENT

Fayol (cited in Kennedy, 1998) identified five foundation stones of modern management, which are applicable to all organisations, regardless of organisational size or organisational type (industrial, commercial, governmental, political or religious). Fayol's five key elements of industrial management have played an instrumental role in many management theories and studies (Kennedy, 1998).

Fayol's (cited in Kennedy, 1998, p. 60) five elements, are:
- "to forecast and plan (examining the future and drawing up the plan of action)";
- "to organize (building up the structure, material and human, of the undertaking)";
- "to command (maintaining activity among the personnel);

- "to coordinate (binding together, unifying and harmonizing all activity and effort)" and

- "to control (seeing that everything occurs in conformity with established rule and expressed command)"

Plunket and Attner (1994) used these five foundation stones to develop a theory of management. According to this theory managers set and achieve goals by using human, financial, material and information resources. In order to accomplish this, managers must undertake the five basic functions of management – plan, organise, staff, direct and control. These management functions are inseparable and are often simultaneous elements of a continuous, interactive process. For example, a manager who wishes to implement a plan must structure human resources into work groups (organising), guide subordinates (directing/leading) and monitor progress (controlling). Management functions are dynamic and frequently complementary (Plunkett & Attner, 1994).

Longenecker and Pringle (1984) initially identified six basic management functions. This model included decision-making as a separate function. Although most authors (Kennedy, 1998; Plunket & Attner, 1994) make use of five functions, the section below contains brief discussions of each of the six functions. The decision-making function was included in the discussion process in order to ensure that the study was comprehensive.

## 2.3.1  Planning

According to Ivancevich and Matteson (1996) planning is a keystone management function. Although the degree of uncertainty might vary, all organisations operate in uncertain environments. In order for an organisation to succeed the organisation's management must be able to cope with and adapt to change. Proper planning helps management adapt to change. Benefits of planning include forcing managers to think ahead, articulating clear objectives, being prepared and developing performance standards. The planning function requires managers to make decisions about the fundamental elements of plans such as objectives, actions, resources and

implementation. Planning can be defined as the management function in which goals are set, alternative ways of achieving the goals are identified and the roles of individuals and departments are clarified (Plunkett & Attner, 1994).

According to Smit and De J Cronje (1992) planning is the management activity that determines the organisation's mission and goals. Planning thus includes identifying ways of attaining the goals and accessing the resources needed for the task. Planning entails determining both the future position of the organisation and the guidelines or plans needed to reach that position. Managerial planning thus involves thought and decision concerning a proposed course of action (Longenecker & Pringle, 1984). It is important to note that a plan is concerned not only with the decision or action that needs to be taken, but also with aspects linked to the decisions such as 'who' should act, 'when' and 'how'.

## 2.3.2 Controlling

The controlling function involves the actions and decisions taken by managers to ensure that actual results are consistent with desired results. The key to effective controlling is to plan for specific results. If managers do not determine the desired level of performance in advance they are unable to judge the actual performance (Ivancevich & Matteson, 1996). Controlling thus involves establishing a standard against which progress toward objectives can be measured in order to make the necessary corrections (Plunkett & Attner, 1994). Managers should constantly ensure that the organisation is on course to attain its goals. The aim of control is thus to verify that performance and action conform to plans to achieve predetermined goals. Control also allows management to identify and rectify any deviations from the plans. The final component of control involves constantly revising goals and plans (Smit & De J Cronje, 1992).

## 2.3.3 Organising

Smit and De J Cronje (1992) identified organising as the second step in the management process. After the goals and plans have been determined, management has to allocate the organisation's human and physical resources to the

relevant departments or persons. Duties have to be defined and procedures fixed in order to attain the objectives. Organising thus involves developing a framework or organisational structure to indicate how personnel and materials should be employed to achieve the goals. Organising involves determining how to structure personnel and other resources (Plunkett & Attner, 1994).

### 2.3.4 Leading

Fayol (cited in Kennedy, 1998, p. 60) referred to this function as "to command". According to Plunkett and Attner (1994) directing/leading involves developing the environment in which work is to be accomplished. Leading involves giving orders to the human resources of the organisation and motivating them in such a way that they act in accordance with the organisation's goals and plans. Managers do not act in isolation and do not simply give orders, instead they have to collaborate with their superiors, equals and subordinates to attain the goals of the organisation. Taking the lead, that is getting and keeping management activities going, motivating and influencing personnel, as well as communicating with and among personnel, has a profound effect on the organisational climate prevailing in an organisation (Smit & De J Cronje, 1992).

### 2.3.5 Motivating

Fayol (cited in Kennedy, 1998, p. 60) referred to this function as "to coordinate". Together with leading, the motivating function sets an organisation in motion (Longenecker & Pringle, 1984). Managers at all organisational levels need to direct and inspire the work of others. High-performing employees can make the difference between marginal and highly effective organisations. The leading function allows managers to secure the cooperation of others in accomplishing an objective. In contrast, the motivating function allows managers to encourage subordinates to strive persistently for high job performance. The leading and motivating functions require the manager to understand individual and group behaviour and to communicate clearly.

### 2.3.6 Decision-making

Although decision-making forms part of planning, motivating and the other managerial functions, it is also an important activity in its own right and should be considered a separate function (Longenecker & Pringle, 1984). Decision-making involves a conscious choice between two or more courses of action. Managers should make decisions by identifying the problem or opportunity faced, searching for possible alternative solutions, evaluating the alternatives and choosing and implementing the most appropriate of the alternatives.

In addition to having various functions managers are also asked to fulfil different roles. For example, the decision-making function is directly linked to the various decisional roles including resource-allocator, negotiator and entrepreneur. The interpersonal role of leader is directly linked to the management function of leading. These various management roles are discussed in detail in the next section.

### 2.4  ROLES OF MANAGEMENT

Mintzberg (1980) identified ten management roles. These roles are classified as informational (monitor, disseminator, spokesman), interpersonal (figurehead, leader, liaison) and decisional (entrepreneur, disturbance handler, resource-allocator, negotiator). The various roles are illustrated in figure 2.1 and table 2.1.

In order to fulfill the various management functions managers have to fill various roles at different times. A role is defined as a set of expectations for a manager's behaviour. Role requirements are influenced by managers' subordinates, peers, superiors and job descriptions. Managerial roles do not represent individual manager types, but instead should be viewed as indicative of the various skills required by managers. Through effectively discharging these multiple roles managers are able to accomplish their managerial functions.

**Figure 2.1: Graphic presentation of manager roles**
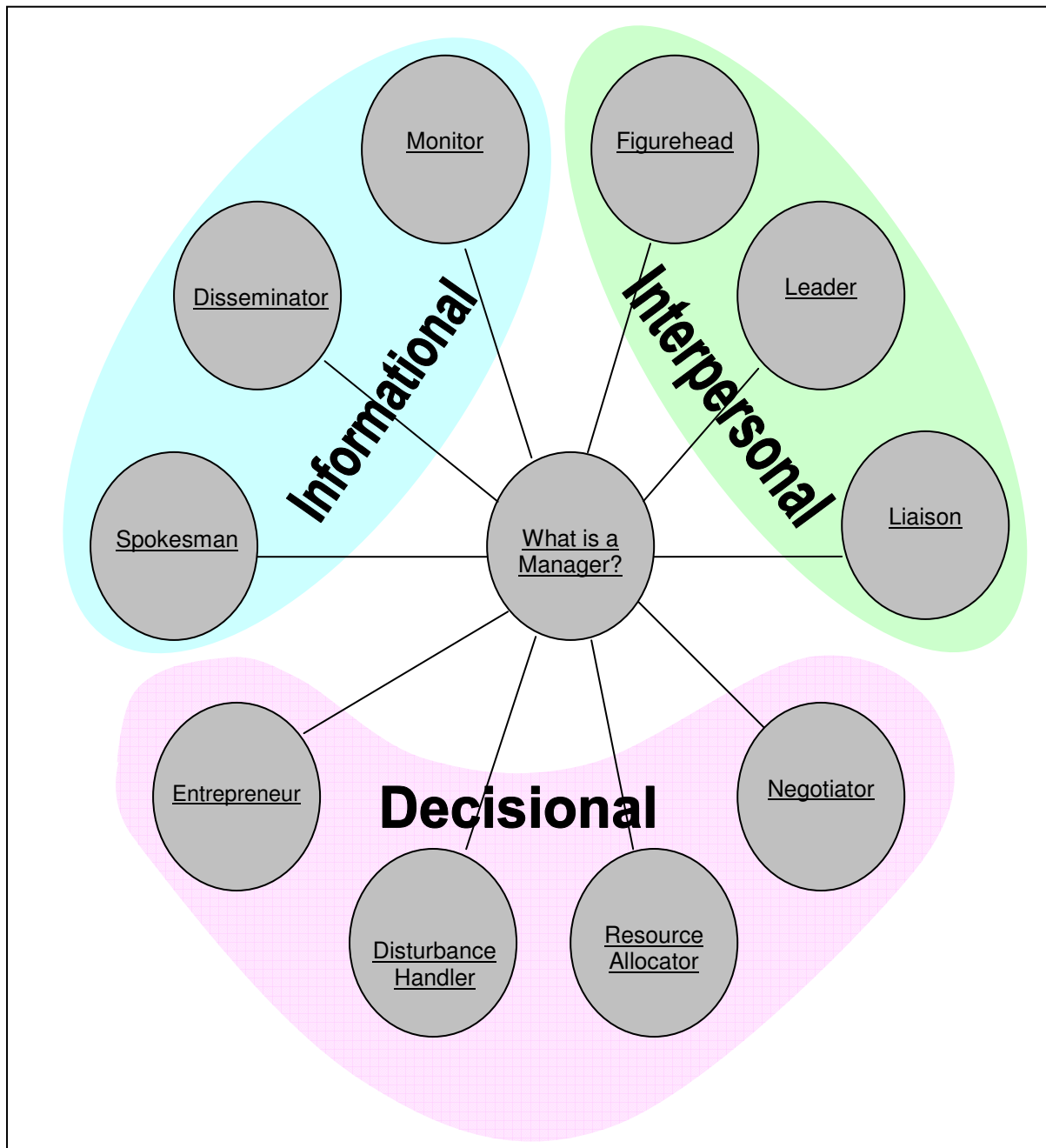


*Source: Compiled based on theory by Mintzberg (1980)*

The planning and organising functions require that the manager perform the resource allocator and figurehead roles. During the motivating function a manager must play the leadership role by providing subordinates with feedback regarding performance. In the directing/leading functions the manager plays the role of disseminator, entrepreneur, and disturbance handler, while in the controlling function the manager acts as a monitor. The decision-making function requires that managers play the role of negotiator, resource allocator, disturbance handler and

entrepreneur. The ability to meet these multiple demands separates successful and unsuccessful managers. A work unit whose manager is unable to play many roles is likely to suffer as a result of this managerial weakness (Plunkett & Attner, 1994).

*Table 2.1: Mintzberg's 10 Management Roles*

| ROLES | DESCRIPTION | ACTIVITIES |
|---|---|---|
| **Interpersonal** | | |
| Figurehead | Performs symbolic routine duties of legal or social nature | Attending ceremonies or other public, legal, or social functions; officiating |
| Leader | Motivates subordinates, ensures hiring and training of staff | Interacting with subordinates |
| Liaison | Maintains self-developed network of contacts and informers who provide favours and information | Acknowledging mail and interacting with outsiders |
| **Informational** | | |
| Monitor | Seeks and receives wide variety of special information to develop thorough understanding of the organisation and environment | Handling all mail and contacts concerned primarily with receiving information |
| Disseminator | Transmits information received from outsiders or subordinates to members of the organisation (some information is factual, some involves interpretation and integration) | Forwarding mail into the organisation for informational purposes, maintaining verbal contacts involving flow to subordinates |
| Spokesperson | Transmits to outsiders information about organisation's plans, policies, actions, results, and so forth, serves as expert on organisation's industry | Attending board meetings, handling mail and contacts involving transmission of information to outsiders |
| **Decisional** | | |
| Entrepreneur | Searches organisation and its environment for opportunities and initiates projects to bring about change | Implementing strategy and review sessions involving improvement |
| Disturbance Handler | Initiates corrective action when organisation faces important, unexpected disturbances | Implementing strategy to resolve disturbances and crises |
| Resource Allocator | Fulfils responsibility for the allocation of organisational resources of all kinds – effects, makes or approves all significant decisions | Scheduling, requesting authorisation, budgeting, programming or subordinates' word |
| Negotiator | Represents the organisation in major negotiations | Negotiating |

*Source: Adapted from Plunkett and Attner (1994, p. 20)*

Table 2.1 details the specific activities related to each management role. Managers require managerial skills in order to successfully perform these activities. For example, in order to succeed in the leader role a manager must perform the activity of interacting with subordinates, which requires human skills such as interpersonal relations. These skills are discussed in the next section.

## 2.5   MANAGERIAL SKILLS

Managerial positions require three types of basic skills: technical, human, and conceptual (Katz, 1974). Managerial positions differ in the degree of technical skill required, but most managerial positions do require some technical ability. For example, laboratory supervisors need to understand the nature of laboratory tests conducted under their supervision. Even at top management levels, knowledge of the industry is required. This is particularly important in smaller companies where extensive staff assistance is unavailable.

Managers also require interpersonal relations (human) skills. Managers accomplish work through the efforts of others and it is therefore important that they are able to interact effectively on various levels. Managers must blend the efforts of subordinate managers who frequently differ in backgrounds, areas of specialisation and viewpoints. The ability to integrate diverse interests and simultaneously preserve the loyalty and enthusiasm of team members contributes directly to organisational effectiveness (Katz, 1974).

Conceptual skills are important as they help managers discern problems, devise solutions, analyse data and exercise judgment. These tasks are often difficult and intellectually demanding because most organisational problems do not lend themselves to easy solutions. The issues involved in areas such as strategic planning, financial administration and designing control systems require highly developed conceptual skills (Katz, 1974).

The levels of technical, human and conceptual skill required vary form position to position within the organisation (see figure 2.2). Lower level managers usually direct routine work and can thus perform successfully with minimum conceptual ability, as

long as they have the appropriate technical knowledge and human relations skills. As the activities that are planned and directed at higher levels become increasingly complex, so the demand for conceptual skills increases and the need for technical skills decreases. However, as previously stated, some degree of technical knowledge remains important at all management levels. The focus of managers' human relations skills changes as they are promoted. Lower level managers require leadership ability within their own units, while higher level managers require intergroup relationships skills such as being able to resolve interdepartmental conflict and promote cooperation (Longenecker & Pringle, 1984).

*Figure 2.2: Skills required at different managerial levels*



Lower-Level Management

Upper-Level Management

Technical Skills

Human Relations Skills
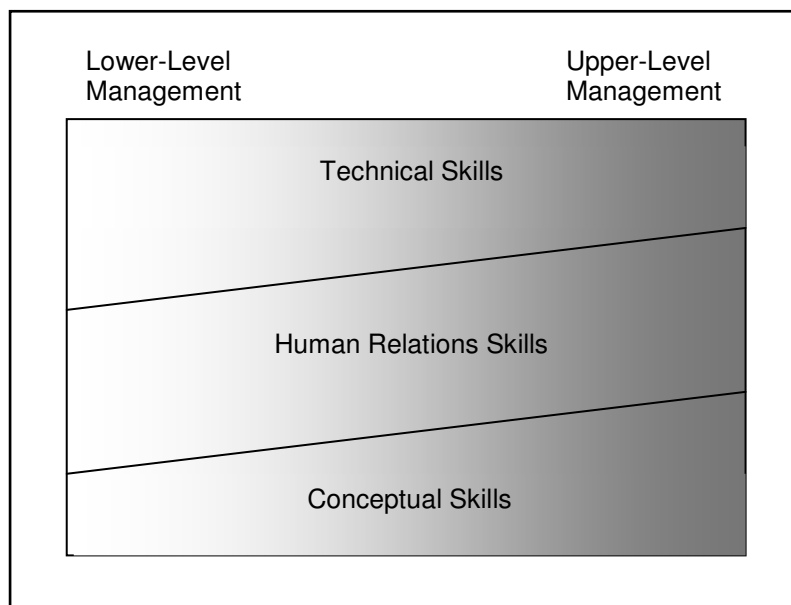
Conceptual Skills

*Source: Adapted from Plunkett and Attner (1994, p. 24)*

The technical, human and conceptual skills described above are required by managers at different levels in the organisation. Within organisations management is usually divided into three levels, known as top management, middle management and supervisory management. These three levels are discussed in the section below.

## 2.6    LEVELS OF MANAGEMENT

Although all managers perform similar functions, different positions in the company require different emphasis. Most organisations have a management hierarchy, which consists of top, middle and first-line or supervisory management. These levels form a pyramid-shaped arrangement (Plunkett & Attner, 1994). Management is thus involved at all levels of an organisation and exerts widespread influence on employees' behaviour, perceptions and interrelations. The various levels of management are important within this study because the organisation involved in the study includes various management levels.

### 2.6.1  Top Management

These high level managers develop and review comprehensive, long-range plans. They evaluate the overall performance of major departments. They also evaluate leading management personnel prior to key executive selection. These managers confer with subordinate managers regarding subjects or problems of general scope (Longenecker & Pringle, 1984).

### 2.6.2  Middle Management

Middle level managers make plans of intermediate range based on top management's long-range plans. These managers analyse managerial performance to determine capability and readiness for promotion and establish departmental policies. Part of their responsibility includes reviewing daily and weekly reports of production and/or sales. Middle managers also have the additional role of counselling subordinate managers on production, personnel and/or other problems (Longenecker & Pringle, 1984).

### 2.6.3  Supervisory Management

Managers at the supervisory level make detailed, short-range operating plans based on middle management's intermediate-range plans. These managers are responsible for reviewing the performance of 'operatives' and minor supervisors and

supervising day-to-day operations. Their responsibility includes making specific task assignments to personnel and maintaining close contact with operative employees (Longenecker & Pringle, 1984).

The previous sections have included discussions regarding the various management styles, the different functions, the management roles, the management skills and the levels on which managers must function. These discussions included information regarding the relationship between leadership and management, in terms of the function of leading, the role of leader or figurehead and the human and conceptual skills required for management.

## 2.7   MANAGEMENT VERSUS LEADERSHIP

Plunkett and Attner (1994) argued that leadership and management are different, albeit related, concepts. According to these authors there are three types of people in positions of responsibility over others: those who possess leadership ability; those who possess management skills; and those who are proficient in both leadership and management. This is illustrated in figure 2.3.

*Figure 2.3: The relationship between leadership and management*
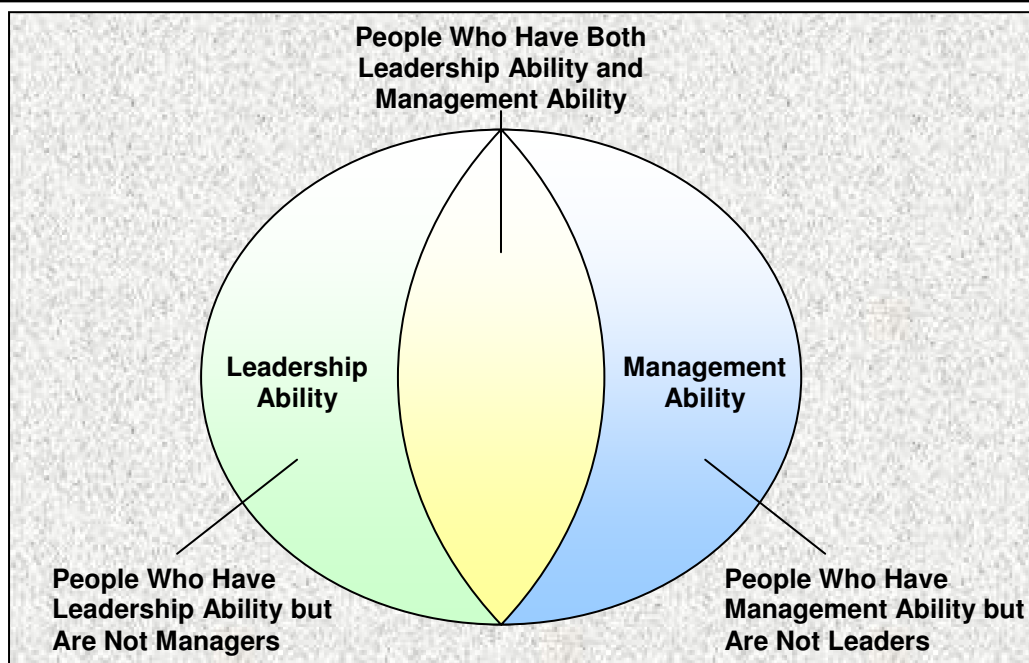


*Source: Adapted from Plunkett & Attner (1994, p. 436)*

Managers are responsible for planning, organising, staffing, directing and controlling. In contrast, leaders create and share visions and generate strategies to bring those visions to reality (Plunkett & Attner, 1994). Kotter (1990) distinguished between leaders and managers on the basis of the tasks they perform. From this perspective managers are focused on the planning and budgeting, work out detailed steps for achieving results and ensure that the necessary resources are available. Managers also work with the organising and staffing. They establish a structure for accomplishing their plan and staff this structure with the necessary individuals to perform the tasks. They are also responsible for controlling and problem solving. Managers meet these responsibilities by closely monitoring the results of the plan, identifying deviations from the plan and organising solutions to these problems (Kotter, 1990).

According to Kotter (1990), leaders focus on establishing direction by developing a vision of the future that includes strategies for achieving this vision. Leaders communicate through words and deeds and thus align people and teams who understand their vision and strategies. Through satisfying people's basic human needs leaders motivate and inspire people to overcome political, bureaucratic and resource barriers.

Northouse (2001) also argued that management and leadership are overlapping concepts. The two concepts cannot be separated because they overlap in terms of duties and responsibilities. The reality of the situation is that sometimes managers have to lead and sometimes leaders have to manage. Northouse (2001) also developed a classification system for leadership. Cho and Ringquist (2011) noted in their study that although all managers are not leaders, some managers play leadership roles.

Stein and Bathurst's (2008) book on performing arts management includes the transcript of an interview with an executive manager at the Brooklyn Academy of Music in New York. The executive manager was asked to answer the following questions: Is there a difference between management and leadership? What are the characteristics of an exemplary manager and leader? Her answer clearly illustrates the existence of a relationship between management and leadership:

Leadership is a creative process that is directed at enhancing the institution's reputation, reinforcing its stability, and creating a path for its future. Management is involved in executing those things that leadership has articulated. Many times, the most effective managers are leaders, and the most effective leaders are managers. The point is that you have to have a vision for where you want to be and where you want to go as an institution, and then you have to get there. You need leadership not only to create that direction, but also to motivate others to follow in that direction, and to follow it in a dedicated way. In every case, the best institutions are those where managers and leaders intermix.

(Stein & Bathurst, 2008, p. 62)

Figure 2.4 contains MacKenzie's (1969) illustration of the management process. The diagram includes the different elements, functions and activities that form part of the management process. People, ideas and things are the basic components of all organisations and are therefore shown in the centre of the diagram. Managers have to work with these basic components. The current study focused mainly on the leadership and people sections of the diagram. These sections of the diagram illustrate the relationships between managers and their subordinates.

## 2.8    DEFINING LEADERSHIP

In order to understand the relationship between leadership behaviour and leadership styles it is necessary to first define leadership. The literature contains a vast array of leadership definitions. Spitzberg (cited in Bass, 1990) noted that many of these definitions are ambiguous and the definitions themselves are often blurred. In addition, leadership is strongly influenced by social processes and is thus dependent on the nature of the organisation (Spitzberg, cited in Bass, 1990). According to Yukl (1998) the various leadership definitions differ in many respects.

**Figure 2.4: Management Process in 3D**
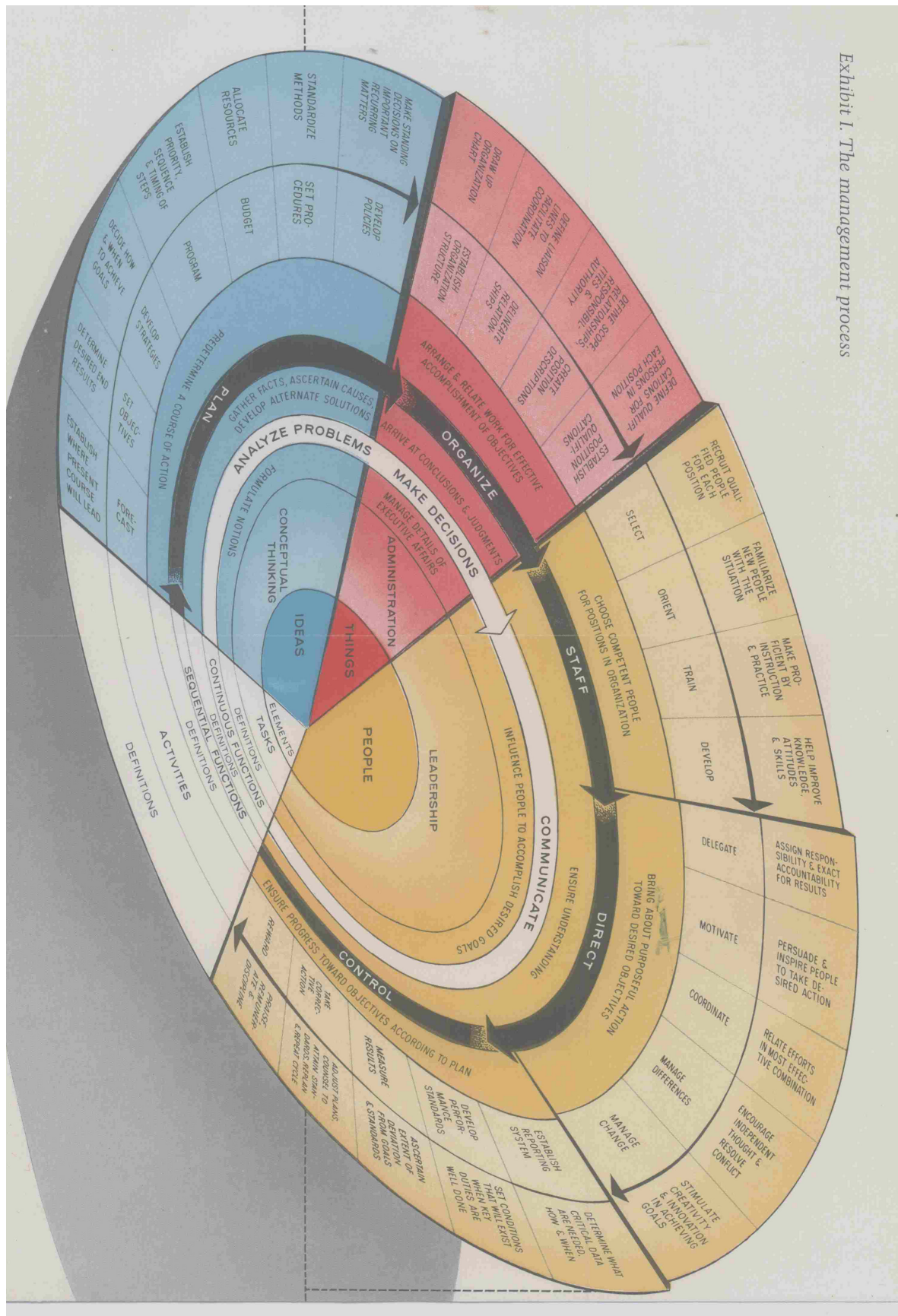


Exhibit 1. The management process

*Source: MacKenzie (1969. p. 86)*

These differences are mostly related to who exerts influence, the intended purpose of the influence, the manner in which influence is exerted and the outcome of the influence attempt. In addition, "researchers who differ in their conception of leadership select different phenomena to investigate and interpret the results in different ways." (Yukl, 1998, p. 3).

Hosking (1988, p. 153) defined leaders as "those who consistently make effective contributions to social order and who are expected and perceived to do so". Schein's (1992, p. 2) definition leans towards a more adaptive style of leadership: "Leadership… is the ability to step outside the culture … to start evolutionary change processes that are more adaptive". In contrast, Walker's (1996) definition focused on the performance of subordinates. According to this definition leadership among project managers is "the manner in which the project managers conduct themselves in their role in order to obtain the best performance from the people they are managing" (Walker, 1996, p. 32).

According to Bass (1990) there are sufficient similarities between the various definitions of leadership to identify certain common factors. These common factors are:
- "the focus of group processes";
- "a matter of personality";
- "a matter of inducing compliance";
- "the exercise of influence";
- "a form of persuasion";
- "a power relation";
- "an instrument to achieve goals";
- "an effect of interaction" and
- "an initiation of structure" (Bass, 1990, p. 11).

Bass (1990, p. 19-20) proposed the following definition of leadership:

> an interaction between two or more members of a group that often involves a structuring or restructuring of the situation and the

perceptions and expectations of the member. Leaders are agents of change – persons whose acts affect other people more than other people's acts affect them.

In her examination of leadership and nursing care management Huber (2006) argued that although leadership and management are not the same they are related. The two concepts can thus be integrated and may be the same at the area of overlap. Huber (2006) defined leadership styles as different combinations of task and relationship behaviours used to influence others to accomplish goals. This definition was used as the unifying definition of leadership, management and leadership styles in the current study. This study focused on leadership/management behaviours and did not necessarily refer to the traditional leadership styles. However, in order to provide some contextual background several approaches to and theories of leadership are discussed in the following section.

## 2.9    LEADERSHIP APPROACHES AND THEORIES

### 2.9.1  The Trait Approach

The trait approach is concerned with the identification of characteristics that distinguish leaders from non-leaders. Bird (1940) compiled a list of 79 traits that leaders possess and non-leaders (or followers) do not possess. Identification of these traits can be used to facilitate the selection of leaders (Bird, 1940). These traits include characteristics such as high intelligence, loyalty, credibility, fairness, ethical behaviour, self confidence, a sense of responsibility, determination, creativeness, solid judgment, open-mindedness, effective listening skills, results orientation and dominance (Jenkins, 1947).

Despite its prominence in the 1940s the trait theory approach to leadership has fallen into disfavour. This is primarily because the traits associated with effective leadership differed from one study to the next. In addition, the theory did not include situational factors to explain the emergence of leaders (Stogdill, 1948). Current theorists believe that it is unrealistic to expect that all effective leaders should possess consistent and unique traits, regardless of their position and environment

(e.g. military leaders, managing directors of multinational companies or leadership positions at a local sports club). However, some of these are still considered important within leadership theory. The trait theory approach to leadership laid the foundation for the formulation of other leadership theories (Bass, 1990).

## 2.9.2 Behavioural Approaches

Behavioural theories differ from the trait approach in that they focus on the leaders' behaviours rather than on their inherent characteristics. These theories do not attempt to identify the 'correct' person for a leadership position. Instead the theories view the leader's behaviour as providing cues for evoking a subordinate's task behaviour. Within these approaches behaviour is thus seen as the key aspect of leadership (Bass, 1990). The subsections below provide information regarding important behavioural approach studies.

### *2.9.2.1    The Ohio State Leadership Studies*

In the 1950s the Ohio State University conducted a study aimed at identifying independent dimensions of leader behaviour. The study resulted in the identification of two factors that accounted for most leadership behaviour. These factors were labelled consideration and initiation of structure (Fleishman, 1953).

The consideration factor refers to: "the extent to which a leader exhibits concern for the welfare of the other members of the group" (Bass, 1990, p. 511). This includes the leader's ability to express appreciation for good work, treating subordinates as equals, putting subordinates' suggestions into operation and obtaining the approval of subordinates before proceeding (Bass, 1990; Yukl, 1998). Considerate leaders are thus orientated towards relationships, friendship, mutual trust and interpersonal warmth. In contrast, inconsiderate leaders criticise subordinates in public, do not consider subordinates' feelings, refuse to accept subordinates' suggestions and do not explain their own actions (Bass, 1990).

The initiation of structure factor refers to "the extent to which a leader initiates activity in the group, organises it, and defines the way work is to be done" (Bass, 1990, p.

512). This factor includes the extent to which the leader insists on maintaining standards and meeting deadlines, makes detailed decisions regarding what needs to be done and how it should be done, establishes communication channels and organises work (Bass, 1990).

The university researchers identified four possible combinations of these two behaviours: high consideration and low initiating structure; low consideration and high initiating structure; low consideration and low initiating structure; or high consideration and high initiating structure. They found that the last combination resulted in the greatest reported levels of job satisfaction and performance by subordinates (Plunkett & Attner, 1994).

### 2.9.2.2    McGregor's Theory

McGregor's (1960) theory of leadership focuses on the development of the individual within an effective and cohesive organisation. This theory views individuals as motivated organisms and sees organisations as structured and controlled environments. Leaders must therefore modify the organisation in order to provide subordinates with the freedom to reach their true potential. This allows the subordinates to fulfil their own needs and contribute to the accomplishment of organisational goals. McGregor (1960) differentiated between two types of organisational leadership, labelled Theory X and Theory Y.

Theory X is based on the assumption that people are passive and resistant to change and that leaders must therefore direct and motivate subordinates in order to bring about change. Theory Y assumes that people already possess motivation and a desire for responsibility. The leader's task is therefore to arrange organisational conditions in a way that makes it possible for people to fulfil their individual needs while directing their efforts towards achieving organisational objectives (Bass, 1990; McGregor, 1960). According to McGregor (1960) ideal leaders no longer view their subordinates as lazy individuals who need to be coerced, controlled and directed. The leaders are able to give subordinates the chance to contribute and take responsibility, and can thus tap into the subordinates' vast talents (McGregor, 1960; Plunkett & Attner, 1994).

*2.9.2.3     The Managerial Grid*

Blake and Mouton (1964) created a two-dimensional model for visualising the continuum from task focus to employee focus management. This model is referred to as the Managerial Grid and is illustrated in figure 2.5. The model includes two axes; the first axis rates concern for people, while the second axis rates concern for production. Ratings are provided on a 9-point scale, with 1 representing low concern and 9 representing high concern. The grid functions as an effective summary of the positions that leaders can take under a variety of circumstances. The ideal leader is defined as an individual who balances the necessity to work with the maintenance of satisfactory morale (Blake & Mouton, 1964).

**Figure 2.5: The Managerial Grid**
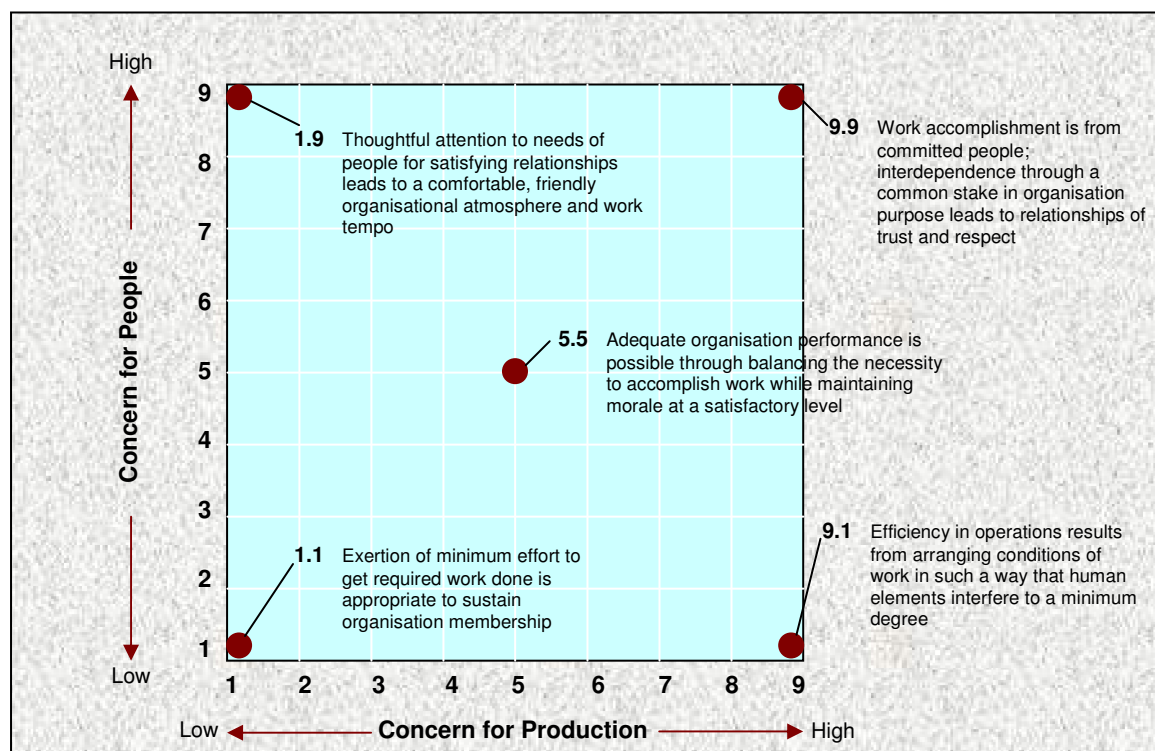


*Source: Adapted from Plunkett and Attner (1994, p. 445)*

In conclusion, behavioural approaches to leadership focus on the needs of individuals and the needs of work groups and society at large. Within this school of thought leaders should view their subordinates as assets, which need to be

developed to reach their full potential. Work accomplishment is achieved through committed, interdependent subordinates who trust and respect their leaders (Blake & Mouton, 1964).

### 2.9.3 Situational Leadership Theories

Situational leadership theories are in direct opposition to behavioural leadership theories and argue that leadership is purely a matter of situational demands. Thus, from a situational leadership perspective situational factors determine which individuals emerge as leaders and how these individuals behave. A leader is the product of the situation and is not necessarily related to a previous leader (Bass, 1990). Situational leadership theories focus on the extent to which the leader, the subordinate or both parties make decisions. The theories differentiate between directive (autocratic) and participative (democratic) leaders, but acknowledge that most leaders exhibit both these modes. The participative leadership style is most useful when subordinates' satisfaction and commitment are important or when subordinates have sufficient information and skills to reach goals on their own. Situations requiring structure need more directive leaders, especially in cases when only the leader has the necessary information or the quality of the decision is more important than the commitment of the subordinates (Bass, 1990; Plunkett & Attner, 1994; Yukl, 1998). The most important situational leadership theories are discussed below.

### 2.9.3.1    House and Mitchell's Path-Goal Theory

House and Mitchell (1974) developed the Path-Goal theory, which focuses on the behaviours a leader uses to stimulate subordinates' motivation to achieve both personal and organisational goals. According to this theory a leadership style's effectiveness is dependent on:

- how successfully leaders influence and support their subordinates' perceptions of the goals that need to be achieved;
- the rewards for successful performance; and
- the behaviours that lead to successful performance.

Leaders can enhance subordinates' motivation by teaching them the competencies needed to perform, tailoring rewards and supporting subordinates' efforts (House, 1996; House & Mitchell, 1974). This theory initially consisted of two broadly defined leader behaviours, which were labelled supportive leadership and directive leadership. A later version of the theory added two additional leader behaviours (House and Mitchell, 1974). Yukl (1998, p.267) defined these four leader behaviours as follows:

- "*Supportive leadership*: Giving consideration to the needs of subordinates, displaying concern for their welfare and creating a friendly climate in the work unit.

- *Directive leadership*: Letting subordinates know what they are expected to do, giving specific guidance, asking subordinates to follow rules and procedures, scheduling and coordinating the work.

- *Participative leadership*: Consulting with subordinates and taking their opinions and suggestions into account.

- *Achievement-oriented leadership*: Setting challenging goals, seeking performance improvements, emphasising excellence in performance, and showing confidence that subordinates will attain high standards".

*2.9.3.2    Tannenbaum and Schmidt's Leadership Continuum*

This theory laid the foundation for various other situational theories, particularly Hersey and Blanchard's life cycle theory, which is discussed in the following section. Tannenbaum and Schmidt's Leadership Continuum is based on the amount of control or authority exercised by the leader. The leadership continuum consists of several leadership styles, which are positioned between the two extreme poles of the continuum (Bass, 1990). According to Bass (1990) this leadership continuum contains the following components:

- The directive or autocratic pole serves as one extreme end of this continuum. Leaders on this end of the continuum give directions and orders to subordinates without explanation. They expect unquestioning compliance and restrict subordinates' participation to the minimum.

- At the next level on the continuum supervisors provide detailed explanations in relation to their directions. They also attempt to persuade, manipulate or bargain with the subordinates in order to make them accept their decisions.

- At the third level, referred to as the democratic stage, the leader consults with subordinates before deciding on a course of action.

- At the fourth level, the supervisor and the subordinates participate fully and take joint decisions regarding all courses of action.

- At the fifth and final level, which is referred to as the laissez-faire pole of the continuum, the supervisor delegates both the task and the manner in which it is to be completed to subordinates. The leader's participation is thus minimal and subordinates are able to make all the decisions, as long as they conform to the originally agreed upon constraints. These supervisors have completely abdicated their responsibilities (Bass, 1990).

### 2.9.3.3    Hersey and Blanchard's Life Cycle Theory

Hersey and Blanchard (1977) proposed a contingency theory, which related leadership behaviour to subordinates' maturity levels. According to this theory new and inexperienced subordinates require autocratic leaders with a high task-low relationship focus (represented in the lower right quadrant on figure 2.6). As people learn and mature in their jobs they become increasingly able to direct themselves and to participate in decision-making. These mature individuals require both high task-high relationship focus approaches and high relationship-low task approaches. Participative (democratic) leaders are most successful with subordinates functioning at this level. Once subordinates attain the characteristics described in quadrant four

(represented in the lower left quadrant on figure 2.6) they should be able to operate in a relative autonomous way, turning to the leader or higher authority only when necessary (Plunkett & Attner, 1994; Yukl, 1990).

**Figure 2.6: Hersey and Blanchard's life-cycle theory of leadership**
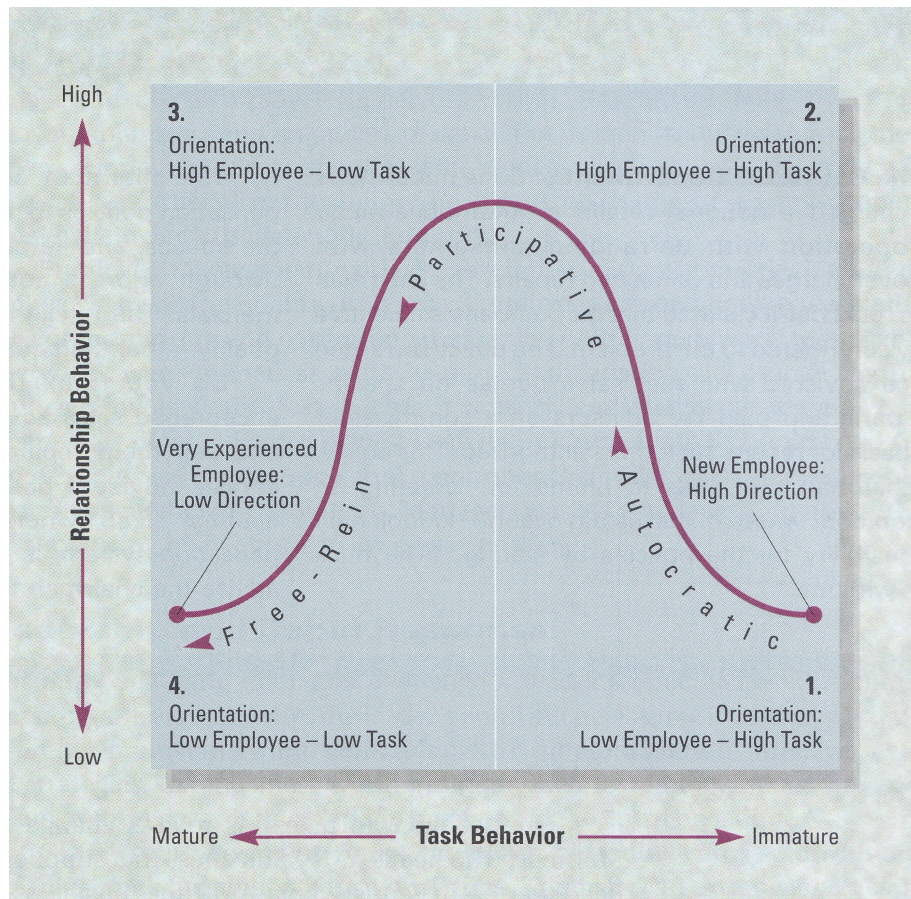


Source: Plunkett & Attner (1994, p. 451)

### 2.9.4 New Approaches

Traditionally the study of leadership styles has been defined and explained in terms such as autocratic versus democratic approaches, directive versus participative decision-making methods, task-orientation versus consideration for subordinates and coercion versus motivation. Various models and theories were developed in relation to these definitions, including the trait, behavioural and situational theories described above. These theories all attempted to explain leadership, and to define and describe the ideal leader. However, these theories failed to adequately explain all the dynamics relating to leadership and the leader-follower relationship. These

inadequacies resulted in the development of the transactional leadership and transformational leadership movements (Bass, 1990; Plunkett & Attner, 1994).

### 2.9.4.1    *Transactional leadership*

Generally speaking, transactional leaders approach their followers with the idea of exchanging one thing for another. These leaders motivate their followers by exchanging rewards for services rendered (Bass, 1990). The transactional leader can thus be described as a person who:

- recognises what subordinates want in order to perform effectively, and tries to ensure they subordinates wants are met if their performance warrants it;

- exchanges rewards and promises of rewards for subordinates' efforts; and

- is responsive to followers' immediate self-interests, if these self-interests can be met by getting the job done (Bass, 1985).

Transactional leadership is an overarching leadership theory and within transactional leadership individual leaders may employ a variety of leadership styles. These styles are described below.

- *Non-Transactional Leadership / Laissez-Faire:* According to some researchers this is not really a leadership style, as these leaders act indifferently towards their followers. They avoid taking stands on issues, do not emphasise results, refrain from intervening when necessary, are not actively involved in followers' work and do not follow up on results.

- *Passive Management by Exception:* These leaders set the standards but wait for problems to arise before reluctantly intervening. They take no action unless problems arise and only implement changes when absolutely necessary.

- *Active Management by Exception:* These leaders determine objectives, monitor subordinates for deviations before correcting them, search for errors and correct them, enforce rules and are alert to mistakes.

- *Corrective Transactional Leadership:* Leaders making use of this style focus on pointing out to subordinates when and how they are going in the wrong direction or when they have made a mistake. Although many leaders prefer this leadership style, most subordinates dislike it.

- *Constructive Transactional Leadership:* These leaders first determine what followers desire or what rewards they wish to receive for their efforts. The leader then makes an agreement in which the subordinate commits to accomplishing certain objectives and in return the leader provides appropriate rewards.

(Bass, 1985; Bass, 1990)

The discussion of transactional leaderships provided in this section clearly indicates that transactional leaders are focused on organisational outcomes. Transformational leadership, which is discussed below, focuses on different organisational needs.

### 2.9.4.2    Transformational leadership

Transactional leaders (discussed in the previous section) pursue cost-benefit, economic exchanges to meet subordinates' current material and other needs in return for 'contracted' services. Transformational leaders tend to go further and seek to arouse and satisfy higher level needs, thus creating fundamental changes in their organisations' values, missions and cultures. This theory of leadership is based on Maslow's hierarchy of needs theory (Bass, 1985; Bass & Avolio, 1994; Maslow, 1943). Maslow's theory focuses on individuals' motivations and needs. The theory is based on four premises, which are described below.

- Premise 1: Only an unsatisfied need can influence behaviour. Satisfied needs are not motivators. Thus, people who have just eaten are unlikely to want food until they become hungry again.

- Premise 2: An individual's needs are arranged in priority order of importance, ranging from the most basic needs (such as water or shelter) to the most complex (esteem and self-actualisation).

- Premise 3: An individual will at least minimally satisfy each level of need before feeling the need at the next level. For example, only once people have felt companionship will they desire self-actualisation.

- Premise 4: If a need is not maintained at any level, the unsatisfied need will become a priority once again. Thus, people who are experiencing social needs are likely to revert to needing safety if they lose their jobs (Bass, 1990; Maslow, 1943; Plunkett & Attner, 1994).

Self-actualisation is at the top of the hierarchy and involves the need to realise and meet one's own potential. Transformational leaders focus on this need and raise consciousness about higher considerations through articulation and role modelling. Through these processes they arouse or alter followers' dormant and unknown strengths. Transformational leaders raise colleagues, subordinates and followers to a greater awareness regarding issues of consequence. Transformational leaders also possess vision, self-confidence and inner strength and are able to motivate people to follow this vision, regardless of whether it is popular or acceptable according to established norms and standards (Bass, 1985; Maslow, 1943).

Transformational leadership is characterised by four types of transformational behaviour. These behaviour types are referred to as the four 'I's:

- *Individualised Consideration:* Transformational leaders always treat followers as distinct individuals by supporting them and focusing on their development.

- *Intellectual Stimulation:* Transformational leaders provide ways for followers to become more creative and innovative in dealing with problems.

- *Inspirational Motivation:* Transformational leaders use words and symbols to articulate both a vision and the way to achieve this vision. Martin Luther King's famous 'I have a dream' speech is a perfect example of a transformational articulation. This speech touched the hearts and souls of millions of people and incited the will to work together to bring about political change.

- *Idealised Influence:* This style is also referred to as charisma. It provides followers with an ideal role model of unusual abilities and determination with which they can identify. Martin Luther King, Mahatma Gandhi and Nelson Mandela are prime examples of charismatic leaders who became role models through their words, influence and actions.

<div align="right">(Bass, 1985; Bass, 1990; Bass & Avolio, 1994)</div>

While transactional leaders are able to identify and meet subordinates' transient needs, transformational leaders ask followers to transcend their own self-interests for the good of the group, organisation or society. Transformational leaders thus attempt to make their followers more aware of important issues. These followers are then able to become leaders in their own right. It is important to note that although transactional and transformational leadership are conceptually distinct individual leaders are likely to display both styles in different amounts and intensities.

The preceding discussion of leadership approaches and theories clearly illustrates that different leadership approaches have different outputs and endorse different behaviours. These different outputs and behaviours are discussed in the section below.

## 2.10 LEADERSHIP BEHAVIOUR

This study focused on the behavioural approach to leadership and this section thus discusses various leadership behaviours. The behavioural approach to leadership originated in the early 1950s when researchers turned their attention to leadership

style and leader behaviour. Many of these early studies compared the relationship orientation versus the task orientation of a leader. The research studies resulted in the identification of two general subcategories of leadership behaviour. The first subcategory examines the ways in which mangers spend their time and looks at typical activity patterns, responsibilities and functions for managerial occupations. The second subcategory is concerned with identifying effective leadership behaviour and trying to pinpoint the ideal leader (Jinhua, 2006). Two important leadership behaviour studies are presented below.

## 2.10.1    Michigan Leadership Study

Researchers from the University of Michigan conducted a major research program on leadership behaviour. The study focused on the identification of relationships between leader behaviour, group processes and measures of group performance. The researchers compared effective and ineffective managers and found significant differences in managerial behaviour (Likert, 1961). This resulted in the identification of three types of leadership behaviour that differentiate between effective and ineffective managers. Effective managers are characterised by the following leadership behaviours:

- *Relations-oriented behaviour:* Effective managers are more supportive and helpful towards subordinates. Task-oriented behaviour does not occur at the expense of concern for human relations.

- *Task-oriented behaviour:* Effective managers do not expend time and effort doing the same work as their subordinates instead they concentrate on task-oriented functions. Effective managers also guide subordinates in setting performance goals that are high but realistic.

- *Participative leadership:* Effective managers use more group supervision. The manager's role in group meetings is primarily to guide the discussion in a supportive, constructive and problem solving manner. However, the manager remains responsible for all decisions and their outcomes (Likert, 1961).

The following section elaborates on leadership behaviour by exploring the nineteen categories of behaviour for effective leaders. These behaviours provide insight regarding leadership actions that can improve organisation or group performance (Yukl, 1981, 1998).

## 2.10.2 Yukl's (1981) Study of Leadership Behaviour

Yukl's (1981) study aimed to identify categories of leadership behaviour. The study resulted in the identification of nineteen categories of leadership behaviour (see table 2.2). These behaviours include task behaviours, relations behaviours and transformational (change) behaviours.

Leaders must adjust their behaviour and style to fit the situation. The various task, relations and transformational behaviours should be used when the need arises. The way that leaders use and display these behaviours is referred to as their leadership style. An individual's leadership styles can be identified by observing his/her leadership behaviours.

*Table 2.2: Yukl's 19 categories of leadership behaviour*

| Category | Definition/Description |
|---|---|
| Performance emphasis | The extent to which a leader emphasizes the importance of subordinate performance, tries to improve productivity and efficiency, tries to keep subordinates working up to their capacity and checks on their performance. |
| Consideration | The extent to which a leader is friendly, supportive, and considerate toward subordinates and strives to be fair and objective. |
| Inspiration | The extent to which a leader stimulates subordinates' enthusiasm for the work of the group and says things to build subordinates' confidence in their ability to perform assignments successfully and attain group objectives. |
| Praise-recognition | The extent to which a leader provides praise and recognition to subordinates with effective performance, shows appreciation for their special efforts and contributions and makes sure they get credit for their helpful ideas and suggestions. |
| Structuring reward contingencies | The extent to which a leader rewards effective subordinate performance with tangible benefits. Such benefits include pay increases, promotions, preferred assignments, a better work schedule and time off. |
| Decision participation | The extent to which a leader consults with subordinates and otherwise allows them to influence decisions. |
| Autonomy-delegation | The extent to which a leader delegates authority to subordinates and allows them to determine how to do their work. |
| Role clarification | The extent to which a leader informs subordinates about their duties and responsibilities, specifies the rules and policies that must be observed and lets subordinates know what is expected of them. |
| Goal setting | The extent to which a leader emphasises the importance of setting specific performance goals for each important aspect of a subordinate's job, measures progress toward the goals and provides concrete feedback. |
| Training-coaching | The extent to which a leader determines training needs for subordinates and provides any necessary training and coaching. |
| Information dissemination | The extent to which a leader keeps subordinates informed about developments that affect their work, including events in other work units or outside the organisation, decisions made by higher management and progress in meetings with superiors or outsiders. |
| Problem solving | The extent to which a leader takes the initiative in |

| | proposing solutions to serious work-related problems and acts decisively to deal with such problems when a prompt solution is needed. |
|---|---|
| Planning | The extent to which a leader decides how to organise and schedule work efficiently, plans how to attain work-unit objectives and makes contingency plans for potential problems. |
| Coordinating | The extent to which a leader coordinates the work of subordinates, emphasises the importance of coordination and encourages subordinates to coordinate their activities. |
| Work facilitation | The extent to which a leader obtains for subordinates any necessary supplies, equipment, support services or other resources, eliminates problems in the work environment and removes other obstacles that interfere with the work. |
| Representation | The extent to which a leader establishes contacts with other groups and important people in the organisation, persuades them to appreciate and support the leader's work unit and influences superiors and outsiders to promote and defend the interests of the work unit. |
| Interaction facilitation | The extent to which a leader tries to get subordinates to be friendly with each other, cooperate, share information and ideas and help each other. |
| Conflict management | The extent to which a leader restrains subordinates form fighting and arguing, encourages them to resolve conflicts in a constructive manner and helps settle disagreements between subordinates. |
| Criticism-discipline | The extent to which a leader criticises or disciplines a subordinate who shows consistently poor performance, violates a rule or disobeys an order. Disciplinary actions include official warnings, reprimands, suspensions and dismissals. |

*Source: Adapted from Yukl (1981, p. 121)*

## 2.11 LEADERSHIP STYLES

Leadership styles consist of the traits, approaches and behaviours discussed previously. This study made use of the leadership styles identified by Goleman (2000). According to Goleman (2000), managers often underestimate the impact organisational climate can have on business finances. Organisational climate is influenced by leadership style, which is defined as the way managers motivate, gather and use information, make decisions and handle crises. Goleman (2000) identified six different leadership styles based on different emotional intelligence

competencies. The various leadership styles are suited to different situations and influence organisational climate in different ways (see table 2.3).

Goleman (2000) found that the Authoritative leadership style had the most positive effect on organisational climate. The leadership styles labelled Affiliative, Coaching and Democratic also had positive effects on organisational climate. In contrast, the Coersive and Pacesetting leadership styles had a negative effect on organisational climate.

Goleman (2000, p. 17) summarised his study with the following comment: "The business environment is continually changing and a leader must respond in kind. Hour to hour, day to day, week to week, executives must play their leadership styles like a pro — using the right one at just the right time and in the right measure. The payoff is in the results".

*Table 2.3: Leadership styles*

| Leadership style | The leader's modus operandi: | The style in a phrase: | Underlying emotional intelligence competencies: | When the style works best: | Overall impact on climate: |
|---|---|---|---|---|---|
| Authoritative ("The visionary") | Mobilizes people toward a vision. | "Come with me" | Self-confidence, empathy, change catalyst | When changes require a new vision or a clear direction is needed | Most strongly positive |
| Coercive ("The dictator") | Demands immediate compliance | "Do what I tell you" | Drive to achieve, initiate, self-control | In a crisis, to kick start a turnaround, or with problem employees | Negative |
| Affiliative ("The people person") | Creates harmony and builds emotional bonds | "People come first" | Empathy, building relationships, communication | To heal rifts in a team or to motivate people during stressful circumstances | Positive |
| Democratic ("The listener") | Forges consensus through participation | "What do you think?" | Collaboration, team leadership, communication | To build buy-in or consensus, or to get input from valuable employees | Positive |
| Pacesetting ("The superman") | Sets high standard of performance | "Do as I do, now" | Conscientiousness, drive to achieve, initiative | To get quick results from a highly motivated and competent team | Negative |
| Coaching ("The nurturer") | Develops people for the future | "Try this" | Developing others, empathy, self-awareness | To help employee improve performance or develop long-term strengths | Positive |

*Source: Adapted from Goleman (2000, p. 7-8)*

## 2.12  CONCLUSION

This chapter has provided an overview of the various theories and models of leadership and management. Trait theorists developed a finite list of traits believed to embody the ideal leader. In contrast, behaviourists place more importance on the leader's behaviour in relation to his/her subordinates. Situational leadership theorists argue that situational factors determine leadership competence. Transactional leadership theory evaluates leaders based on their ability to enter into transactional relationships with followers that produce results that are in the best interests of both the organisation and the individual. The most recent development in leadership theory involves the transformational leadership model, which attempts to incorporate the best of all previous leadership theories into a leadership process that results in strategic transformation in the organisation (Bass, 1990).

Leadership involves two (sometimes contradictory) functions. Firstly, it involves achieving the specific objectives or goals of the organisation and secondly, it involves maintaining healthy relationships with subordinates to preserve their well-being and motivation. A leader's most difficult task involves balancing these two factors in a way that ensures task completion in an effective manner and keeps followers happy and motivated at all times. Leaders must thus induce in subordinates the will to perform in accordance with the leader's vision. Being a leader thus requires influence, persuasion, the ability to induce compliance from subordinates, competence, understanding, determination, decisiveness, trustworthiness, responsibility, flexibility, open-mindedness, fairness, loyalty and charisma (Bass, 1990).

The behavioural approaches to leadership focus on people as individuals with needs and as members of work groups and a larger society. Leaders who adhere to this school of thought view subordinates as assets that need to be developed to reach their full potential. Work accomplishment is thus derived from committed, interdependent subordinates who trust and respect their leaders.

# CHAPTER 3: ORGANISATIONAL CLIMATE

## 3.1    INTRODUCTION

Optimising organisational climate is an essential component of workplace success (Gray, 2001). In his book *The Human Side of Enterprise* McGregor (1960) dedicated a whole chapter to what he termed The Managerial Climate, which he described as the "day-by-day behaviour of the immediate superior and of other significant people in the managerial organisation" (McGregor, 1960, p. 133). The behaviours he highlighted include convincing subordinates that they will receive a fair break, showing that management is concerned with employees' welfare, morale and productivity and demonstrating management's competence and upward influence in the organisation. The book suggests that managers' actions, competencies and abilities create the climate in which subordinates work.

## 3.2    DEFINITIONS OF ORGANISATIONAL CLIMATE

In order to gain a better understanding of the organisational climate concept, it is useful to consider the various definitions that have been used in the past. These definitions share some similarities but are also noticeably different. Members' perceptions of the work environment are a central theme in several definitions (Ekvall, 1996; Govender, 1998; Hellriegel & Slocum, 1974; Luthans, Norman, Avolio, & Avey, 2008; Schmidt, Wood, & Lugg, 2004) and many of the definitions refer to members' experience of feelings towards their working environment (Ekvall, 1996; Govender, 1998; Gray, 2001).

According to Hellriegel and Slocum (1974, p. 256) organisational climate refers to "a set of attributes which can be perceived about how a particular organisation and/or its subsystems deal with their members and environment". Ekvall (1996, p. 105) viewed organisational climate as a feature of the organisation, a conglomerate of attitudes, feelings and behaviours that characterises life in the organisation and that exists independently of the perceptions and understandings of the members of the organisation.

Organisational climate can be described as "dealing with organisational characteristics which are perceived by the individuals; anything in the organisation which members interpret or attach meaning to in their attempt to make sense of the organisational environment" (Govender, 1998, p. 1). Gray (2001, p. 104) provided a simple explanation for the concept by stating that organisational climate is "what it feels like to work here".

Although organisational climate has been defined in many different ways, most of the definitions include three behavioural levels, namely the individual, the interpersonal and the organisational (Cilliers & Kossuth, 2002). The individual level includes the individual's frame of reference, the individual's perception of the nature of the organisational climate and the way in which the individual perceives and reacts to the atmosphere at work. The interpersonal level refers to the nature of managerial support, which has both directive (structure, role clarity, job standards, managerial effectiveness, job satisfaction) and interactive (communication, team functioning, contributing to profits, reward, conflict handling) properties. Cilliers and Kossuth (2002) referred to authors from the 1960s (Likert, Litwin & Stringer, cited in Cilliers & Kossuth, 2002; Taguiri & Litwin, cited in Cilliers & Kossuth, 2002) to describe the behavioural level. According to these authors this level consists of formal (structure, policy, objectives, management practices, task specialisation, decision-making, standards, rewards) and informal (identity, responsibility, interactive communication, employee needs, information sharing, support, warmth, conflict handling) dimensions.

According to Rousseau (cited in Schmidt et al., 2004, p. 681) "individual descriptions of the social setting or context of which the person is a part" constitute the essence of organisational climate. Schmidt et al. (2004, p. 682) defined organisational climate as "a collection of an individual's perceptions about a wide range of concepts within a particular context". More recently authors have qualified the concept of organisational climate. For example, Luthans et al. (2008, p. 225) referred to supportive organisational climate, which they defined as: "the overall amount of perceived support employees receive from their immediate peers, other departments, and their supervisor that they view as helping them to successfully perform their work duties".

***Table 3.1: Definitions of organisational climate over time***

| Date | Author | Core idea of definition |
|------|--------|------------------------|
| 1974 | Hellriegel and Slocum | A set of attributes that can be perceived regarding how a particular organisation and/or its subsystems deal with their members and environment. |
| 1988 | Rousseau | Individual descriptions of the social setting. |
| 1996 | Ekvall | Attitudes, feelings and behaviours that characterises life in the organisation. |
| 1998 | Govender | Anything in the organisation that members interpret or attach meaning to in their attempt to make sense of the organisational environment. |
| 2001 | Gray | Feeling experienced at work place. |
| 2002 | Cilliers and Kossuth | Individual, interpersonal (directive and interactional), organisational (formal and informal) behavioural levels. |
| 2004 | Schmidt, Wood & Lugg | A collection of an individual's perceptions about a wide range of concepts. |
| 2008 | Luthans | Perceived support received to conduct tasks at work. |

Table 3.1 provides an overview of some of the definitions of organisational climate discussed above. The table also shows how the definitions of this concept have evolved and shifted over time. Based on these existing definitions, this research defined organisational climate as the feelings, attitudes and behavioural tendencies that characterise organisational life and that are expressed through the perceptions of the organisation's members. Organisational climate was also perceived as the way in which an organisation's culture is expressed at a particular point in time. The distinction between organisational climate and organisational culture is discussed in the next section.

## 3.3    ORGANISATIONAL CLIMATE AND ORGANISATIONAL CULTURE

Although the terms organisational culture and organisational climate are frequently used interchangeably (Barker, 1994) the two concepts are actually quite distinct (Hofstede, Bond & Luk, 1993). However, attempts to define organisational climate in a way that differentiates organisational climate from organisational culture have proven to be problematic (Field & Abelson, 1982).

Clapper (2000) suggested that organisational climate might be considered a component, an element or a surface manifestation of organisational culture. Moran and Volkwein (1992) also stated that the clearest relationship between the two constructs is the influence organisational culture exerts on the formation of organisational climate. Gray (2001) acknowledged that the relationship between culture and climate is complex. The relationship between these two constructs is best described as symbiotic, with climate being a manifestation of culture (Schein, 1992).

Alvesson, (1991) defines organisational culture as a broad range of internal and external influences, some of which lie beyond managerial control. According to Schein (1992) organisational culture can be seen as a pattern of shared basic assumptions. According to this theory as organisations face and successfully resolve inevitable daily challenges group members learn certain assumptions. These assumptions are associated with a measure of success and are thus considered valid and are taught to new members. These assumptions come to be viewed as the correct way to perceive, think and feel when confronted with similar problems. The assumptions are thus perpetuated and lead to the development of organisational culture. In contrast, McMurray (2003) argued that neither organisational climate nor organisational culture exist apart from the individual's perception. He maintained that: "the individual is the carrier of culture within an organisation and it is the agreed upon perceptions of the behavioural manifestations of culture that provide the raw material for the organisation's climate" (McMurray, 2003, p. 7).

For purposes of this study the constructs of organisational culture and organisational climate were viewed as closely related but not synonymous. Climate was defined as

an individual's perception of the sum of the effects of culture. In addition, organisational climate was seen as referring to the way an organisation's culture is expressed at a particular point in time.

## 3.4    ORGANISATIONAL CLIMATE MODELS

Although various models of organisational climate have been proposed, only a behavioural model, the Traditional Climate Model (Field & Abelson, 1982) and a conceptual model, the Organisational Climate Model (Martins & Martins, 2001), are discussed in this section. These two models formed the theoretical basis for the current study

### 3.4.1  The Traditional Climate Model

The Traditional Climate Model was developed by Field and Abelson (1982) and focuses on the factors that influence climate. These factors are labelled external, organisational and person (see figure 3.1). External influences involve the physical and socio-cultural environment, while organisational influences include aspects such as centralisation, configuration, formalisation, size, structure, technology and standardisation. Person influences include managerial behaviour, leadership pattern and rewards or controls. Research conducted in the 1970s showed that organisational climate has numerous dimensions. Four of these dimensions are included in the Traditional Climate Model, namely autonomy/control, degree of structure, rewards and consideration and warmth and support. The organisational climate (the environment as it is) influences the individual's psychological climate (the climate as it is perceived). However, this link is influenced and moderated by the individual's group, task and personality. A cognitive map is created from the individual's psychological climate. This map serves as a filter for further incoming information and thus has a feedback effect on the psychological climate (Field & Abelson, 1982).

**Figure 3.1: Traditional climate model**
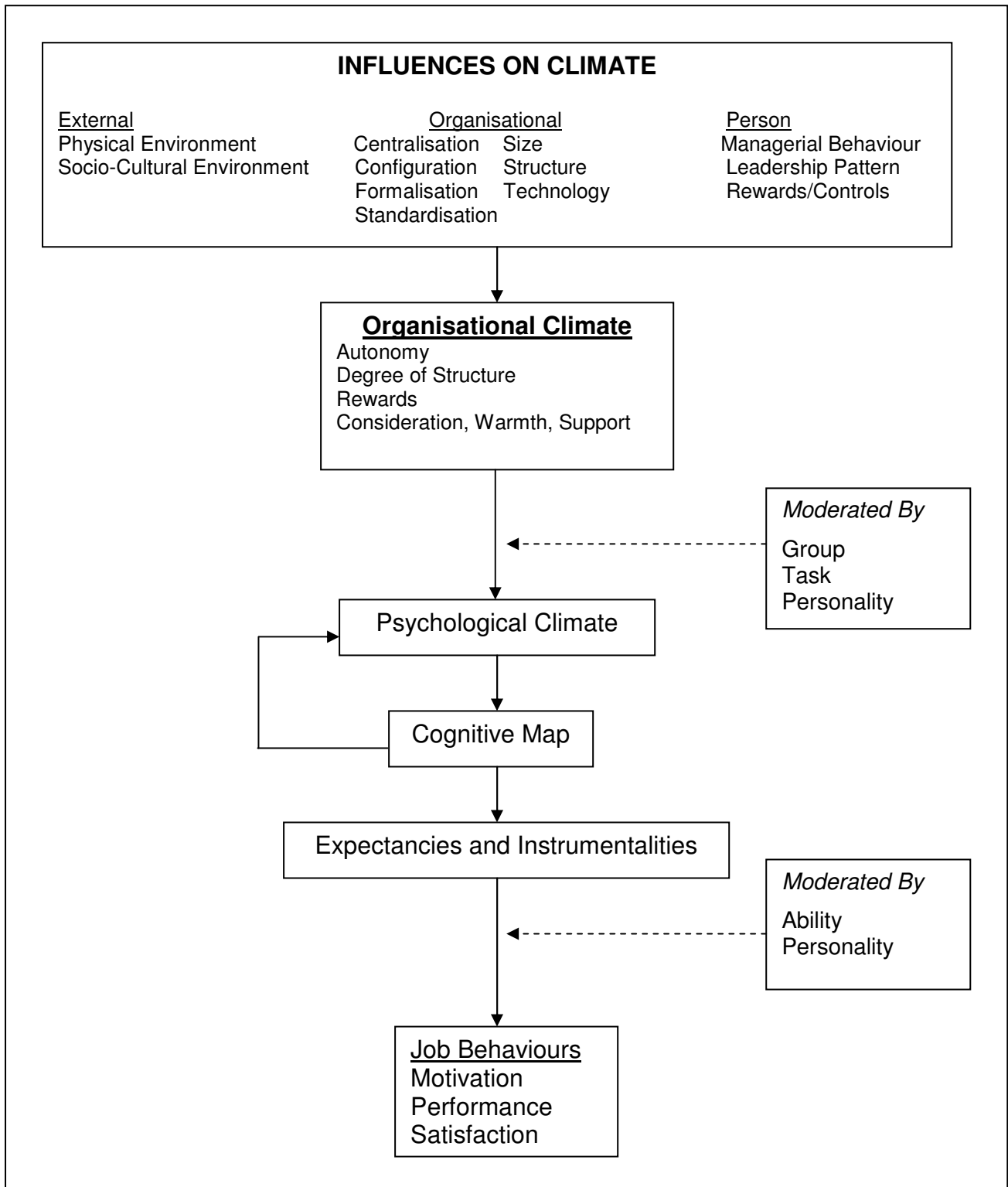


*Source: Adapted from Field & Abelson (1982, p.184)*

Schneider (1973) found evidence suggesting that filtering and feedback effects influenced the link between the cognitive map and the individual's psychological climate. He also found that the longer individuals had contact with an organisation

the more difficult it was to change their perceptions regarding that organisation's climate. Cognitive maps allow individuals to construct expectancies and instrumentalities, which are related to the individual's job behaviours including motivation, performance and satisfaction. The individual's ability and personality moderate these relationships (Field & Abelson, 1982).

This model clearly suggests that managerial behaviour and leadership pattern influence the organisational climate (Field & Abelson, 1982). Employees' experience and opinion of the climate in an organisation can thus be directly influenced by managerial behaviour and leadership pattern. This finding was the basis for this study's focus on the relationship between leadership style and organisational climate.

### 3.4.2  The Organisational Climate Model

Martins and Martins' (2001, 2002) conceptual Organisational Climate Model includes inputs, climate dimensions and outcomes and feedback and evaluation (see figure 3.2). The inputs in the model include human inputs, customer expectations, technology, financial inputs and environmental inputs. These inputs influence the various dimensions of climate. According to the model the dimensions of organisational climate include task systems, job satisfactions and strategic focus. This model sees organisational climate as impacting directly on the organisation's outcomes, including productivity, satisfaction, transformation and profitability. The model also suggests that human inputs have an impact on organisational climate dimensions such as management processes and interpersonal processes. Interpersonal processes in turn influence member's productivity and satisfaction. It is thus possible to argue that there is a relationship between leadership styles (a human input) and organisational climate (management and interpersonal processes) and that these two factors impact employees' perception of the climate (a satisfaction output). This model and the Traditional Climate Model discussed previously served as the theoretical basis for the current study.

**Figure 3.2: Organisational climate model**

INPUTS                    CLIMATE DIMENSIONS                    OUTPUTS

1. Human inputs

2. Customer
   expectations

3. Technology

4. Financial
   inputs

5. Environmental
   inputs

Technology → Task systems → Management processes → Interpersonal and social processes → Transformation and change → Job satisfaction → Employment Equity/ Diversity → Strategic focus → Technology

1. Productivity

2. Satisfaction (customers and employees)

3. Transformation

4. Profitability

Feedback and evaluation

*Source: Martins & Martins (2001. p 48)*

According to Ekvall (1996) organisational climate influences organisational processes such as problem solving, decision-making, communications, co-ordination, controlling and psychological processes such as learning, creating, motivation, and commitment. Through influencing these processes organisational climate thus impacts on the results of the operations of the organisation. Various resources (people, money, machines) are used in the organisation's processes and operations. These operations lead to a multitude of effects at various levels of abstraction. For example, high or low quality products or services; radically new products; only small improvements to old products; high or low well being amongst employees; commercial profit or loss. Although climate exerts a strong influence on these outcomes, these effects or outcomes also influence the organisation's resources and climate. The effect is thus circular and causality is hard to determine (Ekvall, 1996).

## 3.5    PERSPECTIVES ON ORGANISATIONAL CLIMATE

The previous section presented two models of organisational climate. However, it is also possible to consider climate from different perspectives. Moran and Volkwein (1992) identified four perspectives concerning organisational climate, namely the Structural, Perceptual, Interactive and Cultural perspectives.

### 3.5.1  Structural perspective

The structural perspective views climate as an objective manifestation of the organisational structure. Organisational climate develops because all members of an organisation are exposed to the organisation's structural characteristics. This exposure results in employees having similar perceptions regarding organisational traits. These similar perceptions represent the organisational climate (Guion, cited in Moran & Volkwein, 1992).

### 3.5.2  Perceptual perspective

According to this perspective the basis for the formation of the organisational climate lies within the employee. Employees respond to situational variables in a manner

that they feel is psychologically significant. Organisational Climate is thus a psychologically processed description of conditions in the organisation (Joyce & Slocum, cited in Moral & Volkwein, 1992; Schneider & Reichers, cited in Moran & Volkwein, 1992).

### 3.5.3   Interactive perspective

According to the interactive perspective the interaction of individuals in responding to the same organisational situation elicits a shared consensus, which then forms the basis of the organisational climate (Jackofsky & Slocum, cited in Moran & Volkwein, 1992).

### 3.5.4   Cultural perspective

The cultural perspective believes that organisational climate is created by a group of interacting individuals who share a common frame of reference as they come to terms with situational contingencies. This common frame of reference is known as the organisational culture and it gives rise to organisational climate (Berger & Luckman, cited in Moran & Volkwein, 1992). The cultural perspective thus links organisational climate and organisational culture, by suggesting that organisational culture influences the development of organisational climate. According to Aamodt (1999) organisational culture establishes workplace norms of appropriate behaviour (what is wrong or right) and defines roles and expectations for both management and employees.

### 3.6     DIMENSIONS OF ORGANISATIONAL CLIMATE

The previous discussion of organisational climate models and organisational climate literature clearly suggest that organisational climate can be subdivided into various dimensions. Some of the definitions and theories of organisational climate dimensions are discussed below. This discussion is designed to provide a better understanding of the various organisational climate dimensions.

***Table 3.2: Organisational climate dimensions***

| Dimension name | Definition |
| --- | --- |
| Structure | The feeling that employees have about the constraints in the group, how many rules, regulations and procedures there are - is there an emphasis on "red tape" and going through channels or is there a loose and informal atmosphere. |
| Responsibility | The feeling of being your own boss; not having to double check all your decisions; when you have a job to do, knowing that it is your job. |
| Reward | The feeling of being rewarded for a job well done; emphasising positive rewards rather than punishments; the perceived fairness of the pay and promotion policies. |
| Risk | The sense of riskiness and challenge in the job and in the organisation; is there an emphasis on taking calculated risks or is playing it safe the best way to operate. |
| Warmth | The feeling of general good fellowship that prevails in the work group atmosphere; the emphasis on being well-liked; the prevalence of friendly and informal social groups. |
| Support | The perceived helpfulness of the managers and other employees in the group; emphasis on mutual support from above and below. |
| Standards | The perceived importance of implicit and explicit goals and performance standards; the emphasis on doing a good job; the challenge represented in personal and group goals. |
| Conflict | The feeling that managers and other workers want to hear different opinions; the emphasis placed on getting problems out in the open rather than smoothing them over or ignoring them. |
| Identity | The feeling that you belong to a company and you are a valuable member of a working team; the importance placed on this kind of spirit. |

*Source: Litwin and Stringer (1968, p. 81-82)*

A study by Litwin and Stringer (1968) focused on the creation of three simulated business organisations. The study aimed to explore the relationship between leadership style and organisational climate. The researchers investigated the effects of organisational climate on three kinds of individual motivation (achievement, affiliation and power) and identified the effects of organisational climate on variables such as personal satisfaction and organisational performance. Litwin and Stringer (1968) used the results of this study to develop a number of dimensions of organisational climate (see table 3.2).

Martins and Martins (2001) identified eight dimensions of organisational climate. These dimensions are labelled autonomy, cohesion, trust, pressure, support, recognition, fairness and innovation. Table 3.3 provides the definitions for these dimensions as summarised by Martins and Von der Ohe (2003).

*Table 3.3: Universal dimensions of climate*

| Dimension | Definition |
| --- | --- |
| Autonomy | The perception of self-determination with respect to work procedures, goals and priorities. |
| Cohesion | The perception of togetherness or sharing within the organisation setting, including the willingness of members to provide material aid. |
| Trust | The perception of freedom to communicate openly with members at higher organisational levels about sensitive or personal issues with the expectation that the integrity of such communication will not be violated. |
| Pressure | The perception of time demands with respect to task completion and performance standards. |
| Support | The perception of tolerance of member behaviour by superiors, including the willingness to let members learn from their mistakes without fear of reprisal. |
| Recognition | The perception that members' contributions to the organisation are acknowledged. |
| Fairness | The perception that organisational practices are equitable and non-arbitrary or capricious. |
| Innovation | The perception that change and creativity are encouraged, including risk-taking into new areas or areas where the member has little or no prior experience. |

*Source: Adapted from Martins and Von der Ohe (2003, p. 48).*

Martins and Von der Ohe's (2003) study resulted in the adaptation of these organisational dimensions. The researchers interviewed key stakeholders within a specific organisation and also held various focus groups. Following a content analysis of the transcripts of these interviews and focus groups several additional dimensions emerged. The researchers felt that these additional dimensions were essential to measuring the changing work environment of the participating organisation. The 13 dimensions identified by this study are: management and leadership style; policies and procedures; attracting and retaining talent; fairness of organisational practices; training and development; organisational values, work environment; recognition and rewards; teamwork; strategic focus; performance management; employment equity; and discrimination with regard to promotions (Martins & Von der Ohe, 2003). These dimensions are discussed in more detail in chapter 4.

A research study conducted by Blitz, Lazotte and Morris (2003) resulted in the identification of nine organisational climate dimensions. These dimensions are: Employee retention; Job satisfaction; Organisational satisfaction; Service climate; Service support; Training; Compensation; Supervision; and External service value. Although Blitz et al. (2003) did not refer to leadership directly; they identified supervision as a core dimension of organisational climate. Litwin and Stringer (1968) also referred to leadership style indirectly through their identification of dimensions such as structure, reward, support and conflict. The definitions of these dimensions clearly indicate that they are related to leadership style. In the same way Martins and Martins' (2001) dimensions of trust, support and pressure can be seen as related to the concept of leadership style. It is interesting to note that both Martins and Martins (2001) and Litwin and Stringer (1968) identified support as an important dimension of organisational climate. This dimension refers to mutual respect and support by supervisors and can thus be seen as directly related to leadership. Martins and Von der Ohe (2003) identified management/leadership style as a dimension of organisational climate.

This discussion of the organisational climate dimensions identified in the literature clearly indicates that leadership style is relevant to organisational climate. It is thus likely that leadership style is related to the organisational climate construct. This

study aimed to investigate the relationship between leadership style and organisational climate. The literature reviewed in this section provides clear support for the importance and relevance of this aim.

## 3.7 LEADERSHIP STYLES AND ORGANISATIONAL CLIMATE

Organisational climate theory suggests that an organisation's leadership plays an integral role in determining the organisational climate. Organisational climate is a summarised perception of how an organisation deals with its employees and environments, and thus develops from internal factors primarily under managerial influence (Ostroff & Schmitt, 1993). In contrast, organisational culture is created from a broad range of internal and external influences, some of which lie beyond managerial control (Alvesson, 1991).

Litwin and Stringer (1968) conducted a study based on three simulated business organisations with the objective of exploring the relationship between leadership style and organisational climate. They hypothesised that organisational climate would have a significant impact on motivation and therefore on job performance. They also hypothesised that organisational climate can be created by varying leadership style. The study found that organisational climate has a large effect on individual motivation, in relation to achievement, affiliation and power. In addition, the study found that organisational climate influences personal satisfaction at work and organisational performance.

Wallace et al. (1999) found a strong link between specific organisational climate items and a number of managerial values. The study demonstrated the existence of clear relationships between organisational culture, organisational climate and management values. The authors suggested that an additional dimension, managerial behaviour, should be included in further research in order to determine a predictive model for organisational climate, organisational culture and management behaviour and values.

A study by Greyvenstein (1982) found that making changes to the leadership style resulted in change in the organisational climate. The study also found that

organisational climate has a significant impact on employees' motivational levels and thus impacts job performance and job satisfaction. Organisational climate is thus a motivational tool for meeting both organisational and personal objectives. Management and leaders must be able to define the ideal climate necessary to meet company objectives. Managers and leaders should also be aware that their actions affect this climate. In addition, it is important to realise that organisational climate must satisfy personal needs such as physiological and safety needs (which are satisfied by monetary remuneration) and social, esteem and self-actualisation needs (which cannot be satisfied by monetary remuneration) (Greyvenstein, 1982).

Most managers would agree that that the climate or atmosphere of an organisation influences the organisation's performance (Gray, 2001). However, there is less agreement regarding what the ideal climate for optimum performance is and what influence managers have in creating and maintaining this climate (Gray, 2001). The ideal organisational climate will result in most personal needs being satisfied. This will provide continuous motivation and result in increased productivity and the achievement of organisational objectives. Leaders should focus on creating an ideal organisational climate, as this will enable them to achieve other organisational goals. The leader's management team and leadership style are responsible for ensuring that this organisational climate reaches the rest of the organisation. Nasser (cited in Greyvenstein, 1982) suggested that organisational climate is a vital variable in managerial selection. The results of Greyvenstein's (1982) study confirmed this hypothesis.

According to Gray (2001), organisational benefit can be derived from the active promotion of an organisational climate in which participants have maximum involvement in defining their own goals and objectives. A participative organisational climate should encourage members to:
- question, challenge and contribute to the decisions of more senior people;
- actively seek members' suggestions and ideas;
- once ideas are elicited, ensure that members' are valued and treated with respect; and
- allow for intrinsic satisfaction to be gained by members.

A participative management/leadership style where individual contributions are maximised, would thus result in the development of a healthy and supportive organisational climate (Gray, 2001). Transformational leadership behaviour is important in achieving an ethical climate in an organisation (Van Aswegen & Engelbrecht, 2009). Management and leaders are responsible for setting the organisation's ethics and norms. These ethics and norms then regulate the conduct of employees. Work climate characterised by ethical behaviour, can thus be a result of these management inputs.

The term leadership empowerment behaviour has also been linked to a participative leadership style. This behaviour consists of six sub-dimensions, labelled delegation of authority; accountability for outcomes; self-directed decision-making; information sharing; skill development and coaching for innovative performance (Konczak, Stelly & Trusty, 2000). A study by Van Schalkwyk, Du Toit, Bothma and Rothmann (2010) found that leadership empowerment behaviour predicts employee engagement, which in turn predicts low turnover intention of employees. Low turnover in an organisation is frequently seen as retaining talent, which is one of the organisational climate dimensions identified by Martins and Von der Ohe (2003). It could thus be argued that leadership empowerment behaviour impacts on low turnover (retaining of talent), which impacts on organisational climate.

A study by Ekvall (1996) reported fairly strong correlations between climate dimensions and three leadership style dimensions (change and development orientation; employee and relations orientation; tasks and structure orientation). The strongest correlations involved the change and development-oriented leadership dimension. The study also reported low correlations between task and structure leadership orientation and most of the climate dimensions.

Goleman (2000) conducted a detailed study of leadership styles and organisational climate. Table 3.4 displays some of the findings of this study. Goleman's (2000) study found significant correlations between the six leadership styles and organisational climate. In particular, the study found that organisational climate correlated negatively with the Coercive leadership style (-0,26) and the Pacesetting leadership style (-0,25). Positive correlations were found between organisational climate and the four other leadership

styles. Authoritative leadership style had the highest positive correlation of 0,54. The remaining correlations were Affiliative leadership style (0,46). Democratic (0,43) and Coaching (0,42) (Goleman, 2000).

*Table 3.4: Leadership styles' impact on organisational climate*

| Leadership style | Impact on organisational climate |
|---|---|
| Coercive | Flexibility is hampered. The leader's extreme top-down decision-making style inhibits any new ideas by subordinates. Subordinates feel disrespected, their sense of responsibility evaporates and they are unable to function on their own initiative. They loose their sense of ownership and stop feeling any sense of accountability for their performance. |
| Authoritative | People are motivated and understand where their job fits into the bigger organisation's vision. They understand that what they do matters and why. Standards for success and rewards are clear to all. People are allowed the flexibility to find their own way to get to the result; they are just given the end. They have the freedom to innovate, experiment and take calculated risks in order to reach their goal/ end result. |
| Affiliative | Loyalty is created by creating harmony and leaders striving to keep subordinates happy. Communication is good, ideas and inspiration are being shared. People trust each other and have the freedom to do their job in the way they think is most effective. Positive feedback is given regularly with positive motivating words. Relationship building and a sense of belonging are important. |
| Democratic | Even though generally positively experienced due to its involvement of others and encouragement of participation and collaboration, it could also include endless meetings where ideas are mulled over and decisions never being reached. The leader not making crucial decisions can result in subordinates feeling confused and leaderless. It could even escalate conflicts. |
| Pacesetting | Leader sets extremely high performance standards. He is obsessive about doing everything better and faster and expects the same from everyone around him. He pinpoints poor performers and if they do not rise to the occasion they will be replaced with someone that can. Employees feel overwhelmed by the demands and morale drops. Subordinates do not feel trusted to work on their own. They feel directionless and there rarely is any commitment. |
| Coaching | Leaders help subordinates identify their unique strengths and weaknesses. Focus is primarily on personal development. Employees feel free to experiment. Constant feedback is given for improvement. People know what is expected of them and where it fits in the larger vision of the organisation. Commitment from employees. |

*Source: Goleman (2000, p. 3-11)*

The studies discussed in this section provide empirical evidence in support of the hypothesis that there is a relationship between leadership styles and organisational climate. This hypothesised relationship was further investigated in the current study. The results of the study are presented in the following chapters. Relevant literature was taken into consideration during the discussion of results.

## 3.8    CONCLUSION

In this section organisational climate was discussed and explored. Various definitions of organisational climate were provided and the differences and similarities between organisational culture and organisational climate were explored. Two organisational climate models (Field & Abelson, 1982; Martins & Martins, 2001) were discussed. These models formed the basis for the remainder of the study. Some organisational climate perspectives were discussed and a few studies that have explored the different dimensions in organisational climate were presented. The chapter concluded with a discussion of the literature relating to the relationship between leadership styles and organisational climate.

## CHAPTER 4: EMPIRICAL RESEARCH

## 4.1    INTRODUCTION

This chapter presents the objectives of the study, the hypotheses tested, the research design and methodology, the data used, the measuring instrument, the sample and the statistical methods used to analyse the data. The chapter also includes a discussion of limitations to the methodology and ethical considerations. This study investigated the relationship between leadership styles and organisational climate. The theoretical background of these two variables was discussed in chapters two and three.

## 4.2    OBJECTIVES OF THE STUDY

The current study forms part of a larger research project investigating the various dimensions of organisational climate in several organisations in South Africa. This particular study focused on the leadership/management style dimension of organisational climate and explored the relationship between leadership styles and organisational climate. Further understanding of this relationship could assist in understanding the dynamics of organisational climate and leadership styles in other organisations.

The literature review argued for the existence of a relationship between leadership styles and organisational climate. The current study explored this relationship in the context of a private retail organisation in South Africa. The study posed the following research question: Is there a relationship between the leadership styles and the organisational climate in this private retail organisation? The primary objective of this study was to explore the relationship between leadership styles and organisational climate.

## 4.3    HYPOTHESES

A hypothesis is a statement that predicts a particular relationship between two or more variables and is formulated in a testable format (Bailey, 1987). The hypothesis statement is then either accepted or rejected based on research findings. A good hypothesis should be stated in such a manner as to carry clear implications for the

empirical testing of the stated relations (Kerlinger, 1986). Hypothesis statements must therefore be falsifiable. In relation to this study's specific research question (see section 4.2) the following research hypotheses were formulated:

$H_0$:  There is no relationship between leadership styles and organisational climate.

$H_1$:  There is a relationship between leadership styles and organisational climate.

$H_0$:  No gender differences exist in the perception of leadership styles.

$H_1$:  Gender differences exist in the perception of leadership styles.

$H_0$:  No gender differences exist in the perception of organisational climate.

$H_1$:  Gender differences exist in the perception of organisational climate.

## 4.4    RESEARCH DESIGN AND METHODOLOGY

The empirical study made use of an ex post facto research design. A quantitative approach was followed with a cross sectional survey design. Non-probability or convenience sampling was used to collect responses. The data was collected through the use of a survey questionnaire, as this is the most suitable method for gathering large quantities of data regarding respondents' perceptions (Rosnow & Rosenthal, 1996).

A number of statistical techniques were used to determine various results. A Principal Component Analysis was conducted. Cronbach's alpha coefficients were calculated to determine internal consistency and descriptive statistics were used to describe the sample. T-tests and one-way ANOVAs were used to explore differences in the various groups' perceptions of leadership styles and organisational climate. Correlations were calculated to investigate the nature of relationships. The relationship between leadership styles and organisational climate was further explored using standard multiple regression analysis. Effect sizes were calculated in order to confirm practical significance.

## 4.5 DATA COLLECTION

The study made use of data collected by the Centre for Industrial and Organisational Psychology at the University of South Africa (UNISA) during a climate survey conducted for a large retail organisation. During the data collection phase of the initial study UNISA's Centre for Industrial and Organisational Psychology distributed questionnaires to all branches of the organisation for completion by their staff members. The participants also received a covering letter explaining the purpose of the survey. The questionnaire was self-administered. A contact person in each branch assisted with the distribution and collection of the questionnaires. Participation in the study was voluntary and respondents were assured that their responses would remain confidential and anonymous.

## 4.6 MEASURING INSTRUMENT

The organisational climate questionnaire used during this study was developed by UNISA's Centre for Industrial and Organisational Psychology and was tailored to the specific needs of the retail organisation that initially requested the study. The measuring instrument was designed to assess respondents' perceptions regarding several dimensions of organisational climate within their working environment. A study by Martins and Von der Ohe (2003) used this questionnaire to explore organisational and environmental change. These authors adapted the organisational climate questionnaire and reported satisfactory reliabilities (see table 4.2).

### 4.6.1 Structure of the measuring instrument

The organisational climate questionnaire consists of two main sections with a total of 223 items. Section one focuses on organisational climate and is divided in accordance with the various climate dimensions. Items cover subjects such as company identification, work content, management/leadership, immediate manager/supervisor's management style, training and development, relationships, rewards, performance management, company values/culture, industrial relations, working conditions, employment equity and communication. Individual items are combined into various scales that measure specific dimensions of organisational

climate (see table 4.1). Items are measured on five point scale, ranging from 'strongly disagree' (1) to 'strongly agree' (5), with the central option of 'unsure' (3).

The questionnaire was initially compiled atheoretically and was based on a consultation with the client organisation. The questionnaire was designed to measure organisational climate for the particular client organisation. The questionnaire was assessed for content validity by an independent panel of experts from labour, private and academic sectors. Questions and dimensions that did not satisfy the panel were excluded from the questionnaire (Martins & Von der Ohe, 2002).

Martins and Von der Ohe (2003) improved the content validity of the questionnaire by adding items measuring dimensions critical to the changing work environment of the participating organisation. These authors used interviews and focus groups with important stakeholders to determine the relevance of the new dimensions. A Principal Component Analysis was conducted to establish the various dimensions measured by the questionnaire (see section 4.6.1).

This resulted in the identification of thirteen factors/dimensions of organisational climate assessed by this questionnaire (Martins & Von der Ohe, 2003). These dimensions are discussed in table 4.1.

Section two of the organisational climate questionnaire involves the participants' biographical details. Participants are asked to supply information regarding their age, years of service with the organisation, employment status, business unit/branch, gender, race and disability.

**Table 4.1: Dimensions identified in Martins and Von der Ohe's study**

| Dimension | Brief description |
|---|---|
| Management and leadership style | This dimension includes managerial functions such as planning, communication, decision-making, goal setting and information sharing. Additional concepts that grouped under this dimension are trust and leadership style. |
| Policies and procedures | This dimension focuses on the fairness of a number of policies and procedures such as recruitment, selection, promotions, succession planning, HIV/AIDS and retention. All these policies and procedures can influence the perception of fairness and equality in an organisation. |
| Attracting and retaining talent | This factor grouped all aspects relating to the reasons why people join a company and the reasons why employees stay with a company. Aspects such as equal opportunities, management quality, job security and advancement opportunities are included. |
| Fairness of organisational practices | The factor analysis identified 27 items that focus on different issues that may be perceived as fair/unfair in an organisation. Issues such as discipline, dismissals, gender, working conditions, sexual harassment, racism and affirmative action were grouped under this dimension. |
| Training and development | This dimension focuses on elements of training and development, such as providing training programs, career development and the application of training. |
| Organisational values | The factor analysis identified 17 values or value-related items. |
| Work environment | This dimension focuses on working conditions and the set-up of the work environment. These factors may influence an employee's job satisfaction or effectiveness. |
| Recognition and rewards | This dimension focuses on rewards for and recognition of good performance. |
| Teamwork | The six items of this dimension focus on aspects that impact on effective teamwork such as team trust, co-operation and motivation. |
| Strategic focus | This factor focuses on the overall satisfaction with the organisational vision/mission and the alignment with departmental and individual objectives. |
| Performance management | The items of this factor measure satisfaction with all aspects of performance management, such as the performance agreement, an understanding of the process and training in performance management. |
| Employment equity | This dimension focuses on the expectations and implementation of the employment equity process. |
| Discrimination with regard to promotions | The factor analysis identified seven items related to discrimination in terms of promotions of the different race, gender, disability and age groups. |

*Source: Martins and Von der Ohe (2003, p. 55)*

### 4.6.2 Reliability and Validity of the questionnaire

*4.6.2.1 Reliability*

Muchinsky, Kriek and Schreuder (1998, p. 81) defined reliability as: "the consistency or stability of a measure. A measure should yield the same estimate on repeated use when the measured property has not changed". Internal consistency reliability refers to the degree to which the items of a particular scale are related to one another and therefore consistently measure the same construct (Howitt & Cramer, 2000).

The internal consistency reliability of the various dimensions of the organisational climate survey was measured using Cronbach's alpha coefficient. Martins and Von der Ohe (2003) reported reliability coefficients ranging from 0,857 to 0,972 for the 13 climate dimensions (see table 4.2) of the organisational climate survey. The dimension with the highest Cronbach alpha coefficient was Management and leadership style (α = 0,972). These reliability results far exceed Nunnaly's (1978) criteria of a reliability of 0,70 for research purposes.

***Table 4.2: Cronbach alpha – Martins and Von der Ohe (2003)***

| Factor/Dimension | N Items | Cronbach alpha α |
|---|---|---|
| Management and leadership style | 44 | 0,972 |
| Policies and procedures | 30 | 0,959 |
| Attracting and retaining talent | 24 | 0,941 |
| Fairness of organisational practices | 27 | 0,947 |
| Training and development | 10 | 0,929 |
| Organisational values | 17 | 0,928 |
| Recognition and rewards | 10 | 0,899 |
| Work environment | 15 | 0,885 |
| Teamwork | 6 | 0,878 |
| Strategic focus | 13 | 0,871 |
| Performance management | 6 | 0,866 |
| Employment equity | 10 | 0,853 |
| Discrimination with regard to promotions | 7 | 0,857 |
| Total items | | 219 |

*Source: Martins & Von der Ohe (2003)*

*4.6.2.2    Validity*

Validity refers to an instrument's ability to measure what it was designed to measure (Smit, 1991). Test validity is not necessarily a characteristic of a test; instead a psychological instrument is valid for a specific purpose. Validity thus applies to the purpose for which the test is going to be used. Therefore, it is not possible to refer only to the high or low validity of a test, but rather to the high or low validity of the test for a specific purpose (Smit, 1991). Martins and Von der Ohe (2003, p. 57) concluded in their study that: "the organisational climate questionnaire in its adapted form can be used to assess organisational climate in a changing environment". Tjale (2005, p. 71) also used the organisational climate survey in her study and commented that "the results indicate that the factors identified in this measurement are valid".

**4.7    SAMPLE**

The current study's sample consisted of 4549 employees at a private South African retail organisation. These employees all completed the organisational climate survey. Due to use of an existing data set this sample can be considered to be a convenience sample. This study did not make use of random sampling as respondents were all drawn from the particular organisation participating in the climate study and not from a cross-section of all South African retail organisations. In addition, as a result of this study's use of secondary data  information regarding the size of the organisation is unknown and the response rate can therefore not be calculated.

**4.8    STATISTICAL ANALYSIS**

Data was analysed using the Statistical Package for the Social Sciences (SPSS). Unless otherwise indicated, significance levels were set at 0,01 due to the large sample size. Effect sizes were calculated to illustrate practical significance. The study made use of a number of statistical techniques to determine various results.

A Principal Component Analysis was used to address the study's first empirical aim. This analysis determined the factors measured by the organisational climate survey. Cronbach's alpha was calculated to determine internal consistency and descriptive statistics was used to describe the sample.

The study's second empirical aim was addressed through the use of t-tests and ANOVAs. The t-tests were used to explore differences between male and females' perceptions of leadership styles and organisational climate. One-way ANOVAs were used to investigate differences between more than two groups. Differences in the various employee subgroups' (age, years of service, employment status, gender, race) perceptions of leadership styles and organisational climate were also calculated.

The study's third empirical aim was addressed by calculating correlations to investigate relationships. The relationship between leadership styles and organisational climate was explored using correlations. This relationship was further explored using standard multiple regression analysis. The standard multiple regression analysis assisted in exploring the extent to which different leadership styles predict organisational climate.

## 4.8.1 Principal Component Analysis

A Principal Component Analysis was run to confirm the structure of the questionnaire and determine constructs (factors/dimensions). This was done to confirm which items loaded on the various dimensions. The Principal Component Analysis assisted in determining whether the questionnaire actually measures organisational climate and leadership styles. The Principal Component Analysis determined the items that clustered in the different factors.

Foxcroft and Roodt (2001, p. 53) provided the following definition of factor analysis:

… a statistical technique for analysing the interrelationships of variables. The aim is to determine the underlying structure or dimensions of a set of variables because by identifying the common variance between them, it is possible to reduce a large number of variables to a relatively small number of

factors or dimensions. The factors describe the factorial composition of the measure and assist in determining subscales. The factorial validity of a measure thus refers to the underlying dimension (factors) tapped by the measure, determined by the process of factor analysis.

### 4.8.2 Internal consistency reliability

According to Howitt and Cramer (2000), an instrument's reliability should be evaluated with each administration of the instrument. The internal consistency reliability of the various scales of the organisational climate survey for the current sample was assessed by means of Cronbach's alpha.

### 4.8.3 Descriptive statistics

Descriptive statistics were calculated in order to describe the sample. The descriptive statistics were used to indicate the way in which participants had responded on the individual scales of the various dimensions of organisational climate.

### 4.8.4 T-tests

T-tests are used to determine whether the difference between two means is statistically significant (Tabachnick & Fidell, 1996). For the purposes of this study the mean scores of the male and female groups on leadership styles and organisational climate were analysed in order to determine the existence of any gender differences in the perception of leadership styles and organisational climate.

### 4.8.5 One-way ANOVA

Deciding whether two or more groups of observations differ in location is a common task in data analysis. According to Muller and Fetterman (2003), One-way ANOVAs provide the Gaussian parametric approach and test whether the means of two or more groups are equal. The one-way ANOVA technique thus generalises t-tests to three or more groups. ANOVAs are used to compare two or more means in order to

determine whether there are any statistically significant differences between the means (Tabachnick & Fidell, 1996).

The differences between top management, senior management, professionals and skilled technical employees' views of organisational climate and leadership styles were using a one-way ANOVA. These differences were also calculated for employees in relation to differences in race, years of service, age group and employment status.

### 4.8.6 Correlation

This study's main aim was to determine whether a relationship exists between leadership styles and organisational climate. In order to test the first hypothesis (there is a relationship between leadership styles and organisational climate) a Pearson product-moment correlation between leadership styles and organisational climate was calculated. Tilley (1990, p. 2) described correlation as a "relationship where changes in one variable are associated with, but [do] not necessarily directly cause or produce change in another variable". This definition of correlation specifically excludes the concept of causality. Thus, although this study investigated the existence of a relationship between leadership styles and organisational climate, the study was not able to determine the causal nature of this relationship. Causality can only be determined through the use of an experimental research design that meets the three requirements for causal relationships (cause precedes the effect in time; empirical correlation and no other variables influencing the relationship). The current study was thus purely relational (Babbie & Mouton, 2001).

### 4.8.7 Standard multiple regression

According to Muller and Fetterman (2003, p. 97) "multiple regression centres on decomposing the variance of the response variable". In social research dependent variables are often simultaneously influenced by several independent variables (Babbie & Mouton, 2001). Multiple regression analysis assists in analysing these multiple influences cases. According to Howitt and Cramer (2000) psychologists traditionally assumed that the purpose of research was to isolate the influence of one

variable on another. However, this is complicated as other variables may also influence the dependent variable. Researchers are frequently unable to determine exactly which factors (variables) might be related to the dependent variable. Standard multiple regression assists in determining empirically the most effective set of predictors for any criterion.

### 4.8.8 Effect size

Due to the very large sample size (n = 4549) all the techniques used in this study were likely to yield statistically significant results (Pallant, 2006). The results were thus interpreted based on their practical significance or effect size rather than their statistical significance. For correlation statistics the coefficient of determination is reported. The relevant measure of effect size for t-tests and Anova is Cohen's *d or* Eta squared. This measure allows researchers to evaluate the magnitude of any difference obtained (Pallant, 2006; Rosnow & Rosenthal, 1996; Thalheimer & Cook, 2002).

The effect size for the t-test was calculated using Cohen's *d*. The formula for Cohen's *d* is (Thalheimer & Cook, 2002):

$$d = \frac{\overline{x}_t - \overline{x}_c}{\sqrt{\dfrac{(n_t - 1)s_t^{\,2} + (n_c - 1)s_c^{\,2}}{n_t + n_c}}}$$

The key to the symbols used in the above formula is:

*d* =  Cohen's *d* effect size

$\overline{x}$ = mean (average of comparison conditions)

*s* = standard deviations

*n* = number of subjects

subscript *t* = refers to group 1

subscript *c* = refers to group 2

Cohen's *d* was interpreted using the following guidelines from Thalheimer and Cook (2002): negligible effect when *d* >= -0,5 and < 0,15; small effect when *d* >=0,15 and <0,40; medium effect when *d* >=0,40 and < 0,75; large effect when *d* >=0,75 and <1,10; very large effect when *d* >=1,10 and <1,45; huge effect when *d* >1,45.

The effect size for ANOVA was calculated using Eta squared. The formula for Eta squared is (Pallant, 2006):

$$\textit{Eta squared } (\eta^2) = \frac{\textit{Sum of squares between-groups}}{\textit{Total sum of squares}}$$

Cohen (1988) provided the following guidelines for the interpretation of Eta squared values: a small effect = 0,01; a moderate effect = 0,06 and a large effect = 0,14.

## 4.9    LIMITATIONS TO THE METHODOLOGY

### 4.9.1  Questionnaire design

The use of questionnaires with close-ended questions such as the five point scales used in the organisational climate survey questionnaire limits the possible responses to the questions. Respondents are thus forced to answer in a specific way that is predetermined during the questionnaire design (Rosnow & Rosenthal, 1996).

### 4.9.2  Response styles

Self-administered questionnaires are vulnerable to response styles that may invalidate the data collected. Some participants may be inclined (consciously or unconsciously) to answer questionnaires in a socially desirable manner (Huysamen, 1983), and this could result in limitations for the current study. Other response styles that may affect the validity of the results include the halo effect (generalising one

aspect of good performance to all performance) or the cloven hoof effect (generalising one aspect of poor performance to all performance). The central tendency effect (marking the middle value of the scale) could also influence the validity of the results. In addition, it is possible that some responses were either under-reporting or exaggerating behaviours. The questionnaires used in this study were completed anonymously to encourage members to answer as honestly as possible. (Huysamen, 1983).

### 4.9.3  Response rate

The use of secondary data poses a further limitation on the study, as the response rate of members completing the survey questionnaire was unknown to the author.

### 4.9.4  Convenience sample

This study made use of convenience sampling and it is  not known whether the sample included the whole organisation or whether specific groupings were possibly excluded from the sample. The study did not use random sampling and therefore caution should be exercised when attempting to generalise the findings of this study to other contexts.

### 4.9.5  Relational study

The current study was purely relational in nature and thus causality cannot be claimed. However, the information generated regarding the relationship between specific leadership styles and organisational climate can lead to a better understanding of organisations and provide the basis for further experimental research.

### 4.10   ETHICS

This study adhered to the Ethical Code of the Health Professions Council of South Africa (HPCSA, 2008). The following ethical considerations received specific attention:

- *Respect for Human Rights:* Psychologists are obliged to respect the dignity and worth of individuals, including their right to hold their own values, attitudes and beliefs. Participation in the study was voluntary and participants were not coerced in any way.

- *Avoiding Harm:* The research project did not pose any threat to the participants. The questions in the questionnaire were all related to the working environment.

- *Appropriate use of Assessment Methods:* The instruments used in the study were chosen due to their expected relevance to the research. The instrument's psychometric properties were also deemed acceptable. The questionnaire was developed and evaluated in South Africa and the items were thus relevant and culturally fair.

- *Right to confidentiality:* Information was collected anonymously and participants were assured that only the researchers would have access to their responses. The organisation was assured that their name would not be published if any research was conducted on the data.

- *Deception in Research:* There was no deception of research participants.

- *Interpretation of Results:* Due to the multi-cultural society in which the instruments were administered, care needs to be taken with regards to the interpretation of the results.

## 4.11   CHAPTER SUMMARY

This research consisted of a quantitative correlational study that made use of an ex post facto research design. This chapter discussed the methodology and focussed on the objectives of the study, the method of data collection, the measuring instrument, reliability and validity, the sample and the various statistical techniques employed. The chapter also discussed ethical considerations in relation to the study. Although the study did have certain limitations the methodology was deemed

suitable to answer the research question. The next chapter discusses the data analysis, interpretation and results of the study.

# CHAPTER 5: DATA ANALYSIS AND INTERPRETATION

## 5.1 INTRODUCTION

Chapter 4 provided a discussion of the empirical research design of the study and the methodology used to explore the relationship between leadership styles and organisational climate. This chapter describes the analysis of data and the interpretation of results. The dimensions of organisational climate were analysed first, followed by an analysis of the sample. Differences in employees' perceptions of leadership style and organisational climate were explored for various groups. Finally the relationship between leadership styles and organisational climates was explored by investigating the extent to which the different leadership styles predict organisational climate.

## 5.2 DIMENSIONS OF ORGANISATIONAL CLIMATE

A Principal Component Analysis (PCA) was run to reveal the underlying factor structure of the questionnaire and determine the various dimensions of organisational climate. Before this analysis was performed the data set was assessed to determine the suitability of the PCA technique. Inspection of the correlation matrix revealed the presence of many coefficients of 0,3 and above. The Kaiser-Meyer-Oklin value was 0,989, which exceeds the recommended value of 0,6 (Pallant, 2006). In addition, Bartlett's Test of Sphericity reached statistical significance, thus supporting the factorability of the correlation matrix (Pallant, 2006).

All 223 items were retained for the Principal Component Analysis (PCA). The initial solution yielded 28 dimensions with eigenvalues greater than one. However, examination of the scree plot (see figure 5.1) revealed a break after dimension 4. The scree plot also contained a break after dimension 13, after which the line became horizontal. Based on the scree plot a total of 13 dimensions were extracted (see tables 5.1 and 5.2). These 13 factors all had eigenvalues greater than 2. The decision to retain 13 factors was also guided by the literature (Martins & Von der Ohe, 2003; Tjale, 2005), as previous researchers had identified 13 factors using a similar organisational climate survey questionnaire. The data were fitted to a 13 factor structure and Varimax Rotation with Kaiser Normalisation was performed to

aid in the interpretation of the dimensions (see Appendix A). The 13 dimension solution explained 54,381% of the variance, with the individual dimensions contributing between 7,970% and 1,666 % variance (see table 5.1).

**Figure 5.1: Scree plot for Principal Component Analysis**
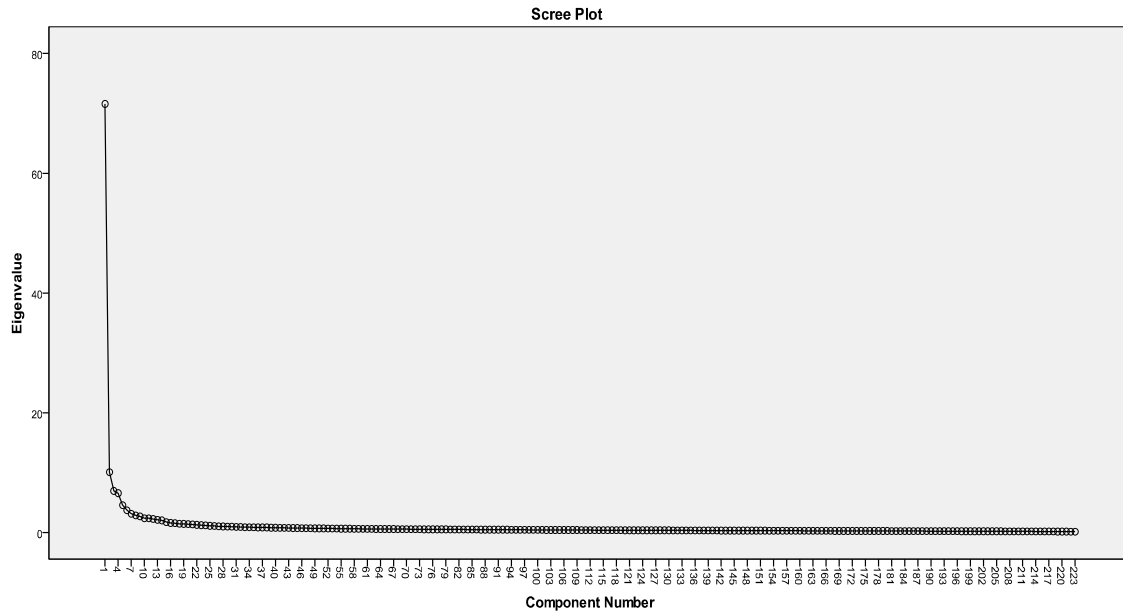


**Table 5.1: Total variance explained by extracted components** [a]

| Component | Initial Eigenvalues | | | Rotation Sums of Squared Loadings | | |
|---|---|---|---|---|---|---|
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 71,581 | 32,099 | 32,099 | 17,774 | 7,970 | 7,970 |
| 2 | 10,087 | 4,523 | 36,622 | 17,299 | 7,757 | 15,728 |
| 3 | 6,940 | 3,112 | 39,735 | 15,615 | 7,002 | 22,730 |
| 4 | 6,562 | 2,943 | 42,677 | 13,720 | 6,152 | 28,882 |
| 5 | 4,569 | 2,049 | 44,726 | 11,485 | 5,150 | 34,033 |
| 6 | 3,716 | 1,667 | 46,392 | 8,965 | 4,020 | 38,053 |
| 7 | 3,128 | 1,403 | 47,795 | 6,861 | 3,077 | 41,130 |
| 8 | 2,859 | 1,282 | 49,077 | 6,110 | 2,740 | 43,869 |
| 9 | 2,695 | 1,208 | 50,285 | 6,052 | 2,714 | 46,583 |
| 10 | 2,381 | 1,068 | 51,353 | 5,089 | 2,282 | 48,865 |
| 11 | 2,377 | 1,066 | 52,419 | 4,488 | 2,012 | 50,878 |
| 12 | 2,258 | 1,013 | 53,432 | 4,097 | 1,837 | 52,715 |
| 13 | 2,116 | 0,949 | 54,381 | 3,715 | 1,666 | 54,381 |

[a] All output not included in this table, only the 13 extracted components

The 13 identified dimensions were reasonably consistent with the dimensions identified by Martins & Von der Ohe (2003), although slight differences did occur (see table 5.2). For the purpose of the current study the 13 factors were labelled as follows:

- Factor 1 – Management/Leadership
- Factor 2 – Employment Equity
- Factor 3 – Organisational values
- Factor 4 – Attraction and Retention
- Factor 5 – Employee Development
- Factor 6 – Policies and procedures
- Factor 7 – Information management
- Factor 8 – Performance management
- Factor 9 – Working environment
- Factor 10 - Relationships/Teamwork
- Factor 11 – Discrimination
- Factor 12 – Remuneration
- Factor 13 – Strategic focus

The differences with regards to the number of items loading on each of the factors in Martins and Von der Ohe's (2003) study compared with the number of items loading on each of the factors in the current study could be explained by the wording of the items, as many items can be categorised under more than one factor. The dimensions identified in the current study were not identical to those identified by Martins and Von der Ohe (2003) and thus some of the dimensions were assigned new names. However, these new dimension names still address the core of the original factors. Only one factor differed substantially from Martins and Von der Ohe's (2003) descriptions; it is suspected that some of the items that originally clustered under Fairness of organisational practices factor in the Martins and Von der Ohe (2003) study clustered under the Employment equity factor in the current analysis. The remaining items can best be described by the new dimension of Information management. For ease of reference the first identified dimension,

labelled Management and leadership style, is referred to as leadership styles throughout the rest of this research report.

*Table 5.2: Comparison of Organisational Climate Dimensions*

| Martins & Von der Ohe (2003) | | | Current study | | |
|---|---|---|---|---|---|
| Dimension | N Items | Cronbach alpha α | Dimension | N Items | Cronbach alpha α |
| Management and leadership style | 44 | 0,972 | Management and leadership style | 29 | 0,965 |
| Policies and procedures | 30 | 0,959 | Policies and procedures | 26 | 0,967 |
| Attracting and retaining talent | 24 | 0,941 | Attraction and Retention | 24 | 0,949 |
| Fairness of organisational practices | 27 | 0,947 | Information management | 11 | 0,914 |
| Training and development | 10 | 0,929 | Employee Development | 17 | 0,935 |
| Organisational values | 17 | 0,928 | Organisational values | 25 | 0,957 |
| Recognition and rewards | 10 | 0,899 | Remuneration | 3 | 0,828 |
| Work environment | 15 | 0,885 | Working environment | 9 | 0,897 |
| Teamwork | 6 | 0,878 | Relationships/ Teamwork | 8 | 0,894 |
| Strategic focus | 13 | 0,871 | Strategic focus | 17 | 0,914 |
| Performance management | 6 | 0,866 | Performance management | 11 | 0,931 |
| Employment equity | 10 | 0,853 | Employment Equity | 36 | 0,965 |
| Discrimination with regard to promotions | 7 | 0,857 | Discrimination | 7 | 0,923 |
| Total items | | 219 | | | 223 |

*Source : Martins and Von der Ohe (2003, p. 54)*

## 5.3    RELIABILITY

Cronbach's alpha statistics were calculated to determine the internal consistency reliability for the new dimensions (see table 5.2). The overall internal consistency reliability for the questionnaire was 0,990. Although large numbers of items can artificially inflate the Cronbach alpha statistic (Palant, 2006), the reliability for the individual climate scales/dimensions was still good, ranging from 0,828 to 0,967. The leadership styles dimension attained a Cronbach alpha coefficient of 0,965. These reliability results are in the same range as those found by Martins and Von der Ohe

(2003). The scales thus meet the reliability requirements for research purposes (Nunnaly, 1978).

## 5.4 SAMPLE

A total of 4549 employee responses to an organisational climate questionnaire were included in the study. The employees were all part of the retail industry. The sections below provide information regarding the sample's age, gender, years of service with the organisation, employment status and race.

### 5.4.1 Age distribution of the sample

Respondents were asked to assign themselves to one of five age categories. The age categories were Less than 25 years old, 25-34, 35-44, 45-54 and 55 years or older. The two largest age categories were 25-34 years old (35,9%) and 35-44 years old (27.2%), thus indicating that the sample was relatively young (see table 5.3 and figure 5.2). A small percentage of respondents failed to reveal their age (5%).

*Table 5.3: Age distribution of the sample*

| Age | Number of participants | Percentage of sample |
|---|---|---|
| Less that 25 years old | 604 | 13,30% |
| 25-34 years old | 1634 | 35,90% |
| 35-44 years old | 1237 | 27,20% |
| 45-54 years old | 681 | 15,00% |
| 55 years or older | 166 | 3,60% |
| No responses | 227 | 5,00% |
| Total (N) | 4549 | 100,00% |

*Figure 5.2: Bar chart of the age group distribution*
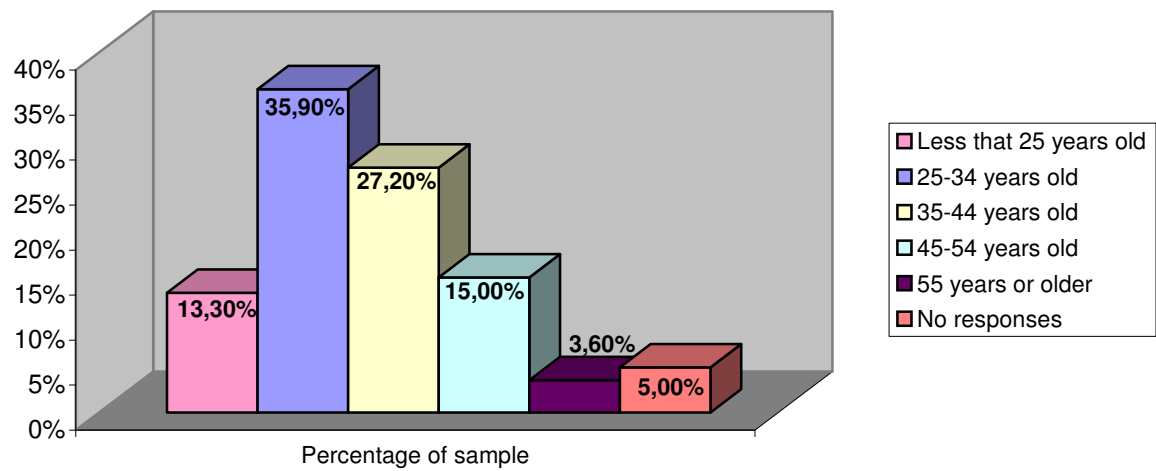


## 5.4.2 Gender distribution of the sample

The majority of respondents were female (50,9%). A substantial portion of respondents (19,5%) did not indicate their gender (see table 5.4 and figure 5.3).

*Table 5.4: Gender distribution of the sample*

| Gender | Number of participants | Percentage of sample |
|---|---|---|
| Male | 1348 | 29,60% |
| Female | 2315 | 50,90% |
| No responses | 886 | 19,50% |
| Total | 4549 | 100,00% |

*Figure 5.3: Bar chart of gender distribution*
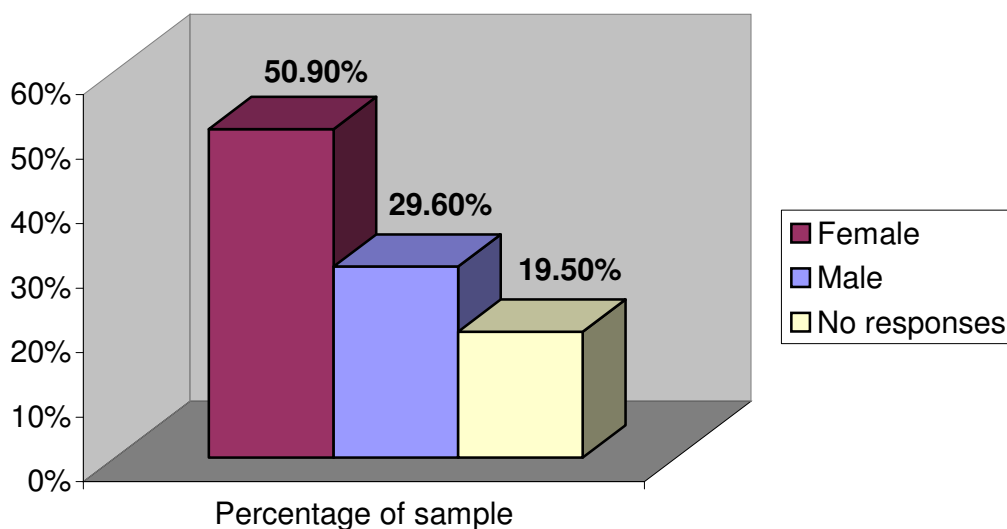


### 5.4.3   Sample distribution according to the years of service

Respondents were asked to indicate their years of service in relation to one of five categories (see table 5.5). Respondents were approximately equally represented in the three categories of 1 to 5 years, 5 to 10 years and 10 to 20 years (see table 5.5 and figure 5.4). Only a small percentage of respondents had less than one year's service (7,2%) or 20 years' or more service (7,3%). A substantial number of respondents failed to report their years of service (20,2%).

*Table 5.5: Sample distribution according to the years of service*

| Years of Service | Number of participants | Percentage of sample |
|---|---|---|
| Less than one year | 329 | 7,20% |
| 1 year, but less than 5 years | 981 | 21,60% |
| 5 years, but less that 10 years | 914 | 20,10% |
| 10 years, but less than 20 years | 1071 | 23,50% |
| 20 years or more | 333 | 7,30% |
| No responses | 921 | 20,20% |
| Total | 4549 | 100,00% |

*Figure 5.4: Bar chart of sample distribution according to the years of service*
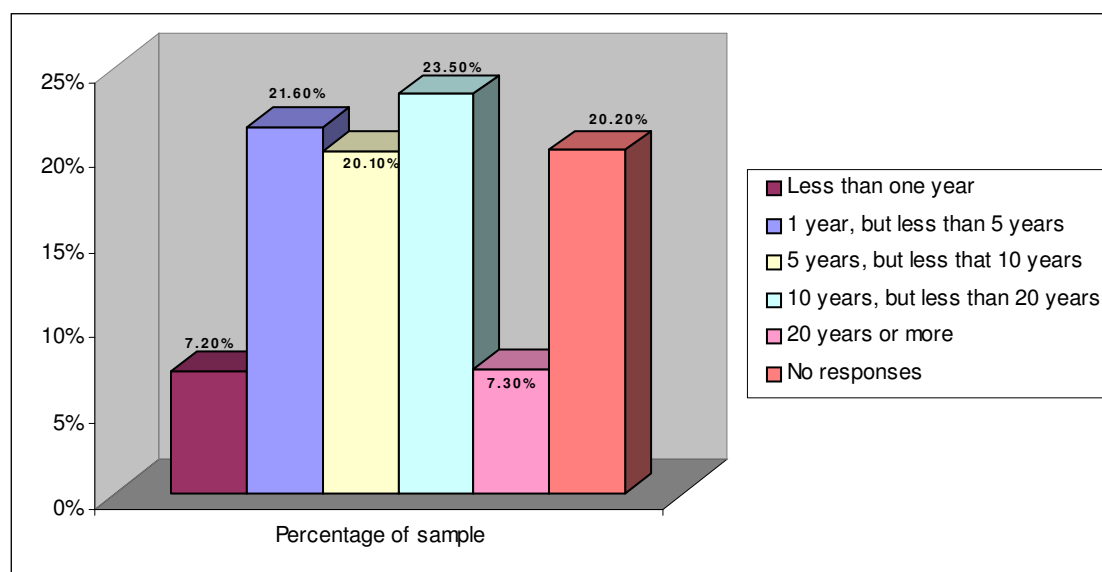


### 5.4.4 Sample distribution according to employment status

In terms of employment status/skill level, the Semi-skilled group represented the largest portion of the sample (31,2%). Other well represented groups included Senior Management (14,9%), Skilled Technical (13,6%) and Professional (13,2%). The smallest categories were Limited skill (5,1%) and Top management (1,7%) (see table 5.6 and figure 5.5).

*Table 5.6: Sample distribution according to employment status*

| Employment Status | Number of participants | Percentage of sample |
|---|---|---|
| Top management | 77 | 1,70% |
| Senior Management | 677 | 14,90% |
| Professional | 602 | 13,20% |
| Skilled technical | 620 | 13,60% |
| Semi-skilled | 1419 | 31,20% |
| Limited skill | 230 | 5,10% |
| No responses | 924 | 20,30% |
| Total | 4549 | 100,00% |

*Figure 5.5: Bar chart of sample distribution according to employment status*
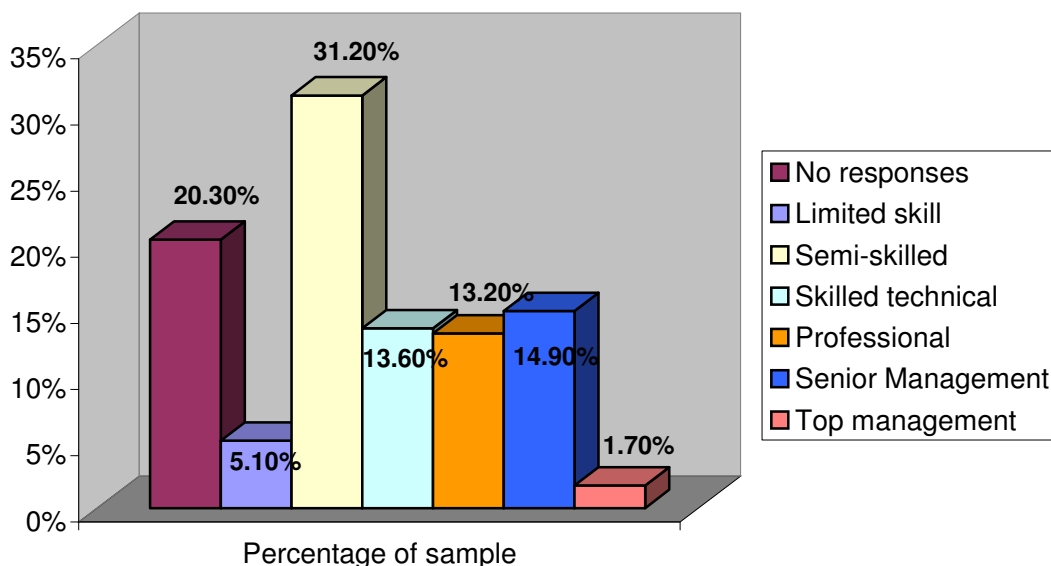


## 5.4.5 Race distribution of the sample

The sample consisted of the following race groups: 31,0% Coloured, 28,6% Black, 20,1% White and 12,7% Indian. A small percentage of respondents (7,5%) did not indicate their race group (see table 5.7 and figure 5.6).

*Table 5.7: Race distribution of the sample*

| Race | Number of participants | Percentage of sample |
|---|---|---|
| Black | 1302 | 28,60% |
| Coloured | 1411 | 31,00% |
| Indian | 579 | 12,70% |
| White | 916 | 20,10% |
| No responses | 341 | 7,50% |
| Total | 4549 | 100,00% |

A comparison between the racial mix of the current sample and that of the 2001 census (see table 5.8) indicates that the sample is not representative of the South African population (Statistics South Africa, 2001). A possible explanation for the high percentage of Coloured and White participants could be linked to the participants residing in a particular geographical area such as the Western Cape.

**Figure 5.6: Bar chart of the race distribution**



Percentage of sample
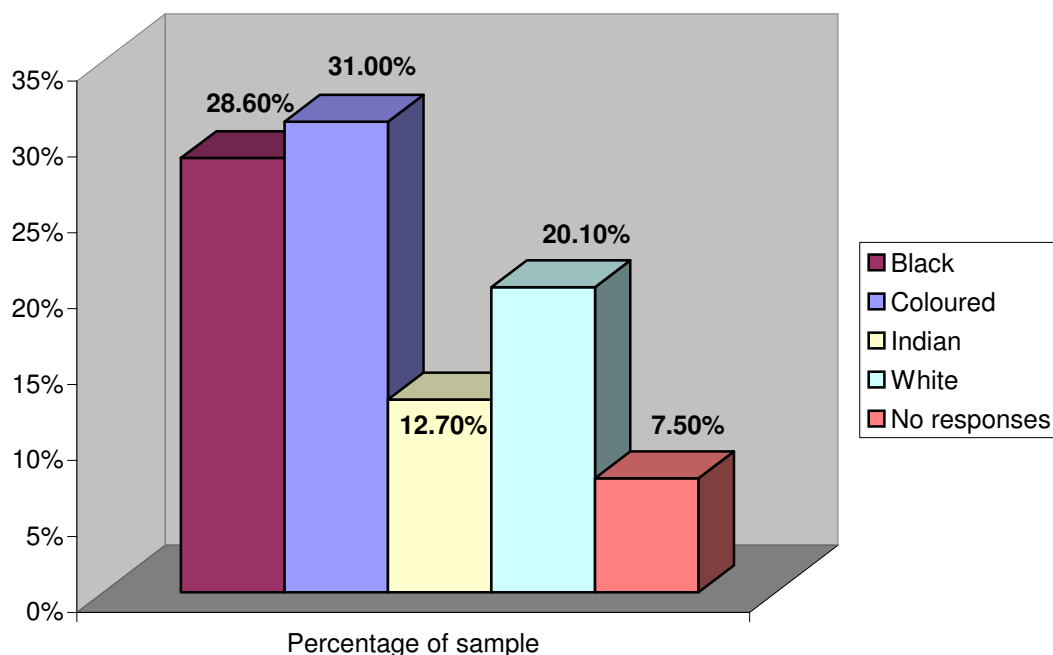
**Table 5.8: South African Work force during 2001 census**

| % Per Race Group | Eastern Cape | Free State | Gauteng | KwaZulu-Natal | Limpopo | Mpumalanga | Northern Cape | North West | Western Cape | Total SA |
|---|---|---|---|---|---|---|---|---|---|---|
| Black | 67 | 81 | 65 | 68 | 91 | 85 | 35 | 85 | 21 | 64 |
| Coloured | 15 | 4 | 4 | 3 | 0 | 1 | 45 | 2 | 54 | 13 |
| Indian/Asian | 1 | 0 | 3 | 17 | 1 | 1 | 0 | 1 | 1 | 4 |
| White | 16 | 15 | 28 | 13 | 8 | 13 | 20 | 12 | 23 | 19 |

*Source: Statistics South Africa (2001)*

## 5.5 DATA DISTRIBUTION FOR ORGANISATIONAL CLIMATE DIMENSIONS

Descriptive statistics were run on the 13 dimensions identified in the Principal Component Analysis in order to determine the response patterns to the survey questionnaire. The descriptive statistics also included an additional dimension, labelled Organisational climate, which is a composite scale of the 12 climate factors

(excluding the Leadership Styles dimensions). The inclusion of this composite climate dimension was based on previous research on the questionnaire (Martins & Von der Ohe, 2003), which indicated that these 12 factors represent organisational climate.

The various scales were constructed through the linear combination of items, which were then averaged to render a score for each of the dimensions. The possible scores ranged from 1 to 5, with lower scores indicating the perception that less of the dimension is present in the organisation. The use of the same scale with all dimensions facilitated comparison between dimensions.

*Table 5.9: Descriptive statistics of organisational climate dimensions*

| | n | Mean | Std, Error of Mean | Std, Deviation | Variance | Skewness | Std. Error of Skewness | Kurtosis | Std. Error of Kurtosis |
|---|---|---|---|---|---|---|---|---|---|
| Strategic Focus | 4516 | 3,755 | 0,010 | 0,678 | 0,460 | **-0,786** | 0,036 | **1,306** | 0,073 |
| Relationships/ Team Work | 4486 | 3,751 | 0,013 | 0,850 | 0,723 | **-0,890** | 0,037 | **0,674** | 0,073 |
| Working Conditions | 4446 | 3,558 | 0,013 | 0,865 | 0,748 | **-0,681** | 0,037 | 0,351 | 0,073 |
| Attraction/ Retention | 4514 | 3,453 | 0,012 | 0,815 | 0,665 | **-0,520** | 0,036 | 0,084 | 0,073 |
| Information Management | 4446 | 3,453 | 0,012 | 0,793 | 0,629 | **-0,614** | 0,037 | 0,396 | 0,073 |
| Leadership styles | 4528 | 3,433 | 0,013 | 0,857 | 0,734 | **-0,638** | 0,036 | 0,051 | 0,073 |
| Organisational Values | 4459 | 3,398 | 0,011 | 0,748 | 0,559 | -0,414 | 0,037 | 0,284 | 0,073 |
| Organisational climate | 4537 | 3,286 | 0,009 | 0,619 | 0,383 | -0,313 | 0,036 | 0,455 | 0,073 |
| Discrimination | 4379 | 3,276 | 0,013 | 0,887 | 0,787 | -0,431 | 0,037 | 0,155 | 0,074 |
| Employment Equity | 4476 | 3,247 | 0,010 | 0,684 | 0,468 | -0,358 | 0,037 | **0,582** | 0,073 |
| Policies/ Procedures | 4455 | 3,197 | 0,012 | 0,786 | 0,618 | -0,468 | 0,037 | 0,191 | 0,073 |
| Employee Development | 4487 | 3,095 | 0,013 | 0,876 | 0,767 | -0,209 | 0,037 | -0,498 | 0,073 |
| Performance Management | 4440 | 3,002 | 0,014 | 0,918 | 0,842 | -0,155 | 0,037 | **-0,552** | 0,073 |
| Remuneration | 4440 | 2,375 | 0,016 | 1,050 | 1,103 | 0,372 | 0,037 | **-0,781** | 0,073 |

(Minimum = 1, Maximum = 5, Range = 4)

Mean, standard deviation, variance, skewness, kurtosis, minimum and maximum statistics were calculated for each of the dimensions. These statistics were used to describe the distribution of responses and to assess for normality (see table 5.9). The variance and standard deviation statistics provide information regarding the distribution of scores around the mean. If the mean is a good representation of the data then most of the scores cluster close to the mean and the resulting standard deviation is small relative to the mean. Large standard deviations results in a flatter, more spread out distribution, while a small standard deviation results in a more pointy distribution (Field, 2005). Table 5.9 shows that the standard deviations in the current study varied from 0,619 for leadership styles to 1,050 for discrimination.

Table 5.9 also shows that the Standard Error of Skewness was 0,036 or 0,037 and the Standard Error of Kurtosis was 0,073 or 0,074 for the various dimensions. Skewness refers to the extent to which the frequency curve is lopsided rather than symmetrical (see figure 5.7). Negative skewness occurs when more scores are to the left of the mode than to the right. In this case the mean and median are smaller than the mode. Positive skewness occurs when more scores are to the right of the mode and the mean and median are larger than the mode (Howitt & Cramer, 2000).

Kurtosis is used to identify the degree of steepness or shallowness of a distribution (Howitt & Cramer, 2000). A positive kurtosis value means the curve is steep (leptokurtic), while a zero kurtosis value means that the curve is neither steep nor flat (mesokurtic) and a negative kurtosis value means that the curve is flat (platykurtic).

Although the means of all the dimensions were close to 3, the standard deviation, skewness and kurtosis values indicated that there were slight differences in the answering patterns for the different dimensions. In the section below these differences are discussed based on the figures in table 5.9.

Table 5.9 and figure 5.7 show that the following dimensions were approximately normally distributed:

- The composite dimension, Organisational climate, had a mean of 3,286. This dimension also had the lowest standard deviation of all the dimensions (0,619). Skewness for this dimension was -0,313 and kurtosis was 0,455.

- The Organisational values dimension had a mean of 3,398 with a standard deviation of 0,748. Skewness for this dimension was -0,414 and kurtosis was 0,284.

- The Employee development dimension had a mean of 3,095 and a standard deviation of 0,876. Skewness for this dimension was -0,209 and kurtosis was -0,498.

- The Policies/procedures dimension had a mean of 3,197 with a standard deviation of 0,786. Skewness for this dimension was -0,468 and kurtosis was 0,191.

- The Discrimination dimension had a mean of 3,276 and a standard deviation of 0,887. Skewness for this dimension was -0,431 and kurtosis was 0,155. The histogram for this dimension appears to be slightly different from those of the other normally distributed dimensions. This visual difference is the result of the two irregularities depicted by the bars in figure 5.7. This dimension is in fact approximately normally distributed. The clustering of scores around 4 on the discrimination histogram suggests that most respondents perceive that discrimination with regard to promotion does not occur in the organisation. However, another cluster of scores around 3 suggests that a fair number of respondents are unsure about whether or not this type of discrimination takes place.

**Figure 5.7: Histograms for approximately normally distributed dimensions**
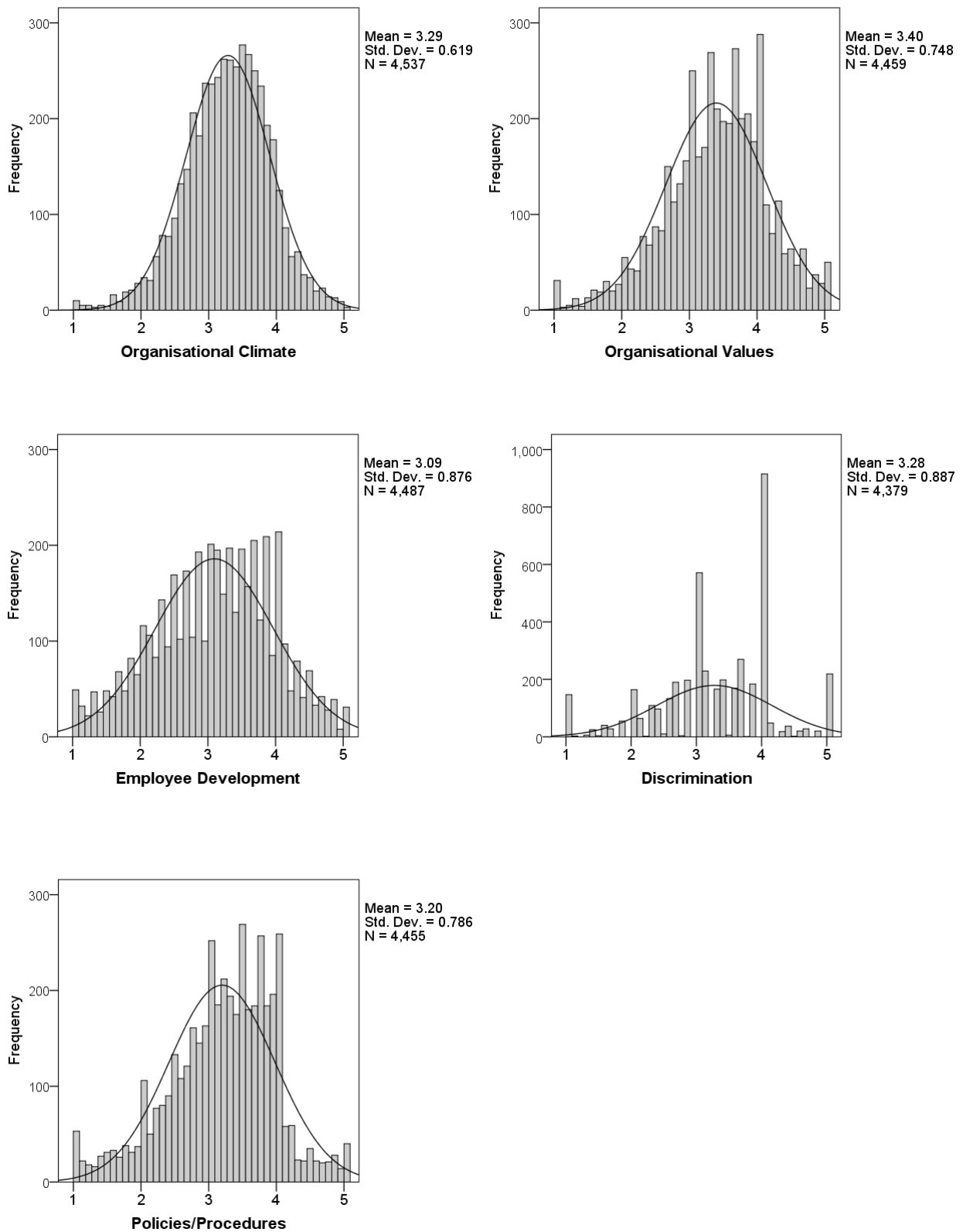
The following dimensions were fairly normally distributed, but had some negative skewness (see figure 5.8):

- The Leadership styles dimension had a mean of 3,433 and a standard deviation of 0,857. Skewness for this dimension was -0,638 and kurtosis was 0,051.

- The Attraction/retention dimension had a mean of 3,453 with a standard deviation of 0,815. Skewness for this dimension was -0,520 and kurtosis was 0,084.

- The Information management dimension had a mean of 3,453 with a standard deviation of 0,793. Skewness for this dimension was -0,614 and kurtosis was 0,396.

- The Working conditions dimension had a mean of 3,558 with a standard deviation of 0,865. Skewness for this dimension was -0,681 and kurtosis was 0,351.

**Figure 5.8: Histograms for dimensions with slight negative skewness**
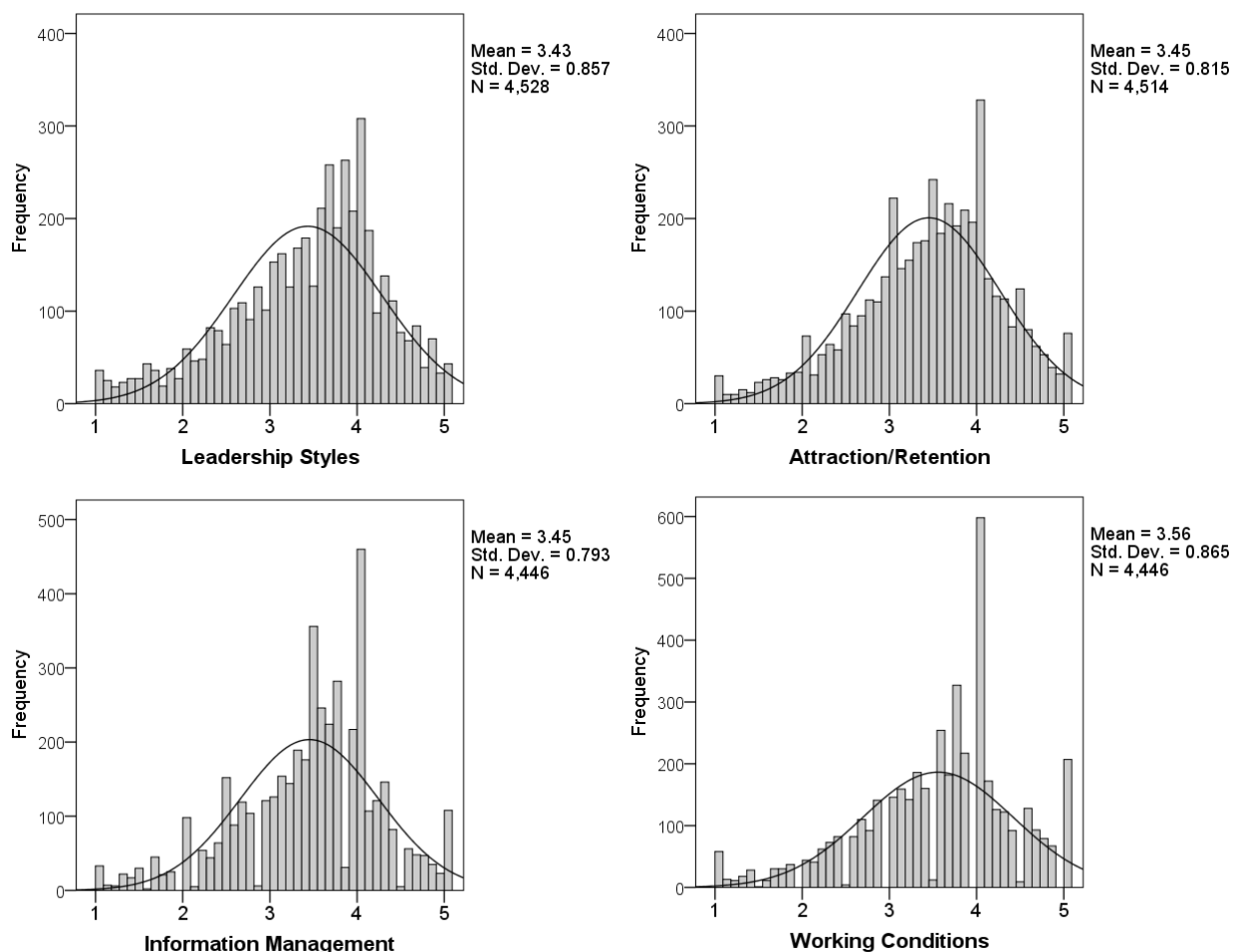
The following dimensions showed greater negative skewness. This means that relatively few respondents reported scores in the lower regions of the distribution. Scores were thus clustered towards the higher end of the scale. This indicates that the respondents perceived the dimension to be present in their organisation (see figure 5.9):

- The Relationships/teamwork dimension had a mean of 3,751 with a standard deviation of 0,850. This dimension had the highest skewness of all the dimensions (-0,890) and a kurtosis score of 0,674. This distribution is considered slightly steep as the kurtosis value is higher than 0,5.

- Respondents agreed most strongly with the statements in the questionnaire that measured the Strategic focus dimension. This dimension had the highest mean (3,755) and a standard deviation of 0,678. Skewness for this dimension was -0,786. This dimension also had the highest kurtosis value of all the dimensions with a score of 1,306. The distribution is considered steep (leptokuric) due to a kurtosis value of greater than 1. The kurtosis value for this dimension is very high and when considered in conjunction with the high mean this suggests that respondents tended to be positively inclined when answering items in this cluster. The respondents were thus in agreement regarding this dimension.

**Figure 5.9: Histograms for dimensions with negative skewness**
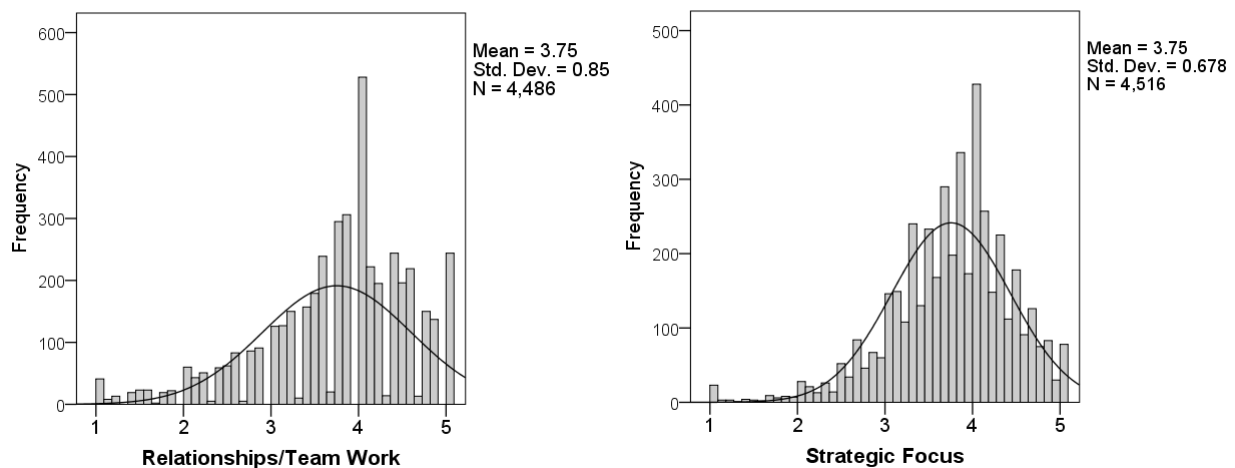
The following dimensions' distributions were flat (platykurtic) and were characterised by negative kurtosis values of less than -0,5 (see figure 5.10):

- The Performance management dimension had a mean of 3,002 with a standard deviation of 0,918. Skewness for this dimension was -0,155 and kurtosis was -0,552.

- The Remuneration dimension had the lowest mean of 2,375. Most of the responses for this dimension clustered around scores 1 and 2 (see figure 5.10). This was the only dimension to display a positive skew distribution (skewness of 0,372). This indicates that many of the respondents expressed low levels of satisfaction with their remuneration. It is not unusual for employees to express dissatisfaction with their salaries. However, this dimension also had the highest standard deviation (1,050) and kurtosis (-0,781) of all the dimensions, thus indicating that this view was not shared by all the respondents.

***Figure 5.10: Histograms for dimensions with platykurtic distributions***
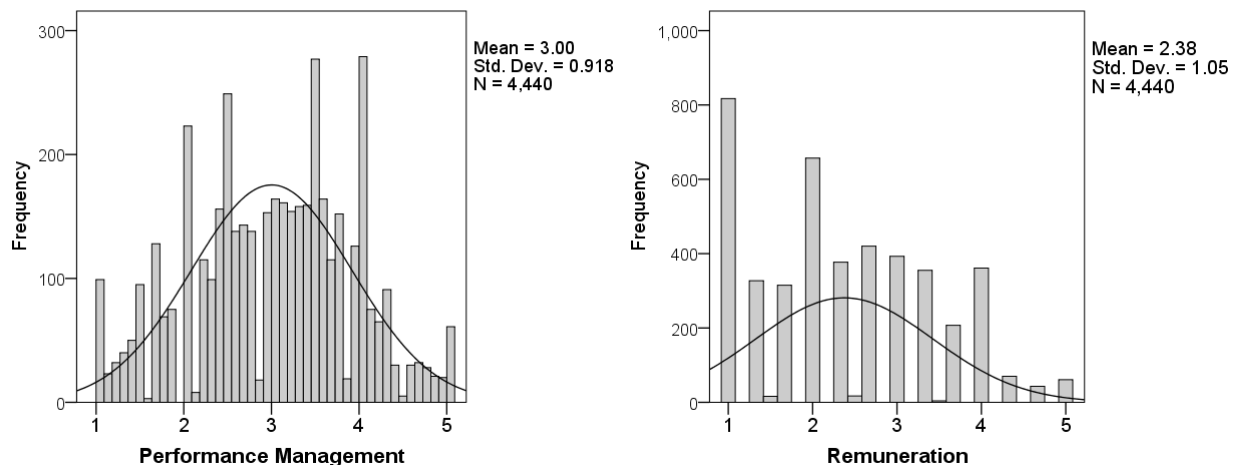


The Employment equity dimension had a slightly steep distribution due to a kurtosis value of more than 0,5 (see figure 5.11). Employment equity had a mean of 3,247 with a standard deviation of 0,684. Skewness for this dimension was -0,358 and kurtosis was 0,582.

**Figure 5.11: Histogram for a dimension with a slightly steep distribution**



Several of the dimensions clustered around scores of 4 (for example Attraction/retention, Information management, Working conditions, Relationships/team work, Strategic focus, Performance management). This suggests that the respondents tended to perceive these dimensions as being present in their organisation. However, further exploration of these tendencies falls outside the scope of this study. The data distribution of the various climate dimensions demonstrated that the assumption of normality had not been violated. The presence of some skewness and kurtosis is unlikely to have influenced the results. Given the approximately normal distribution of the data it was thus possible to conduct further statistical analysis of the data.

## 5.6    GENDER DIFFERENCES IN THE PERCEPTION OF LEADERSHIP STYLES AND ORGANISATIONAL CLIMATE

Independent samples t-tests were used to address the second hypothesis of this study (there is a difference between males' and females' perceptions of leadership styles and organisational climate). The level of significance was set at 0,05. T-tests results that indicated the presence of statistically significant differences were further analysed using Cohen's *d* to assess for practical significance.

### 5.6.1 Gender differences regarding perception of leadership styles

The assumption of equality of variances was examined using Levene's test. The result of this test was statistically significant ($p < 0,001$), indicating that equal variances should not be assumed. The appropriate independent samples t-test that makes provision for unequal variances was therefore used to compare the mean scores of males ($m = 3,437$, $sd = 0,886$) and females ($m = 3,489$, $sd = 0,803$) on perceptions of leadership styles (see tables 5.10 and 5.11). No statistically significant difference was found ($t = -1,762$, $df = 2594$, $p = 0,098$), indicating that males and females do not differ in their perceptions of leadership styles.

***Table 5.10: Gender differences regarding leadership styles***

|  | Gender | N | Mean (*m*) | Std. Deviation (*sd*) | Std. Error Mean |
|---|---|---|---|---|---|
| Leadership styles | Male | 1347 | 3,437 | 0,886 | 0,024 |
|  | Female | 2315 | 3,489 | 0,803 | 0,017 |

***Table 5.11: Independent t-test regarding leadership styles***

| Leadership styles | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | 95% Confidence Interval of the Difference | |
|---|---|---|---|---|---|---|---|---|---|
|  | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | Lower | Upper |
| Equal variances assumed | 18,201 | 0,000 | -1,809 | 3660,000 | 0,071 | -0,052 | 0,029 | -0,108 | 0,004 |
| Equal variances not assumed |  |  | -1,762 | 2594,786 | 0,078 | -0,052 | 0,029 | -0,109 | 0,006 |

### 5.6.2 Gender differences regarding perception of organisational climate

The following tables depict the difference between males and females' perceptions of organisational climate (see tables 5.12 and 5.13):

***Table 5.12: Gender differences regarding organisational climate***

|  | Gender | N | Mean | Std. Deviation | Std. Error Mean |
|---|---|---|---|---|---|
| Organisational climate | Male | 1348 | 3,259 | 0,651 | 0,018 |
|  | Female | 2315 | 3,305 | 0,578 | 0,012 |

***Table 5.13: Independent t-test regarding organisational climate***

| Organisational climate | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | 95% Confidence Interval of the Difference | |
|---|---|---|---|---|---|---|---|---|---|
|  | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | Lower | Upper |
| Equal variances assumed | 20,500 | 0,000 | -2,202 | 3661,000 | 0,028 | -0,046 | 0,021 | -0,086 | -0,005 |
| Equal variances not assumed |  |  | -2,135 | 2556,549 | 0,033 | -0,046 | 0,021 | -0,088 | -0,004 |

Levene's test revealed that the assumption of equality of variances was not met ($p <$ 0,001). The independent samples t-test for unequal variances was thus used to test for gender differences in perceptions of organisational climate. Females ($m$ = 3,305, $sd$ = 0,578) scored slightly higher than males ($m$ = 3,259, $sd$ = 0,651) on average. This difference was statistically significant ($t$ = -2,135, $df$ = 2556, $p$ = 0,033). Cohen's $d$ statistic was calculated in order to estimate the effect size (practical significance) of this difference. The analysis yielded a Cohen's $d$ *of 0,08,* indicating that the difference is very small (Cohen, 1988). Therefore, although there is a statistically significant difference between gender groups' perceptions of organisation climate this difference has very little practical significance.

## 5.7 GROUP COMPARISONS OF LEADERSHIP STYLES AND ORGANISATIONAL CLIMATE

Analyses of variance (ANOVAs) were conducted to determine whether the differences between groups were statistically significant. Where significant differences were found post-hoc comparisons were used to determine where these differences occurred. ANOVAs were conducted for the various age, years of service, employment status and race groups for both leadership styles and organisational

climate. The size of the various subgroups differed and Scheffe's post hoc test was thus used to compensate for these differences. In addition to compensating for varying group size, Scheffe's post hoc test is also the most cautious and conservative method for reducing the risk of a Type 1 error (Pallant, 2006). The alpha level for these analyses was set at 0,05.

### 5.7.1  Group differences in perceptions of leadership styles

Table 5.14 indicates the differences in leadership styles in relation to age, years of service, employment status and race.  These differences can be interpreted by analysing the mean, standard deviation, the F statistic, degrees of freedom and Eta squared.

*Table 5.14: Group differences in perceptions of leadership styles*

| Group | Category | n | m | sd |
|---|---|---|---|---|
| Age | Less that 25 years old | 604 | 3,610 | 0,797 |
| | 25-34 years old | 1633 | 3,427 | 0,864 |
| | 35-44 years old | 1237 | 3,376 | 0,872 |
| | 45-54 years old | 681 | 3,423 | 0,843 |
| | 55 years or older | 166 | 3,507 | 0,801 |
| | $F(4, 2075) = 8,628, p < 0,001, \eta^2 = 0,008$ | | | |
| Years of service | Less than one year | 329 | 3,700 | 0,769 |
| | 1 year, but less than 5 years | 981 | 3,530 | 0,841 |
| | 5 years, but less that 10 years | 913 | 3,437 | 0,802 |
| | 10 years, but less than 20 years | 1071 | 3,344 | 0,869 |
| | 20 years or more | 333 | 3,393 | 0,867 |
| | $F(4, 2457) = 14,542, p < 0,001, \eta^2 = 0,016$ | | | |
| Employment status | Top management | 77 | 3,234 | 0,831 |
| | Senior Management | 677 | 3,366 | 0,929 |
| | Professionally qualified, experienced specialists and mid-management | 602 | 3,596 | 0,706 |
| | Skilled technical and academically qualified workers, junior management, supervisors, foremen, superintendents | 620 | 3,555 | 0,820 |
| | Semi-skilled and discretionary decision-making | 1418 | 3,479 | 0,830 |
| | Limited skill requirement and defined decision-making | 230 | 3,210 | 0,963 |
| | $F(5, 1208) = 11,380, p < 0,001, \eta^2 = 0,016$ | | | |
| Race | Black | 1301 | 3,379 | 0,862 |
| | Coloured | 1411 | 3,416 | 0,871 |
| | Indian | 579 | 3,322 | 0,957 |
| | White | 916 | 3,646 | 0,711 |
| | $F(3, 2971) = 23,866, p < 0,001, \eta^2 = 0,017$ | | | |

*5.7.1.1    Age group differences in perceptions of leadership styles*

Levene's test was run to test the assumption of homogeneity of variance. This assumption was violated ($p$ = 0,006) and therefore the Brown Forsythe robust test of equality of means was used. Statistically significant differences were found between the various age groups' perceptions on leadership styles, $F(4, 2075)$ = 8,628, $p <$ 0,001 (see table 5.14). Scheffe's post hoc tests were calculated to determine where these differences occur (see table 5.15). However, analysis of the practical effect revealed that these differences were negligible, $\eta^2$ = 0,008 (Cohen, 1988).

**Table 5.15: Scheffe for age groups' perceptions of leadership styles**

| Age group | n | Subset for alpha = 0,05 | |
|---|---|---|---|
| | | 1 | 2 |
| 35-44 years | 1237 | 3,376 | |
| 45-54 years | 681 | 3,423 | |
| 25-34 years | 1633 | 3,427 | |
| 55 years or older | 166 | 3,507 | 3,507 |
| Less than 25 years old | 604 | | 3,610 |
| *Sig.* | | *0,228* | *0,481* |

*5.7.1.2    Years of service groups' differences in perceptions of leadership styles*

Levene's test was run to test the assumption of homogeneity of variance. This assumption was violated ($p$ = 0,007) and the Brown Forsythe robust test of equality of means was thus used. The difference between the different years of service groups' perceptions of leadership styles was statistically significant, $F(4, 2457)$ = 14,520, $p <$ 0,001 (see table 5.14). Scheffe's post hoc tests were calculated (see table 5.16) to determine where these differences occur. This analysis found that employees with less than 1 year of service differed from all the other groups and employees with 10 years, but less than 20 years of service differed from the group with 1 year, but less than 5 years of service. No other differences were found for years of service and leadership styles. Eta squared was calculated to measure effect size ($\eta^2$ = 0,016). The effect size is considered small (Cohen, 1988) and therefore the differences between the groups have little practical significance.

**Table 5.16: Scheffe for years of service and perceptions of leadership styles**

| Years of Service | N | Subset for alpha = 0,05 | | |
|---|---|---|---|---|
| | | 1 | 2 | 3 |
| 10 years, but less than 20 years | 1071 | 3,344 | | |
| 20 years or more | 333 | 3,393 | 3,393 | |
| 5 years, but less that 10 years | 913 | 3,437 | 3,437 | |
| 1 year, but less than 5 years | 981 | | 3,530 | |
| Less than one year | 329 | | | 3,700 |
| *Sig.* | | *0,495* | *0,114* | *1,000* |

*5.7.1.3    Employment status group differences in perceptions of leadership styles*

Levene's test was run to test the assumption of homogeneity of variance. This assumption was violated ($p < 0,001$) and the Brown Forsythe robust test of the equality of means was thus used. The difference between the different employment status groups' perceptions of leadership styles was statistically significant, $F(5, 1208)$ = 11,380, $p < 0,001$ (see table 5.14). The Scheffe post hoc tests were calculated to determine where these differences occur. The analysis found that employees with limited skill requirement and defined decision-making were similar to the top management group and both groups were statistically significantly different from the semi-skilled and discretionary decision-making groups, the skilled technical and academically qualified workers, junior management, supervisors, foremen, superintendents and the professionally qualified, experienced specialists and mid management groups, the senior management group did not differ significantly from any of the other groups (see table 5.17). Eta squared was calculated as a measure of effect size ($\eta^2 = 0,016$). The effect size is considered small (Cohen, 1988) and therefore the differences between the groups have a small practical significance.

**Table 5.17: Scheffe for employment status and perceptions of leadership styles**

| Employment status | n | Subset for alpha = 0,05 | |
|---|---|---|---|
| | | 1 | 2 |
| Limited skill requirement and defined decision-making | 230 | 3,210 | |
| Top management | 77 | 3,234 | |
| Senior Management | 677 | 3,366 | 3,366 |
| Semi-skilled and discretionary decision-making | 1418 | | 3,479 |
| Skilled technical and academically qualified workers, junior management, supervisors, foremen, superintendents | 620 | | 3,555 |
| Professionally qualified, experienced specialists and mid-management | 602 | | 3,596 |
| *Sig.* | | *0,473* | *0,076* |

### 5.7.1.4    Race groups' differences in perceptions of leadership styles

Levene's test was run to test the assumption of homogeneity of variance. This assumption was violated ($p < 0,001$) and the Brown Forsythe robust test of the equality of means was thus used. The difference between the different race groups' perceptions of leadership styles was statistically significant, $F(3, 2971) = 23,866$, $p < 0,001$ (see table 5.14). The Scheffe post hoc tests were calculated and showed that the Indian, Black and Coloured groups had similar perceptions regarding leadership styles and these three groups differed statistically significantly from the White group's perceptions of leadership styles (see table 5.18). Eta squared was calculated as a measure of effect size ($\eta^2 = 0,017$). The effect size is considered small (Cohen, 1988) and therefore the differences between the groups have a small practical significance.

**Table 5.18: Scheffe for race groups' perceptions of leadership styles**

| Your race | n | Subset for alpha = 0,05 | |
|---|---|---|---|
| | | 1 | 2 |
| Indian | 579 | 3,322 | |
| Black | 1301 | 3,379 | |
| Coloured | 1411 | 3,416 | |
| White | 916 | | 3,646 |
| *Sig.* | | *0,130* | *1,000* |

### 5.7.2 Group differences in perceptions of organisational climate

The following table (see table 5.19) indicates differences in perceptions of organisational climate for age, years of service, employment status and race groups. These differences can be interpreted by analysing the mean, standard deviation, F statistic, degrees of freedom and Eta squared.

**Table 5.19: Group differences in perceptions of organisational climate**

| Group | Category | n | m | sd |
|---|---|---|---|---|
| Age | Less that 25 years old | 604 | 3,355 | 0,600 |
| | 25-34 | 1634 | 3,237 | 0,616 |
| | 35-44 | 1237 | 3,280 | 0,611 |
| | 45-54 | 681 | 3,337 | 0,612 |
| | 55 or older | 166 | 3,410 | 0,641 |
| | $F(4, 4137) = 7,417, p < 0,001, \eta^2 = 0,007$ | | | |
| Years of service | Less than one year | 329 | 3,488 | 0,569 |
| | 1 year, but less than 5 years | 981 | 3,288 | 0,610 |
| | 5 years, but less that 10 years | 914 | 3,254 | 0,593 |
| | 10 years, but less than 20 years | 1071 | 3,251 | 0,608 |
| | 20 years or more | 333 | 3,279 | 0,650 |
| | $F(4, 3623) = 10,749, p < 0,001, \eta^2 = 0,012$ | | | |
| Employment status | Top management | 77 | 3,379 | 0,649 |
| | Senior Management | 677 | 3,295 | 0,675 |
| | Professionally qualified, experienced specialists and mid-management | 602 | 3,331 | 0,513 |
| | Skilled technical and academically qualified workers, junior management, supervisors, foremen, superintendents | 620 | 3,300 | 0,583 |
| | Semi-skilled and discretionary decision-making | 1419 | 3,294 | 0,601 |
| | Limited skill requirement and defined decision-making | 230 | 3,100 | 0,742 |
| | $F(5, 1062) = 4,972, p < 0,001, \eta^2 = 0,007$ | | | |
| Race | Black | 1302 | 3,262 | 0,628 |
| | Coloured | 1411 | 3,319 | 0,619 |
| | Indian | 579 | 3,115 | 0,683 |
| | White | 916 | 3,400 | 0,500 |
| | $F(3, 2980) = 27,625, p < 0,001, \eta^2 = 0,020$ | | | |

*5.7.2.1    Age group differences in perceptions of organisational climate*

Levene's test was run to test the assumption of homogeneity of variance. The test showed that this assumption was not violated ($p = 0,860$) and the groups were thus compared using ANOVA. The differences between the various age groups' perceptions of organisational climate were statistically significant, $F(4, 4137) = 7,417, p$

< 0,001 (see table 5.19). Scheffe's post hoc tests were calculated to determine where these differences occur (see table 5.20). However, analysis of the practically effect revealed that these differences were negligible, $\eta^2$ = 0,007 (Cohen, 1988). Employees' age therefore does not appear to have much influence on their perception of organisational climate.

**Table 5.20: Scheffe for age groups' perceptions of organisational climate**

| Age group | N | Subset for alpha = 0,05 | |
| --- | --- | --- | --- |
| | | 1 | 2 |
| 25-34 years | 1634 | 3,237 | |
| 35-44 years | 1237 | 3,280 | |
| 45-54 years | 681 | 3,337 | 3,337 |
| Less than 25 years old | 604 | 3,355 | 3,355 |
| 55 years or older | 166 | | 3,410 |
| *Sig.* | | *0,067* | *0,499* |

### 5.7.2.2 Years of service groups' differences in perceptions of organisational climate

Levene's test was run to test the assumption of homogeneity. The results of this tests showed that this assumption was not violated ($p$ = 0,057) and the groups were therefore compared using ANOVA. The difference between the years of service groups' perceptions of organisational climate was statistically significant, $F(4, 3623)$ = 10,749, $p$ < 0,001 (see table 5.19). Scheffe's post hoc tests found that the following groups differed significantly: the group with less than one year of service was statistically significantly different from all the other groups; and the other groups did not differ significantly from each other. The group of employees with less than one year of service thus had a higher mean score on organisational climate than all the other groups of employees, which can be clustered as all having more than one year of service (see table 5.21). Eta squared was calculated as a measure of effect size ($\eta^2$ = 0,012). The effect size is considered small (Cohen, 1988) and therefore the differences between the groups have a small practical effect.

***Table 5.21: Scheffe for years of service groups' perceptions of  organisational climate***

| Years of service | n | Subset for alpha = 0,05 | |
|---|---|---|---|
| | | 1 | 2 |
| 10 years, but less than 20 years | 1071 | 3,251 | |
| 5 years, but less that 10 years | 914 | 3,254 | |
| 20 years or more | 333 | 3,279 | |
| 1 year, but less than 5 years | 981 | 3,288 | |
| Less than one year | 329 | | 3,488 |
| *Sig.* | | *0,903* | *1,000* |

### 5.7.2.3    Employment status groups' differences in perceptions of organisational climate

Levene's test was run to test the assumption of homogeneity. This assumption was violated ($p < 0,001$) and therefore the Brown Forsythe robust test of equality of means was used. The difference between the different employment status groups' perceptions of organisational climate was statistically significant, $F(5, 1062) = 4,972$, $p < 0,001$ (see table 5.19). Scheffe's post hoc tests were calculated to determine where these differences occur (see table 5.22). However, analysis of the practical effect revealed that these differences were negligible, $\eta^2 = 0,007$ (Cohen, 1988).

***Table 5.22: Scheffe for employment status and perceptions of organisational climate***

| Employment status | N | Subset for alpha = 0,05 | |
|---|---|---|---|
| | | 1 | 2 |
| Limited skill requirement and defined decision-making | 230 | 3,100 | |
| Semi-skilled and discretionary decision-making | 1419 | | 3,294 |
| Senior Management | 677 | | 3,295 |
| Skilled technical and academically qualified workers, junior management, supervisors, foremen, superintendents | 620 | | 3,300 |
| Professionally qualified, experienced specialists and mid-management | 602 | | 3,331 |
| Top management | 77 | | 3,379 |
| *Sig.* | | *1,000* | *0,765* |

*5.7.2.4        Race groups' differences in perceptions of organisational climate*

Levene's test was run to test the assumption of homogeneity of variance. This assumption was violated ($p < 0{,}001$) and therefore the robust test of the equality of means (Brown Forsythe) was used. The difference between the different race groups' perceptions of organisational climate was statistically significant, $F(3, 2980)$ = 27,625, $p < 0{,}001$ (see table 5.19). Scheffe post hoc tests were then calculated to determine where these differences occur. This analysis found that the Indian group's perceptions of organisational climate differed statistically significantly from the Black, Coloured and White groups' perceptions of organisational climate. In addition, the Black and Coloured groups had similar perceptions of organisational climate, but these differed significantly from the White and the Indian groups' perceptions (see table 5.23). Eta squared was calculated as a measure of effect size ($\eta^2 = 0{,}020$). The effect size is considered small (Cohen, 1988) and therefore the differences between the groups' perceptions of organisational climate can be seen to have a small practical effect.

**Table 5.23: Scheffe for race groups' perceptions of organisational climate**

| Race | n | Subset for alpha = 0,05 | | |
|------|---|---|---|---|
| | | 1 | 2 | 3 |
| Indian | 579 | 3,115 | | |
| Black | 1302 | | 3,262 | |
| Coloured | 1411 | | 3,319 | |
| White | 916 | | | 3,400 |
| *Sig.* | | *1,000* | *0,260* | *1,000* |

## 5.8    RELATIONSHIP    BETWEEN    LEADERSHIP    STYLES    AND ORGANISATIONAL CLIMATE

The relationship between the two variables of this study, Leadership styles and Organisational climate, was investigated in two parts. The first part of the analysis involved calculating the correlation between leadership styles and the composite organisational climate factor. The second part of the analysis involved calculating the

correlations between leadership styles and each of the other organisational climate sub-dimensions.

## 5.8.1 Relationship between leadership styles and the composite organisational climate dimension

The first hypothesis of this study was that there is a relationship between leadership styles and organisational climate. The scatter plot in figure 5.12 indicates the presence of a linear relationship between these two variables.

*Figure 5.12: Scatterplot*
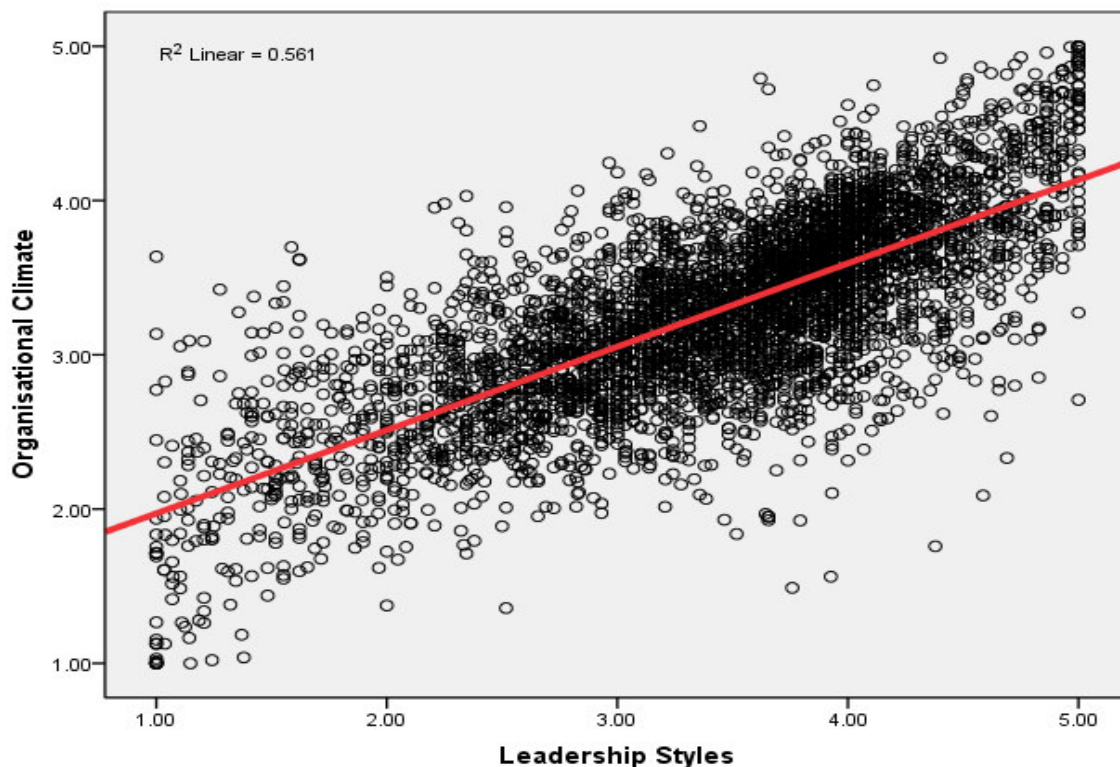


The scatterplot contains a few outliers, but these were judged to not have an undue influence on the relationship. All the data was thus included in the analysis. The relationship was tested using a Pearson correlation (2-tailed) with the level of significance set at 0,01. Leadership styles produced a positive correlation with the composite organisational climate dimension ($r = 0,749$, $p < 0,001$, n = 4528), which translates to a shared variance of 56% (see table 5.24). This relationship can be

characterised as a strong relationship (Cohen, 1988). The first null hypothesis for this study was thus rejected. The positive relationship between leadership styles and organisational climate indicates that when employees experience the leadership style to be supportive (higher scores on these items), they also experience the organisational climate in a positive light (higher scores on this dimension). Conversely, lower scores on leadership styles are associated with lower scores on organisational climate.

### 5.8.2 Relationship between leadership styles and the individual organisational climate dimensions

Pearson's correlation was also calculated at a 0,01 (2-tailed) level of significance for the relationship between each of the other dimensions of organisational climate and leadership styles. The purpose of these correlations was to determine whether there are relationships between the various sub-dimensions and the leadership styles dimension. Positive correlations ranging between 0,409 and 0,722 were found for the sub-dimensions of organisational climate (Comp2 – Comp13) and leadership styles (see table 5.24).

The coefficient of determination ($r^2$) was calculated as a measure of effect size. This figure was used to determine how much variance is shared between leadership styles and the individual organisational climate variables. The results suggested that variance in leadership styles explains between 16% and 52% of the variance in each of the sub-dimensions (see table 5.24).

Table 5.24 shows that Employment equity, Organisational values, Attraction/retention, Employee development, Policies/procedures, Information management, Performance management, Working conditions, Relationship/teamwork and Strategic focus all had large positive relationships with leadership styles. Discrimination and Remuneration had moderate positive correlations with leadership styles (Cohen, 1988). The positive relationships indicate that the higher (or more positively) leadership styles in the organisation are perceived the higher the scores on each of the organisational climate dimensions. The opposite relationship is also true, with low leadership scores correlating with low

organisational climate dimension scores. These findings provide support for the research hypothesis that there is a relationship between leadership styles and organisational climate.

*Table 5.24: Pearson Correlations and Total variance explained*

| Dimensions | Leadership styles | | Organisational climate | |
|---|---|---|---|---|
| | Pearson Correlation | Coefficient of determination | Pearson Correlation | Coefficient of determination |
| | r | $r^2$ | r | $r^2$ |
| **Composite Climate dimension** | 0,749* | 56,105 | 1 | 1 |
| Leadership styles | 1 | 1 | 0,749* | 56,105 |
| Employment Equity | 0,554* | 30,651 | 0,857* | 73,481 |
| Organisational values | 0,612* | 37,419 | 0,835* | 69,733 |
| Attraction/ Retention | 0,536* | 28,769 | 0,677* | 45,800 |
| Employee Development | 0,557* | 31,033 | 0,817* | 66,671 |
| Policies/ Procedures | 0,626* | 39,149 | 0,863* | 74,525 |
| Information Management | 0,622* | 38,747 | 0,786* | 61,814 |
| Performance Management | 0,722* | 52,060 | 0,784* | 61,444 |
| Working Conditions | 0,518* | 26,856 | 0,684* | 46,802 |
| Relationships/ Team Work | 0,612* | 37,410 | 0,640* | 40,975 |
| Discrimination | 0,417* | 17,354 | 0,665* | 44,156 |
| Remuneration | 0,409* | 16,732 | 0,672* | 45,174 |
| Strategic Focus | 0,648* | 41,958 | 0,742* | 54,996 |

*$p < 0,001$

*Table 5.25: Items for each leadership style*

| Leadership style | Item as on survey questionnaire |
|---|---|
| Pacesetting leader | V59 "My immediate manager or supervisor's style is decisive" |
| | V62 "My immediate manager or supervisor's style is task-oriented" |
| | V66 " My immediate manager or supervisor's style is formal" |
| | V67 " My immediate manager or supervisor's style is number oriented" |
| | V68 " My immediate manager or supervisor's style is long-term oriented" |
| Authoritative leader | V43 "My immediate supervisor or manager gives me clear instructions" |
| | V44 "I have confidence in my immediate supervisor to make the right decisions" |
| | V45 "My immediate supervisor or manager sets achievable goals for his or her subordinates" |
| | V46 "My immediate supervisor or manager controls his or her subordinates well" |
| | V49 "In my department the necessary planning of work is done" |
| | V50 "I know the rationale for decisions made by higher levels of management" |
| | V52 "My immediate manager allocates resources effectively" |
| | V56 "Senior management plans adequately for the future" |
| | V57 "My immediate manager or supervisor's style is flexible" |
| | V58 "My immediate manager or supervisor's style is entrepreneurial" |
| | V61 "My immediate manager or supervisor's style is consistent" |
| | V65 "My immediate manager or supervisor's style is proactive" |
| | V217 "The following source supplies me with sufficient information about Organisation A and my work environment My manager" |
| Democratic leader | V42 "When I go to my immediate supervisor or manager with a work-related problem, he or she helps me find a solution" |
| | V47 "My immediate supervisor or manager involves me in the planning of work" |
| | V48 "My immediate supervisor or manager considers the views of his or her subordinates when making important decisions" |
| | V51 "I trust higher levels of management" |
| | V53 "My immediate management works together as a team effectively" |
| | V60 "My immediate manager or supervisor's style is involved" |
| | V63 "My immediate manager or supervisor's style is people-oriented" |
| | V64 " My immediate manager or supervisor's style is participative" |
| | V87 "My immediate supervisor or manager enjoys my trust" |

### 5.8.3 Relationship between the sub components of leadership styles and organisational climate

The correlation between leadership styles and organisational climate was further investigated through an in-depth exploration of the leadership dimension. The theory of leadership styles was used to qualitatively analyse the 29 items in the Leadership/Management styles factor. Goleman's (2000) leadership styles framework was used and the items were clustered under three leadership styles, namely Pacesetting leader; Authoritative leader and Democratic leader (see table 5.25). Two of the 29 items could not be clustered under any of these three leadership styles and therefore only 27 items were used. Descriptive statistics were conducted to assess for normality. Table 5.26 and figure 5.13 show that all three leadership styles were fairly normally distributed but had some negative skewness.

*Figure 5.13: Histograms for the three different leadership styles*
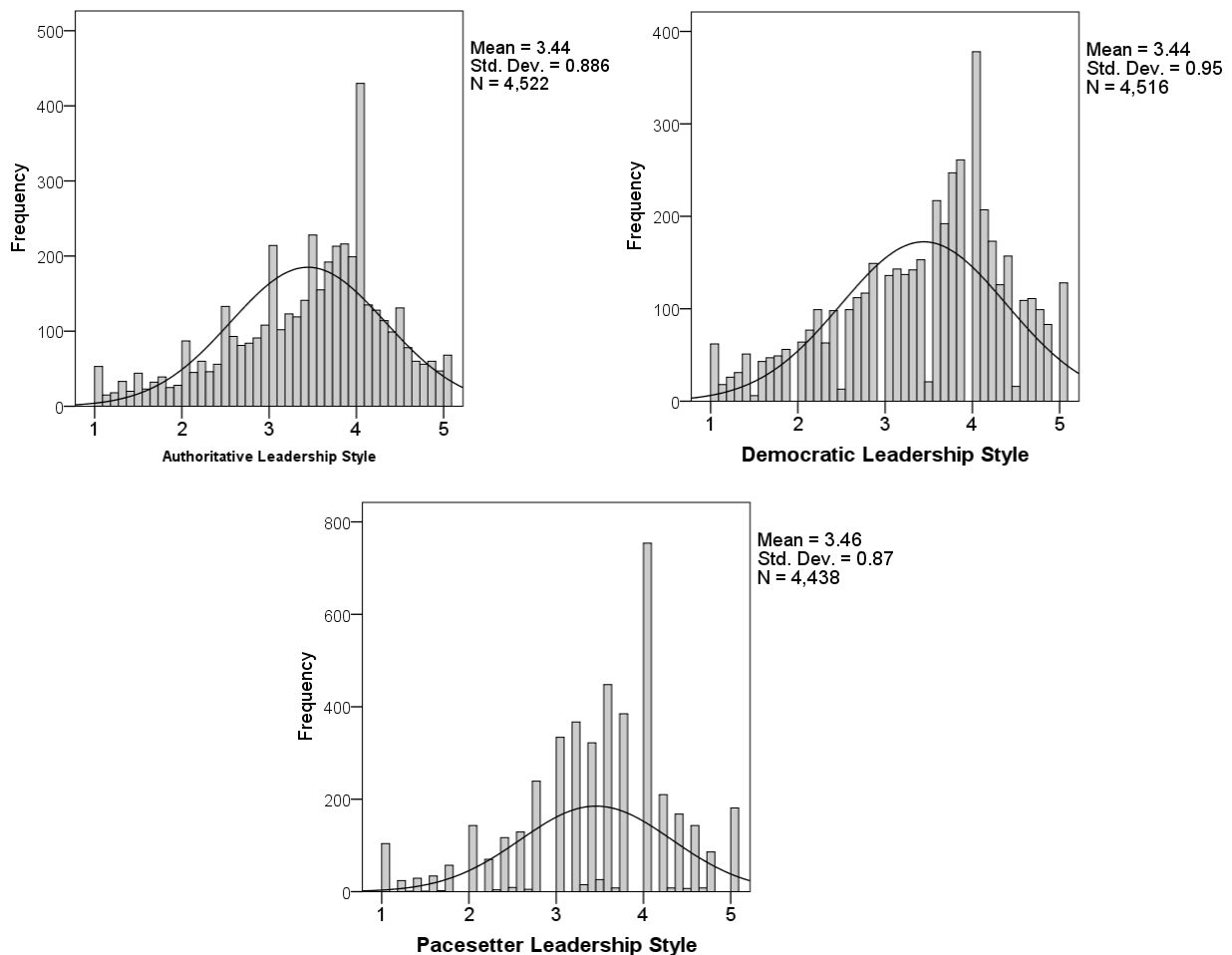
**Table 5.26: Descriptive statistics for leadership styles**

| | n | Mean | Std, Error of Mean | Std, Devia-tion | Variance | Skewness | Std. Error of Skewness | Kurtosis | Std. Error of Kurtosis |
|---|---|---|---|---|---|---|---|---|---|
| Authoritative Leadership Style | 4522 | 3,445 | 0,013 | 0,886 | 0,785 | **-0,646** | 0,036 | -0,021 | 0,073 |
| Democratic Leadership Style | 4516 | 3,442 | 0,014 | 0,950 | 0,902 | **-0,585** | 0,036 | -0,293 | 0,073 |
| Pacesetting Leadership Style | 4438 | 3,457 | 0,013 | 0,870 | 0,756 | **-0,692** | 0,037 | 0,461 | 0,073 |

The theoretical clustering of the three leadership styles was confirmed by calculating the internal consistency reliability using Cronbach's alpha. The following table indicates that all three clusters achieved satisfactory scale reliability, with Cronbach alphas ranging from 0,844 to 0,936 (see table 5.27).

**Table 5.27: Reliability for leadership styles**

| | Nr of items | N | Mean | Standard deviation | Cronbach's alpha |
|---|---|---|---|---|---|
| Pacesetting | 5 | 4091 | 3,456 | 0,094 | 0,844 |
| Authoritative | 13 | 3694 | 3,460 | 0,155 | 0,936 |
| Democratic | 9 | 3959 | 3,452 | 0,200 | 0,912 |

In order to determine which of these three components of leadership styles best predicts organisational climate a standard multiple regression was run with Organisational Climate as the dependent variable and Pacesetting, Authoritative and Democratic leadership styles as the independent variables. An evaluation of the assumptions underlying standard multiple regression statistics was performed using SPSS Regression and SPSS Frequencies. The results of the evaluation indicated that there were sufficient cases to perform the standard multiple regression technique. When assessing for multicollinearity high correlations were found among the independent variables. Authoritative leadership style had a 0,928 correlation with the Democratic leadership style and a 0,797 correlation with the Pacesetting leadership style. The Democratic leadership style had a 0,765 correlation with the Pacesetting leadership style. According to Palant (2006), multicollinearity exists when the independent variables correlate 0,9 and above. However, Tabachnick and Fidell (2001) suggested that with a bivariate correlation of 0,7 and above a composite variable should be considered or one of the variables should be omitted.

However, interpretation of the collinearity diagnostics (see Appendix B) indicated that multicollinearity might not be a concern with this data, as the tolerance values for all three the independent variables were greater than 0,10 and the VIF (variance inflation factor) was less than 10 (Palant, 2006). Although the values were extremely close to the cut-offs described here the decision was taken to perform standard multiple regression with all three independent variables. The assumptions of normality, linearity and homoscedasticity were assessed using the normal probability plot and the residuals scatterplot (see appendices C and D). No further concerns were identified. When interpreting the results of any standard multiple regression analysis it must be noted that this technique is strongly influenced by the variables entered into the model and that results thus fluctuate with the use of different variables (Tabachnick & Fidell, 2001) (see table 5.28 and Appendix B).

*Table 5.28: Standard multiple regression*

| Leadership style | Standardised Coefficients | | 95.0% Confidence Interval for B | | Part Correlation | Unique Variance Explained |
| --- | --- | --- | --- | --- | --- | --- |
| | Beta | t | Lower Bound | Upper Bound | | |
| Authoritative | 0,504 | 17,485* | 0,312 | 0,391 | 0,175 | 0,031 |
| Democratic | 0,188 | 6,957* | 0,088 | 0,157 | 0,070 | 0,005 |
| Pacesetting | 0,078 | 4,653* | 0,032 | 0,078 | 0,047 | 0,002 |
| | $F(3, 4432) = 1848,076, p < 0,001$ | | | | | |

*$p < 0,001$

The regression model explains 55,6% of the variance in organisational climate. This result is statistically significant, $F(3, 4432) = 1848,076$, $p < 0,001$ (see table 5.28). According to this model the variable with the largest beta coefficient is Authoritative leadership style (0,504). This means that (when controlling for the remaining variables in the model) the Authoritative leadership style is the strongest predictor of organisational climate. The beta values for the Democratic leadership style (0,188) and the Pacesetting leadership style (0,078) are considerably lower, indicating that these two variables predicted less of the variance in organisational climate. Authoritative, Democratic and Pacesetting leadership styles each made a small but unique, statistically significant contribution to organisational climate. In this

regression model the Authoritative leadership style has a part correlation coefficient of 0,175; squaring this value yields a result of 0,031 indicating that the Authoritative leadership style uniquely explains 3% of the variance in organisational climate. The unique variance in organisational climate explained by the Democratic and Pacesetting leadership styles was 0,05% and 0,02% respectively. Together the three leadership styles contributed a further shared variance of 51,83%. The magnitude of the shared variance is to be expected due to the strong correlations between the independent variables.

## 5.9    INTERPRETATION AND DISCUSSION OF THE RESULTS

According to Ostroff and Schmitt (1993), an organisation's leadership plays an integral role in determining the organisational climate. This suggests that a relationship exists between leadership styles and organisational climate. This research explored this hypothesis by analysing the data from the organisational climate survey to determine whether leadership styles were measured.

### 5.9.1  Organisational climate dimensions

A Principal Component Analysis was conducted to confirm the factors evaluated. The results of the PCA showed that a number of items clustered in the management/leadership style factor. Martins and Von der Ohe's (2003) study also confirmed the presence of the management/leadership style factor in the organisational climate survey. In the Martins and Von der Ohe (2003) study the Cronbach alpha coefficients ranged from 0,857 to 0,972 whereas the current study found Cronbach alpha coefficients ranging from 0,828 to 0,967 for similar organisational climate dimensions. The various dimensions measured in this study thus met the reliability requirements for research purposes (Nunnaly, 1978). The distributions of the data in the various dimensions were satisfactory for the assumption of normality.

**5.9.2  Describing the sample**

The sample for this study was fairly representative of a typical organisation. The majority (63,1%) of the participants were aged between 25 and 44 years of age and this would appear to be a good representation of the typical working age of the general work force. This age group can be divided into two sub-groups, with participants in the age group 25-34 years (35,9%) representing the young energetic, learning group. The second sub-group consists of employees aged between 34 and 44 years (27,2%) and represents more experienced employees. The age distribution of the sample is logically related to the sample's distribution of years of service. The majority (65,2%) of the participants had between 1 and 20 years of service. The three groupings within this broad period (1-5 years, 5-10 years and 10-20 years) were more or less equally distributed with approximately 20% representation for each group.

The race distribution of this sample was not representative of the South African population. It is possible that the high percentage of Coloured and White respondents could be related to the participants all residing in the same geographical area, for example the Western Cape.

It is important to notice that fairly high percentages of participants did not provide all of their biographical data. This is not unusual with survey research as participants are afraid of being identified or victimised as a result of their responses.

**5.9.3  Gender differences regarding perceptions of leadership styles**

The second empirical aim of this study was to explore the perceptions of leadership styles and organisational climate in the organisation. The results showed that there were no practically significant differences between males and females' perceptions of leadership styles. This finding can be related to Hersey and Blanchard's (1977) life cycle theory, which states that leaders have the ability to learn and mature. Thus, although previously generations of females received little exposure to the environment of management and leadership positions, this has changed in recent times and females are now exposed to management and leadership positions.

According to Yukl (1998, p. 506) " role expectations could be expected to disappear in the future as more women move into leadership positions and stereotypes gradually change". The results of this study show that male and female participants did not perceive leadership styles differently.

### 5.9.4  Gender differences regarding perceptions of organisational climate

This study also aimed to explore gender differences in employees' perceptions of organisational climate. Although the results indicated a slight statistical difference further analysis showed that this difference was not practically significant. The study thus concluded that there was no significant difference between males and females' perceptions of organisational climate in the organisation under investigation.

### 5.9.5  Group comparisons of leadership styles and organisational climate

There was a difference between the years of service groups' perceptions of organisational climate. This difference was found to be statistically significant with a small practical effect. The group of employees with less than one year of service had a higher mean score on organisational climate than the groups of employees with more than one year of service. This finding relates to Schneider's (1973) finding that the longer individuals have contact with an organisation the more difficult it is to change their perceptions regarding that organisation's climate. The current finding thus suggests that participants who were with the organisation for longer than one year have a less positive evaluation of the organisational climate.

### 5.9.6  Relationship between leadership styles and organisational climate

The main aim of this study was to determine whether a relationship exists between leadership styles and organisational climate. The study found that there is a strong positive relationship between organisational climate and leadership styles with a Cronbach's Alpha correlation coefficient of 0,749. This study supports previous research findings by Ekvall (1993, 1996), Greyvenstein (1982), Litwin and Stringer (1968) and Wallace et al. (1999), which also suggested that there is a relationship between organisational climate and leadership styles. The information contained in

table 5.24 provides additional information regarding the nature of this relationship. The table shows that the organisational climate dimensions that are mostly or solely the responsibility of managers and leaders (for example Performance management, Strategic focus and policies and Procedures) are the dimensions with the strongest correlations with leadership styles (Yukl, 1981). This finding makes practical sense because leadership style would directly impact the way in which these management functions/ tasks are performed by leaders and managers. This would thus impact on employees' perceptions of leadership and management behaviour (Bernett, 1991). In addition, the table shows that there are a number of organisational climate dimensions that strongly correlate with leadership style, thus further reinforcing the strong correlation between organisational climate and leadership styles. The Remuneration dimension had the lowest correlation with leadership styles. This could be because this dimension is not necessarily directly linked to a leader, as employees are likely to blame the organisation rather than the leader if they are dissatisfied with their salary. It can thus be argued that the number of organisational climate dimensions that are strongly correlating with leadership style support the strong correlation between organisational climate and leadership styles. This supports Ostroff and Schmitt's (1993) statement that organisational climate develops specifically from internal factors primarily under managerial influence.

### 5.9.7  Different leadership styles correlating with organisational climate

The relationship between leadership styles and organisational climate was further investigated by theoretically clustering the leadership styles items into three specific leadership styles, namely Authoritative, Democratic and Pacesetting leadership style. A multiple regression analysis was conducted with these three leadership styles and organisational climate. This regression model explained 55,6% of the variance in organisational climate. Authoritative leadership style made the largest unique contribution to the variance in organisational climate. This finding supports the Goleman (2000) results, which indicated that Authoritative leadership style has the strongest correlation (of the six leadership styles) with organisational climate. Goleman's (2000) study also found that Pacesetting leadership had a negative correlation with organisational climate. Although the current study did not report a negative correlation between Pacesetting style and organisational climate, this style

showed the lowest correlation with organisational climate. In addition, a study by Ekvall (1993) found low correlations between task and structure leadership orientation and most of the climate dimensions. In the current study structured and task-oriented items clustered under the Pacesetting leadership style, which had the lowest correlation with organisational climate.

### 5.9.8  Graphic representation of organisational climate factors

Figure 5.14 illustrates the 13 dimensions of organisational climate and their relationship with the overall organisational climate construct. The figure depicts correlations between the individual dimensions and organisational climate as well as the rotated variance of each dimension in the factor structure (see tables 5.1 and 5.24). The correlation statistics and unique variance explained (derived from the standard multiple regression analysis) of each of the three sub-dimensions of leadership styles in relation to organisational climate are also indicated in the figure. The Pearson correlation (r) between each of these dimensions and organisational climate is indicated. The figures in brackets provide the rotated percentage variance explained based on the Principal Component Analysis (see table 5.1). The leadership styles dimension is further broken down into the three theoretical leadership styles. The Pearson correlation (r) between each of these leadership styles and organisational climate is indicated in red with a dotted line (see Appendix C). Furthermore the unique variance explained by each of the leadership styles is indicated in red with brackets following the relevant dotted lines (see table 5.28).

The results discussed above provide support for the strong relationship between leadership styles and organisational climate. The null hypothesis ($H_0$: There is no relationship between leadership styles and organisational climate) was thus rejected.

*Figure 5.14: Representation of organisational climate dimensions*



Employee development

Attraction and Retention

Policies and Procedures

Information management

Organisational values

r=0,817
(5,150%)

r=0,863
(4,020%)

r=0,786
(3,077%)

r=0,835
(7,002%)

r=0,677
(6,152%)

Employment Equity

r=0,784
(2,740%)

Performance management

**Organisational climate**

r=0,857
(7,757%)

r=0,684
(2,714%)

Strategic focus

r=0,742
(1,666%)

r=0,640
(2,282%)

Working environment

r=0,749
(7,790%)

r=0,672
(1,837%)

r=0,665
(2,012%)

Relationships/ Teamwork

**Leadership styles**

Authoritative leadership style

r=0,740
(3,064%)

Remuneration

Democratic leadership style

r=0,715
(0,485%)

Pacesetting leadership style

r=0,623
(0,217%)

Discrimination

## 5.10   CHAPTER SUMMARY

A few age and race group differences were highlighted in relation to employees' perceptions of organisational climate and leadership styles. Some differences in terms of the years of service at the organisation and participants' employment status in relation to perceptions of organisational climate and leadership styles were also identified. The results of the correlation analyses indicate a statistically significant relationship between leadership styles and organisational climate. Three leadership styles were evaluated in a standard multiple regression analysis with organisational climate. The Authoritative leadership style was found to be the best predictor of organisational climate. Chapter 6 concludes the study, discusses the limitations of the study and makes recommendations for future research.

# CHAPTER 6: CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

## 6.1 INTRODUCTION

The main aim of this study was to determine whether a statistically significant relationship exists between leadership styles and organisational climate. In this chapter the conclusions of the research project are formulated on the basis of the literature review (see chapters 2 and 3) and the empirical results discussed in chapter 5. The limitations of the research are then identified. The chapter concludes with recommendations for future studies.

## 6.2 CONCLUSIONS

The research question was investigated in two different ways. The first method of investigation involved a theoretical investigation through the conducting of a literature review, while the second investigative method involved a statistical empirical investigation. The study focused on two variables, leadership styles and organisational climate. These variables were conceptualised and the theoretical relationship between them was investigated.

### 6.2.1 Conclusions relating to the literature review

The literature review focused on the concepts of leadership styles and organisational climate. The literature reviewed provided the knowledge basis from which the study's hypotheses were formulated. The findings from previous research studies were also related to the present study. The literature aims for this study were:

(1)     to explore the concepts of leadership and management;
(2)     to explore organisational climate;
(3)     to explore the theoretical relationship link between leadership styles and organisational climate.

*6.2.1.1    Leadership styles*

Chapter 2 addressed the first literature aim and focused on leadership styles. The chapter explored various definitions of leadership and management. The literature showed that the terms management and leadership are often used interchangeably. Although the literature provided a vast number of definitions for leadership, there was sufficient similarity among the definitions to allow for a rough scheme of common factors. The various definitions suggested that leaders tend to focus on strategy and visioning while managers tend to be involved with tasks such as daily planning, organising and staffing. However, it was noted that the duties, tasks and behaviours of management and leadership overlap considerably, and that leaders are often expected to manage things and managers are often expected to lead. The literature review thus focused on both management and leadership in order to provide a detailed overview of the concept of leadership styles. The literature review identified the works of Bass (1990), Likert (1961), Mintzberg (1980) and Yukl (1981) as particularly important in the field of management and leadership.

The detailed review of the literature showed that the various authors' evaluations of leadership styles and behaviours contained several overlapping key behavioural attributes, tasks and responsibilities. These key overlapping concepts included people focus (supportive style, transformational), task focus (directive style, transactional), democratic style and participative style (Bass, 1985, 1990; Goleman, 2000; Likert, 1961; MacKenzie, 1969; Yukl, 1984, 1998). The study chose to focus on the leadership styles identified by Goleman (2000), as these styles seemed to encompass all the styles, behaviour and responsibilities found in the rest of the literature. In addition, Goleman's (2002) study was particularly relevant to the current study, as it included descriptions of the impact of the various leadership styles on organisational climate. The results of Goleman's (2000) study provided theoretical justification for this study's proposed link between leadership styles and organisational climate.

*6.2.1.2    Organisational climate*

Chapter 3 addressed the second literature aim of the study and discussed organisational climate. The literature review showed that the terms climate and culture are often used interchangeably. Based on this finding the decision was taken to focus on organisational climate within the context of this research study. The traditional climate model provided theoretical justification for viewing managerial behaviour and leadership patterns as influences on organisational climate (Field & Abelson, 1992). In the traditional climate model managerial behaviour and leadership pattern form part of the person influence cluster, which suggests that employees' experiences and perceptions of the climate in their organisation are directly influenced by the behaviour of managers and the leadership patterns displayed by leaders. Martins and Martins' (2001) model further highlighted the role of managerial tasks and responsibilities in organisational climate. The model includes strategic focus and management processes as key factors.

Various authors have investigated organisational climate dimensions (Blitz et al., 2003, Litwin & Stringer, 1968, Martins & Martins, 2001, Martins & Von der Ohe, 2003). The literature review showed that although leadership styles as such are not necessarily directly named by all the authors as one of the organisational climate dimensions, all of them had one or more dimension indirectly referring to leadership styles e.g. supervision and support to employees, as part of their list of organisational climate dimensions. The organisational climate models, and the commonalities in the organisational climate dimensions, assisted in drawing a theoretical link between leadership styles and organisational climate.

*6.2.1.3    Theoretical relationship link between leadership styles and organisational climate*

The third and final literature aim involved identifying any theoretical overlaps or linkages between the leadership styles and organisational climate constructs. The researcher used the various situational leadership theories, which argue that leaders are the product of their situations, to suggest the existence of a relationship between leadership styles and organisational climate. In addition, Litwin and Stringer (1968)

and Greyvenstein (1982) argued that changes in leadership style could be observed in the organisational climate. Gray (2001) and Konczak et al., (2000) reported that participative climate and leadership have a positive effect on organisational performance. The most compelling evidence for the existence of a relationship between leadership styles and organisational climate came from the work of Goleman (2000), who found statistically significant relationships between six leadership styles and organisational climate. Goleman's (2000) study found negative correlations between organisational climate and coercive and pacesetting leadership styles and positive correlations between organisational climate and coaching, affiliative, democratic and authoritative leadership styles. The highest positive correlation was found between organisational climate and the authoritative leadership style.

### 6.2.2  Conclusions relating to the empirical study

The study's main aim was to determine whether or not a statistically significant relationship exists between leadership styles and organisational climate. This main aim was subdivided into three empirical aims:

(1)     to explore the dimensions measured by the survey;

(2)     to explore the perceptions regarding leadership styles and organisational climate in the organisation; and

(3)     to explore the relationship between various leadership styles and organisational climate.

#### 6.2.2.1    *Dimensions of organisational climate*

A Principal Components Analysis was used to address the first aim. The PCA determined the underlying structure of organisational climate survey used in the study and yielded similar results to those reported in the Martins and Von der Ohe (2003) study. The PCA indicated that the organisational climate survey measured 13 factors related to organisational climate. One of these 13 factors was labelled management/leadership style and was referred to as leadership styles within this research.

*6.2.2.2 Perceptions regarding leadership styles and organisational climate*

The second empirical aim was addressed through comparing the various groups' perception of leadership styles and organisational climate. Gender differences were explored with t-tests and no practically significant differences were found. Various other group differences (race, age, years of service and employment status) were explored through the use of ANOVAs. The majority of these group differences were not statistically significant. The few differences that were statistically significant did not have any practical significance when effect sizes were brought into consideration. The only practically significant group difference that was observed involved years of service, with the group with less than one year of service scoring higher on the overall organisational climate dimension than the employees with more than one year of service. However, the relationship between leadership styles and organisational climate was found to be statistically significant with a Pearson product-moment correlation of 0,749 ($p < 0,001$). This meant that the null hypothesis was rejected and the results showed that there is a relationship between leadership styles and organisational climate.

*6.2.2.3 The relationship between various leadership styles and organisational climate*

The third empirical aim was addressed through using standard multiple regression analysis to further explore the relationship between organisational climate and leadership styles. The leadership styles dimension was investigated based on the theory highlighted in the literature review. The investigation showed that the items in the leadership styles factor of the organisational climate survey fit three of the leadership styles identified by Goleman (2000). The items loading on the leadership styles factor were thus clustered into three different leadership styles namely: Authoritative, Democratic and Pacesetting leadership style. These three leadership styles were added as the independent variables in a standard multiple regression analysis with organisational climate as the dependent variable. The regression model explained 55,6% of the variance in organisational climate. This result thus supports Goleman's (2000) findings regarding the impact of the different leadership styles on organisational climate. Goleman's (2000) findings are similar to those

reported in the current study, with Authoritative leadership style displaying the highest positive correlation with organisational climate. In addition, this study found that the Pacesetting leadership style contributed the smallest unique variance to organisational climate while Goleman (2000) found that the Pacesetting leadership style correlated negatively with organisational climate.

## 6.3   LIMITATIONS

The limitations identified during the literature review and the empirical study are outlined below.

### 6.3.1   Literature review limitations

There is an extremely large body of literature regarding leadership and management and this literature includes a fair amount of controversy and disagreement in terms of definitions, differences and similarities. This bulk of literature made it a complex task to condense and focus the literature for the purposes of this specific study. The study made use of an atheoretical instrument that was developed in accordance with the needs of the client organisation. This questionnaire was based on the organisational climate model of Martins and Martins (2001). The researcher was unable to determine the specific leadership model or theory on which the leadership styles items were based.

### 6.3.2   Empirical study limitations

The following empirical limitations apply to this study:

- Results can not be generalised to other organisations since the sampling method did not include employees from other organisations or sectors (e.g. service delivery or government).

- The items in the survey questionnaire used to investigate leadership styles were not originally developed to measure leadership. The leadership styles

items were clustered into leadership styles categories based on theory and literature.

- The study focused on employees' perceptions regarding leadership styles and it was thus difficult to relate the results to previous studies concerning leadership styles and organisational climate, which used leadership styles questionnaires to measure specific leadership styles.

- Although the sample was very large, a substantial portion of the employees did not provide all their biographical information.

## 6.4  RECOMMENDATIONS

### 6.4.1  Recommendations for future research

The following recommendations for future research are suggested:

- It is strongly recommended that future research samples should include employees from various employment sectors in South Africa. In addition, the samples should be representative of the South African population in terms of gender and race.

- Although this study did confirm the existence of a relationship between leadership styles and organisational climate, the study could be improved by measuring specific leadership styles using theoretical models and a measuring instrument designed to measure leadership styles. This would increase the value of the recommendations for organisations regarding the leadership styles and behaviour that have positive and negative influences on the organisational climate. This specific targeted feedback would add value to the organisation and thus improve management practices.

- Using a specific leadership styles questionnaire would also assist in relating the research results to the results of previous studies concerning leadership styles and organisational climate.

- The clustering around scores of 4 on several of the organisational climate dimensions was evident, but unfortunately further exploration of these tendencies fell outside the scope of this study. It could however be interesting for practitioners to explore the reasons for these tendencies, especially from an organisational development consultancy stance.

### 6.4.2 Practical recommendations for Industrial Psychologists

The following practical recommendations are suggested:

- The empirical study confirmed the existence of a relationship between leadership styles and organisational climate. However, it is important that practitioners note that organisational climate is specific to every organisation. Each organisation should thus be analysed and consulted within their specific situation and circumstances and organisational climate issues should not be generalised across organisations.

- Practitioners could keep the results of this study in mind during organisational development projects investigating organisational climate. Since there is a relationship between leadership styles and organisational climate, they can explore the leadership style of that specific organisation to determine whether there are maybe non congruent leadership styles or specific leadership or management practises impacting the organisational climate negatively.

- This study has practical value for managers and leaders in the workplace as it clearly illustrates that the adoption of an appropriate leadership style could possibly influence positively influence subordinates' experience of organisational climate.

- Practitioners should thus focus on coaching managers and leaders in the skills related to the appropriate leadership style. If managers and leaders understand the impact of an appropriate leadership style on organisational climate, and thus on

employee performance and organisational success, they will be able to acquire the necessary skills to facilitate and improve organisational climate.

## 6.5  INTEGRATION OF THE RESEARCH

This dissertation used a behaviourist paradigm to focus on the relationship between organisational climate and leadership styles. The variables were theoretically evaluated in chapters 2 and 3 and the results of the empirical investigations were reported in chapter 5.

Throughout this study the focus was on determining whether or not a relationship exists between leadership style and organisational climate. The results of the empirical study suggested that this relationship does exist, and a decision was taken to further explore the leadership styles dimension. The theoretical clustering of the leadership styles items and the standard regression model resulted in the identification of the Authoritative leadership style as a statistically significant contributor to organisational climate.

This information is of importance for Industrial psychologists as they will be able to provide organisations with suggestions for developmental programs for leaders and managers in order to increase positive perceptions regarding organisational climate. Recommendations were also provided concerning practical implications for Industrial psychologists and organisations based on the results of the study. This study thus contributed towards building research evidence regarding the influence of leadership styles on organisational climate.

## 6.6  CHAPTER SUMMARY

This chapter provided the conclusions, limitations and recommendations of this study. In addition, the integration of the research was presented. This study found evidence for the existence of a statistically significant relationship between leadership styles and organisational climate.

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# APPENDIX A: Output from Principal Component Analysis

| ROTATED COMPONENT MATRIX | Component | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** |
| V65 "My immediate manager or supervisor's style is proactive" | **0,739** | 0,160 | 0,156 | 0,177 | 0,073 | 0,131 | 0,088 | 0,084 | 0,069 | 0,019 | 0,047 | 0,045 | -0,104 |
| V64 " My immediate manager or supervisor's style is participative" | **0,738** | 0,134 | 0,142 | 0,181 | 0,085 | 0,129 | 0,074 | 0,061 | 0,058 | 0,063 | 0,098 | 0,076 | -0,036 |
| V60 "My immediate manager or supervisor's style is involved" | **0,734** | 0,126 | 0,125 | 0,168 | 0,091 | 0,127 | 0,101 | 0,066 | 0,062 | 0,072 | 0,084 | 0,080 | -0,045 |
| V63 "My immediate manager or supervisor's style is people-oriented" | **0,729** | 0,136 | 0,139 | 0,169 | 0,084 | 0,118 | 0,063 | 0,051 | 0,058 | 0,084 | 0,056 | 0,071 | -0,017 |
| V61 "My immediate manager or supervisor's style is consistent" | **0,720** | 0,135 | 0,150 | 0,158 | 0,070 | 0,144 | 0,094 | 0,066 | 0,078 | 0,032 | 0,034 | 0,073 | -0,045 |
| V62 "My immediate manager or supervisor's style is task-oriented" | **0,708** | 0,153 | 0,144 | 0,184 | 0,078 | 0,121 | 0,117 | 0,112 | 0,057 | 0,002 | 0,020 | 0,083 | -0,143 |
| V57 "My immediate manager or supervisor's style is flexible" | **0,707** | 0,111 | 0,119 | 0,147 | 0,087 | 0,084 | 0,101 | 0,092 | 0,062 | 0,132 | 0,075 | 0,077 | 0,013 |
| V44 "I have confidence in my immediate supervisor to make the right decisions" | **0,692** | 0,101 | 0,057 | 0,177 | 0,108 | 0,016 | 0,157 | 0,069 | 0,102 | 0,174 | 0,103 | 0,012 | 0,163 |
| V58 "My immediate manager or supervisor's style is entrepreneurial" | **0,669** | 0,174 | 0,138 | 0,153 | 0,070 | 0,107 | 0,103 | 0,081 | 0,080 | 0,006 | 0,000 | 0,049 | -0,130 |
| V59 "My immediate manager or supervisor's style is decisisve" | **0,659** | 0,162 | 0,152 | 0,167 | 0,060 | 0,075 | 0,101 | 0,070 | 0,075 | -0,007 | -0,017 | 0,067 | -0,133 |
| V46 "My immediate supervisor or manager controls his or her subordinates well" | **0,656** | 0,134 | 0,104 | 0,150 | 0,092 | 0,034 | 0,165 | 0,061 | 0,117 | 0,169 | 0,057 | 0,017 | 0,117 |
| V52 "My immediate manager allocates resources effectively" | **0,647** | 0,182 | 0,119 | 0,198 | 0,127 | 0,115 | 0,176 | 0,108 | 0,109 | 0,074 | 0,051 | 0,003 | 0,104 |
| V48 "My immediate supervisor or manager considers the views of his or her subordinates when making important decisions" | **0,647** | 0,139 | 0,094 | 0,157 | 0,094 | 0,043 | 0,138 | 0,063 | 0,131 | 0,160 | 0,076 | 0,021 | 0,159 |
| V53 "My immediate management works together as a team effectively" | **0,636** | 0,116 | 0,094 | 0,165 | 0,090 | 0,093 | 0,130 | 0,089 | 0,088 | 0,161 | 0,133 | 0,021 | 0,194 |
| V54 "My immediate management anticipates the competition adequately" | **0,622** | 0,183 | 0,161 | 0,155 | 0,140 | 0,112 | 0,164 | 0,106 | 0,106 | 0,058 | 0,031 | 0,003 | 0,051 |
| V45 "My immediate supervisor or manager sets achievable goals for his or her subordinates" | **0,620** | 0,118 | 0,112 | 0,166 | 0,107 | 0,038 | 0,228 | 0,058 | 0,134 | 0,144 | 0,045 | 0,020 | 0,083 |
| V47 "My immediate supervisor or manager involves me in the planning of work" | 0,614 | 0,114 | 0,063 | 0,155 | 0,078 | 0,055 | 0,169 | 0,093 | 0,150 | 0,169 | 0,101 | 0,037 | 0,140 |
| V68 " My immediate manager or supervisor's style is long-term oriented" | 0,601 | 0,186 | 0,137 | 0,180 | 0,141 | 0,180 | 0,071 | 0,122 | 0,143 | 0,036 | -0,076 | 0,066 | -0,188 |
| V43 "My immediate supervisor or manager gives me clear instructions" | **0,588** | 0,076 | 0,043 | 0,172 | 0,100 | 0,000 | 0,208 | 0,043 | 0,116 | 0,206 | 0,140 | 0,056 | 0,142 |
| V42 "When I go to my immediate supervisor or manager with a work-related problem, he or she helps me find a solution" | **0,580** | 0,099 | 0,044 | 0,162 | 0,091 | -0,023 | 0,169 | 0,067 | 0,114 | 0,222 | 0,136 | 0,051 | 0,143 |
| V66 " My immediate manager or supervisor's style is formal" | **0,552** | 0,070 | 0,150 | 0,140 | 0,053 | 0,233 | 0,079 | 0,065 | 0,061 | 0,059 | 0,115 | 0,060 | -0,113 |
| V67 " My immediate manager or supervisor's style is number oriented" | **0,517** | 0,161 | 0,147 | 0,177 | 0,113 | 0,158 | 0,072 | 0,180 | 0,119 | 0,039 | -0,098 | 0,069 | -0,282 |
| V49 "In my department the necessary planning of work is done" | **0,500** | 0,129 | 0,099 | 0,128 | 0,101 | 0,081 | 0,278 | 0,081 | 0,080 | 0,216 | 0,111 | 0,034 | 0,089 |

| ROTATED COMPONENT MATRIX | Component | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| V217 "The following source supplies me with sufficient information about Organisation A and my work environment My manager" | **0,472** | 0,291 | 0,131 | 0,115 | 0,089 | 0,010 | 0,048 | 0,186 | 0,161 | 0,120 | **0,434** | 0,069 | 0,094 |
| V87 "My immediate supervisor or manager enjoys my trust" | **0,462** | 0,101 | 0,080 | 0,125 | 0,216 | 0,075 | 0,099 | 0,109 | 0,206 | **0,438** | 0,001 | 0,046 | 0,015 |
| V56 "Senior management plans adequately for the future" | **0,417** | 0,212 | 0,220 | 0,182 | 0,223 | 0,257 | 0,157 | 0,038 | 0,043 | -0,007 | 0,057 | -0,023 | 0,134 |
| V51 "I trust higher levels of management" | **0,409** | 0,177 | 0,158 | 0,216 | 0,220 | 0,236 | 0,170 | 0,051 | 0,039 | 0,028 | 0,096 | 0,010 | 0,245 |
| V55 "Senior management positions itself to take advantage of the new socio-political environment in South Africa" | **0,409** | 0,248 | 0,203 | 0,179 | 0,184 | 0,182 | 0,172 | 0,047 | 0,036 | -0,025 | -0,057 | -0,015 | 0,029 |
| V50 "I know the rationale for decisions made by higher levels of management" | **0,396** | 0,185 | 0,168 | 0,156 | 0,190 | 0,161 | 0,224 | 0,016 | 0,121 | 0,013 | 0,013 | -0,022 | 0,100 |
| V206 "My experience is that the following policy and procedure is fair towards all regarding Corporate culture" | 0,151 | **0,698** | 0,314 | 0,151 | 0,145 | 0,105 | 0,123 | 0,078 | 0,072 | 0,032 | 0,064 | 0,009 | -0,020 |
| V205 "My experience is that the following policy and procedure is fair towards all regarding facilities" | 0,161 | **0,695** | 0,258 | 0,152 | 0,113 | 0,093 | 0,147 | 0,188 | 0,059 | 0,032 | 0,074 | 0,006 | 0,003 |
| V203 "My experience is that the following policy and procedure is fair towards all regarding Job assignments" | 0,178 | **0,692** | 0,253 | 0,134 | 0,111 | 0,170 | 0,109 | 0,063 | 0,127 | 0,053 | 0,133 | -0,004 | 0,016 |
| V202 "My experience is that the following policy and procedure is fair towards all regarding Performance and evaluation systems" | 0,158 | **0,675** | 0,253 | 0,149 | 0,107 | 0,181 | 0,113 | 0,021 | 0,148 | 0,047 | 0,136 | -0,004 | 0,028 |
| V190 "My experience is that the following policy and procedure is fair towards all regarding Job classifications and grading" | 0,158 | **0,672** | 0,195 | 0,147 | 0,127 | 0,116 | 0,053 | 0,077 | 0,101 | 0,091 | 0,042 | 0,178 | 0,124 |
| V191 "My experience is that the following policy and procedure is fair towards all regarding Terms and conditions of employment" | 0,165 | **0,669** | 0,198 | 0,156 | 0,170 | 0,029 | 0,090 | 0,117 | 0,064 | 0,089 | 0,022 | 0,175 | 0,013 |
| V195 "My experience is that the following policy and procedure is fair towards all regarding disciplinary procedures" | 0,239 | **0,666** | 0,209 | 0,122 | 0,212 | 0,025 | 0,084 | 0,140 | 0,029 | 0,060 | 0,023 | 0,181 | 0,025 |
| V189 "My experience is that the following policy and procedure is fair towards all regarding Recruitment procedures" | 0,170 | **0,663** | 0,203 | 0,133 | 0,131 | 0,093 | 0,066 | 0,064 | 0,082 | 0,085 | 0,063 | 0,196 | 0,100 |
| V197 "My experience is that the following policy and procedure is fair towards all regarding diversity programmes and sensitisation" | 0,141 | **0,661** | 0,308 | 0,143 | 0,132 | 0,074 | 0,103 | 0,050 | 0,104 | 0,046 | 0,053 | 0,021 | -0,122 |
| V204 "My experience is that the following policy and procedure is fair towards all regarding Remuneration and benefits" | 0,110 | **0,655** | 0,292 | 0,159 | 0,111 | 0,206 | 0,099 | 0,053 | 0,105 | 0,027 | 0,069 | -0,030 | 0,107 |
| V198 "My experience is that the following policy and procedure is fair towards all regarding Community investment" | 0,125 | **0,654** | 0,255 | 0,123 | 0,138 | 0,109 | 0,109 | 0,036 | 0,088 | 0,057 | 0,062 | -0,009 | -0,103 |
| V192 "My experience is that the following policy and procedure is fair towards all regarding Transfers" | 0,189 | **0,653** | 0,164 | 0,139 | 0,156 | 0,056 | 0,054 | 0,100 | 0,067 | 0,081 | 0,055 | 0,198 | 0,100 |
| V196 "My experience is that the following policy and procedure is fair towards all regarding dismissals" | 0,222 | **0,649** | 0,206 | 0,127 | 0,230 | -0,006 | 0,064 | 0,132 | 0,015 | 0,044 | 0,023 | 0,177 | -0,007 |

| ROTATED COMPONENT MATRIX | Component | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| V188 "My experience is that the following policy and procedure is fair towards all regarding selection procedures" | 0,160 | **0,648** | 0,218 | 0,112 | 0,116 | 0,103 | 0,048 | 0,038 | 0,096 | 0,088 | 0,080 | 0,200 | 0,132 |
| V194 "My experience is that the following policy and procedure is fair towards all regarding Succession planning" | 0,178 | **0,645** | 0,238 | 0,115 | 0,169 | 0,136 | 0,077 | 0,028 | 0,110 | 0,070 | 0,105 | 0,155 | 0,093 |
| V200 "My experience is that the following policy and procedure is fair towards all regarding Retention measures" | 0,127 | **0,644** | 0,279 | 0,117 | 0,106 | 0,107 | 0,103 | 0,010 | 0,110 | 0,033 | 0,087 | -0,021 | -0,130 |
| V193 "My experience is that the following policy and procedure is fair towards all regarding Promotions" | 0,176 | **0,633** | 0,205 | 0,149 | 0,134 | 0,150 | 0,040 | 0,078 | 0,112 | 0,085 | 0,085 | 0,183 | 0,202 |
| V201 "My experience is that the following policy and procedure is fair towards all regarding Training and development" | 0,134 | **0,629** | 0,237 | 0,111 | 0,090 | 0,308 | 0,097 | 0,030 | 0,088 | 0,037 | 0,157 | 0,007 | -0,005 |
| V187 "My experience is that the following policy and procedure is fair towards all regarding advertising of positions" | 0,140 | **0,624** | 0,163 | 0,106 | 0,122 | 0,044 | 0,079 | 0,106 | 0,049 | 0,112 | 0,072 | 0,194 | 0,076 |
| V199 "My experience is that the following policy and procedure is fair towards all regarding HIV or AIDS education and prevention program" | 0,087 | **0,590** | 0,231 | 0,123 | 0,090 | 0,070 | 0,088 | 0,108 | 0,053 | 0,058 | 0,107 | -0,022 | -0,145 |
| V209 "The information Organisation A communicates to its employees can always be believed" | 0,190 | **0,421** | 0,287 | 0,173 | 0,231 | 0,120 | 0,127 | 0,094 | 0,065 | 0,051 | 0,296 | 0,102 | 0,114 |
| V211 "Company policies and rules are clearly communicated to employees" | 0,202 | **0,404** | 0,244 | 0,126 | 0,204 | 0,136 | 0,131 | 0,141 | 0,115 | 0,035 | 0,345 | 0,119 | 0,069 |
| V210 "Organisation A management listens to the ideas and opinions of its employees" | 0,235 | **0,398** | 0,268 | 0,181 | 0,219 | 0,153 | 0,099 | 0,094 | 0,087 | 0,025 | 0,292 | 0,122 | 0,236 |
| V175 "From what I have seen, all employees at the same levels in the organisation receive equal working conditions (ie offices, access to telephones)" | 0,168 | **0,376** | 0,313 | 0,151 | 0,090 | 0,074 | 0,077 | 0,185 | 0,076 | 0,046 | 0,043 | 0,245 | 0,251 |
| V221 "The following source supplies me with sufficient information about Organisation A and my work environment The internal E-mail" | 0,260 | **0,371** | 0,138 | 0,108 | 0,084 | 0,060 | 0,054 | 0,279 | 0,116 | 0,020 | 0,370 | 0,024 | -0,028 |
| V213 "In the work situation, communication flows freely between colleagues and supervisors" | 0,327 | **0,354** | 0,210 | 0,135 | 0,096 | 0,039 | 0,095 | 0,145 | 0,133 | 0,188 | 0,343 | 0,096 | 0,158 |
| V158 "I support the Employment Equity programme of Organisation A" | 0,088 | 0,195 | **0,659** | 0,159 | 0,161 | 0,060 | 0,097 | 0,056 | 0,079 | 0,084 | 0,085 | -0,011 | -0,040 |
| V151 "The Employment Equity programmes are accepted by all race groups" | 0,103 | 0,144 | **0,658** | 0,129 | 0,158 | 0,151 | 0,060 | -0,027 | 0,080 | 0,074 | 0,111 | 0,020 | 0,047 |
| V152 "Blacks have realistic expectations about Employment Equity" | 0,104 | 0,150 | **0,641** | 0,119 | 0,087 | 0,080 | 0,088 | 0,047 | 0,112 | 0,075 | 0,093 | -0,018 | -0,127 |
| V149 "Employment Equity is not reverse discrimination" | 0,092 | 0,163 | **0,623** | 0,178 | 0,102 | 0,102 | 0,063 | 0,054 | 0,102 | 0,115 | 0,112 | -0,013 | -0,072 |
| V167 "Organisation A's culture is supportive of Employment Equity" | 0,172 | 0,339 | **0,604** | 0,145 | 0,188 | 0,077 | 0,099 | 0,093 | 0,073 | 0,019 | 0,017 | 0,060 | -0,019 |
| V153 "Employment Equity is necessary to address the imbalances of the past" | 0,082 | 0,170 | **0,602** | 0,136 | 0,091 | 0,018 | 0,112 | 0,056 | 0,074 | 0,120 | 0,059 | -0,026 | -0,192 |
| V166 "Organisation A has a genuine concern to improve race relations between employees" | 0,147 | 0,291 | **0,602** | 0,162 | 0,219 | 0,109 | 0,118 | 0,116 | 0,052 | 0,019 | 0,047 | 0,102 | 0,056 |

| ROTATED COMPONENT MATRIX | Component | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| V150 "Whites do not have any fears because of Employment Equity" | 0,064 | 0,064 | **0,582** | 0,095 | 0,107 | 0,146 | 0,038 | -0,050 | 0,093 | 0,084 | 0,163 | 0,028 | 0,037 |
| V170 "I think Organisation A strives to accommodate the different ethnic cultures and beliefs of all employees in the workplace" | 0,169 | 0,348 | **0,578** | 0,128 | 0,195 | 0,086 | 0,114 | 0,129 | 0,019 | 0,016 | 0,015 | 0,148 | 0,067 |
| V172 "I feel that relationships among the different race groups in Organisation A are good" | 0,173 | 0,293 | **0,567** | 0,142 | 0,210 | 0,069 | 0,078 | 0,130 | 0,016 | 0,027 | 0,020 | 0,176 | 0,157 |
| V161 "Organisation A is committed to equality between males and females" | 0,142 | 0,241 | **0,566** | 0,119 | 0,182 | 0,128 | 0,127 | 0,133 | 0,017 | 0,066 | 0,105 | 0,176 | 0,095 |
| V168 "Racism seldom occurs at Organisation A" | 0,130 | 0,231 | **0,565** | 0,126 | 0,104 | 0,034 | 0,066 | 0,105 | 0,024 | 0,043 | 0,019 | 0,184 | 0,096 |
| V154 "All races are provided with the same opportunities at Organisation A" | 0,142 | 0,251 | **0,564** | 0,139 | 0,170 | 0,207 | 0,008 | 0,053 | 0,048 | 0,019 | 0,046 | 0,102 | 0,260 |
| V160 "The different race groups understand each other's culture at Organisation A" | 0,143 | 0,222 | **0,557** | 0,125 | 0,205 | 0,100 | 0,075 | 0,093 | 0,018 | 0,038 | 0,043 | 0,123 | 0,200 |
| V159 "Different race groups respect each other at Organisation A" | 0,158 | 0,241 | **0,555** | 0,145 | 0,194 | 0,058 | 0,076 | 0,139 | -0,008 | 0,067 | 0,029 | 0,130 | 0,194 |
| V165 "I know how employment equity will affect me" | 0,128 | 0,257 | **0,553** | 0,092 | 0,138 | 0,074 | 0,117 | 0,112 | 0,191 | 0,038 | 0,064 | 0,024 | -0,124 |
| V162 "Women are regarded as a asset to Organisation A" | 0,116 | 0,240 | **0,546** | 0,096 | 0,177 | 0,094 | 0,153 | 0,119 | 0,050 | 0,041 | 0,058 | 0,140 | 0,005 |
| V169 "Discrimination against women seldom occurs at Organisation A" | 0,128 | 0,258 | **0,540** | 0,083 | 0,127 | 0,007 | 0,134 | 0,144 | 0,016 | 0,013 | 0,017 | 0,232 | -0,018 |
| V164 "Equality has been achieved at Organisation A in terms of promotion opportunities" | 0,179 | 0,302 | **0,529** | 0,125 | 0,151 | 0,229 | 0,021 | 0,076 | 0,124 | 0,015 | 0,079 | 0,123 | 0,233 |
| V147 "The Employment Equity programme will not lead to the lowering of standards" | 0,103 | 0,144 | **0,523** | 0,150 | 0,251 | 0,153 | 0,101 | 0,193 | 0,183 | 0,135 | 0,085 | -0,016 | -0,148 |
| V163 "The selection procedures used by Organisation A ensure that the best person for the job is appointed" | 0,180 | 0,265 | **0,522** | 0,148 | 0,172 | 0,225 | 0,033 | 0,060 | 0,075 | 0,026 | 0,109 | 0,132 | 0,229 |
| V155 "Management is not only talking about Employment Equity, but enough s being done in practice" | 0,213 | 0,338 | **0,508** | 0,124 | 0,159 | 0,141 | 0,062 | 0,167 | 0,119 | -0,004 | 0,022 | 0,079 | 0,119 |
| V156 "Organisation A has a good reputation of advancing blacks" | 0,197 | 0,315 | **0,480** | 0,127 | 0,222 | 0,127 | 0,070 | 0,122 | 0,027 | -0,060 | -0,040 | 0,126 | 0,083 |
| V171 "I feel that opportunities for promotions exists in Organisation A" | 0,172 | 0,320 | **0,478** | 0,149 | 0,176 | 0,158 | 0,097 | 0,106 | 0,098 | 0,004 | 0,070 | 0,127 | 0,159 |
| V157 "Different races mix in the canteen" | 0,112 | 0,171 | **0,476** | 0,099 | 0,144 | 0,030 | 0,116 | 0,200 | -0,020 | 0,044 | 0,090 | 0,126 | 0,071 |
| V144 "Employment Equity is a strategic priority at Organisation A" | 0,157 | 0,250 | **0,450** | 0,122 | 0,330 | 0,118 | 0,101 | 0,287 | 0,152 | 0,081 | -0,069 | -0,043 | -0,149 |
| V173 "Sexual harassment seldom occurs at Organisation A" | 0,100 | 0,258 | **0,448** | 0,100 | 0,130 | -0,074 | 0,137 | 0,130 | 0,009 | 0,019 | -0,049 | 0,158 | -0,160 |
| V145 "I know the reasons for the existence of the Employment Equity programme" | 0,152 | 0,221 | **0,435** | 0,133 | 0,262 | 0,060 | 0,132 | 0,292 | 0,198 | 0,081 | -0,050 | -0,064 | -0,226 |
| V143 "I know Organisation A has an Employment Equity programme" | 0,137 | 0,192 | **0,425** | 0,131 | 0,300 | 0,084 | 0,133 | 0,310 | 0,162 | 0,121 | -0,042 | -0,062 | -0,208 |
| V148 "Organisation A has a good reputation as an Affirmative Action employer" | 0,187 | 0,267 | **0,407** | 0,143 | 0,380 | 0,172 | 0,044 | 0,219 | 0,095 | 0,011 | -0,088 | 0,082 | 0,063 |
| V178 "Tokenism seldom at Organisation A" | 0,123 | 0,325 | **0,393** | 0,093 | 0,088 | 0,083 | 0,083 | 0,037 | 0,091 | 0,044 | 0,084 | 0,249 | 0,069 |

**ROTATED COMPONENT MATRIX**

|  | Component | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| V146 "Line managers are skilled in managing diversity" | 0,273 | 0,212 | **0,393** | 0,147 | 0,280 | 0,174 | 0,044 | 0,244 | 0,207 | 0,094 | 0,080 | 0,017 | 0,046 |
| V176 "Women have the same opportunities for advancement as their male counterparts" | 0,138 | 0,365 | **0,386** | 0,112 | 0,122 | 0,070 | 0,173 | 0,145 | 0,062 | 0,068 | 0,071 | 0,332 | 0,031 |
| V174 "From what I have seen, all employees at the same levels in the organisation receive equal benefits" | 0,092 | 0,337 | **0,367** | 0,140 | 0,125 | 0,149 | 0,070 | 0,093 | 0,126 | 0,026 | 0,055 | 0,243 | 0,308 |
| V179 "There is no discrimination regarding pay at Organisation A" | 0,090 | 0,344 | **0,358** | 0,137 | 0,118 | 0,197 | 0,051 | 0,061 | 0,130 | -0,007 | 0,064 | 0,264 | 0,283 |
| V177 "Favouritism seldom occurs at Organisation A" | 0,098 | 0,230 | **0,357** | 0,075 | 0,062 | 0,124 | 0,047 | 0,060 | 0,104 | 0,085 | 0,177 | 0,219 | 0,184 |
| V20 "Benefits is a factor in my decision to stay with Organisation A" | 0,115 | 0,131 | 0,082 | **0,679** | 0,133 | 0,105 | 0,106 | 0,041 | 0,019 | -0,018 | -0,024 | 0,032 | 0,075 |
| V11 "Equal opportunity is a factor in my decision to come to Organisation A" | 0,123 | 0,105 | 0,118 | **0,677** | 0,066 | 0,131 | 0,004 | 0,061 | 0,048 | 0,026 | 0,000 | 0,078 | 0,071 |
| V18 "Open communication is a factor in my decision to stay with Organisation A" | 0,228 | 0,077 | 0,115 | **0,674** | 0,101 | 0,054 | 0,089 | -0,003 | 0,060 | 0,076 | 0,123 | 0,004 | 0,125 |
| V19 "Control of work schedule is a factor in my decision to stay with Organisation A" | 0,190 | 0,109 | 0,096 | **0,665** | 0,089 | 0,067 | 0,153 | 0,019 | 0,046 | 0,069 | 0,095 | 0,024 | 0,035 |
| V16 "Salary or wage is a factor in my decision to stay with Organisation A" | 0,058 | 0,116 | 0,089 | **0,665** | 0,010 | 0,079 | 0,051 | 0,069 | 0,104 | -0,008 | -0,081 | 0,001 | 0,167 |
| V21 "Overall management quality is a factor in my decision with stay Organisation A" | 0,264 | 0,129 | 0,104 | **0,664** | 0,116 | 0,040 | 0,105 | 0,031 | 0,060 | 0,022 | 0,096 | 0,014 | 0,119 |
| V23 "Equal opportunity is a factor in my decision to stay with Organisation A" | 0,163 | 0,132 | 0,147 | **0,657** | 0,097 | 0,099 | 0,044 | 0,005 | 0,044 | 0,024 | -0,001 | 0,041 | 0,152 |
| V8 "Benefits is a factor in my decision to come to Organisation A" | 0,103 | 0,118 | 0,075 | **0,648** | 0,089 | 0,131 | 0,074 | 0,082 | 0,044 | -0,029 | -0,029 | 0,078 | -0,013 |
| V13 "Advancement opportunity to reach my full potential is a factor in my decision to stay with Organisation A" | 0,117 | 0,111 | 0,117 | **0,640** | 0,099 | 0,107 | 0,136 | 0,033 | 0,069 | 0,042 | 0,071 | 0,046 | 0,051 |
| V10 "Job security is a factor in my decision to come to Organisation A" | 0,115 | 0,076 | 0,106 | **0,639** | 0,103 | 0,054 | 0,082 | 0,031 | 0,002 | 0,032 | -0,009 | 0,072 | -0,029 |
| V6 "Open communication is a factor in my decision to come to Organisation A" | 0,191 | 0,054 | 0,129 | **0,631** | 0,063 | 0,103 | 0,057 | 0,052 | 0,061 | 0,111 | 0,146 | 0,040 | 0,001 |
| V14 "Challenge of the job is a factor in my decision to stay with Organisation A" | 0,144 | 0,134 | 0,072 | **0,628** | 0,083 | 0,059 | 0,201 | 0,105 | 0,046 | 0,054 | 0,017 | 0,062 | -0,015 |
| V9 "Overall management quality is a factor in my decision to come to Organisation A" | 0,204 | 0,127 | 0,099 | **0,622** | 0,106 | 0,098 | 0,051 | 0,102 | 0,070 | 0,046 | 0,066 | 0,048 | -0,004 |
| V22 "Job security is a factor in my decision to stay with Organisation A" | 0,110 | 0,084 | 0,122 | **0,617** | 0,130 | 0,068 | 0,106 | -0,053 | 0,009 | 0,049 | 0,019 | 0,004 | 0,114 |
| V15 "Ability to balance work with my personal or family life is a factor in my decision to stay with Organisation A" | 0,062 | 0,062 | 0,096 | **0,615** | 0,071 | 0,040 | 0,173 | 0,002 | 0,032 | 0,070 | 0,037 | 0,018 | 0,034 |
| V7 "Control of work schedule is a factor in my decision to come to Organisation A" | 0,157 | 0,077 | 0,087 | **0,615** | 0,046 | 0,098 | 0,113 | 0,054 | 0,061 | 0,125 | 0,117 | 0,034 | -0,062 |
| V17 "Manager or supervisor is a factor in my decision to stay with Organisation A" | 0,340 | 0,090 | 0,064 | **0,610** | 0,051 | -0,001 | 0,094 | 0,038 | 0,109 | 0,100 | 0,063 | -0,006 | 0,077 |
| V4 "Salary or wage is a factor in my decision to come to Organisation A" | 0,023 | 0,109 | 0,079 | **0,597** | -0,001 | 0,088 | 0,027 | 0,099 | 0,087 | -0,014 | -0,100 | 0,053 | 0,063 |

## ROTATED COMPONENT MATRIX

| | Component | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| V24 "Good reputation of Organisation A with people outside the company is a factor in my decision to stay with Organisation A" | 0,116 | 0,097 | 0,160 | **0,572** | 0,200 | 0,069 | 0,194 | -0,056 | 0,002 | 0,023 | 0,038 | -0,007 | 0,005 |
| V2 "Challenge of the job is a factor in my decision to come to Organisation A" | 0,159 | 0,098 | 0,070 | **0,571** | 0,072 | 0,078 | 0,162 | 0,112 | 0,025 | 0,037 | 0,024 | 0,077 | -0,149 |
| V12 "Good reputation of Organisation A with people outside the company is a factor in my decision to come to Organisation A" | 0,099 | 0,093 | 0,127 | **0,566** | 0,155 | 0,084 | 0,152 | 0,001 | 0,039 | 0,032 | 0,032 | 0,049 | -0,109 |
| V3 "Ability to balance work with my personal or family life is a factor in my decision to come to Organisation A" | 0,056 | 0,038 | 0,094 | **0,558** | 0,048 | 0,055 | 0,129 | 0,039 | 0,008 | 0,080 | 0,024 | 0,050 | -0,048 |
| V1 "Advancement opportunity to reach my full potential is a factor in my decision to come to Organisation A" | 0,136 | 0,127 | 0,066 | **0,540** | 0,052 | 0,119 | 0,118 | 0,114 | 0,048 | 0,041 | 0,038 | 0,054 | -0,140 |
| V5 "Manager or supervisor is a factor in my decision to come to Organisation A" | 0,231 | 0,052 | 0,084 | **0,529** | 0,039 | 0,081 | 0,044 | 0,055 | 0,104 | 0,095 | 0,105 | -0,008 | -0,032 |
| V118 "Organisation A sets the example" | 0,122 | 0,162 | 0,271 | 0,149 | **0,624** | 0,289 | 0,091 | 0,044 | 0,120 | 0,080 | 0,099 | 0,046 | 0,177 |
| V119 "Organisation A always finds a better way" | 0,107 | 0,136 | 0,247 | 0,141 | **0,624** | 0,296 | 0,111 | 0,049 | 0,113 | 0,096 | 0,156 | 0,042 | 0,148 |
| V114 "I feel that Organisation A adapts quickly to changes in South Africa" | 0,137 | 0,206 | 0,232 | 0,138 | **0,620** | 0,212 | 0,120 | 0,070 | 0,092 | 0,039 | 0,031 | 0,048 | 0,009 |
| V116 "In my opinion, Organisation A is adapting well to the changed political, economic, social and legislative environment in South Africa" | 0,154 | 0,218 | 0,254 | 0,154 | **0,602** | 0,187 | 0,106 | 0,083 | 0,096 | 0,022 | -0,003 | 0,048 | 0,034 |
| V111 "Organisation A treats its employees with respect" | 0,131 | 0,157 | 0,218 | 0,192 | **0,593** | 0,255 | 0,056 | 0,059 | 0,091 | 0,110 | 0,083 | 0,034 | 0,259 |
| V113 "I know the values of the company" | 0,121 | 0,160 | 0,198 | 0,124 | **0,583** | 0,128 | 0,249 | 0,125 | 0,175 | 0,111 | 0,054 | 0,066 | -0,131 |
| V112 "Organisation A encourages its employees to be involved in their jobs" | 0,150 | 0,154 | 0,215 | 0,166 | **0,581** | 0,227 | 0,144 | 0,097 | 0,134 | 0,153 | 0,159 | 0,073 | 0,077 |
| V115 "Organisation A has a stimulating and challenging environment" | 0,133 | 0,179 | 0,245 | 0,154 | **0,570** | 0,241 | 0,167 | 0,089 | 0,127 | 0,100 | 0,094 | 0,029 | 0,048 |
| V117 "Organisation A treats all staff like family" | 0,122 | 0,135 | 0,245 | 0,177 | **0,564** | 0,311 | 0,032 | 0,040 | 0,119 | 0,090 | 0,124 | 0,028 | 0,317 |
| V110 "Organisation A is concerned about the quality of the merchandise it sells" | 0,064 | 0,091 | 0,202 | 0,116 | **0,563** | 0,118 | 0,187 | 0,103 | 0,077 | 0,194 | 0,090 | 0,078 | -0,109 |
| V109 "Organisation A is concerned about providing a good service to all its customers" | 0,077 | 0,090 | 0,167 | 0,115 | **0,563** | 0,119 | 0,181 | 0,148 | 0,105 | 0,181 | 0,144 | 0,117 | -0,160 |
| V120 "Employees of Organisation A always test our conclusions" | 0,143 | 0,201 | 0,275 | 0,173 | **0,546** | 0,236 | 0,076 | 0,058 | 0,154 | 0,054 | 0,080 | 0,038 | 0,063 |
| V127 "Discipline at Organisation A is fair" | 0,242 | 0,268 | 0,186 | 0,156 | **0,543** | 0,111 | 0,028 | 0,245 | 0,124 | 0,026 | -0,042 | 0,086 | 0,073 |
| V122 "We are a team" | 0,184 | 0,137 | 0,221 | 0,157 | **0,527** | 0,214 | 0,061 | 0,060 | 0,119 | 0,245 | 0,165 | 0,051 | 0,250 |
| V121 "Employees are allowed to have and share their point of view" | 0,209 | 0,201 | 0,218 | 0,176 | **0,513** | 0,209 | 0,039 | 0,110 | 0,141 | 0,114 | 0,088 | 0,056 | 0,249 |
| V126 "I believe Organisation A handles the problem of stay- always fairly" | 0,217 | 0,237 | 0,187 | 0,142 | **0,513** | 0,089 | 0,071 | 0,228 | 0,120 | 0,032 | -0,027 | 0,056 | -0,005 |
| V125 "Employees understand the disciplinary procedures at Organisation A" | 0,140 | 0,172 | 0,189 | 0,103 | **0,490** | 0,155 | 0,144 | 0,172 | 0,179 | 0,112 | 0,101 | 0,065 | -0,069 |
| V124 "We treat the company's money like our own" | 0,109 | 0,131 | 0,185 | 0,098 | **0,457** | 0,096 | 0,167 | 0,159 | 0,114 | 0,104 | 0,061 | 0,046 | -0,099 |
| V128 "Organisation A pays attention to employee complaints" | 0,215 | 0,233 | 0,264 | 0,187 | **0,441** | 0,210 | 0,016 | 0,211 | 0,097 | 0,073 | 0,032 | 0,052 | 0,231 |

| ROTATED COMPONENT MATRIX | Component | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| V130 "If an employee has a grievance he or she is given a fair hearing" | 0,225 | 0,273 | 0,234 | 0,151 | **0,411** | 0,097 | 0,008 | 0,306 | 0,078 | 0,088 | -0,029 | 0,113 | 0,044 |
| V123 "The competitor is regarded as the enemy" | 0,103 | 0,142 | 0,153 | 0,091 | **0,400** | 0,012 | 0,132 | 0,167 | 0,149 | 0,052 | 0,017 | 0,070 | -0,179 |
| V129 "At Organisation A employees are seldom dismissed without good reason" | 0,134 | 0,230 | 0,239 | 0,128 | **0,387** | 0,025 | 0,077 | 0,272 | 0,055 | 0,038 | -0,105 | 0,103 | -0,094 |
| V131 "Employees understand how the grievance procedure works" | 0,152 | 0,185 | 0,266 | 0,090 | **0,380** | 0,146 | 0,100 | 0,261 | 0,137 | 0,128 | 0,070 | 0,071 | -0,028 |
| V132 "Employees are not victimised by management if they voice complaints" | 0,303 | 0,235 | 0,213 | 0,124 | **0,351** | 0,112 | 0,008 | 0,282 | 0,129 | 0,126 | 0,072 | 0,098 | 0,167 |
| V133 "Employees have enough opportunity to let management know how they feel about issues that affect them" | 0,306 | 0,230 | 0,214 | 0,142 | **0,324** | 0,116 | -0,005 | 0,287 | 0,140 | 0,129 | 0,129 | 0,057 | 0,192 |
| V75 "Organisation A provides training programmes that meet my personal development needs" | 0,153 | 0,137 | 0,131 | 0,155 | 0,166 | **0,724** | 0,114 | 0,081 | 0,134 | 0,064 | 0,097 | 0,030 | 0,038 |
| V74 "Organisation A helps me plan my career development" | 0,169 | 0,114 | 0,135 | 0,166 | 0,190 | **0,720** | 0,111 | 0,029 | 0,138 | 0,075 | 0,114 | 0,049 | 0,086 |
| V73 "Organisation A provides sufficient training in the technical skills involved in my job" | 0,174 | 0,136 | 0,124 | 0,155 | 0,169 | **0,714** | 0,113 | 0,103 | 0,092 | 0,073 | 0,084 | 0,061 | 0,013 |
| V72 "Organisation A runs effective employee advancement programmes" | 0,167 | 0,169 | 0,171 | 0,173 | 0,198 | **0,690** | 0,109 | 0,064 | 0,080 | 0,066 | 0,050 | 0,052 | -0,010 |
| V70 "Organisation A provides sufficient training in people-handling skills" | 0,136 | 0,124 | 0,123 | 0,132 | 0,193 | **0,689** | 0,138 | 0,061 | 0,084 | 0,064 | 0,106 | 0,065 | -0,006 |
| V71 "Organisation A's educational (study) assistance programme helps employees to qualify for better jobs" | 0,179 | 0,169 | 0,121 | 0,186 | 0,199 | **0,640** | 0,079 | 0,099 | 0,054 | 0,097 | 0,032 | 0,088 | -0,026 |
| V76 "Staff development is one of the key objectives of Organisation A" | 0,165 | 0,138 | 0,132 | 0,162 | 0,238 | **0,639** | 0,112 | 0,035 | 0,111 | 0,104 | 0,098 | 0,066 | -0,002 |
| V77 "I have received the training I need to do my job well" | 0,170 | 0,129 | 0,068 | 0,106 | 0,141 | **0,580** | 0,171 | 0,076 | 0,164 | 0,142 | 0,078 | 0,068 | 0,019 |
| V78 " I have a detailed career plan" | 0,152 | 0,076 | 0,165 | 0,136 | 0,166 | **0,552** | 0,148 | 0,016 | 0,183 | 0,158 | 0,126 | 0,016 | -0,069 |
| V69 "I have the opportunity to apply what I have learned from Organisation A training programme" | 0,244 | 0,169 | 0,082 | 0,178 | 0,178 | **0,530** | 0,124 | 0,118 | 0,107 | 0,102 | 0,065 | 0,069 | -0,066 |
| V90 "Organisation A incentive schemes adequately reward extra effort" | 0,081 | 0,139 | 0,204 | 0,167 | 0,245 | **0,455** | 0,072 | 0,080 | 0,211 | 0,070 | -0,011 | 0,005 | 0,236 |
| V91 "Compared with other retail companies, Organisation A rewards its employees well" | 0,057 | 0,143 | 0,234 | 0,198 | 0,279 | **0,431** | 0,062 | 0,103 | 0,201 | 0,041 | -0,096 | -0,017 | 0,272 |
| V92 "At Organisation A, a promotion means a fair increase" | 0,089 | 0,184 | 0,202 | 0,200 | 0,243 | **0,400** | 0,051 | 0,078 | 0,234 | 0,073 | -0,085 | 0,010 | 0,293 |
| V83 "My Human Resources Manager provides fair and useful assistance" | 0,284 | 0,196 | 0,136 | 0,165 | 0,212 | **0,316** | 0,012 | 0,129 | 0,068 | 0,249 | 0,050 | 0,027 | 0,086 |
| V82 "I feel free to approach my Human Resources Manager with any problem I have" | 0,251 | 0,172 | 0,115 | 0,172 | 0,188 | **0,313** | 0,017 | 0,125 | 0,062 | 0,284 | 0,075 | 0,031 | 0,092 |
| V96 "My salary and benefits package is structured efficiently" | 0,119 | 0,236 | 0,163 | 0,223 | 0,179 | **0,308** | 0,059 | 0,223 | 0,262 | 0,059 | -0,190 | 0,030 | 0,276 |
| V95 "The performance bonus effectively motivates superior performance" | 0,083 | 0,180 | 0,173 | 0,184 | 0,225 | **0,302** | 0,091 | 0,123 | 0,264 | 0,087 | -0,109 | 0,031 | 0,173 |
| V33 "My work methods are relevant and effective" | 0,237 | 0,147 | 0,147 | 0,221 | 0,091 | 0,054 | **0,573** | 0,113 | 0,038 | 0,064 | -0,046 | 0,056 | -0,011 |

| ROTATED COMPONENT MATRIX | Component | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| V31 "The resources I use to carry out my work are sufficient" | 0,188 | 0,096 | 0,146 | 0,148 | 0,064 | 0,192 | **0,567** | 0,127 | 0,075 | -0,027 | 0,046 | 0,015 | 0,129 |
| V30 "The technology I use to carry out my work is sufficient" | 0,143 | 0,069 | 0,122 | 0,157 | 0,058 | 0,210 | **0,564** | 0,126 | 0,047 | -0,014 | 0,061 | 0,041 | 0,070 |
| V41 "I know what I must do to do my job well" | 0,160 | 0,051 | 0,134 | 0,209 | 0,133 | 0,071 | **0,544** | 0,007 | 0,013 | 0,189 | 0,058 | 0,044 | -0,096 |
| V38 "My department knows exactly what tasks have to be carried out" | 0,272 | 0,093 | 0,134 | 0,223 | 0,114 | 0,040 | **0,541** | 0,051 | 0,044 | 0,208 | 0,063 | 0,068 | -0,044 |
| V37 "I know how the job I do fits into total picture of Organisation A" | 0,196 | 0,111 | 0,098 | 0,225 | 0,155 | 0,054 | **0,534** | 0,079 | 0,052 | 0,130 | 0,035 | 0,075 | -0,129 |
| V34 "My department attempts to constantly make use of new, improved work methods" | 0,273 | 0,126 | 0,095 | 0,188 | 0,078 | 0,096 | **0,509** | 0,091 | 0,073 | 0,169 | 0,099 | 0,018 | 0,106 |
| V27 "I clearly understand my job goals" | 0,178 | 0,084 | 0,098 | 0,263 | 0,131 | 0,063 | **0,508** | 0,024 | 0,046 | 0,079 | 0,042 | 0,098 | -0,065 |
| V29 "I go the extra mile to meet business needs" | 0,168 | 0,108 | 0,115 | 0,246 | 0,109 | 0,007 | **0,490** | 0,081 | 0,011 | 0,082 | -0,026 | 0,087 | -0,242 |
| V32 "I am satisfied with the quality of equipment which I use in my work" | 0,169 | 0,098 | 0,079 | 0,147 | 0,073 | 0,183 | **0,485** | 0,229 | 0,075 | 0,018 | 0,071 | -0,005 | 0,228 |
| V28 "I personally agree with the organisation's mission and goals" | 0,199 | 0,165 | 0,149 | 0,297 | 0,192 | 0,087 | **0,468** | 0,032 | 0,056 | 0,017 | 0,002 | 0,047 | -0,017 |
| V26 "I understand the goals and objectives of Division or Department" | 0,242 | 0,134 | 0,128 | 0,304 | 0,170 | 0,033 | **0,467** | 0,043 | 0,050 | 0,041 | 0,005 | 0,081 | -0,044 |
| V25 "I understand the goals and objectives of Organisation A as a whole" | 0,173 | 0,153 | 0,128 | 0,299 | 0,199 | 0,119 | **0,463** | 0,040 | 0,071 | -0,021 | 0,057 | 0,046 | -0,057 |
| V39 "My job provides sufficient challange" | 0,272 | 0,103 | 0,104 | 0,254 | 0,081 | 0,167 | **0,461** | 0,113 | 0,086 | 0,099 | 0,073 | 0,043 | 0,050 |
| V36 "The physical (work environment) set-up at work allows me to achieve my objectives" | 0,275 | 0,140 | 0,116 | 0,205 | 0,081 | 0,173 | **0,459** | 0,148 | 0,099 | 0,118 | 0,108 | -0,020 | 0,202 |
| V35 "My department is constantly trying to improve working conditions" | 0,282 | 0,120 | 0,080 | 0,155 | 0,087 | 0,112 | **0,430** | 0,097 | 0,124 | 0,216 | 0,119 | -0,009 | 0,159 |
| V40 "I am allowed to do my job the way I think it should be done" | 0,281 | 0,122 | 0,085 | 0,161 | 0,080 | 0,083 | **0,369** | 0,071 | 0,067 | 0,171 | 0,039 | 0,009 | 0,229 |
| V140 "The canteen facilities are equitable for all" | 0,144 | 0,156 | 0,142 | 0,074 | 0,187 | 0,077 | 0,115 | **0,650** | 0,057 | 0,065 | 0,111 | 0,069 | 0,080 |
| V141 "The canteen is always in a clean and hygenic state" | 0,139 | 0,104 | 0,162 | 0,080 | 0,128 | 0,079 | 0,060 | **0,628** | 0,062 | 0,155 | 0,172 | 0,055 | 0,070 |
| V139 "Rest and recreation areas are adequate" | 0,168 | 0,187 | 0,200 | 0,106 | 0,181 | 0,138 | 0,147 | **0,594** | 0,093 | 0,021 | 0,058 | 0,030 | 0,070 |
| V142 "The change rooms or toilets are always in a clean and hygenic state" | 0,140 | 0,078 | 0,153 | 0,060 | 0,100 | 0,087 | 0,055 | **0,584** | 0,056 | 0,164 | 0,194 | 0,034 | 0,034 |
| V135 "My refreshment needs (tea,coffe,water) are adequately catered for" | 0,154 | 0,171 | 0,178 | 0,059 | 0,202 | 0,069 | 0,119 | **0,565** | 0,059 | 0,133 | 0,114 | 0,048 | 0,000 |
| V138 "I have adequate physical working space" | 0,180 | 0,168 | 0,210 | 0,118 | 0,190 | 0,087 | 0,202 | **0,533** | 0,076 | 0,127 | 0,063 | 0,041 | -0,009 |
| V134 "The store or department I work in is kept clean and neat" | 0,138 | 0,092 | 0,150 | 0,041 | 0,225 | 0,101 | 0,175 | **0,519** | 0,097 | 0,261 | 0,198 | 0,040 | -0,036 |
| V136 "I am comfortable working in this store or department" | 0,244 | 0,167 | 0,193 | 0,117 | 0,222 | 0,082 | 0,174 | **0,489** | 0,101 | 0,220 | 0,087 | 0,058 | 0,069 |
| V137 "I am comfortable receiving customers or visitors in my work area" | 0,148 | 0,120 | 0,200 | 0,101 | 0,244 | 0,104 | 0,175 | **0,478** | 0,109 | 0,168 | 0,082 | 0,063 | -0,017 |
| V105 "I have been trained or prepared in the performance management process" | 0,235 | 0,166 | 0,123 | 0,100 | 0,142 | 0,212 | 0,078 | 0,075 | **0,621** | 0,057 | 0,092 | 0,057 | 0,026 |
| V100 "I have a performance agreement" | 0,180 | 0,157 | 0,147 | 0,114 | 0,206 | 0,196 | 0,097 | 0,060 | **0,618** | 0,062 | 0,063 | 0,044 | -0,083 |

| ROTATED COMPONENT MATRIX | Component | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| V106 "We use the performance management process to continually improve our department" | 0,232 | 0,136 | 0,142 | 0,090 | 0,229 | 0,211 | 0,072 | 0,067 | **0,605** | 0,119 | 0,157 | 0,061 | 0,046 |
| V99 "I have read the performance management policy and understand the process" | 0,172 | 0,154 | 0,169 | 0,094 | 0,207 | 0,175 | 0,120 | 0,103 | **0,602** | 0,048 | 0,052 | 0,024 | -0,075 |
| V107 "I understand how my performance on my job is evaluated" | 0,205 | 0,156 | 0,168 | 0,131 | 0,255 | 0,162 | 0,142 | 0,066 | **0,580** | 0,070 | 0,087 | 0,072 | -0,001 |
| V103 "My manager and I sit down regularly to review my overall performance" | 0,362 | 0,116 | 0,101 | 0,118 | 0,129 | 0,148 | 0,042 | 0,086 | **0,570** | 0,139 | 0,163 | 0,050 | 0,135 |
| V101 "My manager sets clear, fair and relevant performance expectations" | 0,432 | 0,165 | 0,115 | 0,123 | 0,203 | 0,118 | 0,079 | 0,104 | **0,553** | 0,137 | 0,087 | 0,066 | 0,013 |
| V102 "My manager effectively designs opportunities for me to attain my career objectives" | 0,413 | 0,158 | 0,118 | 0,127 | 0,158 | 0,200 | 0,062 | 0,092 | **0,548** | 0,089 | 0,135 | 0,053 | 0,093 |
| V108 "I think my performance on my job is evaluated fairly" | 0,256 | 0,189 | 0,146 | 0,123 | 0,212 | 0,163 | 0,082 | 0,094 | **0,534** | 0,120 | 0,065 | 0,046 | 0,168 |
| V104 "My manager is an effective coach, enabling me to improve my performance" | 0,463 | 0,136 | 0,089 | 0,116 | 0,158 | 0,112 | 0,046 | 0,089 | **0,530** | 0,155 | 0,149 | 0,077 | 0,120 |
| V98 "My manager demonstrated strong personal commitment to the performance management process" | 0,422 | 0,164 | 0,150 | 0,143 | 0,219 | 0,126 | 0,061 | 0,113 | **0,479** | 0,128 | 0,049 | 0,044 | 0,017 |
| V86 "Within my department we motivate and support each other" | 0,235 | 0,076 | 0,078 | 0,102 | 0,146 | 0,131 | 0,136 | 0,124 | 0,147 | **0,689** | 0,081 | 0,044 | -0,009 |
| V89 "Working together with the members of my department, everyday is something to look forward to" | 0,221 | 0,051 | 0,094 | 0,096 | 0,177 | 0,133 | 0,123 | 0,130 | 0,159 | **0,664** | 0,116 | 0,019 | 0,045 |
| V79 "In my department, we work together as a team" | 0,312 | 0,079 | 0,055 | 0,098 | 0,105 | 0,102 | 0,140 | 0,155 | 0,086 | **0,663** | 0,084 | 0,049 | 0,025 |
| V84 "Employees in my department trust one another" | 0,242 | 0,090 | 0,108 | 0,101 | 0,114 | 0,139 | 0,073 | 0,162 | 0,040 | **0,650** | 0,040 | 0,032 | 0,060 |
| V81 "The people I work with are pleasant" | 0,262 | 0,147 | 0,102 | 0,125 | 0,132 | 0,095 | 0,127 | 0,155 | 0,041 | **0,596** | -0,017 | 0,049 | -0,038 |
| V80 "There is good co-operation between people in my department and the people in other departments at Organisation A" | 0,208 | 0,093 | 0,109 | 0,097 | 0,146 | 0,185 | 0,161 | 0,135 | 0,064 | **0,580** | 0,086 | 0,017 | 0,049 |
| V85 "We work independently but cooperate when necessary between divisions" | 0,252 | 0,155 | 0,160 | 0,151 | 0,220 | 0,186 | 0,182 | 0,157 | 0,064 | **0,443** | -0,073 | 0,039 | -0,093 |
| V88 "My immediate supervisor or manager trusts me" | 0,413 | 0,117 | 0,092 | 0,121 | 0,252 | 0,066 | 0,128 | 0,102 | 0,191 | **0,423** | -0,027 | 0,062 | -0,005 |
| V223 "The following source supplies me with sufficient information about Organisation A and my work environment Early morning training sessions (EMT's)" | 0,189 | 0,283 | 0,108 | 0,059 | 0,105 | 0,162 | 0,059 | 0,228 | 0,162 | 0,091 | **0,538** | 0,056 | -0,049 |
| V219 "The following source supplies me with sufficient information about Organisation A and my work environment Staff meetings" | 0,223 | 0,323 | 0,128 | 0,103 | 0,107 | 0,091 | 0,057 | 0,272 | 0,116 | 0,121 | **0,508** | 0,080 | -0,009 |
| V215 "The following source supplies me with sufficient information about Organisation A and my work environment booklets or pamphlets" | 0,097 | 0,367 | 0,252 | 0,100 | 0,142 | 0,172 | 0,133 | 0,151 | 0,084 | 0,031 | **0,469** | 0,080 | -0,067 |
| V216 "The following source supplies me with sufficient information about Organisation A and my work environment Information boards (notice boards)" | 0,139 | 0,379 | 0,247 | 0,107 | 0,109 | 0,154 | 0,120 | 0,146 | 0,074 | 0,045 | **0,464** | 0,128 | -0,047 |

| ROTATED COMPONENT MATRIX | Component | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| V212 "My department receives information about what is happening in other departments" | 0,176 | 0,349 | 0,198 | 0,081 | 0,135 | 0,153 | 0,126 | 0,178 | 0,141 | 0,097 | **0,443** | 0,079 | 0,095 |
| V220 "The following source supplies me with sufficient information about Organisation A and my work environment Internal memos (letters)" | 0,260 | 0,373 | 0,195 | 0,124 | 0,121 | 0,109 | 0,052 | 0,222 | 0,093 | 0,058 | **0,435** | 0,056 | -0,056 |
| V208 "I receive enough information about the Store or department" | 0,270 | 0,373 | 0,176 | 0,104 | 0,130 | 0,076 | 0,186 | 0,162 | 0,133 | 0,090 | **0,422** | 0,080 | 0,089 |
| V222 "The following source supplies me with sufficient information about Organisation A and my work environment Ross communication videos" | 0,175 | 0,347 | 0,153 | 0,093 | 0,110 | 0,103 | 0,073 | 0,243 | 0,128 | 0,003 | **0,402** | 0,015 | -0,086 |
| V214 "The following source supplies me with sufficient information about Organisation A and my work environment Organisation A Vibe" | 0,098 | 0,386 | 0,278 | 0,140 | 0,159 | 0,124 | 0,124 | 0,121 | 0,038 | 0,057 | **0,395** | 0,050 | -0,131 |
| V218 "The following source supplies me with sufficient information about Organisation A and my work environment Human Resources" | 0,219 | 0,360 | 0,221 | 0,134 | 0,148 | 0,212 | 0,016 | 0,119 | 0,091 | 0,063 | **0,389** | 0,043 | 0,036 |
| V207 "I receive information I need to do my job properly" | 0,240 | 0,321 | 0,192 | 0,082 | 0,132 | 0,112 | 0,178 | 0,103 | 0,130 | 0,124 | **0,371** | 0,092 | 0,129 |
| V181 "I think there is no unfair discrimination regarding promotions towards Indians" | 0,155 | 0,380 | 0,265 | 0,143 | 0,134 | 0,078 | 0,063 | 0,094 | 0,068 | 0,015 | 0,051 | **0,647** | 0,019 |
| V182 "I think there is no unfair discrimination regarding promotions towards Coloureds" | 0,150 | 0,368 | 0,283 | 0,152 | 0,141 | 0,095 | 0,071 | 0,088 | 0,071 | 0,021 | 0,057 | **0,641** | 0,036 |
| V184 "I think there is no unfair discrimination regarding promotions towards Women" | 0,131 | 0,353 | 0,313 | 0,130 | 0,121 | 0,091 | 0,126 | 0,084 | 0,055 | 0,076 | 0,101 | **0,622** | -0,018 |
| V185 "I think there is no unfair discrimination regarding promotions towards People with disabilities" | 0,130 | 0,351 | 0,304 | 0,133 | 0,114 | 0,083 | 0,106 | 0,082 | 0,063 | 0,063 | 0,056 | **0,593** | -0,020 |
| V186 " I think there is no unfair discrimination regarding promotions towards Specific age groups" | 0,120 | 0,347 | 0,307 | 0,159 | 0,122 | 0,111 | 0,076 | 0,046 | 0,066 | 0,065 | 0,091 | **0,564** | 0,028 |
| V180 "I think there is no unfair discrimination regarding promotions towards blacks" | 0,170 | 0,396 | 0,282 | 0,158 | 0,155 | 0,086 | 0,043 | 0,083 | 0,069 | -0,030 | -0,017 | **0,543** | 0,111 |
| V183 "I think there is no unfair discrimination regarding promotions towards Whites" | 0,033 | 0,214 | 0,299 | 0,112 | 0,069 | 0,068 | 0,125 | -0,005 | 0,061 | 0,127 | 0,146 | **0,527** | -0,093 |
| V93 "The salary I am paid for my job is fair compared to what I know of other jobs at Organisation A" | 0,061 | 0,208 | 0,156 | 0,212 | 0,143 | 0,311 | 0,060 | 0,204 | 0,282 | 0,061 | -0,246 | -0,009 | **0,373** |
| V94 "My salary matches the responsibilities I have" | 0,094 | 0,211 | 0,135 | 0,198 | 0,112 | 0,305 | 0,045 | 0,216 | 0,305 | 0,049 | -0,260 | -0,020 | **0,366** |
| V97 "I get enough recognition for what I do" | 0,224 | 0,190 | 0,146 | 0,160 | 0,153 | 0,291 | 0,073 | 0,151 | 0,331 | 0,157 | -0,073 | 0,008 | **0,358** |

Extraction Method: Principal Component Analysis.  Rotation Method: Varimax with Kaiser Normalization. Rotation converged in 18 iterations.

**APPENDIX B: Output for the Regression model**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | 95.0% Confidence Interval for B | | Correlations | | | Collinearity Statistics | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | | Lower Bound | Upper Bound | Zero-order | Partial | Part | Tolerance | VIF |
| 1 | (Constant) | 1,462 | 0,026 | | 55,262 | 0,000 | 1,410 | 1,514 | | | | | |
| | LeadAuth | 0,352 | 0,020 | 0,504 | 17,485 | 0,000 | 0,312 | 0,391 | 0,740 | 0,254 | 0,175 | 0,121 | 8,280 |
| | LeadDemo | 0,123 | 0,018 | 0,188 | 6,957 | 0,000 | 0,088 | 0,157 | 0,715 | 0,104 | 0,070 | 0,137 | 7,300 |
| | LeadPace2 | 0,055 | 0,012 | 0,078 | 4,653 | 0,000 | 0,032 | 0,078 | 0,623 | 0,070 | 0,047 | 0,360 | 2,775 |

**Model Summary**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | R Square Change | F Change | df1 | df2 | Sig. F Change |
| 1 | 0,745 | 0,556 | 0,555 | 0,41248 | 0,556 | 1848,076 | 3 | 4432 | 0,000 |

**ANOVA**

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 943,285 | 3 | 314,428 | 1848,076 | 0,000 |
| | Residual | 754,052 | 4432 | 0,170 | | |
| | Total | 1697,337 | 4435 | | | |

**APPENDIX C: Correlations and Scatterplot for the Regression model**

**Correlations**

| | | CLIMATE | Authoritative | Democratic | Pacesetting |
|---|---|---|---|---|---|
| Pearson Correlation | CLIMATE | 1,000 | 0,740 | 0,715 | 0,623 |
| | Authoritative | 0,740 | 1,000 | 0,928 | 0,797 |
| | Democratic | 0,715 | 0,928 | 1,000 | 0,765 |
| | Pacesetting | 0,623 | 0,797 | 0,765 | 1,000 |
| Sig. (1-tailed) | CLIMATE | , | 0,000 | 0,000 | 0,000 |
| | Authoritative | 0,000 | , | 0,000 | 0,000 |
| | Democratic | 0,000 | 0,000 | , | 0,000 |
| | Pacesetting | 0,000 | 0,000 | 0,000 | , |
| N | CLIMATE | 4537 | 4522 | 4516 | 4438 |
| | Authoritative | 4522 | 4522 | 4510 | 4436 |
| | Democratic | 4516 | 4510 | 4516 | 4436 |
| | Pacesetting | 4438 | 4436 | 4436 | 4438 |



Scatterplot
Dependent Variable: CLIMATE2
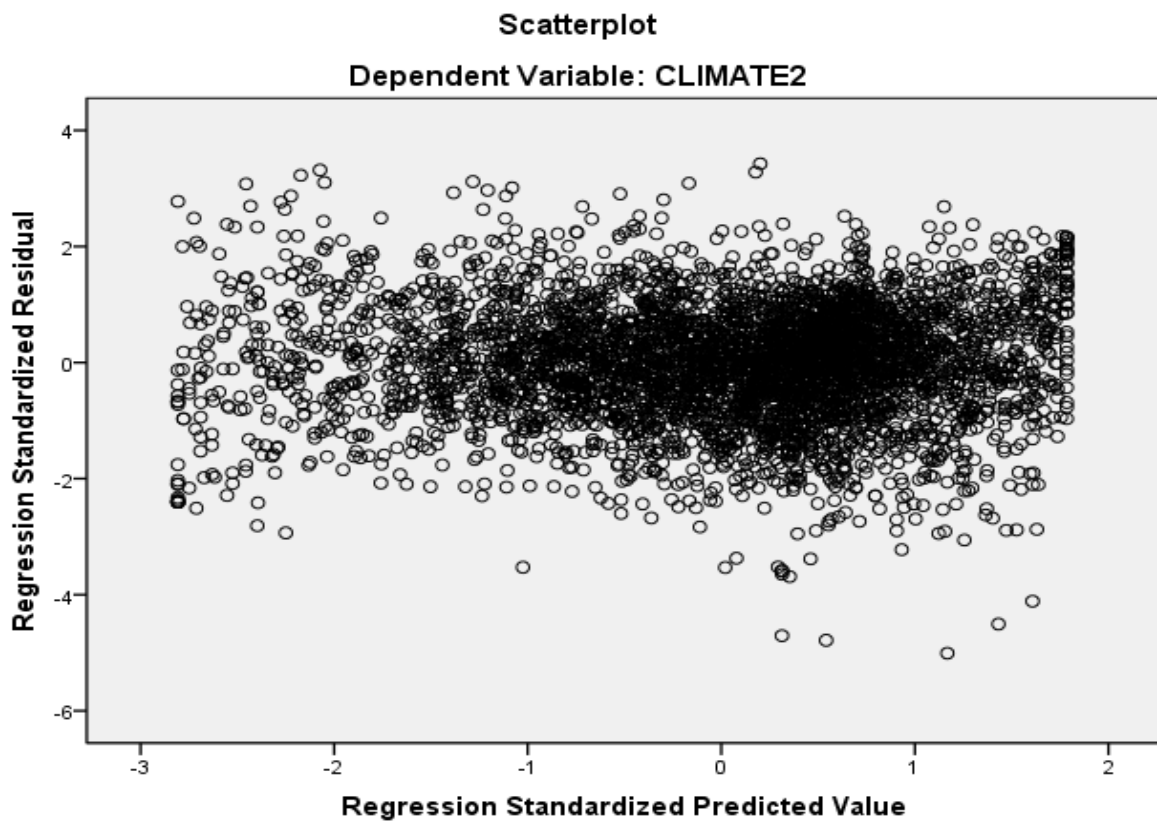
**APPENDIX D: Normal Probability Plot for the Regression model**



Normal P-P Plot of Regression Standardized Residual

Dependent Variable: CLIMATE2