1. INTRODUCTION

In this chapter, the background to and motivation for this research, as well as the central problems to be addressed, will be presented. This will be followed by the objectives – both theoretical and empirical – of the research, a discussion of the paradigm perspective, and the research design and methodology. In conclusion, an outline of chapters for this research study and a chapter summary will be given.

1.1 BACKGROUND TO AND MOTIVATION FOR THE RESEARCH

With recent global developments and the emergence of the ‘new economy’, the phenomenon of trust has come under increasing threat, also bringing the employer-employee relationship under threat. Companies need to be able to gauge the levels of trust inherent in their organisations in order to deal effectively with the effects of mistrust or poor trusting relationships.


… global trends in the nineties have seen a sharp upsurge in drastic change efforts including re-engineering, merging of companies, so-called ‘outsourcing’ and ‘downsizing’ which suddenly affected companies which, for years, had been havens for people with a need for job security. Guarantees of lifetime employment, regular promotions and salary increases to those pledging steadfast allegiance to the firm have long gone. In South Africa, organisations apparently immune to this type of change under the old order have recently had their foundations shaken by drastic re-engineering programs. Many government and semi-government departments, city councils and business organisations have undergone drastic restructuring. Thousands of employees on all organisational levels, have been offered early retirement or retrenchment packages, resulting in a loss of enthusiasm, commitment, loyalty and trust with stressful manifestations and even feelings of guilt amongst the so-called
‘survivors’. Under these conditions, employers can hardly promise employees job security, advancement, recognition and a stable work environment.

Trust is an essential and integral ingredient in most business ventures and involves trust between companies as well as within companies. Martins (1998) sees trust as being at the core of all business activity, involving groups of people who are dependent on each other implying some relationship of trust. Shaw (1997) posits that trust is founded on

- achieving results
- acting with integrity and
- demonstrating concern.

Martins (1998) believes that this scenario challenges human resource professionals to consider new ways of gaining loyalty and commitment from employees. He further warns of the misconception among management that distrust only results from dissatisfaction with remuneration, conditions of service or working conditions. According to Martins (1998) a better understanding of the building blocks of organisational trust should help employers and employees to create avenues for reconciliation and, therefore, trust among the most important stakeholders of any company. A further benefit is that South African organisations can gain an understanding of the nature of changing employee values and customise their managerial strategies according to these needs.

The theoretical objective of the research is to explore how trust is developed, sustained and restored (if violated) in professional work relationships. Some of the ways in which trust is violated in professional relationships will be identified and the process necessary to restore trust will be described. Furthermore, the need for trusting relationships within teams will be indicated and leadership/management's impact on trust will be explored.
1.2 PROBLEM STATEMENT

The fundamental problem that is being dealt with in this research is “How can we build trust in our team?” Most of us have at one time or another been a member of a team which fails to identify or achieve its objectives. Team relationships are sometimes lifeless, defensive, ineffective, unsatisfying and confusing. This is a costly defect in any organisation, as optimisation for accomplishment of the aim of a system requires co-operation between the components of the system (Whitney & Deming, 1994).

Safizadeh (1991) states that the introduction of teamworking signals a move towards collective effort, joint goal sharing and thus increased interdependence. Furthermore George and Jones (1998) suggest that trust is important to teamworking as it promotes the co-operation necessary for successful teams. Hay (2002) concurs that trust is important to relations between teams and that the presence of trust between teams may promote a co-operative orientation. There are also other scholars (e.g. Axelrod, 1984; Gambetta, 1988; Good, 1988; Mayer, Davis & Schoorman, 1995; McAllister, 1995; Whitney & Deming, 1994) who have widely acknowledged that trust can lead to co-operative behaviour among individuals, groups and organisations. Fukuyama (1995) argues further that high trust among citizens accounts for the superior performance of all institutions in a society, including firms. Zucker (1986:56) follows with the statement that “trust is vital for the maintenance of cooperation in society and necessary as grounds for even the most routine, everyday interaction.” Lewis and Wiegert (1985:968) agree, adding that “trust is indispensable in social relationships.”

The general picture is this: not only is trust the key issue for business, but also business is trusted less than ever before. It is thus important for anyone involved in business to understand what trust is and how to build it (Reynolds, 1997). Conversely, business leadership should also develop an acute awareness of the roots of mistrust in organisations and implement measures to eliminate and/or mitigate its impact on the business. What mistrust indicates is an important characteristic of the psychology of the relationship between the manager and employee (Whitney & Deming, 1994).
Some of the roots of mistrust – which offer compelling reasons for organisations to attend to the decline in trust – have been identified as follows:

- **Misalignment of measurements of rewards.** These misalignments create intolerable waste and complexity. People are set in opposition against one another and against the firm, detracting from the organisation’s real purpose of getting and keeping profitable customers (Whitney & Deming, 1994).

- **Incompetence or the presumption of incompetence, whether it is bosses, peers or subordinates.** The cost is enormous considering the layers of supervision and the subsequent sub-optimisation because of a demotivated workforce that just follow orders under the watchful eyes of bosses (Whitney & Deming, 1994). Rossouw and Bews (2002) concur with this notion that the cost of distrust to a business is mostly in the form of the control mechanisms that have to be introduced. They further state that with regards to external stakeholders, distrust will also lead to disloyalty to the organisation. They firmly believe that an interest in trust makes business sense.

- **Imperfect understanding of systems,** causing activity that diverts effort from the organisational goals (Whitney & Deming, 1994).

- **Lack of integrity.** If integrity failure is overlooked anywhere, trust will be tarnished everywhere (Whitney & Deming, 1994).

- **Untrustworthy information,** that is information that is biased, late, useless or wrong. It produces defence mechanisms, which add to the cycle of mistrust and its inevitable cost to the business (Whitney & Deming, 1994).

Butler (1999) believes that information sharing can be perceived as risky in that one’s opponent could use the information to take advantage of one’s vulnerability in a particular situation.

Other compelling reasons for organisations to attend to decline in trust include:

- **Participation and teamwork**
  Participative management - which hinges upon interaction and co-operation - is increasingly becoming the norm. It can hardly work without sufficient trust amongst those participating in managing the company (Rossouw & Bews, 2002).
Lawler (1992) concurs with the notion of the increasing importance of trust as he cites continuing changes in the workplace in the direction of more participative management styles and the implementation of work teams.

- **The flow of knowledge**
  The organisation’s capability for knowledge management is becoming a key determinant of its success. Business should thus succeed in gaining access to its employees’ knowledge and ensure that information flows to where it can be optimally utilised. Once employees feel that they can trust others with their knowledge and expertise they will be willing to share them with others in the organisation. Trust thus facilitates the flow of information that is vital to the survival and success of organisations (Rossouw & Bews, 2002).

- **Loyalty**
  As alluded to earlier trust has the potential to promote co-operation and loyalty within organisations. In winning the trust of their subordinates, managers/leaders can expect them to be loyal to managerial goals. Trust will thus inspire loyalty within the business, leading to self-sacrificing behaviour in order to advance the interests of the organisation (Rossouw & Bews, 2002).

- **Alliances**
  With the rise of globalisation, highly competitive world markets are emerging that are forcing firms to form alliances. These kinds of alliances and inter-organisational cooperation presuppose relatively stable trust relationships (Rossouw & Bews, 2002).

  Hagedoorn (1993) sees the potential benefits of alliances as wide-ranging, including but not limited to economies of scale, faster new market entry, first mover advantage, cost and risk reduction, complementary resource utilisation and organisational learning. However the greatest difficulty, according to Das and Teng (2001), lies in the management of the dynamics of the trust which occurs between firms.

  In interfirm relationships, researchers (e.g., Dore, 1983; Noordewier, John & Nevin, 1990) credit trust with lowering transaction costs in more uncertain environments thereby providing firms with a source of competitive advantage (Barney & Hansen, 1994).
According to Das and Teng (2001) trust also facilitates long-term co-operative relationships at the interfirm level (see Ganesan, 1994; Ring & Van de Ven, 1992; Sydow, 1998), and is an important component in the success of strategic alliances (see Browning, Beyer & Shetler, 1995; Gulati, 1995). They further state that trust is effective in lessening concerns about opportunistic behaviour, better integrating the partners and reducing formal contracting in alliances.

The central questions that arise are:

- What is trust?
- Why is trust such an important component of teamwork?
- How can we develop trust?
- What are the consequences if trust is violated?
- How can we restore trust?
- What is the impact of management/leadership on trust in employees?

1.3 OBJECTIVES OF THE STUDY

1.3.1 General objective

Against the background of the aforementioned scenario (in section 1.2), the general objective of this research is to do a comparative study of the trust audit results – obtained during 2000 – of three business units of a South African Company.

1.3.2 Theoretical objectives

- To explore how trust is developed, sustained and restored (if violated) in professional work relationships. Some of the ways in which trust is violated in professional relationships will be identified and the process needed to restore trust will be described.
- To indicate the need for trusting relationships within teams.
- To explore the impact of leadership/management on trust.

1.3.3 Empirical objectives

The empirical objective of the research is to do comparative analyses with a view to determining whether there is any significant differences between the three business
units regarding the “Big Five” personality dimensions and the “Managerial Practices” dimensions.

The comparative analyses will, inter alia, focus on the following:

- Comparing the total population with regards to the “Big Five” personality dimensions; this entails:
  - comparisons between the qualification groups and
  - comparisons between the main functional groups.

- Comparing the total population with regards to “Managerial Practices”; this entails
  - comparisons between the qualification groups
  - comparisons between the functional groups and
  - comparisons between the major grade groups.

- Comparing the three business units with regards to the “Big Five” personality dimensions and “Managerial practices”.

1.4 RESEARCH MODEL

According to Mouton and Marais (1992:7), “social sciences research is a collaborative human activity in which social reality is studied objectively with the aim of gaining a valid understanding of it.”

Dimensions of research in the social sciences that are emphasised in this definition are sociological, ontological, teleological, epistemological and methodological (Mouton & Marais, 1992).

It must be emphasised that these five dimensions of research are five aspects of one and the same process.
Research can be discussed from these various perspectives, as follows:

- From the sociological perspective, one is interested in highlighting the social nature of research as a typical human activity – as praxis.
- The ontological dimension emphasizes that research always has an objective – be it empirical or non-empirical. Therefore this dimension investigates the reality in research in the social sciences.
- When one looks at research within the teleological perspective, one wants to stress that research is goal-driven and purposive. Research is directed specifically towards human goals of understanding and gaining insight and explanation.
- The epistemological dimension focuses on the fact that this goal of understanding or gaining insight should be further clarified in terms of what would be regarded as “proper” or “good” understanding.
- Finally, the methodological dimension of research refers to the ways in which these various ideals may be attained (Mouton & Marais, 1992: 8).

From the aforementioned points of view, this research will be based on the epistemological perspective. According to Mouton and Marais (1992), it is accepted that the epistemic ideal ought to be the generation of research findings which approximate, as closely as possible, the true state of affairs. At this level, we are more inclined to talk about the validity, demonstrability, reliability or replicability of our research findings.

In order to distinguish between ‘good’ and ‘poor’ research in the social sciences, models are used as an approach for interpreting the process of research (Mouton & Marais, 1992). The research will be based on an integrated model for social sciences research as proposed by Mouton and Marais (1992). This model is depicted in Figure 1. The aim of the model is to systematise the five dimensions of social research – alluded to earlier – within the framework of the research process.
Figure 1. An integrated model of social sciences research
(Source: Marais & Mouton, 1992: 22)
The model can be described as a systems theoretical model. In this model the authors distinguish between three subsystems which interact with each other and with the research domain as defined in a specific discipline. These are:

- The intellectual climate of a specific discipline
- The market of intellectual resources within each discipline
- The research process itself. (Mouton & Marais, 1992)

The research domain that needs investigation in this particular research project is the realities that trust imposes on organisational effectiveness. This indicates that this research project is goal-driven and aims at providing understanding about trust in a working situation and how this situation can be managed to improve the quality of human life.

1.5 THE PARADIGM PERSPECTIVE

The research is directed by a specific paradigm perspective, including the specific statements and the market of intellectual resources (Mouton & Marais, 1992). This ascertains boundaries and points of departure for the research.

1.5.1 The intellectual climate

According to Mouton and Marais (1992:21) intellectual climate refers to the “set of beliefs, values and assumptions which, because of their origin can usually be traced to non-scientific contexts, and are not directly related to the theoretical goals of the practice of scientific research.” Furthermore these beliefs tend to display the qualities of postulates of assumptions.

The paradigm of psychology that will be focused on in the research will be cognitive psychology. According to Leahey (1994), in cognitive psychology the emphasis is on factors such as thinking, intelligence, memory, learning, expectancy and perception. In terms of a disciplinary relationship, the focus of this research is primarily on industrial psychology. The applicable sub-discipline in industrial psychology that will be focused on is organisational psychology. According to Bergh and Theron (1999:17), “the basic aims of organisational psychology are fostering worker adjustment, satisfaction and productivity, as well as organisational efficiency.”
The literature is presented from the General Systems theoretical framework. The basic assumptions are that systems exist within systems; and that the functions of a system are dependent upon its structure.

Organisations are viewed as systems in active exchange with their surrounding environments. Individuals, groups and organisations may be conceptualised as open systems. Individuals provide the primary internal unit in-groups, and groups are the major units in organisations (Dunnette, 1983).

According to Bergh and Theron (1999) several authors (e.g., Cummings, 1980; McCaughan & Palmer, 1994) state that the systems perspective considers all the possible interactions between persons and groups, their relationship and relatedness to other contexts within and without the organisation. They further state that behaviour must be interpreted in terms of its functions or meanings where, when and how it happens in a certain environment or situation.

According to Cummings (1980) as cited in Bergh and Theron (1999) an organisation functioning as a whole or as a unit, is formed to achieve objectives that cannot be achieved by individuals on their own. Thus, individuals join an organisation to achieve objectives and to satisfy needs in a work context that would be impossible or difficult to accomplish on their own. The type of interaction between individual and organisation finally contributes to the objectives for organisation and individual success. Bergh and Theron (1999) believe that individuals, as self-systems in all their domains of behaviour, can be best understood by first examining their functioning in the context of the wider and hierarchical systems that surround them.

Thematically, individuals are the first basic part of the system and form the personality structure they bring to the organisation. Elementary to an individual's personality are motives and attitudes which condition the range of expectancies they hope to satisfy by participating in the system (organisation). The interrelated patterns of jobs make up the structure of the organisation. There is a fundamental conflict resulting from the demands made by the system and the structure of the mature, normal personality. In any event, the individual has expectancies of the job he or she
is to perform and, conversely, the job makes demands on, or has expectancies of the performance of the individual. As there might be incongruencies resulting from the interaction of organisations in order to be effective, their subparts or components must be consistently structured and managed, that is, they must approach a state of congruence (Brammer & Shostrom, 1971).

Concepts relevant to this research which will be studied include: metatheoretical statements on the worker, the working environment, betrayal, trust, trust relationship, conscientiousness, agreeableness, emotional stability, resourcefulness, extroversion, credibility, team management, information sharing, work support, mean, dimension, variable, frequencies and valid-N.

The empirical study is presented from the phenomenological approach. Basic to this philosophy is assuming the responsibility of choice and acting intentionally on the world. This approach emphasises that behaviour is holistic and can be best understood from the individual’s frame of reference. The approach holds an optimistic view of people, and focuses on the dignity and worth of the individual (Brammer & Shostrom, 1971).

1.5.2 The market of intellectual resources

According to Mouton and Marais (1992:21), “the market of intellectual resources refers to the collection of beliefs which has a direct bearing upon the epistemic status of scientific statements, i.e. to their status as knowledge claims. The two major types are: theoretical beliefs about the nature and structure of phenomena, and methodological beliefs concerning the nature and structure of the research process.”

Theoretical beliefs are those beliefs of which testable statements about social phenomena are made and may be regarded as assertions about the what (descriptive) and why (interpretative) aspects of human behaviour (Mouton & Marais, 1992).

*Theoretical models and theories*  
Models serve as a classification and also suggest relationships between data.
Because of the nature and the objective of this research, the following models and theories are relevant:

- An Integrated Model of Interpersonal Trust (Mayer, Davis & Schoorman, 1995: 17)
- An Integrated Model of Intra-organisational Trust (Bews & Martins, 2002: 16)
- Dynamic Model of Trust Violation (Lewicki & Bunker, 1996: 126)

The aforementioned models will be utilised in the elaboration of the topic of trust. The study of interpersonal trust in organisations has been problematic for various reasons. To address these issues, the models start out with a proposal for the development of dyadic trust in organisations (Mayer et al., 1995). They then continue to describe different levels of trust and how each develops, building on the other (Lewicki & Bunker, 1996). Building on the work of various authors (Kramer, Meyerson & Weick, 1996; Lewicki & Bunker, 1996; Martins, Watkins, Von der Ohe & De Beer, 1997; Mayer et al., 1995; Mishra, 1996), Bews (1999) proposes an integrated model for intra-organisational trust. He proposes that trust is a dynamic phenomenon that unfolds over two stages, both of which depend on the interplay of various factors. The first of these stages is directional, depends on certain pre-trust conditions, and is usually short in duration. The second is variable. It depends on perceptions of the facilitators of trustworthiness, and continues throughout the duration of the relationship (Bews & Martins, 2002).

Having looked at the development of trust in various settings, the models then explore how trust is violated (Lewicki & Bunker, 1996). This model is seen from the point of view of the person whose trust is being violated (the “victim”). It begins with a relationship in which mutual trust has been established and where one of the parties has violated this trust relationship. It also presents us with a solution as to how to restore the relationship.
1.6 RESEARCH DESIGN

Mouton and Marais (1992) refer to Selltiz, Jahoda, Deutsch and Cook (1965:50) who define research design as “the arrangement of conditions for collecting and analysing data in a manner that aims to combine relevance to the research purpose with economy and procedure.” According to Mouton and Marais (1992) the aim of the research design is to plan and structure the research in such a way that the eventual validity of the research findings is maximised. Irrespective of how structured or unstructured a research project is likely to be, it is the duty of the researcher to take every possible step to ensure that factors which may render the results invalid are either minimised or eliminated.

Because there is a close link between the choice of a research goal and the choice of a research strategy, the researcher briefly wants to turn the attention to the latter. Mouton and Marais (1992) propose that a distinction be made between research that is of greater contextual interest, and research that is more representative or of greater general interest. The aim of the researcher is to study a representative number of people with a view to generalising the results of the study to a defined universe.

In this research, accurate and reliable data is collected and analysed appropriately which will ensure that the data supports the final conclusion that will be made and which will ensure the internal validity on a contextual level. Mouton and Marais (1992) uses the term ‘internal validity’ to refer to the fact that a study has generated accurate and valid findings of the specific phenomena which has been studied. The term ‘external validity’ refers to the fact that findings of a given project are generalisable to all similar cases. Research in which the contextual interest is emphasised would consider internal validity as extremely important, while research with a generalisable interest would also have to comply with the requirements of external validity (Mouton & Marais, 1992).

In this research, the independent variable is trust, and the dependable variables are personality aspects and managerial practices. According to Mouton and Marais (1992), the distinction between independent and dependent variables refers to the basic cause-effect relationship between specific events or phenomena. The
independent variable refers to the antecedent phenomenon and the dependent variable to the consequent phenomenon.

This research is both exploratory and explanatory in nature. It is based upon the exploratory approach because the only way to determine if a relationship exists between the dependent and the independent variables is through investigation (Mouton & Marais, 1992).

As clearly indicated by the term “exploratory studies”, the goal which is pursued in these studies is the exploration of a relatively unknown research area. The aims of such studies may vary quite considerably.

They may be
• to gain new insights into the phenomenon
• to undertake a preliminary investigation before a more structured study of the phenomenon
• to explicate central concepts and constructs
• to determine priorities for future research
• to develop new hypotheses about an existing phenomenon (Mouton & Marais, 1992: 43).

According to Mouton and Marais (1992), the most important research design considerations which apply are the need
• to follow an open and flexible research strategy, and
• to use methods such as literature reviews, interviews, case studies and informants, which may lead to insight and comprehension.

In this particular research, the methods used included readings, case studies and literature reviews – conducted by the researcher – as well as a trust audit, which was conducted in the various business units by their respective coordinators.

Furthermore, the research is explanatory (Mouton & Marais, 1992) as it aims to explore the concept of trust in terms of personality aspects and managerial practices.
The main aim of explanatory studies is to indicate causality between variables or events. A valid causal explanation must meet three central requirements:

- that a demonstrable relationship exists between the phenomena or, stated differently, that the causal (or independent) variable covaries with the dependent variable, and
- that there is a specific sequence of cause and effect (temporal sequence),
- that a specific phenomenon is the real cause of the independent variable (Mouton & Marais, 1992: 45).

At the end of the research project it should be clearly demonstrated that relationships do/do not exist between the dependent and independent variables.

There are also qualitative and quantitative approaches to research. The quantitative approach may be described as that approach to research in the social sciences that is more highly formalised and more explicitly controlled, with a range that is more exactly defined. Qualitative approaches are those approaches in which the procedures are not strictly formalised and the scope is more likely to be undefined (Mouton & Marais, 1992).

Research approaches are determined by the nature of the subject matter and by the research goals. When a representative view of a phenomenon is required, the most appropriate approach would be a quantitative one. If researchers were interested in explaining the causal relationship between phenomena, one of the quantitatively oriented experimental designs would be more applicable. Should researchers be interested in understanding the essential elements of a phenomenon, they would be forced to employ qualitative methodologies (Mouton & Marais, 1992). This research largely used the quantitative approach with a structured methodology, and the quantitative research was based on the trust audit that was conducted.

The following units of analysis are relevant to this research:

- Individuals are the typical objects of research. In this particular case a certain number of individuals are studied as representative of the particular population that was initially identified.
• Groups as collectives of individuals also form part of the research due to the fact that the research results will be based on the research findings of groups and not individuals. The reason for studying groups rather than individuals is to be found in the fact that groups possess characteristics which are not necessarily applicable to the behaviour of individuals (Mouton & Marais, 1992).

1.7 RESEARCH METHODOLOGY

This research will be conducted in the following two phases:

1.7.1 Phase 1: Literature study

This phase entails a literature study based on the investigative and explanatory approach. This involves the most relevant models and theories presented in an integrated way to serve as background to trust and its impact on interpersonal and/or inter-organisational relationships.

The steps can be described as follows:
Step 1 Review of and search for appropriate literature
Step 2 Integration and description of information
Step 3 Analysis of information
Step 4 Summary and conclusions based on the information

1.7.2 Phase 2: Empirical research

This phase will entail the use of a trust questionnaire which will be administered to workers at the various business units.

The steps can be described as follows:
Step 1 Performing statistical analyses
Step 2 Reporting these results
Step 3 Analyses and interpretation of results
Step 4 Formulation of conclusions
Step 5 Discussion of limitations of the research
Step 6 Formulation of recommendations
1.8 OUTLINE OF CHAPTERS

The chapters of this research will be presented as follows:

Chapter 1  Introduction
In this chapter the background to and motivation for this research, as well as the central problems to be addressed, are presented. This is followed by the objectives of the research, a discussion of the paradigm perspective and a brief introduction to the research design and methodology.

Chapter 2  Nature and extent of trust
This chapter examines the nature, importance, dimensions, dynamics and benefits of trust; attempts to clarify definitions of trust; briefly elaborates on trust within teams; looks at trust-distrust dynamics as well as ethical considerations of trust; and finally elaborates on management/leadership's impact on trust.

Chapter 3  Strategies and models of trust
The primary motivation of this chapter is to add to the understanding of how people trust one another. The focus will be on the dynamics of trust, models for developing and maintaining trust and the violation of trust will be elaborated on, and strategies for developing, maintaining and restoring trust at the interpersonal and organisational level will be discussed.

Chapter 4  Research methodology
In this chapter the research methodology will be presented. The sample that was used will be discussed and the procedures followed to obtain the sample will be described. The statistical techniques used to analyse the data will also be described.

Chapter 5  Research findings
The results of the empirical research proposed in Chapter 4 will be presented and interpreted in this chapter.

Chapter 6  Conclusions, limitations of the research and recommendations.
This chapter will look at the conclusions drawn from the research and the limitations of the research, and will endeavour to provide some
recommendations for addressing problem issues identified in the research.

1.9 CHAPTER SUMMARY

In this chapter, the background of and the motivation for this research, as well as the central problems to be addressed, were discussed. This was followed by the objectives, the research model, the paradigm perspective and the market of intellectual resources. The research design and the research methodology were also briefly introduced. Finally the outline of the chapters was presented.
CHAPTER 2
NATURE AND EXTENT OF TRUST

2.1 INTRODUCTION

According to Martins (1998), the loss of employee loyalty and the subsequent widening of the trust gap between employers and their employees is becoming a major issue for management. The loss of employee loyalty implies that employees will no longer engage in self-sacrificing behaviour in order to advance organisational interests (Rossouw & Bews, 2002). Martins (1998) believes that this phenomenon is having serious financial effects on many South African organisations. He goes further to stress the importance for organisations to establish the extent of internal trust relationships and to make special efforts to close the gap where necessary.

Fuhr (1992) expresses the desire of South African managers for stable labour relations and a workforce committed to organisational goals. These managers dream of relationships that are built on trust, of motivated, productive employees that fully live out company values of service excellence and total quality. However, reality is that at best they might get ‘reluctant compliance,’ where employees do the bare minimum or just enough to stay out of trouble or at worst are faced with terminal apathy,’ where employees become involved in destructive behaviour such as theft, intimidation, ‘trouble stirring’ and sabotage.

Doney, Cannon and Mullen (1998) feel that the importance and benefits of trust, and the emerging global and multicultural workplace, highlight the need for us to understand how trust develops. Within organisations, trust contributes to more effective implementation of strategy, greater managerial coordination (McAllister, 1995) and more effective work teams (Lawler, 1992).

This chapter examines the nature and importance of trust and the bases of trust within organisations, attempts to clarify definitions of trust, elaborates on the dimensions of organisational trust, examines the dynamics of trust, deliberates on some of the benefits of trust, briefly examines trust within teams and its relationship with performance effectiveness, explores trust-distrust dynamics, expounds on the limits of trust and finally considers management/leadership's role in trust.
2.2 NATURE AND IMPORTANCE OF TRUST

According to Shaw (1997), trust is vital in today's competitive economy because successful changes require a new form of corporational glue. At the same time trust is also becoming more elusive as the need for constant change erodes the fundamentals on which trust is built. Shaw seeks to offer pragmatic advice to managers who face this dilemma. He wants to answer questions like ‘what is trust?’, “what are the key factors to promote trust”, and “why is trust so hard to gain and so easy to lose?”

Managers are facing a fundamental dilemma in today’s hyper-competitive environment. Trust is needed as people will be much more likely to support change if they believe they will not suffer as a result of change. Also, most of the new organisational responses to the increasing competition such as empowerment, decentralisation and organisational learning ask for trust as a prime enabler. On the other hand, in change situations certain measures have to be taken, such as layoffs, which eventually erode the fundamentals of trust (Shaw, 1997).

Trust is based on the assumption that others can and want to meet our needs. People have different trust thresholds depending on situation, attitude and the disposition of the trusting person and on the perceived trustworthiness of others. Therefore the radius of trust varies. Shaw (1997) claims that organisations can provide three basic factors in order to expand the radius of trust: They have to achieve results (to prove they can meet the expectations), they have to act with integrity, and they have to demonstrate concern (to show they want to meet the expectations).

According to Gouldner (1960), the most fundamental manifestation of trust refers to the confidence that another will fulfil their obligations to you. Secondly, we trust people to be able to do things that their position, qualifications, experiences and achievements suggest they can do. Finally, we trust people not to harm us, but to rather care for our welfare.
As a consequence of favourable trusting experiences, we come to trust people for what they are. We infer personal qualities that make it reasonable for us to trust them. Trust itself is often reciprocal. Some employees may retain high trust in colleagues or immediate line managers who consistently fulfil their obligations to the work group, or who repeatedly demonstrate their capacity to tackle difficult problems and succeed (Gouldner, 1960).

According to Hofstede (1980) the loss of trust can be so great as to threaten the norms of collaboration and commitment. Both parties to the employment contract will be wasting time, effort and money trying to ensure that the other fulfils its side of the bargain. He sees transaction costs as an inevitable consequence of a transactional relationship. The loss of trust can thus remove the possibility of quality relationships. Furthermore he believes that although trust may be formed in a variety of ways, whether, and how, trust is established depends on the societal norms and values that guide people’s behaviour and beliefs.

Having briefly expounded on the nature and importance of trust, some of the bases of trust within organisations will be explored.

2.3 BASES OF TRUST WITHIN ORGANISATIONS

According to Kramer (1999) considerable theory and research by various authors (e.g., Creed & Miles, 1996; Lewicki & Bunker, 1995; Mayer et al., 1995; Sheppard & Tuckinsky, 1996; Zucker, 1986) has focused on identifying the bases of trust within organisations. Research on this question attempts to clarify antecedent conditions that promote the emergence of trust, including psychological, social and organisational factors that influence individuals’ expectations about others’ trustworthiness and their willingness to engage in trusting behaviour when interacting with them.

Shapiro, Sheppard and Cheraskin (1992) as cited by Doney et al. (1998) propose that trust has three bases namely deterrence-based trust, emphasizing cost and benefits; knowledge-based trust, requiring getting to know each other; and identification-based trust that forms on the bases of common values.
For the purpose of this dissertation, the focus will be based on Kramer’s (1999) taxonomy. The various bases of trust can be summarised as follows:

2.3.1 Dispositional trust

Various authors (e.g., Gurtman, 1992; Sorrenitino, Holmes, Hanna & Sharp, 1995) according to Kramer (1999) believe that individuals differ considerably in their general predisposition to trust other people. The predisposition to trust or distrust others tends to correlate with people’s beliefs about human nature (PEW, 1996; Wrightsman, 1991). Rotter (1971, 1980) proposes that people extrapolate from their early trust-related experiences to build up general beliefs about other people.

Mayer, Davis and Schoorman (1995) refers to propensity to trust as being a stable within-party factor that will affect the likelihood that the party will trust. They believe that people with different developmental experiences, personality types and cultural backgrounds vary in their propensity to trust.

2.3.2 History-based trust

Kramer (1999) cites various other authors (e.g., Boon & Holmes, 1991; Deutsch, 1958; Lindskold, 1978; Pilisuk & Skolnick, 1998; Solomon, 1960) and states that individuals’ perceptions of others’ trustworthiness and their willingness to engage in trusting behaviour when interacting with them are largely history-dependent processes. He posits that interactional histories give decision makers information that is useful in assessing others’ dispositions, intentions and motives and provides a basis for drawing inferences regarding their trustworthiness and for making predictions about their future behaviour.

According to Kramer (1999) a number of studies (e.g., Deutsch, 1958; Lindskold, 1978; Pilisuk & Skolnick, 1998) have demonstrated that reciprocity in exchange relations enhances trust, while the absence or violation of reciprocity erodes it.

Kramer (1999) posits that these theories draw attention to two psychological facets of trust judgements. Firstly, individuals’ judgements about others’ trustworthiness are anchored in their expectations about others’ behaviour. Secondly, those expectations change in response to the extent to which subsequent experience either
validates or discredits them. Interactional histories thus become a basis for initially calibrating and then updating trust-related expectations. He concurs with other authors (e.g., Lewicki & Bunker, 1995; Shapiro et al., 1992) that history-based trust can be construed as an important form of knowledge-based or personalised trust in organisations.

2.3.3 Third parties as conduits of trust
Burt and Knez (1995) as cited in Kramer (1999) expound on the role of third party gossip in building (or destroying) reputational trust. They argue that third parties in organisations are important conduits of trust because of their ability to diffuse trust-relevant information via gossip. Third parties tend to make only partial disclosures about others and often communicate incomplete and skewed accounts regarding the trustworthiness of a prospective trustee. Consequently, when a person has a strong relationship with a prospective trustee, third parties tend to convey stories and information that corroborate and strengthen the tie, thereby increasing certainty about the person's trustworthiness.

2.3.4 Category-based trust
Category-based trust refers to trust predicated on information regarding a trustee’s membership in a social or organisational category (Kramer, 1999). Brewer (1981) as cited by Kramer (1999) notes that there are a number of reasons why membership in a salient category can provide as basis for presumptive trust.

Firstly, shared membership in a given category bypasses the need for personal knowledge when interacting with other members of that category. Furthermore individuals tend to attribute positive characteristics such as honesty, cooperativeness and trustworthiness to other in-group members (Brewer, 1996). Consequently individuals may confer a sort of depersonalised trust on other in-group members that is simply based on awareness of their shared category membership (Kramer, 1999).

2.3.5 Role-based trust
Kramer (1999) posits that role-based trust is based on knowledge that a person occupies a particular role in the organisation rather than specific knowledge about the person’s capabilities, dispositions, motives and intentions.
Roles can thus serve as proxies for personalised knowledge about other organisational members. Barber (1983) as cited by Kramer (1999) notes that to the extent that people within an organisation have confidence in the fact that role occupancy signals both intent to fulfil such obligations and competence in carrying them out, individuals can adopt a sort of presumptive trust based upon knowledge of role relations.

According to Kramer (1999) numerous scholars (e.g., Barber, 1983; Dawes, 1994; Kramer et al., 1996) note that it is not the person in the role that is trusted as much as the system of expertise that produces and maintains role-appropriate behaviour of role occupants.

Kramer (1999) believes that roles lessen the perceived need for and costs of negotiating trust when interacting with others. He cites other authors (e.g., Kramer et al., 1996; Roberts & Weick, 1993) who believe that roles also facilitate acts of cooperation and coordination, even in the absence of other psychological correlates usually associated with trust. Furthermore, he concurs with numerous other scholars (Mishra, 1996; Roberts & Weick, 1993; Webb, 1996) that role-based trust can also be quite fragile and produce catastrophic failures of cooperation and coordination, especially during organisational crises.

2.3.6 Rule-based trust

Rules, both formal and informal, capture much of the knowledge members have about understandings of transaction norms, interactional routines and exchange practices. Rule-based trust is based on shared understandings of the system of rules for appropriate behaviour (Kramer, 1999). March and Olson (1989: 27) as cited by Kramer (1999) state that “rule-based trust is sustained within an organisation not [by] an explicit contract ... [but] by socialization into the structure of rules.”

2.4 CLARIFYING DEFINITIONS OF TRUST

In this section the researcher will briefly review the various definitions of trust that have been proposed within the approaches or context of a) individual expectations, b) interpersonal relationships, c) economic exchanges and d) social structures.
2.4.1 Trust as individual expectations

Zand (1972:232) defines trust as “increasing one’s vulnerability to the risk of opportunistic behaviour of one’s transaction partner, whose behaviour is not under one’s control in a situation in which the cost of violating the trust are greater than the benefits of upholding the trust.” Hosmer (1995) states that Zand (1972) emphasizes the vulnerability aspect of trust, but divides trust into personal behaviour and individual expectations.

“Trust may also be defined as the expectation that an exchange partner will not engage in opportunistic behaviour, even in the face of countervailing short-term incentives and uncertainty about long term benefits” (Chiles & McMakin, 1996:85).

Barber (1983: 9-10) as cited by Hosmer (1995), agrees that “trust is a set of optimistic expectations on the part of an individual”, but shifts the focus of those expectations to three conditions and/or assumptions that determine the outcome:

1. *Expectation of the persistence and fulfilment of the natural (and existing) social order in which the individual finds himself or herself* (e.g. Luhman, 1989). Part of trust is the personal expectation that the world will continue without discontinuous change.

2. *Expectation of technically competent role performances from those involved with the individual* (e.g. Gabarro, 1978; Jennings, 1971; Luhmann, 1988).

3. *Expectation of morally correct role performance from those associated with the individual.*

Hosmer (1995) believes that Barber (1983) added greatly to the “personal expectations” literature on trust. He concludes that Barber’s (1983) concept requires a person who was trusting and a second person who was worthy of that trust – but that trust remained the optimistic expectations of a single individual relative to the eventual outcome of an uncertain event.

2.4.2 Trust as interpersonal relations

Zand (1972:232) expanded his first definition of trust from the confident expectations of a single individual to approach the dependent interactions of a dyad.

Carnevale, Pruitt and Carrington (1982:13) define trust as “a concomittant
expectation that the other [in a dyad] will reciprocate,” which is essential for “the goal of achieving mutual co-operation.” Meeker (1983: 231) as cited in Hosmer (1995) also stresses that “the trusting person expects helpful or cooperative behaviour from the other.”

Butler (1991:647) concludes that “the literature on trust has converged on the beliefs that (a) trust is an important aspect of interpersonal relationships, (b) trust is essential to the development of managerial careers, (c) trust in a specific person is more relevant in terms of predicting outcomes than the global attitude of trust in generalized others, and (d) a useful approach to studying trust consists of defining and investigating a number of conditions (determinants) of trust.”

According to Hosmer (1995) the interpersonal literature on trust in management appears to be focused on superior/subordinate relationships and the personal characteristics of specific individuals within those relationships.

2.4.3 Economic transactions

Hosmer (1995) believes that economic transactions can be seen as just a specialised form of interpersonal behaviour. Central to this idea is the belief that the agent in any principal/agent relationship is not to be trusted, and that the risk of opportunism is high.

Bromily and Cummings (1992:4) as cited by Hosmer (1995) argue that trust can reduce transaction costs, and define trust as “the expectation that another individual or group will (1) make a good faith effort to behave in accordance with any commitments, both explicit or implicit; (2) be honest in whatever negotiations preceded those commitments; and (3) not take excessive advantage of others even when the opportunity [to renegotiate] is available.”

They further state that higher level of trust eliminate the need for installing control systems.
According to Hosmer (1995) these views of trust share an important implication, namely, that trust should be more essential for ensuring cooperation between strangers, or people who encounter each other infrequently, than for supporting cooperation among people who interact frequently and repeatedly.

2.4.4 Social structures

Lewis and Weigert (1985: 968) as cited by Hosmer (1995) reinforce the belief that trust is a “collective attribute based upon the relationships between people that exist in a social system”. They conclude that trust requires social relationships to exist.

Zucker (1986) suggests that trust may be based on:
1. The process of exchange,
2. Characteristics of the exchange partners, or
3. Societal institutions.

Chiles and McMackin (1996) posit that the conditions that create trust may be viewed through the lens of social norms. They conclude that “global trust in generalised others” (Butler, 1991:643) is generated as a result of social norms, such as norms of reciprocity (Gouldner, 1960), norms of obligation and cooperation (Bradach & Eccles, 1989) and norms of fairness (Kahneman, Knetzsch & Thaler, 1986).

Chiles and McMackin (1996:86) further believe that “such norms generate shared expectations among people at various societal level, including the larger society (Gouldner, 1960), regional and local culture, ethnic or religious sectors, industry sectors and professional and occupation sectors (Husted, 1989; Zucker, 1986).” They conclude that it is the honouring of moral obligations inherent in these social norms that generate trust, which, in turn, constrains opportunistic behaviour.

For the purpose of this research, the phenomenon of ‘trust’ will be defined in an organisational setting, and in terms of a bi-party relationship between employees and those to whom these employees report directly.
According to Hosmer (1995:390) scholars from a wide range of disciplines have looked at trust in a number of different contexts and have reached a number of similar conclusions:

1. Trust is generally expressed as an optimistic expectation on the part of an individual about the outcome of an event or the behaviour of a person.
2. Trust generally occurs under conditions of vulnerability to the interests of the individual and dependence upon the behaviour of other people.
3. Trust is generally associated with willing, not forced, cooperation and with the benefits resulting from that cooperation.
4. Trust is generally difficult to enforce.
5. Trust is generally accompanied by an assumption of an acknowledged or accepted duty to protect the rights and interests of others.

Synthesising the essentials from each of the approaches in which the concept of trust has been used in the literature of organisational theory and its related disciplines, Hosmer (1995:390) proposes the following definition:

“Trust is the reliance by one person, group, or firm upon a voluntarily accepted duty on the part of another person, group, or firm to recognize and protect the rights and interests of all others engaged in a joint endeavour or economic exchange.”

2.5 DIMENSIONS OF ORGANISATIONAL TRUST

The focus of the research is on elements - which will be referred to as the facilitators of trustworthiness - by which the trustor evaluates the trustworthiness of the trustee. The term ‘facilitator’ is used to encompass the role that these elements play. According to Bews and Uys (2002) these facilitators play an active role in lubricating or, in their more negative form, impeding the flow of trust. They (facilitators) are referred to with respect to trustworthiness rather than trust per se, as it is these facilitators that the trustor uses to evaluate the trustworthiness of the trustee.
2.5.1 Facilitators of trustworthiness/dimensions

Bews and Uys (2002) state that the intensity of any trust relationship will depend on certain facilitators of trustworthiness, which have often been referred to as antecedents (Mayer et al., 1995), dimensions (Martins, Watkins, Von der Ohe & De Beer, 1997; Mishra, 1996; Robbins, 2001) or characteristics (Cloete & Engelbrecht, 2000). In an attempt to introduce some degree of consistency, these will be referred to here as dimensions.

A literature scan uncovered numerous ‘dimensions’ of trust. According to Bews and Martins (2002:15) “these ‘dimensions’ have been labeled in the literature as benevolence (Mayer et al., 1995), competency, openness, concern and reliability (Butler & Cantrell, 1984; Mishra, 1996) and integrity, competency, loyalty, openness (Butler & Cantrell, 1984; Robbins, 2001) amongst others (see Bews, 2000: 25-26).”

The following dimensions of an expanded version of Mishra’s (1996) model for organisational trust will be discussed:

- Benevolence/Concern
- Competency
- Integrity
- Openness
- Personality Characteristics/Factors was also included for the purpose of this research (Bews & Martins, 2002).

**Benevolence/Concern**: according to Bews and Martins (2002) refers to the degree of concern that the trustee shows towards the trustor. They cite Mayer et al. (1995) who refer to benevolence as an antecedent of trust and indicate that it incorporates support and encouragement (see also Butler & Cantrell, 1984) and encapsulates fairness, concern and loyalty (see also Bews & Uys, 2002). Cloete and Engelbrecht (2000) found empirical support for Mayer et al’s (1995) model during their testing thereof.

Shockley-Zalaback, Ellis and Winograd (2000) posit that sincerity and caring coupled with openness contribute to the perception of concern. This dimension occurs when organisational members perceive concern for them from their
leadership. Bromiley and Cummings (1996) see concern as being demonstrated when a party does not take advantage when another party is vulnerable. Furthermore, Mishra (1996) describes concern as the balancing of one’s self-interests with others’ interests, whether at a team, organisational or societal level. Ellis and Shockley-Zalabak (1999) as cited by Shockley-Zalaback et al. (2000) directly link sincerity to trust at all levels of management.

Organisational members describe an environment of caring, empathy and tolerance in which a learning organisation (Senge, 1990) can thrive as important. The importance of sincerity in communication plays a critical role in the amount of trust that employees will give to an organisation (Ellis & Shockley-Zalabak, 1999). Caring and empathy not only enhances team trust (LaFasto & Larson, 1989), but also enhances trust in top leadership (Ellis & Shockley-Zalabak, 1999; Nanus, 1989), and subsequently in the organisation as a whole (Shockley-Zalaback et al, 2000).

**Competency:** according to Bews and Uys (2002:22), relates to an ability, on both the technical and managerial levels, to wield influence in a specific domain (Mayer et al., 1995), thus making some positive difference for the trustor (Davis, Mayer & Schoorman, 1995). Butler and Cantrell (1984) as cited by Hosmer (1999) concur that competence is the technical knowledge and interpersonal skills needed to perform the job.

Shockley-Zalaback et al. (2000) believe that competence is a generalised perception that assumes the effectiveness of the leadership (see Barnes, 1983; Dwivedi, 1983) as well as the organisation's ability to survive and compete (Ellis & Shockley-Zalabak, 1999) in the marketplace.

Shockley-Zalaback et al. (2000) further state that having faith in an organisation's competence might include faith in its ability to deliver quality products or services, to compete dynamically to survive in an ever-changing global economy, or to embrace disruptive technological developments, such as e-business. A firm might thus demonstrate the dimensions of organisational trust such as openness or caring, but if it does not have the expertise or competence to embrace new technology to remain competitive, its ability to engender trust with its employees, customers and
business partners would be diminished.

**Integrity:** Is the fair and consistent application of a set of moral and ethical principles, acceptable to both trustor and trustee, which increase predictability and reliability, thus introducing greater equity. (Bews & Uys, 2002:22)

Butler and Cantrell (1984) as cited in Hosmer (1995) see integrity as the reputation for honesty and truthfulness on the part of the trusted individual and consistency as the reliability, predictability and good judgement in handling situations.

Shockley-Zalaback et al. (2000) see reliability as the expectation for consistent and dependable behaviour. Consistency and congruency between words and actions build trust. Inconsistencies and incongruencies decrease trust.

They cite McGregor (1967) and Ouchi (1981) who believe that this linkage of reliable behaviour, or the matching of words to actions, to organisational trust is not new. They also refer to Gabarro (1987) who explains how trust develops in working relationships as the result of a historical pattern of reliability across events and experiences. Finally they cite various other scholars (e.g., Kouzes and Posner, 1987; Nanus, 1989) who see the congruence between what management/leadership do, and what they expect and ask of their employees, as having immense impact on credibility and organisational trust.

According to Mishra (1996) as cited in Shockley-Zalaback et al. (2000) the themes of reliability, dependability and consistency also permeate the level of trust between an organisation and its suppliers, customers and business partners.

**Openness:**

refers to a flow of information on two levels, the first of which concerns that information that is necessary to get a job done, while the second operates at a much deeper level and is of a more personal nature between trustor and trustee. Mishra (1996) warns of the danger of too great a degree of openness at the latter level, which could at times be hurtful. Openness beyond what is appropriate in a particular situation may be more harmful than beneficial as it may result in
perceptions of insincerity, which in turn are likely to erode trust (Bews & Uys, 2002:22).

Butler and Cantrell (1984) as cited in Hosmer (1995) see openness as mental accessibility, or the willingness to share ideas and information freely with others.

According to Shockley-Zalaback et al. (2000) various other scholars (e.g., Atwater, 1988; Ellis & Shockley-Zalabak, 1999; Nanus, 1989; Whitener et al., 1998) believe that employees are most likely to hold trust in their organisation when they see the organisational leadership as open and honest. They also cite Ellis and Shockley-Zalabak (1999) who found that it is not just the amount of information shared, but whether or not the leadership’s efforts are perceived as being sincere. Shockley-Zalaback et al. (2000) conclude that while openness and sincerity are important among all levels (top management, supervisors and co-workers), the perception of trust in top management has more predictive power for whether or not followers will have trust in their organisation networks as a whole.

**Personality factors**: include those characteristics that have been referred to as the “Big Five” (Martins, 2000) and encompass agreeableness, conscientiousness, emotional stability, extraversion and resourcefulness. These personality factors will be described in Chapter 4.

The broader aspect of trust among management and employees is probably one of the major current managerial concerns. Further investigation of the possible antecedents of trust (or mistrust) has led to the assumption that trust within companies is probably created by **personality factors** and **managerial practices**. In the Trust Audit, these personality factors are viewed as possible antecedents or dimensions of interpersonal trust among superiors and subordinates (Harvey, Markham & Murray, 1995). For the purpose of this research ‘managerial practices’ was also included as a dimension to be measured.

The **managerial practices** dimension includes credibility, team management, information sharing and work support. The importance and relevance of these aspects for management effectiveness are obvious and probably need no further
explanation here. It is, however, interesting to note how these behaviours are able to influence trust relations within organisations (Martins, 2000). These dimensions will be discussed in Chapter 4.

Bews and Uys (2002) propose that depending on contextual factors, which may influence the perceived importance of each dimension (facilitator), the trustor evaluates the trustworthiness of the trustee via an interrelationship of the aforementioned dimensions (facilitators).

2.6 DYNAMICS OF TRUST

According to Kramer and Tyler (1996), two key issues have emerged as central to the analysis of trust. One is an understanding of the dynamics of trust in organisations. On the macro-level this involves a concern for the influence of social organisation on patterns of trust; on the meso-level, it involves an exploration of social networks; and on the micro-level, it involves the consideration of the psychological basis of trust and distrust. The second issue is understanding why people trust. Firstly, let us consider the dynamics of trust.

2.6.1 Understanding the dynamics of trust

*Macro-level analysis*

Kramer (1996) states that two issues are important at this level, namely:

- Has trust declined?
- How can trust be rebuilt?

These questions can be addressed on an institutional or organisational level by examining how trust is related to organisational dynamics or management philosophy. Mishra (1996) finds that the level of trust in many organisations is actually declining at a time when the competitive advantages to be gained from higher levels of trust within and between organisations is now being recognised. This means that management downsizing moves to restructure organisations into “lean and mean” flattened hierarchies may not be sufficient for competitive renewal over the long run. Mishra (1996) calls for a new management paradigm that makes trust and the nurturing of trust-building processes a central concern of organisation strategists.
Mishra (1996) examines the influence of trust on key behaviours of organisational actors during times of crisis. He argues that trust between managers, workers and managers, and workers, managers, customers and suppliers all have a positive influence on the following three aspects of responses to crisis. He states that trust facilitates decentralisation, it increases truthful communication and it leads to collaboration over the allocation of scarce resources. Organisations with high levels of trust are thus more likely to successfully survive crises.

Creed and Miles (1996) believe that the nature of the trust issues that arise in organisations is shaped by evolution in organisational forms and management philosophies. This evolution is signified by an ongoing shift from hierarchical to network processes and structures. Traditional models of authority assume that workers lack the ability for self-direction, find their work distasteful and are instrumentally motivated and hence require closer supervision because they cannot be trusted. More recent human resource models assume that workers can be creative and self-directed, can enjoy their work, and can be motivated by interest in work tasks. In this view, managers need to create an environment in which workers can be trusted.

With regards to evolution in organisational forms, Creed and Miles (1996) find that loosely coupled network forms enable quick, adaptive, learning-based responses to sudden, unpredictable shifts in the competitive environment. They believe that the key to competitive success is investing in, and mobilising, the learning capabilities of network members. Co-operative problem solving requires motivated, passionate participants who are prepared to take risks and merge capabilities to craft a mutual project. The essential argument that they make is that organisational forms, from hierarchies to networks, have different trust requirements.

_Meso-level analysis_

Powell (1996) focuses on the context within which trust emerges, but his concern is with the issue of networks of collaboration. He argues that trust is the by-product, rather than the precondition, of collaborative, trust-based forms of network governance. In this regard he argues for the existence of four types of collaborative networks, each with unique sources of trust. The first network is linked to ties of
place and kinship, the second to common membership in a professional community, the third to shared historical experiences and the practical advantages of group membership, and the fourth to mutual dependencies. These four categories represent four different pathways to cooperative social relationships, each with a distinct basis for trust. He concludes that trust is ‘learned and reinforced, hence a product of ongoing interaction and discussion.’

Sheppard and Tuchinsky (1996) build on Powell’s (1996) characterisation of trust as an outgrowth of learning-based dialogue. They posit that trust, in networks, is a form of membership control of lateral relationships. As such, the basis of trust must be built and sustained by mechanisms that monitor the behaviour of participants in the network. Network dialogue can serve as a medium for monitoring, as well as for cooperative learning. Trust-based network interactions is build on the premise of power sharing as well as recognition of mutual dependence within the network. Network organisations need to develop governance mechanisms and relational qualities (especially in managers) that permit the building and sustaining of trust.

Burt and Knez (1996) also focus on the production of trust in interpersonal networks. They examine the effect of third party gossip in building (or destroying) reputational trust. They find that social relationships, characterised by frequency or duration of contact or emotional closeness, lead to greater trust of others. However, distrust of another leads to diminished contact. Bert and Knez (1996) believe that trust builds incrementally, but distrust has a more dramatic ‘catastrophic’ quality. From a network perspective, they offer evidence that third parties weaken already weak social relationships (they gossip) but strengthen strong relationships.

Finally, Zucker, Darby, Brewer and Peng (1996) explore the influence of the structure of scientific fields on patterns of collaboration within those fields. The findings suggest that organisational boundaries are important, because being a member of the same organisation generates trust. Zucker et al. (1996) outline the high value of intellectual capital and the need to create trust and use information boundaries to retain it.
This trust is more important when a field is competitive. If, as Zucker and her colleagues maintain, distrust is a cost of transacting across boundaries, it is also one potential consequence of poorly implemented change.

Micro-level analysis
Trust can also be addressed on the individual level by considering the psychology of the individual. Such a psychological model considers why people trust and why their trust declines or increases.

Working primarily at the interpersonal micro-level, Lewicki and Bunker (1996) offer a social-psychological multistage development model for building, sustaining and even restoring trust. They broaden our thinking about the nature of trust by articulating a model of trust that has a bandwidth. They postulate three forms of trust with different capacities for sustaining social relationships: deterrence-based trust (economic exchange), knowledge-based trust (a relationship exists with sufficient information about persons to understand their behaviour) and identification-based trust (the needs and desires of others are taken as personal goals and people act in ways that consider joint gains). Moving from one form of trust to the other involves a shift of frame with respect to the nature of the relationship. Lewicki and Bunker (1996) suggest that a trust violation may trigger slippage to an earlier stage of trust and leave open the possibility of the injured and offending parties working to reweave a stronger cooperative relationship.

Kramer, Meyerson and Weick (1996) believe that organisations are moving away from formal hierarchical structures to more flexible and temporary groupings around particular projects. They create the concept of ‘swift trust’ - trust that develops in temporary systems. In temporary systems trust occur in conjunction with several features of task structure: accountability (including deadlines and tasks), continuous interrelating, overlapping networks and limited labour pools, and diverse skills among participants. The authors advance the idea that role-based trust can emerge in short-lived systems through small networks in which roles are clear. Here they come close to Zucker’s (1986) institutional-based trust as cited in Hosmer (1995).
Kramer (1996) investigates how trust and distrust are construed in hierarchical relationships. He notes that understandings about trust can differ dramatically at different levels within a hierarchy. Trust is not easily built when top executives and low-level employees experience ‘divergent realities’ grounded in the imbalance of power and privilege. Kramer (1996) state that top executives expect task-oriented trust based on employee adherence to the organisation’s values, objectives and policies. However, the low-level employees might overpersonalise cues and information from above leading to divergent perceptions which, in turn, lead to reciprocal disappointments and decline in trust. This suggests that changes in the governance context of hierarchical relationships may improve prospects for convergence around shared understandings about trust.

Bies and Tripp (1996) explore individuals’ responses to the betrayal of trust. Their study of revenge examines how people react when others with whom they believe they have a trusting relationship betray them. Two negative consequences result from trust violations – a damaged sense of civic order through the failure of others to follow social rules and a damaged identity or social reputation. Interpretations of, and responses to those negative consequences take a variety of forms. Bies and Tripp (1996) develop the implications of trust violation, particularly for getting even and the need for revenge.

Bromiley and Cummings (1996) provide both a framework and a measurement tool for assessing organisational trust. They identify several aspects of trust. The first involves the belief that others make a good-faith effort to behave in accordance with their commitments. The second concerns honesty in negotiations. The third involves not taking excessive advantage of others when opportunities are available.
The main ideas around the dynamics of trust are summarised in Figure 2.1

![Diagram of DYNAMICS OF TRUST]

Figure 2.1: The dynamics of trust

(Source: Kramer & Tyler, 1996: 6-10)

2.6.2 Why do people trust: need for trust

According to Kramer & Tyler (1996) many studies are based on the underlying assumption that trust is rationally based. They believe that people’s decisions about whether to cooperate are based on their estimates of the probability that others will reciprocate that cooperation. Hardin (1993) refers to this rational perspective as an ‘encapsulated interest’ perspective on trust. Coleman (1990:91) defines trust as “an incorporation of risk into the decision of whether or not to engage in the action” by acting based on estimates of the likely future behaviour of others.

Degoey and Tyler (1996) contrast ‘instrumental’ and ‘relational’ models of trust, arguing that the latter are more powerful in building trustworthy relationships. The instrumental model assumes that calculations about trust focus on the outcomes of
management decisions. The relational model assesses the trustworthiness of authority figures by determining whether the decision-making process signals good management intentions and whether organisation members feel that they have been treated with respect. This suggests that cognitions about trust are shaped by social contexts within which organisation members develop a sense of shared identity. If a social context grounded in procedural justice supports their sense of identity and self-worth, organisation members are more likely to trust others and to behave in a trustworthy manner.

Brewer, Hanna and Kramer (1996) continue this line of reasoning, arguing that a collective form of ‘identity-based’ trust is a necessary condition for effective collective action. This dispersed collective trust becomes institutionalised at the macro-level and internalised at the micro-level. From this perspective, collective trust becomes a public good that individuals are motivated to develop and maintain.

Brockner and Siegel (1996) also argue for the importance of trust. They suggest that issues of trust underlie the important role of procedural and distributive justice in shaping people’s reactions to their social experiences. They suggest that trust have both instrumental and relational components.

One major problem addressed by trust researchers pertains to interaction among unfamiliar actors – that is, actors who have little information about, or have not established affective bonds with one another. The first perspective assumes that factors exist within the individual that predisposes them to trust or distrust others whom they don't know. Rotter (1967; 1971; 1980) as cited in Bigley and Pierce (1998) posits that trust is a fairly stable belief based on individuals’ extrapolations from their early-life experiences. Furthermore, he suggests that the strength of the trust's impact on behaviour is a function of the novelty with which people are confronted. He concludes that as people become more acquainted with specific others, their personal knowledge of those others becomes the primary driver of their thought and actions. Along the same lines, Mayer et al. (1995:715) propose the notion of trust propensity, or “a stable within-party factor that will affect the likelihood the party will trust.”
Hardin (1993) as cited in Bigley and Pierce (1998) argues that those who develop a distrusting disposition tend to avoid cooperative activities. They are thus apt to have fewer positive interactional experiences that can function to adjust initial distrust levels. In organisations, those who distrust may be expected to seek roles that have limited dependencies on others or to resist job changes that cause them to be more reliant on others.

A second major approach to understanding trust among unfamiliar actors may be called ‘behavioural decision theory’. These frameworks tend to focus on immediate situational factors in the context of game setting, and posit that ‘trusting’ is a function of relatively rational decision-making processes (e.g. Axelrod, 1984), rather than personality characteristics. Typically, they operationalise trust and distrust in terms of cooperative and competitive behaviour respectively, and they usually attempt to ascertain how changes in the game affect behaviours (Bigley & Pierce, 1998).

Institutional frameworks represent a third prominent approach. These models emphasise the causal role of situational factors in fostering trust among strangers. These principal-agent relationships allow individuals, groups or organisations to bridge the extreme social and physical distances occurring in a complex industrialised society so that they may obtain the benefits of more extensive trade with strangers (Bigley & Pierce, 1998).

Mayer et al. (1995) state that working together often involves interdependence, and people must therefore depend on others in various ways to accomplish their personal and organisational goals. Current trends in both workforce composition and the organisation of the workplace suggest that the importance of trust is likely to increase in coming years. One important trend in workforce composition is the increase in diversity. They cite Jackson and Alvarez (1992) who point out that the increase in workforce diversity necessitates that people with very diverse backgrounds come into contact and deal closely with another. Similarly they refer to other scholars (e.g., Berscheid & Walster, 1978; Newcomb, 1956) who believe that a diverse workforce is less able to rely on interpersonal similarity and common background and experience to contribute to mutual attraction and enhance the willingness to work
together. Finally they conclude that the development of mutual trust in this context provides one mechanism for enabling employees to work together more effectively.

Sheppard and Sherman (1998) build on Mayer et al.’s (1995) idea of interdependence and contend that trust can be conceptualised as four distinct and ordered forms, – namely shallow dependence, shallow interdependence, deep dependence, and deep interdependence – determined by the nature of the interdependence between trusting parties. In their conceptualisation they describe the four relational forms as follows:

- **Shallow dependence** is said to occur when one's outcomes are contingent upon the actions of another. It entails two key risks for the trustor namely those of unreliability and indiscretion. Thus partners are only selected on the basis of their history of reliable and discreet behaviour. Qualities associated with trustworthiness include discretion, reliability and competence (Sheppard & Sherman, 1998).

- In **shallow interdependence** both parties must effectively coordinate behaviour in order to achieve desired goals. Although trust often requires that one’s partner is reliable and discreet, it goes further. Trust in effective coordination is required; behaviour must be predictable. Sheppard and Sherman (1998) cite various scholars (e.g., Butler, 1991; Dasgupta, 1988; Gabarro, 1978; Giffin, 1967; Good, 1988; Hart, Capps, Cangemi & Caillouet, 1986;) to support their contention that consistency, transparency and predictability are all key attributes of trustworthiness.

- In **deep dependence** relationships, a trustee’s behaviour is often outside the trustor’s range and therefore difficult to monitor. Trustworthiness requires that one’s partner have the qualities that mitigate against cheating, abusing or neglecting a dependent other. According to Sheppard and Sherman (1998) qualities associated with trustworthiness thus include honesty (Butler, 1991; Larzelere & Huston, 1980) and integrity (Butler, 1991; Lieberman, 1981; McFall, 1987), concern (Mishra, 1996; Farris, Senner & Butterfield, 1973) and benevolence (Larzelere & Huston, 1980; Solomon, 1960; Strickland, 1958).

- In **deep interdependence** relationships the capacity of parties to communicate is essential. Parties may be separated by great distances, or the complexity and speed demanded by their deep interdependence may prevent complete or regular
communication. Sheppard and Sherman (1998) see the central risk here as mis-
anticipation. They believe that this requires that parties foresee or guess what
their partners would do in certain situations, which requires intuition (Westcott,
1968), foresight and empathy (Eisenberg & Strayer, 1987).

The next section will look at some of the benefits of trust within an organisational
setting.

2.7 BENEFITS OF TRUST

Trust has a number of important benefits for organisations and their members.
Within organisational settings, trust as a form of social capital is discussed primarily
on three levels (Kramer, 1999):

2.7.1 Trust and transaction costs

Kramer (1999) cites various authors (e.g., Barber, 1983; Kollock, 1994; Sabel, 1993;
Shapiro, 1987; Roth & Sitken, 1993) and asserts that in the absence of personalised
knowledge about others trust within organisations must be either individually
negotiated or substitutes for trust located. However, such remedies have often been
found to be inefficient and costly. According to him, recognition of this problem has
led a number of theorists (e.g., Bromiley & Cummings, 1996; Chiles & McMakin,
1996; Creed & Miles, 1996; Granovetter, 1985; Uzzi, 1997; Williamson, 1993) to
focus on the role of trust in reducing the costs of both intra- and inter-organisational
transactions.

Kramer (1999) believes that trust can function to reduce transaction costs by
operating as a social decision heuristic. He cites Allison and Messick (1990) who see
social decision heuristics as representing behavioural rules of thumb actors use when
making decisions about how to respond to various kinds of choice dilemma
situations they encounter. Uzzi (1997:44) as cited in Kramer (1999) reasons that the
“heuristic character of trust permits actors to be responsive to stimuli.” He notes that
trust heuristics thus facilitate the exchange of a variety of assets that are difficult to
put a price on but mutually enrich and benefit each organisation's ability to compete
and overcome unexpected problems.
Chiles and McMackin (1996) concur and argue that trust’s role in constraining opportunistic behaviour allows parties to adopt less elaborate safeguards, thereby economising on transaction costs. They state that in the face of opportunism, contracts have to be laden with safeguards that are designed to protect each party from the opportunistic behaviour of other. Such safeguards are costly and include costs associated with negotiating, drafting and monitoring contracts. They cite March (1988) who believe that trust decrease negotiations by fostering an approach to negotiations in which actors are co-operative and quick to come to a resolution. Trust also allows contracts to be specified more loosely with the expectation that any gaps in the contract will be dealt in a fair manner, thereby decreasing drafting costs. Furthermore trust decrease monitoring costs as a result of each party’s confidence in the other’s performance, even in the face of short term incentives which might favour opportunism. The costs associated with more complex safeguards such as bonding are decreased and a party’s reputation for trustworthiness decreases the cost of finding an exchange partner. Because the costs associated with contractual safeguards are transactional costs, trust economises on transaction costs.

2.7.2 Trust and spontaneous sociability

Fukuyama (1995) as cited in Kramer (1999) argues that one of the most important manifestations of trust as a form of social capital is the spontaneous sociability such trust engenders. Kramer (1999) states that spontaneous sociability assumes many forms within organisational contexts. He believes that organisational members are expected to contribute their time and attention towards the achievement of collective goals (Murninghan, Kim & Metzger, 1994; Olson, 1965); they are expected to share useful information with other organisational members (Bonacich & Schneider, 1992), and they are expected to exercise responsible restraint when using valuable but limited organisational resources (Degoev & Tyler, 1996; Messick et al., 1983).

Several empirical studies (e.g., Brann & Foddy, 1988; Henager, Parks & Scamahorn, 1996; Hulbert & Parks, 1995; Messick et al, 1983) document the important role trust plays in people’s willingness to engage in such behaviour. In sum, the results from these studies demonstrate that trust enhances individuals’ willingness to engage in various forms of spontaneous sociability, but in complex ways (Kramer, 1999).
2.7.3 Trust and voluntary deference

Organisational research has also examined the relationship between trust and various forms of voluntary deference within hierarchical relationships in organisations. Kramer (1999) cites Arrow (1974) and Miller (1992) stating that although hierarchical relationships assume varied forms (e.g. leader-follower, manager-subordinate and employee-employee), the centrality of trust within such relationships has long been recognised.

He further states that trust is crucial for those in positions of authority. According to Degoey and Tyler (1996) as cited in Kramer (1999) the ability of organisational authorities to effectively manage would be greatly diminished if they had to continually justify their actions. Authorities cannot detect and punish every failure to cooperate, nor can they recognise and reward every co-operative act. Consequently, efficient organisational performance depends on individuals’ feelings of obligation toward the organisation, their willingness to comply with its directives and regulations, and their willingness to voluntarily defer to organisational authorities.

When conflict arises, trust is important because it influences acceptance of dispute resolution procedures and outcomes. Tyler (1994) as cited in Kramer (1999) believes that individuals are more likely to accept outcomes, even if unfavourable, when they trust an authority’s motives and intentions.

According to Kramer (1999) research by various authors (e.g., Butler, 1991; Brockner, Daly, Siegel, & Tyler, 1997; Brockner & Siegel, 1996) on the conditions under which people are likely to attribute trustworthiness to those in positions of authority, sought to identify specific attributes associated with perceived trustworthiness. He cites Gabarro (1978) who found that perceived integrity, motives, consistency, openness, discreteness, functional competence, interpersonal competence, and decision-making judgement contributed to attributions of trustworthiness between vice-presidents and presidents.

Similarly Butler (1991) found that perceived availability, competence, consistency, fairness, integrity, loyalty, openness, overall trust, promise fulfilment, and receptivity influenced subordinates’ judgements of an authority’s trustworthiness. Furthermore Brockner and Siegel (1996) as cited in Kramer (1999) notes that procedures are
important because they communicate information about authorities’ motivation and intention to behave in a trustworthy manner, as well as their ability to do so.

According to Kramer (1999) the research of Tyler and his associates (reviewed in Degoey & Tyler, 1996 and Lind & Tyler, 1992) identifies several important components of trustworthiness attributions. These include status recognition, benevolence and neutrality. Another finding from this stream of research is that trust matters more in relationships when some sort of bond exists between authorities and their subordinates.

The next section will briefly elaborate on trust within teams. The acknowledgement that trusts is important for the functioning of organisations has increased the demand for research showing how this importance is reflected on the behaviour of its members (Costa, Roe and Taillieu, 2001). The section will explore trust within teams and its relation with performance effectiveness.

2.8 TRUST WITHIN TEAMS

Bailey and Cohen (1997:241) define a team as “a collection of individuals who are interdependent in their tasks, who share responsibility for outcomes, who see themselves and who are seen by others as an intact social entity embedded in one or more larger system, and who manage their relationships across organisational boundaries.”

Costa et al. (2001) believe that traditional forms of management have been replaced by more collaborative approaches that emphasise co-ordination, sharing of responsibilities and worker participation in the decision process. New emphasis is thus given to interpersonal and group dynamics at the workplace, where trust is seen as one of the critical elements. They cite Sabel (1993) who states that if trust is absent, no one will risk moving first and all parts will sacrifice the gains from collaboration and cooperation in increasing effectiveness. They conclude that understanding the role of trust at team level, and how it relates with performance effectiveness has become increasingly important.
Some symptoms of absent trust generally include

• communication breakdowns
• lack of collaboration among team members
• impaired performance and fragmented work efforts, and
• rework, false starts, amongst other things (http://www.yorkteam.com/trust.htm).

According to Hay (2002) mistrust between teams can result in arguments, tension and a reluctance to share resources. This mistrust can also fuel divisions in the organisation and thus promote defensive relationships. Schonberger (1986) as cited in Hay (2002:46) believes that such an environment will “tend to promote a culture of parochialism, distrust, secrecy and finger pointing.”

Farrell, Mainous, Rogers and Rusbult (1988) as cited in Hay (2002:46) also find that “employees who feel betrayed by management resort to destructive behaviour such as neglect and, in extreme cases, sabotage.” They conclude that mistrust of management can lead to decreased organisational commitment, which is likely to detract from efforts to ensure the success of the new practices.

Hay (2002) states that destructive organisational behaviours such as decreased commitment and sabotage go hand in hand with mistrust. Kramer and Tyler (1996) argue that as trust declines people increasingly insist on costly sanctioning mechanisms to defend their own interests. Oestriech and Ryan (1988) as cited in Hay (2002) contend that once mistrust sets in it is difficult to break the cycle of mistrust which involves, for example, negative assumptions and self-protective behaviour.

As alluded to earlier, the introduction of teamwork is associated with changes in the way workers interact with each other: a move towards collective effort, joint goal sharing and thus increased interdependency is found (Safizadeh, 1991). Katzenbach and Smith (1993) therefore view trust as a key characteristic of high performing teams. George and Jones (1998) suggest that trust is important to teamworking as it promotes the cooperation necessary for successful teamwork.

Hay (2002) further suggests that trust may not only be required between individual
members within teams, but may also be important to relationships between teams. She cites West (1994) who argues that teams rarely operate in isolation and will develop either a cooperative or competitive orientation towards other teams in the organisation. She thus asserts that the presence of trust between teams may promote a cooperative orientation.

Hays (2002) also sees trust at a managerial level as critical to the success of teamworking since, in practice, teams are often required to function with a degree of autonomy. She cites Mueller and Procter (2000) who advocate that management must allow workers the freedom to perform their job without close supervision. This requires a high trust management style.

According to Cohen and Bailey (1997) team effectiveness is often used to express multiple team outcomes. These can be grouped into three major categories:

- Team performance, referring to the quantity and quality of team outputs
- Team members’ attitudes, expressing for instance the satisfaction, commitment, and stress of the team members
- Behavioural team outcomes, which may refer to the level of absenteeism and turnover within teams.

Researchers determine effectiveness by considering dimensions of team performance and team members’ attitudes. According to Hackman (1987) as cited in Costa et al. (2001) dimensions of team effectiveness should measure the output of the team (task performance), the state of the group as a performing unit, and the impact of the group experience on individual members. Costa et al. (2001) state that although task performance can be evaluated from a management point of view, team members have the best understanding of how well their teams perform in relation to their objectives. Smith and Barkley (1997) found that perceived task performance correlated with more objective measures and relationship continuity.

Arrow (1974) as cited by Costa et al. (2001) believe that trust is an important lubricant of the social system and a facilitator of coordinated action among individuals and that some positive outcomes have been found associated with it. According to Costa et al. (2001) satisfaction and commitment have been pointed out
by many researchers (e.g., Smith & Barkley, 1997) as dimensions of effectiveness predicted by trust. Furthermore they cite Hunt and Morgan (1994) who argue that work relationships characterised by trust engender cooperation, reduce conflict, increase the commitment to the organisation and diminish the tendency to leave. They conclude that trust can be expected to have a positive effect on satisfaction and the commitment of members to their own team.

The next section will briefly elaborate on the relationship between trust and high performance in teams.

2.8.1 The relationship between trust and high performance in teams.

According to Costa et al. (2001) many authors (e.g., Bromily & Cummings, 1996; Butler, 1991; McAllister, 1995) have suggested the relationship between trust and high performance. They cite Zand (1972) who has shown that in teams with low levels of trust, there is a tendency to share less information and ideas, members are less personally involved, and impose controls when coordination is necessary. They also state that monitoring behaviours are usually seen as non-productive activities (e.g. McAllister, 1995) since they increase costs, restrict change and reduce cooperation (Bromily & Cummings, 1996). Furthermore they believe that the pursuance of such behaviours leaves fewer resources to accomplish fundamental work objectives. According to Zand (1972) as cited by Costa et al. (2001) teams with high levels of trust seem to be more open to discussion, develop more innovative and original solutions, solve their problems more effectively, and have more self-control and less arousal in situations of threat. A positive relationship between trust within teams and perceived task performance can thus be expected (Costa et al., 2001).

Costa et al. (2001) tested a model relating trust to perceived task performance, team satisfaction, relationship commitment and stress. In their model trust is presented as a multi-component variable with distinct but related dimensions. These include propensity to trust, perceived trustworthiness and cooperative and monitoring behaviours. Their results are supportive of the multi-component structure of trust and confirm the importance of trust for the functioning of teams in organisations.
They found that trust was mostly explained by perceived trustworthiness. Cooperative behaviours were the second strongest component of trust. Only a small percentage of the total variance of trust within teams was explained by the components propensity to trust and monitoring behaviours. Bigley and Pierce (1998) suggest that different components of trust can be more important in some contexts that others, depending on the degree of familiarity between individuals and the degree of dependence.

Costa et al. (2001) found that all components, except monitoring behaviours, were positively related with the trust factor. They cite Curral and Inkpen (1997) who believe that this is consistent with that notion that trust excludes the deliberate control of others. They also cite Das and Teng (1998) who state that teams may however demand different requirements for cooperative behaviours and/or monitoring behaviours depending on various issues such as work objectives, risks involved, amount of resources committed, etc. They conclude that a high level of trust may not automatically dictate an increase in cooperative behaviours and a lowering of monitoring behaviours.

The results of the Costa et al. (2001) study in general suggests that trust is important for the functioning of teams in organisations. High trust within teams indicates lack of stress between members, high satisfaction and commitment to the relationship, and high perceptions of team performance. Costa et al. (2001) cite McAllister (1995) who, in the investigation of dyadic relationships, found a positive relationship between the behavioural consequences of trust and the supervisor’s assessment of performance. They also cite Smith and Barkley (1997) who similarly found a positive relationship between trusting behaviours and perceived trustworthiness with task performance. Consistent with other studies (e.g., Hunt and Morgan, 1994; Smit & Barkley, 1997) they also found positive relations between trust and team satisfaction and commitment within the team.

The study by Costa et al. (2001) has also shown that deficits of trust are associated with high stress, low satisfaction and relationship commitment, and low perceived performance.
According to Costa et al. (2001) teams where individuals feel tense, unsatisfied and less committed might become extremely unproductive in the long run. They cite Kahn and Katz (1978) who believe that these conditions may also lead to a higher rate of absenteeism. They finally conclude that the result will be detrimental not only for the team but also for the whole organisation.

The following section will look briefly at a conceptualisation by Lilly and Porter (1996) to aid us in an attempt to better understand team interaction antecedents and performance consequences of task-related conflict in project teams.

2.8.2 Understanding team interaction antecedents and performance consequences of task-related conflict in project teams.

In Lilly and Porter’s (1996: 364) conceptualisation, task commitment is defined as “the group’s determination to perform to a degree that is superior to acceptable standards of performance.” This definition focuses on team members’ perceptions that the group performance norm is superior performance rather than simply doing the job.

Moorman, Deshpande and Zaltman (1993:81) as cited in Lilly and Porter (1996) define trust as “confidence in the group’s reliability and expertise.” According to Lilly and Porter (1996) trust may be low, even if task commitment is high, when members have different goals and objectives for the joint activity. This may be particularly relevant in teams composed of people from different departments or functions. If trust exists between exchange partners, they will tend to be more committed to the relationship. As group members perceive that others in the group are highly determined to excel, their trust in the group increases. Lilly and Porter (1996) also believe that where team member behaviours signal high task commitment, confidence is likely to increase.

Ancona and Caldwell (1992) as cited by Lilly and Porter (1996) view task processes as behaviours aimed at organising members to get the work done. According to Lilly and Porter (1996) quality of task processes refers to the group’s effectiveness at organising work-related activities. They posit that task processes may be influenced by trust because high trust should lead to greater ability to achieve consensus on
important task-related issues. Furthermore they believe that group members with high confidence in the group’s ability may be more likely to accept group decisions. It follows that when trust is present, the team members may be more willing to accept ideas and contributions of other team members rather than adopt an adversarial position. This further suggests that under conditions of high trust, team members are likely to view the team’s task processes favourably.

Next, the issue of how trust influences the level of task-oriented conflict within the group will be addressed.

Lilly and Porter (1996:365) define conflict as “the group members’ perceptions of the amount of opposing work-related views articulated within the group.” They state that increased conflict may distract the team from its focal task and lead to consensus building activities that may waste time and energy. In project activities with low creative requirements, conflict has a negative impact on performance since the team is responsible for many task-related decisions that can effect the overall success of the project. They believe that impact of conflict on performance should be less negative or even positive if the group is able to hash out disagreements over task-related issues and arrive at a decision acceptable to the whole group. Conversely, McGrath (1991) as cited in Lilly and Porter (1996) states that an inability to achieve consensus on important task-related issues is likely to affect performance adversely through reduced commitment to the team’s approach or by detracting attention from task issues in order to deal with group maintenance issues. Lilly and Porter (1996) is confident that the negative impact of conflict on performance may be reduced when the group is able to effectively identify objectives, prioritise work and develop workable plans.

They further posit that group members may feel less compelled to challenge the ideas and positions of fellow group members when group trust is high. They believe that groups may also have more ability to exert normative pressure on uncooperative group members, thus reducing the overall amount of conflict occurring within the group. Janis (1982) as cited in Lilly and Porter (1996) states that under certain conditions, group cohesiveness may however lead to poorer decision quality because individuals with dissenting views will be pressurised to accept the group’s position.
Lilly and Porter (1996) state that when group trust is high, group members may be more willing to express opposing viewpoints, and challenge each other’s ideas without fear that this ‘conflict’ would be interpreted as a personal assault. The aforementioned factors lead to the belief that trust reduces the level of task conflict within the group. The implication of these findings are that management would do well to structure the team so that task conflict is minimised.

The aforementioned research just emphasises the fact that new leadership skills are required in the modern workplace. Though great teams have great leadership, the responsibility for leading increasingly rests with everyone in the team, rather than with one outstanding individual (Watkin, 2002).

The next section will deal with managing or leading teams in the modern workplace.

### 2.8.3 Managing or leading teams in a modern environment

A growing reliance on teams in changing and uncertain organisational environments creates a managerial imperative to understand how to manage or lead teams (Edmondson, 1999).

Watkin (2002) posits that there are three key elements to leading teams effectively. He believes that leaders need to:

- facilitate team development
- free the potential of every team member
- inspire the team to achieve its goals.

**Facilitate team development:**

Watkin (2002) has identified seven stages within the cycle of a team and believe that each stage needs to have its associated issues resolved fully to maximise the team’s potential. The seven stages are as follows:

*The creating stages*

1. Establishing a common vision.
2. Building trust between team members.

   Trust is the antidote to the fears and risks attendant on meaningful commitment. It means confidence in team leadership and vision. When trust
prevails, team members are more willing to go through a difficult process if they are supported through ups, downs, questions, unknowns and fears. With leadership’s commitment to a clear vision, and a genuine plan to share risks and rewards, the atmosphere for trust is in place.


3. Clarifying individual roles and objectives
4. Gaining intellectual and emotional commitment to plans and strategies

The sustaining stages
5. Implementation of plans and strategies
6. Delivering results

Watkin (2002) believes that if issues are left unresolved in the early stages, this may prove a key limiting factor to team performance. The successful team leader thus needs to
- identify the earliest stage at which issues are unresolved
- facilitate the resolution of those issues.

Free the potential of each team member:
Watkin (2002) states that organisational and personal barriers to performance need to be removed in order to free the potential of individuals. He believes that removing organisational barriers requires genuine empowerment - encouraging risk taking and entrepreneurship within a no-blame culture. He concludes that the leader may have to shape his environment to make this possible within the organisation.

In order to remove personal barriers the leader needs to
- work with teams to develop inspirational goals
- coach and develop individuals, focusing on their positive potential, and
- be a role model in everything they do (Watkin, 2002).

Inspire the team to achieve its goals:
Watkin (2002) believes that inspirational leaders capture hearts, minds and souls and posses vision and trust. He further states that great leaders have the capacity to
convey a vision that their people want to belong to and the integrity to capture their commitment to achieving it. He concludes that nobody will follow a leader they do not trust, and that with trust comes the potential to inspire people to achieve your vision.

Recent research and client work by Watkin (2002) has revealed that the most successful teams all have certain key characteristics, notably:

- Effective leadership
- Clear mission and goal
- Clear individual objectives
- A balance of roles
- Sufficient expertise
- Interdependent members
- Mutual trust and support
- Excellent communication
- A no-blame culture
- Effective meetings

Watkin (2002) concludes that the successful organisations of today are those whose people are meeting this leadership challenge.

The following section will look at the trust-distrust dynamics. This has been briefly alluded to in section 2.6 under the micro-level analysis of trust. This section specifically aims to examine the relationship between trust and distrust and the possibilities for their coexistence. These trust-distrust dynamics are explained by way of a model (by Lewicki, McAllister & Bies, 1998) integrating these two concepts.

2.9 **TRUST-DISTRUST DYNAMICS**

Lewicki, McAllister and Bies (1998: 439) define trust in terms of “confident positive expectations regarding another’s conduct”, and distrust in terms of “confident negative expectations regarding another’s conduct”. They posit that both trust and distrust involve movements towards certainty: trust concerning expectations of things hoped for and distrust concerning expectations of things feared.
Lewicki et al. (1998) draw their intellectual foundations from Luhmann’s (1989) articulation of trust and distrust as functional equivalents allowing people to contain and manage social uncertainty and complexity. Trust and distrust exist as two separate dimensions, as is depicted in Figure 2.2.

<table>
<thead>
<tr>
<th><strong>High Trust</strong></th>
<th><strong>Low Trust</strong></th>
<th><strong>Low Distrust</strong></th>
<th><strong>High Distrust</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Characterised by</td>
<td>Casual acquaintances</td>
<td>Characterised by</td>
<td>Characterised by</td>
</tr>
<tr>
<td>Hope</td>
<td>Limited interdependence</td>
<td>No fear</td>
<td>Fear</td>
</tr>
<tr>
<td>Faith</td>
<td>Bounded, arms length transactions</td>
<td>Absence of skepticism</td>
<td>Skepticism</td>
</tr>
<tr>
<td>Confidence</td>
<td>Professional courtesy</td>
<td>Absence of cynicism</td>
<td>Cynicism</td>
</tr>
<tr>
<td>Assurance</td>
<td></td>
<td>Low monitoring</td>
<td>Wariness and watchfulness</td>
</tr>
<tr>
<td>Initiative</td>
<td></td>
<td>No vigilance</td>
<td>Vigilance</td>
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<tr>
<td>High-value congruence</td>
<td></td>
<td>Undesirable eventualities expected and feared</td>
<td></td>
</tr>
<tr>
<td>Trust but verify</td>
<td></td>
<td>Harmful motives assumed</td>
<td></td>
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<tr>
<td>Interdependence promoted</td>
<td></td>
<td>Interdependence managed</td>
<td></td>
</tr>
<tr>
<td>Relationship highly segmented and bounded</td>
<td></td>
<td>Preemption; best offense is a good defense</td>
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</tr>
<tr>
<td>Opportunities pursued</td>
<td></td>
<td>Paranoid</td>
<td></td>
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<tr>
<td>Opportunities pursued and downside risks/vulnerabilities continually monitored</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>New initiatives</td>
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</tbody>
</table>

**Figure 2.2: Integrating trust and distrust**

(Source: Lewicki, McAllister & Bies, 1998: 445)
Within this framework, trust is presented on the vertical dimension and characterised as either high or low. High-trust relationships are characterised by faith, confidence, assurance, initiative and industry. Distrust is presented on the horizontal dimension and similarly characterised as either high or low. Distrust is expressed by wariness, scepticism, and such behaviours as observed defensiveness, watchfulness and vigilance (Lewicki et al., 1998).

Within the two-dimensional framework, Lewicki et al. (1998) identify four relationship conditions: low trust/low distrust (cell 1), high trust/low distrust (cell 2), low trust/high distrust (cell 3), and high trust/high distrust (cell 4). These will be briefly discussed.

*Low Trust/Low Distrust (Cell 1)*

Here, an individual has neither reason to be confident or reason to be wary and watchful. With increased interdependence, awareness of the other will develop quickly, giving rise to the establishment of beliefs about the other’s trustworthiness and untrustworthiness. The relationship is not characterised by complex interdependency or complex assessment of risk or vulnerability. Conversation is simple and casual, not violating the privacy of either party or suggesting the existence of any closeness or intimacy (Lewicki et al., 1998).

*High Trust/Low Distrust (Cell 2)*

Here, one individual has reason to be confident in another and no reason to suspect the other. The relationship is characterised by pooled interdependence, where interested parties are assured that partners are pursuing common goals. Lewicki et al. (1998) believe that this experience enables the trusting party to exercise initiative, assured of the support of the trusted party. Parties seek ways to continually develop and enrich this relationship and to expand their mutual beneficial interdependencies. Lewicki et al. (1998) cite various authors (e.g., Lewicki & Bunker, 1995; McAllister, 1995) who posit that the trusting party is likely to identify with the trusted party’s values, feel strong positive affect toward the trusted party, and express these feelings by way of appreciation, support and encouragement.
Low Trust/High Distrust (Cell 3)

Here, one individual has no reason for confidence in another and ample reason for wariness and watchfulness. Lewicki et al. (1998) state that conditions such as these make it extremely difficult to maintain effective interdependent relations over time. They believe that distrusting parties may devote significant resources to monitoring the other’s behaviour, preparing for the other’s distrusting actions, and attending to potential vulnerabilities that might be exploited. When the parties have low trust and high distrust but are interdependent nevertheless, they must find ways to manage their distrust. Lewicki et al. (1998) argue that distrust relations are most effectively managed when they allow for the emergence of constrained trust relations that permit functional interaction within the constraints.

High Trust/High Distrust (Cell 4)

Here, one individual has reason to be highly confident in another in certain aspects, but also has reason to be strongly wary and suspicious in other respects. Lewicki et al. (1998) state that the relationship is characterised by reciprocal interdependence, where relationship partners have separate as well as shared objectives. They believe that parties should limit their interdependence to those issues that reinforce the trust and strongly move away from those issues engendering the distrust. In this type of relationship opportunities are pursued and down-side risks/vulnerabilities continually monitored.

They contend that this condition of sustained trust and distrust is the most prevalent for working relationships in modern organisations. They further state that this perspective fits well with the understanding that networks of social relations are penetrated by elements of trust and distrust.

The next section will explore some ethical considerations of trust.

2.10 ETHICAL CONSIDERATIONS OF TRUST

The vast body of business literature assumes that trust is good from an ethical point of view. Husted (1998) however argues that trust relations may not always have beneficial consequences. He cites examples where trust or trust-like behaviour can be seen at the root of corrupt activities (Husted, 1994) and may allow parties in a trust-
based exchange to take advantage of the other party by permitting illegal conduct with little risk of detection (Vaughan, 1982). He posits that the analysis of the ethical limitations of trust in business relationships depends to a large extent on the process by which trust is created.

In order to evaluate the ethics of a trust relationship, Husted (1998) argues that it is necessary to examine both the ends and means of the relationship. It is also useful to distinguish between the internal and external morality of the trust relationship. Here the ethics of trust is evaluated at two levels, namely, the specific dyad including trustee and trustor, and the relationship of the trust dyad to third parties and even society as a whole.

Bews and Rossouw (2002) see the internal morality of trust as the morality of the interaction between the trustor and the trustee. Here, the honouring of trust requires the trustee to respond positively to the goals that the trustor has entrusted to her/him and entails the trustee’s assisting the trustor in attaining her/his goals. They believe that if the trustor’s goals are moral goals, then we can conclude that honouring the trustor’s trust would amount to moral behaviour. Conversely, if the trustor’s goals are immoral, then honouring that trust does not amount to ethical behaviour. Thus they concur with Husted’s (1998:239) view where he warns that “…there is no element inherent in the trust relationship to ensure that the trustor’s good is good for the trustee.”

Bews and Rossouw (2002) see the external morality of trust as the impact of a trusting relationship on people (or third parties) outside that relationship. Where the interests of the trusting parties are advanced to the detriment of those outside that relationship, the trust involved cannot be considered moral. However, should a trust relationship not be detrimental to the interests of third parties, then it can be considered moral.

As a general guideline Bews and Rossouw (2002) say that whenever trust is used to exclude third parties or to disadvantage third parties, it constitutes a moral abuse of trust. Trust is also abused when it is used to cover up immoral practices such as fraud.
and corruption. They believe that in such cases the moral character of trust is eroded and it would be moral to end such trust relationships.

Husted (1998:245) found that with respect to both the internal and external morality of a trust relationship, the ends of the relationship need to be subjected to standard ethical analysis. With respect to the internal morality of the means of a trust relationship, fairness evaluations, safeguards, assimilation of the trustor’s value, or procedural justice may prevent injustice with respect to the trustor. With respect to the external morality of the relationship, trust relations may not discriminate unfairly against third parties. Trust relations may only be favoured over arm’s-length relations if the element of trust is essential to task performance. Otherwise, third parties in arm’s-length relationships are treated unfairly.

Brenkert (1998:311) believes that at least four morally significant phenomena are linked with trust:

- Communication of self-understanding to others;
- The voluntary exposure of one’s vulnerabilities to others;
- Voluntary restriction of self-interested behaviour; and
- A reciprocity which fosters autonomy.

The next section briefly explores the role that management/leadership plays in trust.

2.11 MANAGEMENT/LEADERSHIP’S ROLE IN TRUST

The researcher would now like to change the focus to the manager who is concerned about trust and wants to know more about his or her role in creating it. The questions that arise here are:

- What can a manager do to inspire trust in subordinates?
- How does a manager demonstrate that he/she will be responsive to the conditions that must be met before a subordinate can safely internalise the dominant value system of the organisation?
- What type of managerial response creates alarm within subordinates?

(Culbert & McDonough, 1986)
As alluded to earlier, research on the antecedents of trust has focused on trustor perceptions and beliefs, such as the trustor’s perceptions of the trustee’s competence, benevolence and integrity, which appear to be critical conditions for trust (Butler, 1991; Mayer et al., 1995).

According to Whitener, Brodt, Korsgaardt and Werner (1998) these insights into the trustor’s perceptions help identify how trust arises and suggest that managers may have considerable impact on building trust. Whitener et al. (1998) further argue that managers’ actions and behaviours provide the foundation for trust and that it is actually management’s responsibility to take the first step in initiating trusting relationships.

Managerial behaviour – and in particular, trustworthy behaviour – is an important influence on the development of trust in relationships between managers and employees. Whitener et al. (1998:516) define trustworthy behaviour by management as “volitional actions and interactions performed by managers that are necessary to engender employees’ trust in them.” They posit that this behaviour occurs in a social and economic exchange context, in which managers initiate and build relationships by engaging in trustworthy behaviour as a means of providing employees with social reward. They further believe that managers who engage in this behaviour will increase the likelihood that employees will reciprocate and trust them, providing a necessary, but not sufficient, foundation for employees’ ‘trust-in-supervisors’.

Five categories of behaviour capture the variety of factors that influence employees’ perceptions of managerial trustworthiness:

- Behavioural consistency
- Behavioural integrity
- Sharing and delegation of control
- Communication (e.g. accuracy, explanations, and openness)
- Demonstration of concern (Whitener et al., 1998:516)
The next section will briefly expound on the aforementioned factors.

**Behavioural consistency**

Whitener et al. (1998) posit that if managers behave consistently over time and across situations, employees will be in a better position to predict managers’ future behaviour; consequently their (employees’) confidence in their ability to make such predictions should increase. They believe employees become willing to take risks in their work or in their relationship with their manager. They cite Graen and Uhl-Bien (1995) who believe that predictable, positive behaviour reinforces the level of trust in the relationship.

**Behavioural integrity**

Employees observe the consistency between managers’ words and actions and make deductions about their integrity, honesty and moral character (Whitener et al., 1998).

**Sharing and delegation of control**

Whitener et al. (1998) posit that sharing control, including participation in decision making and delegating control, are key components of trustworthy behaviour. They cite various scholars (e.g., Alexander & Ruderman, 1987; Deci, Connell & Ryan, 1989; Folger & Konovsky, 1989; Korsgaardt & Roberson, 1989; Vroom & Yetton, 1973) who believe that the extent to which managers involve employees influence the development of trust.

Management involvement of employees in decision making afford employees greater control over decisions that affect them and consequently lead to protection of employees’ interest. Whitener et al. (1998) cite Rosen and Jerdee (1977) who contend that when managers share control they demonstrate significant trust in and respect for their employees. They conclude that employees value being involved in decision making because it affirms their standing and worth in the organisation.

**Communication**

Employees see managers as trustworthy when their communication is accurate and forthcoming. According to Whitener et al. (1998) various scholars (e.g., Folger & Konovsky, 1989; Konovsky & Cropanzano, 1991; Sapienza & Korsgaard, 1996) believe that adequate explanations and timely feedback on decisions lead to higher
levels of trust. They further state that managers who take time to explain their
decisions thoroughly are likely to be perceived as trustworthy. They cite various
scholars (e.g., Butler, 1991; Farris et al., 1973; Gabarro, 1978; Hart et al., 1986) who
conclude that open communication, in which managers exchange thoughts and ideas
freely with employees, enhances perceptions of trust.

communication and the resulting information being disseminated to employees is one
of the most essential elements of trust. They believe that the more an individual is
part of the channels providing essential information, the more that he or she may
experience organisational trust. This reiterates the importance of information sharing
by management.

Gilbert and Tang (1998) also see information flowing to employees by way of
mentoring, social integration and work group cohesion. They posit that the benefits
from increased organisational communication provided by social integration and
mentoring include material resources, job mobility information, functional expertise
and political information. Consequently, access to organisational communication
channels has been suggested to enhance organisational trust.

Demonstration of concern
Whitener et al. (1998) see benevolence or demonstrating concern for the welfare of
others as part of trustworthy behaviour which consists of three actions:

• showing consideration and sensitivity for employees’ needs and interests,
• acting in a way that protect employees’ interest, and
• refraining from exploiting others for the benefit of one’s own interest.

They posit that these actions on the part of managers may lead employees to perceive
them as loyal and benevolent.

Whitener et al. (1998) developed a framework which identifies major sets of
variables at the organisational, relational and individual level that they believe
support or encourage managerial trustworthy behaviour.
Their framework proposes the following:

1. Organisations that are highly centralised, formalised, hierarchical, and focused on efficiency will be less likely to generate managerial trustworthy behaviour – in particular communication and delegation of control – than will organisations that are decentralised, less formal, less hierarchical, and focused on effectiveness.

2. The more an organisation’s Human Resources (HR) policies and procedures incorporate (procedural) justice principles into performance appraisal and reward systems (e.g. regular and timely feedback and mechanisms for employee input into performance appraisal), the more likely it will be that managerial trustworthy behaviour, especially communication and behavioural consistency, will occur.

3. Organisations with cultures characterised by risk-taking, inclusiveness, open communication, and valuing people will show greater trustworthy behaviour, particularly delegating control, communicating openly, and showing concern, than will organisations with cultures that do not share these values and norms.

4. The more effective an employee is in initially meeting role requirements, the greater the likelihood will be that the manager will engage in trustworthy behaviour, particularly sharing control, communicating openly and sharing concern.

5. The greater a manager’s expectations are concerning an employee’s willingness to reciprocate, the greater the likelihood that the manager will engage in trustworthy behaviour, particularly sharing control and communicating openly.

6. The higher the costs associated with unreciprocated exchanges, the lower the likelihood will be that managers will engage in trustworthy behaviour, particularly sharing control.

7. The greater a manager’s propensity or disposition to trust is, the greater the manager’s expectation of reciprocation will be, and the greater the likelihood will be that the manager will engage in trustworthy behaviour, particularly behavioural integrity.
8. Managers who lack efficacy regarding their knowledge, skills and abilities to demonstrate trustworthy behaviour (e.g. delegating control or communicating openly) will be unlikely to engage in trustworthy behaviour.

9. Finally, managers whose values are self-transcendent will be more likely to engage in trustworthy behaviour such as demonstration of concern and behavioural integrity than will those whose values are self-enhancing (Whitener et al., 1998: 520 - 523).

The focus now shifts to the manager who is concerned about trust and wants to know more about his role in creating it. This section specifically focuses on the importance of employee-empowerment in organisations.

2.11.1 Importance of employee empowerment in organisations

There has been a steady management trend during the past 30 years towards employee empowerment – a work culture in which all employees take personal responsibility for the work and for improving the effectiveness of their jobs. The more competitive business landscape and the need to be able to stay ahead of the competition is a compelling reason for organisations to move towards employee empowerment. Organisational survival is another good reason forcing organisations to reach levels of accomplishment never before dreamed of. Such levels cannot be achieved without virtually everyone in the organisation pulling together (Andrews, 1994).

Dowling (2003) believes that the notion of empowerment seeks to answer questions regarding:

- the capability of employees within new team-based organisations of functioning without the supervision of middle management, and
- the reliability and dependability of their (employees’) decisions as they take a more active role in the development of the organisation.

Empowerment is one of the important keys to understanding trust and trusting relationships in an organisation. In fact, Culbert and McDonough (1986) go as far as to assert that it is the most fundamental issue in every individuals organisational life.
They argue that people seek a work environment that they can pursue with feelings of high energy and spirited commitment because they believe that they are working in personally meaningful ways generating output that is important to the productivity of the organisation. It further follows that no clear-thinking individual internalises a system that is not personally and professionally empowering to him or her. An organisation’s management can only succeed when its representatives understand this fact and comprehend what individuals need in order to feel empowered (Culbert & McDonough, 1986).

In order to feel empowered, individuals need confidence that their management has a real understanding of the special commitments and circumstances that make their contributions valuable. Employees are especially alert to responses that signal management’s lack of understanding and appreciation for what they seek to contribute. Furthermore, they (employees) scrutinise the words and behaviour of management for its sensitivity to the situations and dilemmas with which they struggle in making a contribution (Culbert & McDonough, 1986:182-183).

From the standpoint of the employee’s feelings of empowerment, management is thus continuously on trail to respond in ways that leave the subordinate believing that his or her efforts are being viewed in the context of his or her actual intentions. Employees are actually sensitised to the sentiments and actions of superiors whose judgements and impressions affect their professional and organisational standing. (Culbert & McDonough, 1986).

In conclusion, Culbert and McDonough (1986:188) believe that the individual’s need for empowerment and the organisation’s need for empowerment are in some way intertwined:

- Organisation effectiveness requires that people internalise a definition of the system that extends to the wider interest of the system as a whole.
- Individuals, in turn, make their decision as to how broad a definition of the system they will internalise based on their assessment of the system’s commitment to seeing them and their distinctive abilities and accomplishments as a whole.
If organisations are serious about having people internalise orientations that attend to the wider interest of the system as a whole, then management must devote sufficient attention to the process of trust so that managerial behaviour in promoting trust gets subjected to, and evaluated against, the same type of uncompromised standards that now exist for evaluating operational efficiency.

The key to increased managerial effectiveness lies in a deeper understanding of the legitimate and ever-present needs of the individual for an internalised frame of reference that is both personally and organisationally empowering.

Gomez and Rosen (2001) conducted a study of the leader-member exchange as a link between managerial trust and employee empowerment. They found that employees who were strongly trusted by their managers expressed experiencing a better quality exchange with their managers. Those employees who expressed having high-quality relationship with their manager experienced higher levels of meaning, competence, self-determination and impact. In other words, in-group employees felt higher levels of empowerment. However, it is also a matter of concern that out-group members may experience far less empowerment. Perhaps the most important contributions of their findings are that managerial trust influences employee perceptions of empowerment through the manager-employee relationship.

The findings of this study have some implications for management/leadership. Gomez and Rosen (2001) cite Spreitzer (1996) who posit that organisations can redesign jobs and ensure that many social structure variables support empowerment initiatives. Furthermore, they believe that managers need to be made aware of the potential drawbacks of initially assigning employees to an out-group status based on non-job related factors. They assert that there is a real possibility of creating a self-fulfilling prophecy that deprives out-group employees of opportunities to experience empowerment early in the manager-employee relationship. From an employee’s perspective, identifying and engaging in actions that engender managerial trust may be one important strategy for expanding personal control.
Conversely, managerial mistrust of employees will likely impede employee empowerment. Gomez and Rosen (2001) believe that when trusting relationships are established, a manager’s time can be allocated to more strategic initiatives rather than close monitoring of employees. Therefore, building a climate of trust and high-quality relationships between managers and their employees may prove to be extremely valuable.

Dowling (2003) concurs that it is intrinsic to human functioning for people to be and feel empowered. Organisations which foster the very best in humans, which assume that they are naturally motivated to work and doing a good job, can have access to the full potential and capabilities of their employees. Dowling (2003) asserts that high-powered companies more readily use participative management (see also Rossouw & Bews, 2002; Lawler, 1992), are highly decentralised, emphasise people and creativity, and utilise the best, most recent technology and resources available. He believes that this method of organisational structure, whether called ‘self-directed work teams’, ‘self-management’, or ‘participative management’, is now spreading rapidly.

Empowerment is considered a major issue accompanying this transition. Dowling (2003) posits that employees have a need to feel confident in their decision-making abilities, must feel supported by the company environment and must be able to make good, effective decisions in a team-based organisation. He asserts that empowerment is a necessary process, especially in organisations where workers are used to doing their jobs essentially on auto-pilot as their supervisors make all decisions for them.

He firmly believes that it is in the best interest of organisations to see to it that employees are operating at their fullest capacities and with complete confidence in their abilities to make and implement decisions. Subsequently, Dowling (2003) proposes a methodology to help employees feel empowered. He posits that a good starting-point in the empowerment process in an organisation is to see how empowered its employees feel.
Dowling (2003) advocates a current state assessment of the organisation along several dimensions, including organisational structure, management style, worker profile, informal power, organisational culture, flow of information and employee assessment (these guidelines are based on Hitchcock & Willard, 1995; Potterfield, 1999; Robinson, 1997).

Once an assessment of empowerment in the organisation has been made, the process of empowerment can begin. Dowling (2003) sees the ultimate goal of empowerment as creating a workbase of employees who are informed and engaged in the organisation’s functioning, and feel enabled to contribute through their action.

The following section will briefly explore the impact of leader behaviour on trust in employees.

2.11.2 Impact of leader behaviour on trust in employees.

The importance of trust for cooperation in organisations has been established earlier in this dissertation. The important role of leaders in enhancing trust has also been alluded to. Den Hartog, Shippers and Koopman (2002) believe that in general transformational leadership is expected to lead to more positive effects on subordinates than transactional leadership.

Den Hartog et al. (2002) posit that both transactional and transformational leader behaviours can enhance the development of trust in the leader. They assert that management-by-exception will lead to calculus-based trust through the emphasis on monitoring and controlling whether subordinates perform as expected. They cite Bass (1985:135) who states that negative feedback “can provide the novice subordinate with needed advice on what not to do.” Den Hartog et al. (2002) believe that contingent rewarding and individualised consideration should increase knowledge-based trust. They further note that consistently practising contingent reward involves keeping promises that were made (e.g. regarding extra pay or a promotion for work well done).
At a higher level, contingent reward may also involve non-material recognition of subordinates’ performance. Den Hartog et al. (2002) believe that contingent reward should increase knowledge-based trust with time. This is brought about by the subordinates’ increasing reliance upon the leader to reward them for their efforts as promised. Individualised consideration according to Bass (1985) can be seen as treating each subordinate differently according to their needs and capabilities, and giving them personal attention. Den Hartog et al. (2002) assert that this can take different forms, for instance, appreciating a job well done, advising subordinates on what to do and providing developmental feedback. They conclude that individualised consideration addresses the relationship development needed for knowledge-based trust and ensures the exchange of information on expectancies, needs and wants.

Finally, Lewicki and Bunker (1996) as cited by Den Hartog et al. (2002:31) believe that many of the activities that increase the other forms of trust also serve to develop identification-based trust. They name four types of activities that specifically increase identification-based trust:

- developing a collective identity;
- co-location (working in the same building/neighbourhood);
- creating joint products or goals; and
- committing to commonly shared values

Den Hartog et al. (2002) see articulating an attractive vision and having shared goals to strive for, committing to shared values and developing a sense of collective identity as important components of transformational leader behaviour. They believe that it should increase identification-based trust. They concur with several other theories of transformational leadership (e.g., Shamir, House & Arthur, 1993) that emphasise the importance of developing a collective identity and the importance of followers’ identification with certain values and the collective identity. Den Hartog et al. (2002) conclude that personal and social identification, as well as value internalisation, play a role in this leadership process. Finally they state that these processes are linked to identification-based trust.
Employees can also develop more generalised trust in management and trust in colleagues or co-workers. Den Hartog et al. (2002) posit that trust in generalised others can be important in the development and maintenance of cooperative attitudes towards these parties and the organisation as a whole. They believe that trusting management or co-workers is likely to influence employees’ behaviour towards these groups and the amount of effort they are willing to spend on their behalf. They cite Clegg and Wall (1981) who found that trust in management declines as one moves down the management, supervisory, white collar and blue collar hierarchy.

Transformational leadership is expected to foster a cooperative and trusting attitude towards both management and employees. Den Hartog et al. (2002) assert that trusting one’s own leader, feeling treated fairly, and the idea of pursuing common organisational goals should foster a more generalised sense of trust in management. They further state that the relationship between transformational leadership and generalised trust in management and colleagues should be stronger than the relationship between transactional leadership and these types of trust. They conclude that trust in the leader is also expected to be related to trust in management.

2.12 CHAPTER SUMMARY

This chapter examined the nature and importance of trust and the bases of trust within organisations; attempted to clarify definitions of trust; elaborated on the dimensions of organisational trust; examined the dynamics of trust and the benefits of trust; briefly examined trust within teams and its relation to performance effectiveness; explored the trust-distrust dynamics; expounded on some ethical considerations of trust and finally considered management/leadership’s role in trust.
CHAPTER 3
STRATEGIES AND MODELS OF TRUST

3.1 INTRODUCTION

In the previous chapter an attempt was made to delineate the concept of trust in order to provide a frame of reference for further discussion on the topic. As alluded to earlier, the development of trust between people has been considered a critical element in developing and maintaining successful relations and the complex systems with which they interact. In the South African context, the issue of mutual trust in working relationships is becoming increasingly vital to business success (Martins et al., 1997). When such trust is violated, it is not restored of its own accord; a concerted, concentrated effort is required to restore it. This will require the parties involved to engage in various strategies in an attempt to develop, maintain and restore trust at the individual, as well as the organisational, level.

In this chapter the focus will be on the dynamics of trust; models of developing, maintaining and violating trust will be elaborated on; and strategies for developing, maintaining and restoring trust at the individual as well as organisational level will be discussed. The primary motivation for this chapter is to add to the understanding of how people trust one another.

The next section will look at a conceptual model of interpersonal trust as developed by Mayer et al. (1995).

3.2 DIMENSIONS OF A PROPOSED INTERPERSONAL TRUST MODEL

Mayer et al. (1995:709) state that the study of trust in organisations has remained problematic for several reasons:

- Problems with the definition of trust itself.
- Lack of clarity in the relationship between risk and trust.
- Confusion between trust and its antecedents and outcomes.
- Lack of specificity of trust referents leading to confusion in the level of analysis.
- A failure to consider both the trusting part and the party to be trusted.
In an attempt to illuminate and resolve these problems they present a model of trust (See Figure 3.1) of one individual for another.

Factors of perceived trustworthiness

Perceived risk

Ability

Benevolence

Trust

Risk taking in relationship

Outcomes

Integrity

Trustor’s propensity

Figure 3.1: Integrated model of interpersonal trust
(Source: Mayer et al., 1995: 715)

They propose that the level of dyadic trust and the level of perceived risk in the situation will lead to risk taking in a relationship. They argue that trust entails risk as one or more parties make themselves vulnerable to the actions or non-actions of others. This model of trust is designed to focus on trust in an organisational setting involving two parties: a trusting party (trustor) and a party to be trusted (trustee). The model also encompasses factors about both the trustor (propensity to trust) and trustee (perceived trustworthiness)(Mayer et al., 1995).

Mayer et al. (1995) also distinguish between trust and other concepts such as cooperation, confidence and predictability. They point out that vulnerability and risk are lacking in all these three concepts.

They argue that risk is apparent in an active willingness to place trust as opposed to the passive intent of showing trust (Bews & Uys, 2002).
In the following sections the characteristics of both the trustor and the trustee, which affect the amount of trust the trustor has for the trustee, are considered.

3.2.1 Characteristics of the trustor

Mayer et al. (1995) cite various scholars (e.g., Dasgupta, 1988; Farris et al., 1973; Rotter, 1967) who posit that some parties have a higher general willingness or propensity to trust than others.

According to Mayer et al. (1995) propensity to trust is proposed as being a stable within-party factor that will affect the likelihood that the party will trust. They further state that people with different developmental experiences, personality types and cultural backgrounds (e.g., Hofstede, 1980) vary in their propensity to trust. Even though propensity would contribute to the explanation of some variance in trust, a given trustor exhibits different levels of trust with regards to different trustee.

To address this variance, the characteristics of the trustee are examined in the next section.

3.2.2 Characteristics of the trustee: The concept of trustworthiness

Consideration of the attributes of the trustee is one approach to understanding why a given party will have a greater or lesser amount of trust for another party. Mayer et al. (1995) cite several authors (e.g., Good, 1988; Hovland, Janis & Kelley, 1953; Johnson-George & Swap, 1982) who have considered why a party will be judged as trustworthy. These authors have suggested that the characteristics and actions of the trustee will have an effect on the degree to which that person is trusted.

In the following section, three characteristics of the trustee that determine trustworthiness are examined. According to Mayer et al. (1995) these variables help build the foundation for the development of trust.

3.2.3 Factors of perceived trustworthiness

Even though a number of factors have been proposed (see Butler, 1991; Butler & Cantrell, 1984; Martin et al, 1997; Mishra, 1996; Robbins, 2001; Strickland, 1958), three characteristics of a trustee appear frequently in the literature: ability,
benevolence and integrity. These three appear to explain a major portion of trustworthiness (Mayer et al., 1995).

*Ability*, is that group of skills, competencies and characteristics that enable a party to have influence within some specific domain (Mayer et al., 1995:717). Cloete and Engelbrecht (2000) refer to Butler (1991), Mishra (1996) and Clark and Payne (1997) who use a similar construct, namely competence.

*Benevolence* is the extent to which a trustee is believed to want to do good to the trustor, aside from an egocentric profit motive (Mayer et al., 1995:718). Cloete and Engelbrecht (2000) assert that if the trustor perceives that the trustee falls short of any of Butler’s (1991) concepts of loyalty, openness (e.g. Clarke & Payne, 1997; Mishra, 1996), receptivity or availability, it may also decrease the perception of the trustee’s benevolence.

*Integrity* pertains to following a set of mutually acceptable principles (Butler, 1991; Mayer et al., 1995). A party’s integrity is judged by his or her past actions, consistency between words, principles and actions, and the belief that the party has a strong sense of justice (Mayer et al., 1995).

Cloete and Engelbrecht (2000) state that each of these three factors (ability, benevolence and integrity) captures some unique elements of trustworthiness. If all three factors were perceived to be high, the trustee would be deemed quite trustworthy.

According to Cloete and Engelbrecht (2000) trustworthiness should be thought of as a continuum along which each of these factors can vary, rather than perceiving the trustee as absolutely trustworthy or not. Ability, benevolence and integrity are important to trust, and each may vary independently from the others.

The Mayer et al. (1995) model can explain trust (based on propensity) before any relationship between two parties has developed. As a relationship begins to develop, the trustor may be able to obtain data on the trustee’s integrity through third-party sources and observation. In the absence of sufficient information about the trustee’s benevolence toward the trustor, integrity will be important for the formation of trust early in the relationship. As the relationship develops, interactions with the trustee
enables the trustor to gain insights about the trustee’s benevolence, and the relative impact of benevolence on trust will grow. The development of the relationship is therefore likely to change the relative importance of the factors of trustworthiness.

To understand the extent to which a person is willing to trust another person, both the trustor’s propensity to trust and the trustor’s perceptions of the trustee’s ability, benevolence, and integrity must be discerned. Furthermore, Mayer et al. (1995) assert that the specific consequences of trust will be determined by contextual factors such as the stakes involved, the balance of power in the relationship, the perception of the level of risk, and the alternatives available to the trustor. The assessment of the antecedents of trust (ability, benevolence, integrity and propensity to trust) is also affected by the context. The trustor’s perception and interpretation of the context of the relationship will affect both the need for trust and the evaluation of trustworthiness.

The Mayer et al. (1995) model incorporates the dynamic nature of trust. The trustor’s perceptions of the trustee are enhanced when a trustor takes a risk with a trustee that leads to a positive outcome. Similarly, perceptions of the trustee will decline when trust leads to unfavourable conclusions. The outcomes of engaging in trusting behaviour will affect trust directly. Mayer et al. (1995) propose that the outcome of the trusting behaviour will influence trust indirectly through the perceptions of ability, benevolence and integrity during the next interaction.

According to the researcher several limitations of the proposed theory should be recognised:

- Mayer et al. (1995) limited their model of trust to a dyad of trustor and trustee. The broader social context (groups and organisations) in which such dyadic relationships exists, are left out (Wekselberg, 1996).
- The model only deals with the psychological processes of trustors and neglects the social processes (Wekselberg, 1996).
- Furthermore, the proposed model only includes the psychological processes and characteristics of trustors (perceived trustworthiness of trustees, trustor’s propensity, perceived risk and trust), risk-taking behaviours of the trustor, and outcomes (Wekselberg, 1996). Mayer et al. (1995) point out that their
consideration of trust in this model is unidirectional.

• This model is focusing on trust in an organisational relationship, and its propositions may not generalise to relationships in other contexts (Mayer et al., 1995).

• The Mayer et al. (1995) model appears to be based on the influence approach to social interactions and its specific case of exchange. Wekselberg (1996:333) posits that this approach:
  • is focussed on individuals who are connected only through what they do to each other psychologically or physically,
  • neglects social context,
  • considers only individual purposes of interaction,
  • considers only individual meaning of interaction, and
  • is focused mostly on individual outcomes of interaction.

Wekselberg (1996:334) propose to analyse social phenomena based on cooperative interaction. He cites the advantages of the cooperative approach as:
  • individuals are treated as elements who are linked with each other through what they do to the interaction,
  • all interactions are analysed in their social context,
  • purposes of the interaction, and not only individuals’ purposes, are considered,
  • shared meaning is crucial, and
  • the main focus is on outcomes that are related to interaction itself and the purposes of interaction.

To summarise, Mayer et al. (1995) add to our understanding of trust by focusing attention on the factors that increase the trustworthiness of a party. They also clarify the relationship between trust and risk-taking behaviour. However, risk-taking behaviour is only one behavioural consequence of trust.

The next section will look at some other models that will endeavour to explain the development and maintenance of trust.
3.3 DEVELOPING AND MAINTAINING TRUST

3.3.1 The stagewise evolution of trust

Lewicki and Bunker (1996) have described different levels of trust and how each develops, building on the other. The three levels of trust are calculus based, knowledge based and identification based. Each is assumed to facilitate the development of deeper levels of trust, and thus become an antecedent of the other levels. Although all three types of trust increase a party’s ability to predict the other’s actions, they differ in the basis for such predictions. The movement from one level of trust to another requires a frame change in the relationship. Lewicki and Bunker (1996) propose that the evolution of trust may assist in the understanding of how relationships change and evolve.

The assumption of Lewicki and Bunker’s (1996) three-stage model (Figure 3.2) is that two parties are entering into a new relationship. As a result of a lack of history, there is uncertainty about each other and about the future longevity of the relationship.
At this point, some calculus-based trust relationships become knowledge-based trust relationships.

At this juncture, a few knowledge-based trust relationships where positive affect is present, go on to become identification-based trust relationships.

**Figure 3.2: The stagewise evolution of trust**

(Source: Lewicki & Bunker, 1996: 124)

The first level of trust is calculus-based trust. Bews and Martins (2002) posit that calculus-based trust is based on Shapiro et al’s (1992) theory of deterrence and grounded in economics. They further state that trust functions largely in the hope that delivery will be rewarded and the fear that violation will be punished. Lewicki and Bunker (1996) point out trust is based on assuring consistency of behaviour and that the deterrence elements will be a more dominant motivator than the benefit-seeking elements. They state that trust at this level focuses primarily on contrasting (differences) between self and other. Calculus-based trust, they believe, creates conditions in which each party can learn more about the other, potentially leading to knowledge-based trust.
This transition to knowledge-based trust occurs at point \( J_1 \) in Figure 3.2. However, Lewicki and Bunker (1996:124-125) assert that the parties may not move past calculus-based trust, particularly if

- the relationship does not necessitate more than ‘business’ or ‘arms-length’ transactions,
- the interdependence between the parties is heavily bounded and regulated,
- the parties have already gained enough information about each other to be aware that any further information gathering is unnecessary or likely to be unproductive, or
- one or more violations of calculus-based trust have occurred.

The second level of trust is knowledge-based trust. Bews and Martins (2002:16) state that “knowledge-based trust is grounded in predictability, which is, in turn, based on knowledge gathered during regular interactions between trustor and trustee which usually extend over a period of time.” This type of trust relies on information rather than deterrence; therefore Lewicki and Bunker (1996) see regular communication and courtship as key processes. They further state that trust here is not necessarily broken by inconsistent behaviour. Bews and Martins (2002) assert that the trustor is able to anticipate the trustee’s actions and is more likely to rationalise certain inappropriate actions and move on in the relationship.

The frame change in the evolution from calculus-based to knowledge-based trust is a “shift from a sensitivity to contrasts (differences) between self and others to a sensitivity to assimilation (similarities) between self and others” (Lewicki & Bunker, 1996:125). This knowledge, they believe, can create conditions where the parties not only understand each other’s goals, but also come to value the same goals.

The next level of trust is identification-based trust. The movement from knowledge-based trust to identification-based trust begins at point \( J_2 \) in Figure 3.2.
Bews and Martins (2002:16) sum up identification-based trust as a form of trust dependent on a deep understanding of the needs of another and an “... identification with the other’s desires and intentions ... to the point that each can effectively act for one another.” They further state that trust is usually reserved for the more intense relationship often seen within the family; however, they do not exclude it from forming in an employer-employee setting. They see contracts as minimal, precluding the need to monitor the other party’s actions as loyalty is unquestionable.

Furthermore, Lewicki & Bunker (1996) posit that at this level the parties also develop a deep understanding of what is required of them to sustain the other’s trust.

Despite the apparent benefits of identification-based trust, many productive relationships remain in the knowledge-based trust stage. Lewicki and Bunker (1996) state that relationships at work are often found to be knowledge-based trust relationships. They posit that identification-based trust may not develop for several reasons: either due to lack of time or energy to invest beyond the knowledge-based trust level, or lack of desire for a closer relationship.

Building on the work of various authors, including Kramer et al. (1996), Lewicki and Bunker (1996), Martins et al. (1997), Mayer et al. (1995) and Mishra, (1996), Bews (1999) proposes an integrated model for intra-organisational trust. Aspects of this model were empirically tested and in some respects show congruence with Cloete and Engelbrecht’s (2000) findings in respect of the model of Mayer et al. (1995).

The next section will look at Bews’ (1999) proposed integrated model for intra-organisational trust.

3.3.2 Integrated model for intra-organisational trust

Bews and Martins (2002) propose that trust is a dynamic phenomenon unfolding over two stages, both of which depend on the interplay of various factors. They see the first stage as directional, depending on certain pre-trust conditions namely contextual factors, perceived risk, propensity to trust and reputation. These concepts show congruence with elements of the Mayer et al. (1995) model discussed previously.
Bews and Martins (2002:15) include the notion of reputation which refers to “the gathering of knowledge against which the trustor is able to evaluate the trustee’s potential to act in a trusting manner.”

The second stage is considered to be variable. Bews and Martins (2002) posit that it depends on perceptions in respect of the facilitators of trustworthiness, and that it is continuous throughout the duration of the relationship. In their conceptualisation, facilitators of trustworthiness include **benevolence, competency, integrity, personality characteristics, a history of interactions** and openness. All of these facilitators of trustworthiness have been discussed previously except for a **history of interactions**, which refers to a “… long-term pattern of exchanges” (Zucker in Husted, 1998: 237) or a collection of the trustor’s experiences in respect of the trustee (Bews & Martins, 2002:16).

The formation of trust is deemed to be dependent on pre-trust conditions that favour the formation of a trust-based relationship. Bews and Martins (2002) argue for the initial fixing of trust at a particular point on a continuum before it either progresses or retreats along the continuum. Along the continuum they propose consecutive levels of trust building on each other and what Lewicki and Bunker (1996) termed as ‘calculus-based’, ‘knowledge-based’ and ‘identification-based’ trust. Each level of trust is considered to be both descriptive of the degree of trust in the relationship and is a precursor for a deeper level of trust. Bews and Martins (2002) conclude that the intensity of the trust relationship will depend on trustor’s perception of the trustee’s trustworthiness.

The interplay of the aforementioned components of trust is graphically illustrated in the model presented in Figure 3.3.
The preceding sections looked at models showing how trust is developed and sustained over time. There appears to be a general consensus amongst researchers (e.g., Culbert & McDonough, 1986; Costa et al., 2001; Den Hartog et al., 2002; Elangovin & Shapiro, 1998; George & Jones, 1998; Gomez & Rosen, 2001; Katzenbach & Smith, 1993; Lilly & Porter, 1996; Mayer et al., 1995; Morris & Moberg, 1994, Whitener et al., 1998) that trust is important and useful in a range of organisational activities, such as teamwork, leadership, goal setting, performance appraisal and development of labour relations. Elangovin and Shapiro (1998) however, assert that there is also a growing concern about distrust and the violation or abuse of trust in organisations.
The following sections will endeavour to look at mechanisms by which trust declines and is violated. There will also be some focus on discussing how trust can be repaired.

### 3.3.3 The decline of trust

Trust decline is a general process reflecting the stage of trust development. A model, describing what happens when trust is violated, is proposed in Figure 3.4 and is presented from the perspective of the person who experiences the trust violation (Lewicki & Bunker, 1996).

**Figure 3.4. The dynamics of trust violation (as seen by the violated person)**  
(Source: Lewicki & Bunker, 1996: 126)

The starting point is a relationship of established mutual trust where the parties have achieved equilibrium. The other perceives one of the parties as acting in such a way that trust is violated. Lewicki & Bunker (1996) state that this creates instability and upsets the recipient, who then assesses the situation at both cognitive and emotional levels. Cognitively, the individual reflects on the importance of the situation and where the responsibility for it lies. Emotionally, it may involve strong feelings of...
anger, hurt, fear, and frustration; these reactions lead them to reassess how they feel about the other.

The person whose trust is violated may respond in a number of ways. The violator may accept or deny the other’s reactions but also indicate how he or she feels about continuing the relationship. Lewicki and Bunker (1996) believe that this behaviour may influence the response of the recipient. Consequently, the latter may pursue one of three outcomes: to terminate the relationship, renegotiate the relationship and encourage it to develop on a different basis or restore the relationship to its former state.

The nature of a violation of trust in each of the stages needs to be examined to help clarify what led to its decline or disruption (Lewicki & Bunker, 1996).

3.3.4 Violations of calculus-based trust
This can cause the relationship to deteriorate completely. Lewicki and Bunker (1996) state that the violated party is likely either to renegotiate the contract, to better ensure the desired outcomes, or to seek another relationship.

3.3.5 Violations of knowledge-based trust
The violated person will reorganise his or her knowledge base and perceptions of the other in the face of this event. An active cognitive and emotional reassessment is expected to occur of which the outcome could either be a restoration of the relationship on a new ground or permanent rupture of the trust in the relationship (Lewicki & Bunker, 1996).

3.3.6 Violation of identification-based trust
At this level violations of trust can be major relationship-transforming events as it collide with common interests or agreements. Lewicki and Bunker (1996) cite Kramer, Shah and Woerner (1994) who assert that it creates a sense of moral violation as they tap into values that underlie the relationship. This kind of trust violation only requires one person to experience it as a ‘moral’ violation, as a fundamental challenge to the relationship.
Lewicki and Bunker (1996) believe that relationships characterised by strong identification-based trust may be able to sustain rather strong challenges to both calculus-based and knowledge-based aspects of the relationship. Trust violations are experienced and reacted to differently at different relationship stages. The more advanced the relationship, the more the parties have the capacity to handle violations.

There are numerous examples of violations or betrayals of trust in organisations. Despite growing concern in organisations, relatively little theory exists regarding the dynamics of trust violation from the perpetrator/violator’s (rather than the victim’s) perspective (Elangovin & Shapiro, 1998). The next section will look at a conceptualisation that adopts a violator’s perspective.

### 3.3.7 Violation of trust from the violator’s/betrayer’s perspective

Elangovan and Shapiro (1998) adopt a betrayer’s perspective and offer a conceptualisation of betrayal, and in particular, opportunistic betrayal. They assert that opportunistic betrayal constitutes the bulk of betrayal incidents, thus emphasising the significance of examining employees’ organisational experiences as a whole to better understand betrayal behaviour. Their model focuses on factors leading to an initial act of betrayal. The essence of their conceptualisation is that a trustee’s decision to betray the trustor is a function of his or her motivation to betray and the presence of the ‘right’ conditions to do so.

Elangovin and Shapiro (1998) see the process as being triggered when certain crises or unfulfilled needs or personal characteristics of the trustee prompt him or her to consider betrayal as an option for satisfying that need or crisis. They state that the trustee will then assess and rate the overall situation at present including an assessment of the benefits associated with betrayal in this situation, the relationship with the trustor and, an assessment of the principles involved. They conclude that an unsatisfactory assessment of the current situation will motivate the trustee to change the status quo by breaking the trust.
Elangovan and Shapiro (1998:553) posit that “low current situational satisfaction” will also influence the trustee’s motivation to betray by negatively affecting his or her integrity and benevolence toward the trustor. Furthermore, a low perceived likelihood of suffering severe penalties will result in the motivation leading to actual betrayal.”

The model proposes that intrapersonal - , interpersonal - , and organisational characteristics (impact of culture and practices) all influence betrayal behaviours. Elangovin and Shapiro (1998) assert that any attempt to minimise incidents of betrayal should take into account issues relating to recruitment, socialisation, and organisational culture and practice. They believe a useful starting point to be the screening of potential employees for qualities potentially underlying one’s tendencies to engage in betrayal behaviour. New organisational employees should also experience situations of high favourability, such as positive relational experiences with co-workers and supervisors, and norms that promote cooperation and caring to minimise betrayal behaviours.

The next section will look at the possibility of repairing a relationship where trust has been violated.

3.3.8 Repairing trust that has been broken

Lewicki and Bunker (1996:129) posit that parties, who want to engage in a trust repair process, must:

- be willing to invest time and energy into the repair process
- perceive that the short- and/or long-term benefits to be derived from the relationship are highly valued,
- perceive that the benefits to be derived are preferred relative to options for having those needs satisfied in an alternative manner.

3.3.9 Steps required of each side in the trust repair process.

Actions of the violator. He or she must engage in a series of steps that identify, acknowledge and assume some ‘ownership’ of the trust-destroying events that occurred (Lewicki & Bunker, 1996).
The following four-step sequence would assist in repairing trust:

Step 1. Recognition and acknowledgement of the occurrence of a violation.
Step 2. Determination of the nature of the violation and admission that one’s actions caused it.
Step 3. Admission that the event was ‘destructive’ of trust.

*Actions of the victim.* The ‘victim’ also has to engage in the same four steps. There might not be any direct threat to the operational level of trust between the parties if the victim does not recognise the violation.

The victim might not want to engage in any actions intended to ‘rebuild’ or ‘reconstruct’ the earlier level of trust if the violator appears to be unsympathetic and unwilling to own responsibility (Lewicki & Bunker, 1996).

**3.3.10 The process of trust repair: next steps**

Lewicki and Bunker (1996) believe that there are four fundamentally different alternative courses of trust reconstruction:

- Refusal by the victim to accept any actions, terms or conditions for re-establishing the relationship.
- Acknowledgement of forgiveness by victim and specification of ‘unreasonable’ acts of reparation and/or trust restoration to be performed by the violator.
- Acknowledgement of forgiveness by victim and indication that no further acts of reparation are required.
- Acknowledgement of forgiveness by victim and specification of ‘reasonable’ acts of reparation and/or trust restoration to be performed by the violator.

“Once the course of action is agreed upon, both parties must show good faith in enacting the agreed upon course of action. The parties may undertake occasional monitoring of these actions and will use the opportunities afforded by this monitoring to rebuild calculus-based and knowledge-based trust” (Lewicki & Bunker, 1996:135).
Reina and Reina (1999) provide some advice for managers and other leaders who have the burden of rebuilding trust in the workplace. They maintain that betrayal acts as a virus which spreads quickly throughout the organisation. This should provide the driving force for leaders to acknowledge betrayal and work quickly to regain trust. They present a seven-step approach to leaders/managers for overcoming betrayal:

- Acknowledge that betrayal exists
- Acknowledge the pain caused by betrayal.
- Give employees time to grieve or otherwise express their feelings.
- Provide support and recognise employees’ transitional needs.
- Guide employees by helping them to see the big picture.
- Take responsibility for their roles in the process. This entails admitting when they make mistakes and telling the truth, which is the fundamental basis for trust in the workplace.
- Finally, leaders should help their people forgive and forget respectively.

Overcoming high levels of distrust requires a break from past organisational practises. Shaw (1997) suggests doing an assessment of the level and causes for distrust. To overcome distrust he believes that often leaders have to change, the structural frame has to be altered in a way to prevent isolation and competition among departments, trust-eroding practices and certain reward systems have to be done away with, and teamwork has to be stressed. Finally organisations have to capitalise on collective wins.

3.3.11 Trust repair at different levels of relationship development

Lewicki and Bunker (1996) believe that most calculus-based trust can be repaired using their conceptualisation of trust repair. They assert that as the parties renegotiate the relationship they may decide to prepare additional safeguards, that will define the consequences and costs of any subsequent violations.
They see the repair of knowledge-based trust and identification-based trust as far more problematic since violations of these two forms of trust present a direct threat to the victim’s self-image and self-esteem. Consequently a complete restoration of trust to its former state may not be possible (Lewicki & Bunker, 1996).

The considerations made in this and preceding chapters make a compelling case for organisations to attend to both intra- and inter-organisational trust. Managers have an extremely important – albeit, pivotal – role to play in enhancing trust and engendering the trusting relationships.

The next sections will look at strategies for improving organisational performance by creating conditions of trust.

### 3.4 IMPROVING ORGANISATIONAL PERFORMANCE BY CREATING CONDITIONS OF TRUST

The very process of change, which places greater emphasis on trust-based relationships, is also eroding trust as organisations restructure and job security comes under threat (Bews & Martins, 1996). This places an even greater emphasis on the need for management/leadership to understand the dynamics of trust and on the need to rebuild intra-organisational trust where it has been eroded.

Before elaborating on a framework for building trust, it is important to briefly reflect on some of the symptoms of trustless relationships. This could serve as a point of departure for developing a framework for trust development strategies.

It is often not difficult to know when a lack of trust is impacting on either personal relationships or group work. Employees’ responses to a lack of trust are declining performance, inefficiency, lack of innovation and collaboration, and so forth, all adding up to behaviours that limit growth and profits.
Some of the common symptoms of trustless relationships are as follows:

- **Poor communication**: Lack of openness, reluctance to explore concerns, unwillingness to truly listen.
- **Inflexibility**: Members rigidly sticking to their perceptions and beliefs, even in the face of contrary evidence.
- **Lack of respect**: Involves concerns about members’ competence, knowledge or motives.
- **Guarded information flow**: Excessive control of information and information processes.
- **Hidden agendas**: Objectives and expectations that are not freely shared with the group.
- **Avoidance of conflict**: Lack of interpersonal confrontation about legitimate concerns.
- **Backbiting**: Critical discussions of team members behind their backs.
- **Backstabbing or sabotage**: Attempts to undermine the credibility or success of a team member.
- **“End-abouts”**: Avoiding or eliminating someone who should legitimately be involved in a decision, request or communication.
- **Inappropriate independence**: Stubbornly refusing to seek the input of other team members or to work toward consensus.
- **Poor follow-through**: Failure to keep commitments or take agreed-upon actions.
- **Disinterest**: Displaying apathy, indifference or inattention in group activities.
- **Instant resistance**: Before people hear any of the details, they are against them. Associated with these are criticism, cynicism and sarcasm.
- **Rejection**: People reject anything that is different and deny problems exist.
- **Disruption**: Individual direct, but hidden, actions to restrain or kill an initiative.
- **Resistive coalitions**: Underground, hidden “guerrilla” groups whose purpose is to sabotage the initiative.
- **Bewilderment**: This makes it hard for managers to lead in a changing work environment. People just don’t understand what is happening.
- **Initial accord**: People agree without realising what is involved, then later resist.
- **Silence**: Lack of feedback makes this especially hard to deal with.
• Spiteful conformity: They smile and seem to agree, and it is only later that the true feelings emerge.
• Deflection: People ignore the initiative or avoid it altogether, hoping it will somehow disappear (Goldsmith, 1991; Josephson, 1993; 1994; Scheffert, 1996; Walker & Williams, 1995).

This list is by no means exhaustive, but nevertheless presents a compelling reason for building trust. However, we find that modern managers are sometimes mystified about what to do about these problems. They lack an understanding of trust-building strategies within the corporate environment because most have arrived at their present level through a management paradigm that is rooted in fear-based leadership. Their response is often to
• use manipulation on the opposition – this breeds resentment, and will not work in the long run
• ignore employee resistance – this is ineffective because the resistance continues to exist.
• make deals – if deals are good enough, and the resistance is low, this may appear to work, until a crisis occurs.
• use power to overcome the situation – this usually hardens the resistance.
• play off associations – friends may go along for a while until they see the cost of the trade-offs.
• apply force of reason – assuming the other party will listen; this often starts off well, but then deteriorates into one of the other approaches
• kill the messenger – this is one way of discounting information (Goldsmith, 1991; Josephson, 1993; 1994; Scheffert, 1996; Walker & Williams, 1995).

Needless to say, these responses will not assist in building trust relationships; at worst they will only exacerbate an already fragile situation. Behaviour change is required for building trust, and unexpected disruptions in the trust-building process can, and will, occur. A change of attitude in leadership at the top is the only way an open culture can develop.
A framework for building trust will now be elaborated on.

### 3.4.1 A framework for building trust

Before elaborating on a framework for building trust, the researcher wants to explore the notion of high trust organisations. The discussion will focus on certain salient aspects of high trust organisations as well some methodologies for building high trust organisations. This will then be followed by a brief elaboration of a framework for building trust.

According to Carnevale (1995) as cited by Johnson (1995:58), high trust organisations embody a democratic philosophy where

- everyone has a voice and the opportunity to participate in decisions;
- power is dispersed and authority is diffused;
- a clear set of principles establishes the framework to guide behaviour;
- conflict is resolved through collaboration and bargaining;
- teamwork is valued;
- feedback is frequent with an emphasis on learning;
- information and skills are shared throughout the organisation;
- critical and effective thinking is developed and encouraged.

Furthermore he notes that organisational structure, work design, people management policies, information technology and culture will have to be aligned so that they support and reinforce each other to build high-trust, high-performance organisations.

Bews (2001) concurs with importance of establishing high trust environments and presents a methodology for doing that. He believes that establishing high trust environments, as a means of retaining, motivating and empowering employees, and repairing damaged trust, should include the following steps:

- Assessment of the current state of trust.
- Identification of weaknesses in respect of perceived trustworthiness.
- Providing managers with the background to key aspects of the dynamics of trust.
- Facilitation of trust with specific work areas identified by means of a trust audit
• Reassessment of trust levels after a period.

In his approach to building high trust high performance organisations, Reynolds (1997) views competence, openness, reliability and equity as core principles which are at the heart of the trust effect. He states that if you want to build a high trust organisation, you can put these principles to work in relationships between managers and staff, between departments and teams, with your suppliers and with your customers. He argues that they are especially relevant to building high trust teams. In his conceptualisation there are eight practices linked to the core principles. The following section will present a brief synopsis of the four practices which will enable you to trust others with confidence:

• Competence: choose the right people
• Openness: tell them the score
• Reliability: make them accountable
• Equity: identify their concerns (Reynolds, 1997).

High trust organisations choose people who are going to be trustworthy in the context of the particular business and put a great deal of time and effort into making sure that they have exactly the right person for the job. Low trust organisations often use the wrong process to assess people (Reynolds, 1997). Whitney and Deming (1994) concur that hiring decisions have a very profound impact on the organisation’s short- and long-term performance.

High trust organisations are very open with people about the progress they are making (Reynolds, 1997). Whitney and Deming (1994) suggest that the organisation share as much information as possible about the aims, mission and values of the system. This should provide a thorough understanding of how employees’ specific missions and supporting objectives relate to the aims and values of the firm. They concur that organisations should make a concerted effort to tell people how they are progressing towards the achievement of these goals.
People are constantly monitored and checked in an organisation based on power relationships. Reynolds (1997) believes that this is a costly way to run a business and that it is extremely demotivating. In addition, this approach tends to blur the difference between the important and the trivial. Consequently high trust organisations must focus on results. If the organisation wants people to be reliable and dependable, they must be provided with the right resources to do the job and be held accountable.

Whitney and Deming (1994) concur that people should be held accountable for the following things, among others:

- Activities over which they have control
- Activities in their spheres of influence which they do not control
- Proficiency in their specialty or area of activity
- Continued improvement in their specialty
- Readiness to take on new assignments
- Working cooperatively with their colleagues
- Keeping the customer in mind
- Performing their jobs in a manner that will build trust. If the organisation has removed the barriers to trust, individuals should be held accountable for fostering trust.

Reynolds (1997) posits that the only way to ensure equity in relationships is to find out what the other party really wants. Thus, leaders should spend a lot of their time getting out and about to listen to the concerns of their employees, customers, suppliers and business partners.

In order to ensure that others trust you, Reynolds (1997) suggests four things one should do to develop one’s trustworthiness:

- Equity: lead decisively
- Reliability: act with integrity
- Openness: give feedback
- Competence: promote learning
According to Reynolds (1997), knowing the right way to make a decision so that the decision is seen to be equitable is an essential skill of high trust organisations. He sees integrity involving keeping promises and also acting according to the highest ethical standards. He asserts that high trust organisations recognise that giving open, honest feedback enhances the quality of a trust-based relationship – provided that it is done well.

Whitney and Deming (1994) suggest three important reasons for feedback namely, improving the enterprise, improving the contribution of the person to whom the feedback is being given, and improving the performance of the system and its leaders.

People cannot be trusted to do their jobs if they do not have the necessary competence. If they have incompetent leaders, the mistrust is exacerbated significantly (Whitney & Deming, 1994). However, being competent is no guarantee of staying competent in a rapidly changing world. Reynolds (1997) believes that the only way to stay competent is to make a commitment to learning. Consequently high trust organisations do not just commit themselves to traditional forms of learning but are serious about finding opportunities daily for everyone involved in the company to learn and develop.

This discussion briefly summarised the eight practices that Reynolds (1997) believes are linked to the core principles of the trust effect. A common thread among the various conceptualisations of building trust is the role that leadership plays in the process.

The discussion will now shift to a framework for building trust. The framework is depicted in Figure 3.5 and has three key leveraging points namely leadership practices, organisational architecture and organisational culture. The key imperatives in building high-trust organisations and teams according to Shaw’s (1997) conceptualisation are achieving results, acting with integrity and demonstrating concern.
3.4.1.1 Building trust through leadership

Shaw (1997) sees the actions of leadership as being pivotal to organisational trust. He posits that highly credible leaders can overcome distrust and create a trust-based environment through the sheer impact of their individual influence. However, the erosion of whatever trust exists within an organisation or team by incompetent or unethical leaders is also a very real and present threat.

This places an imperative on leaders to act in a trustworthy way, build trustworthy leadership groups through the organisation, and to develop trust-sustaining mechanisms. The establishment of credibility at the top level is contingent on the following factors:

- Leadership achieving results by matching their specific skills to the needs of the company at any particular point in time, and
- Leadership acting with integrity, that is, being honest and aligning words and actions (Shaw, 1997).

Figure 3.5: Building Trust

(Source: Shaw, 1997: 18)
In their studies, Kouzes and Posner (1987) found that leadership honesty was the single most important ingredient in the leader-follower relationship. Reynolds (1997) concurs that acting with integrity means being open, honest and truthful with people. He further states that high trust organisations ensure that their people get to know the truth about the business as a whole and how it is doing as well as the truth about individual performance.

Shaw (1997) believes that integrity and its concomitant trust are based on a few essential actions, namely, defining a clear purpose, confronting reality, having open agendas and following through. It also imperative for leadership to demonstrate concern. Concern and its attendant trust are based on four essential actions, namely, building one vision and one company, showing confidence in people’s ability, establishing familiarity and dialogue and, finally, recognising contributions.

Proponents of ethical leadership (Covey, 1992; Josephson, 1993, 1994; Pritchett, 1999; Scheffert, 1996; Walker & Williams, 1995) suggest the following strategy to build or rebuild trust. Leaders can

- show consistency in the basic values that guide their decision making.
- show respect for old ideas and traditions while exploring new ones. This is particularly important during times of rapid change.
- listen in ways that show respect for others and that their ideas are valued.
- show that they are working for others’ interests as well as their own.
- practise openness and sharing.

The next section will look at how trust can be build through organisational architecture.

3.4.1.2 Building trust through organisational architecture

The formal and informal aspects of organisational life are important in promoting or eroding trust over time. Shaw (1997) asks firms to promote stretched targets in order to align the interests of the employees. This goes hand in hand with aligned performance accountabilities. They allow organisations to communicate and
enforce the desired outcomes regarding results, integrity and concern. The overall structure should be very decentralised and characterised by high ownership. These claims ask for superior talent (recruiting and retaining). Structural measures should also provide rich information that is easily accessible. Finally, a few rigorous control mechanisms have to be established to counterbalance this high autonomy.

The next section will explore how trust can be built through organisational culture.

3.4.1.3 *Building trust through organisational culture*

“The focus of internal change in organisations should not only lie with process and structure, but also with organisational culture: the values, beliefs and attitudes that permeate a business” (Woolsey, 1997:12).

Woolsey (1997) sees the challenge then as building an organisational culture that encourages and nurtures a release of people’s creativity, ideas and knowledge. He believes that this can be achieved by building high trust organisations. He also asserts that trust is the foundation for an effective organisational culture. The higher the trust within an organisation, the stronger the culture foundation.

A trust enabling culture rest on two pillars. On the one hand intrinsic motivation is needed in a sense that people should subscribe to collective norms. This norm compliance will make it easier for high-trust organisations or teams to develop a common vision and shared view of competitive realities and to live by genuinely felt values and operating principles. On the other hand culture should promote familiarity across levels and groups too. For example a culture of dialogue helps to build strong ties ensuring a more familiar atmosphere. Finally high-trust organisations should encourage a culture of risk-taking and experimentation (Shaw, 1997).
According to Woolsey (1997:14) “survival in the atmosphere of the 21st century marketplace of global competition, changing technology and more discriminating and demanding consumers, will demand the creation and nurturing of organisations that are energised, focused and synergised. This requires not only re-engineering processes and structures but, most importantly, changes to culture that will bring about high trust organisations.”

The next section will briefly look at how the dilemmas of trust can be managed.

3.5 MANAGING THE DILEMMAS OF TRUST

One way of understanding the dilemmas of trust is to consider the trade-offs between the three imperatives – achieving results, acting with integrity and demonstrating concern. For example, delivering profits in a highly competitive business environment in a way that demonstrates concern is very difficult. Thus, the dilemma: how do you achieve results while demonstrating concern? If the organisation’s efforts to achieve results violate ethical standards, the organisation must act immediately to correct it. Similarly initiatives aimed at improving business effectiveness can be softened by balancing it with a more general approach that takes cognisance of values such as standards of integrity and honesty, teamwork and support (Shaw, 1997).

Finally some organisations need to downsize in order to become more productive and competitive. In times of downsizing trust is very difficult to sustain. As downsizing is often due to strategic failures and management inconsistencies on the part of the organisation, it causes people to mistrust the organisation. This further erodes the collective sense of ownership and cohesion that is needed to compete over the long term (Shaw, 1997).

Trust must be sustained, however, if the organisation wishes to keep its people, customers and markets. There are a few actions that are important in mitigating the impact that reductions in the workforce will have on trust. Shaw (1997) highlights the following as important, namely focusing on the needs of the business and its customer markets, acting boldly in terms of taking the necessary action that is required by the competitive situation (for example it is often better to make one
drastic cut than several small ones), communicating consistently and openly and providing sufficient support where required. He asserts that every effort should be made to retain those who wish to remain with the organisation by way of reassignment and retraining.

Earlier in this research the researcher alluded to the interplay between trust and distrust. The next section will briefly examine managing trust and distrust and looks specifically at new directions for practice and research.

3.6 MANAGING TRUST AND DISTRUST: NEW DIRECTIONS FOR PRACTICE AND RESEARCH

“Despite the critical importance of distrust and trust, and the presence of conditions promoting ambivalence (co-existence of trust and distrust), little is known about how ambivalence is managed” (Lewicki et al., 1998:452).

Lewicki et al. (1998) assert that critical opportunities exist for managing ambivalence in peer relations and leader-member interaction at the interpersonal level. They contend that organisation members must know when to trust others and similarly when to monitor them closely. Consequently, organisation members must develop the capacity to manage the ways in which they are trusted and distrusted by others. Lewicki et al. (1998) cite research findings (e.g., Ashford & Tsui, 1991; Thompson, 1967; Tsui, 1994) indicating that the individuals who successfully manage their reputations for effectiveness are distinguished by their efforts to seek negative as well as positive feedback on their performance. This strongly suggests that effective self-regulation is the product of efforts to manage distrust as well as trust simultaneously. This places some imperative on organisation members to direct efforts at minimising distrust in some relationships and enhancing trust in others.

The dynamics of ambivalence within collaborative relations and teamwork also requires some consideration. Lewicki et al. (1998) posit that functional coexistence of trust and distrust may be a central component in high-performance teams. They see the dynamic tension between trust and distrust being reflected in enhanced decision making and problem solving, harmonious interaction and coordinated
implementation. They conclude that effective organising for concerted action depends on parties’ ability to leverage the benefits of diversity while managing the dynamics of trust and distrust inherent within the relationship.

Similarly, at the macro-level of analysis, Lewicki et al. (1998) believe that there is considerable potential for concerted attention on the institutional dynamics of distrust. They cite Luhmann (1989), who suggests that distrust can be institutionalised in formal organisational roles and that this process may be essential for the expansion of trust. Distrust may be institutionalised in specialised roles (e.g. quality control inspectors or auditors), positions (e.g. first-line supervisors) and sanctions (applicable punishments for specific transgressions). Luhman (1989) argues that institutionalised distrust allows for the depersonalisation of distrust activities. People may merely execute certain activities by virtue of their organisational roles and not necessarily because they personally distrust others. Similarly, formalised procedures for sanctioning transgressions may be useful because they specify the boundaries for retribution and provide for restitution. Zucker (1986) as cited by (Lewicki et al. (1998) concurs that increases in institutionalised distrust may subsequently lead to increases in trust.

### 3.7 CHAPTER SUMMARY

The primary purpose of this chapter was to add to the understanding of how people trust one another. In this section use was made of various models and theories in an attempt to elucidate the concept of trust. These models started out with a proposal for the development of dyadic trust in organisations (Mayer et al., 1995). They then continued to describe different levels of trust and how each develops, building on the other (Lewicki & Bunker, 1995). Building on the work of various authors, including (Kramer et al., 1996; Lewicki & Bunker, 1996; Martins et al., 1997; Mayer et al., 1995; Mishra, 1996), Bews and Martins (2002) proposed an integrated model for intra-organisational trust. They proposed that trust is a dynamic phenomenon that unfolds over two stages, both of which depend on the interplay of various factors. Having looked at the development of trust in various settings, the models then explored how trust is violated and suggested a framework for restoring trust.
These models set the scene for developing strategies for improving organisational performance by creating conditions of trust. A framework for building trust was then discussed. This framework had three key leveraging points, namely, leadership practices, organisational architecture and organisational culture. The key imperatives in building high-trust organisations and teams were identified as achieving results, acting with integrity and demonstrating concern.

Various trust-building strategies were then discussed. The chapter concluded with a brief look at managing the trust-distrust dynamics.
CHAPTER 4
RESEARCH METHODOLOGY

4.1 INTRODUCTION
This chapter will present the research methodology. The sample that was used will be discussed and the procedures used to obtain the sample will be described. The statistical techniques used to analyse the data will also be described.

4.2 OBJECTIVES OF THE STUDY
The objectives of this research were as follows:

General objective
The general objective of this research is to do a comparative study of the Trust Audit results – obtained during 2000 – of three business units of a South African Company.

Theoretical objectives
• To explore how trust is developed, sustained and restored (if violated) in the work relationship
• To indicate the need for trusting relationships within teams
• To explore the impact of leadership/management on trust

Empirical objectives
The empirical objective of the research is to do comparative analyses with a view to determining whether there are any significant differences between the three business units regarding the “Big Five” personality dimensions and the “Managerial Practices” dimensions.

The comparative analyses will, inter alia, focus on the following:
• Comparing the total population with regards to the “Big Five” personality dimensions. This entails
  - comparisons between the qualification groups and
  - comparisons between the main functional groups.
• Comparing the total population with regards to “Managerial Practices”; this entails
  - comparisons between the qualification groups
  - comparisons between the functional groups and
  - comparisons between the major grade groups.
• Comparing the three business units with regards to the “Big Five” personality dimensions and “Managerial practices”.

4.3 SAMPLING DESIGN

Kerlinger (1986: 110) defines sampling “as taking any portion of a population or universe as representative of that population or universe.”

According to Dane (1990: 289) “sampling is the process of selecting participants for a research project”. Sampling ensures that the sample has approximately the characteristics of the population relevant to the research in question.

For the purpose of the Trust Audit each of the business units drew a stratified sample. In a stratified sample the whole population is first divided into two or more parts called strata. In this particular case, the population was divided into major grade groups, namely, A-band, B-band, C-band and management across different functional areas. The actual sample in the various grade groups was obtained using a table of random numbers. The employee lists for people in the various grade groups in each business unit were utilised. People were then chosen randomly in the various grade groups.

The following procedure describes the approach that was followed in the various business units for the sampling for the Trust Audit survey in more detail:
• Firstly, sampling had to ensure that there would be enough respondents per department and per section.
• A 20 percent sample was considered the statistical ideal, but the business units realised that they had to be creative to ensure that they had enough responses to have valid and reliable information to work with.
• Business units also realised that they had to use more than 20 percent because of the low numbers in specific departments/sections and that in some cases they might not use the full 20 percent for practical reasons.

• The business units followed the following approach to do the sampling:
  - Operating – 20 percent per shift or not less than 25 people per shift.
  - Maintenance – 20 percent per section but not less than 25 people per section.
  - Engineering – 20 percent of total compliment
  - Human Resources (HR) and Finance – if 20 people for Human Resources and 20 for Finance were available (if HR and Finance each has a compliment of 20 or more), then a report for each could be produced. If the numbers are limited to less than 20 for these two departments then the data would be analysed together.

The respondents involved in the research satisfied the following conditions:

• They were informed of the nature of the study. The following points were discussed with them:
  - Why a survey had to be done – it was used as a Human Resources (HR) Key Performance Indicator (KPI) which was part of the business unit manager’s contract.
  - What it measures and what the benefits will be
  - What will happen with the results

• They completed the questionnaires voluntarily. No restrictions were placed on the variables of sex, race, educational qualifications, and levels of experience or position.

For the purpose of the comparative study, the researcher used purposive and stratified sampling as an example of non-probability sampling to select three business units. “Non-probability sampling refers to any procedure in which elements have unequal chances of being included” (Dane, 1990: 302). In purposive sampling, units are selected because they possess certain desirable characteristics or because they are important or rare or because they are thought to be representative of an entire group (Lininger & Warwick, 1975).
The sample used by the researcher consisted of 1256 employees, which included employees across different functional areas within each of the business units, as well as employees with different gradings. The sample thus consisted of a cross-section of the population from the lower level employee up to management. The different functional areas included Operating, Maintenance, Finance and Human Resources.

4.4 BIOGRAPHICAL INFORMATION

One thousand two hundred and twenty six (1226) usable questionnaires were received from the three business units. Tables 4.1 to 4.8 and Graphs 4.1 to 4.5 give an overview of the biographical composition of the survey.

Table 4.1 depicts the distribution of the employees in the sample per Business unit

<table>
<thead>
<tr>
<th>TABLE 4.1</th>
<th>DISTRIBUTION OF EMPLOYEES IN SAMPLE PER BUSINESS UNIT (BU)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Unit (BU)</td>
<td>Frequency</td>
</tr>
<tr>
<td>BU 1</td>
<td>430</td>
</tr>
<tr>
<td>BU 2</td>
<td>302</td>
</tr>
<tr>
<td>BU 3</td>
<td>507</td>
</tr>
<tr>
<td>Total</td>
<td>1239</td>
</tr>
<tr>
<td>Missing from system</td>
<td>17</td>
</tr>
<tr>
<td>Total</td>
<td>1256</td>
</tr>
</tbody>
</table>

From the table it is evident that the highest number of respondents came from BU 3.

Table 4.2 depicts the distribution of the qualification levels of all the employees in the sample.
The qualification distribution appears to be well dispersed over the various groupings. In Table 4.2 more than half (54.7%) of the respondents are in the “Std. 10 and lower” category. The rest of the sample (42.5%) is made up of respondents in the “Certificate to Degree+” category. This could be indicative of the qualification distribution at the various business units. This qualification distribution could lead to great diversity in the responses by virtue of the different levels of “intellectual abilities” involved.

Table 4.3 depicts the distribution of the main functional areas of the total population.
The distribution of respondents in the Operating and Maintenance areas is more or less equal, and they are also the highest out of the four functional groups. This is merely by virtue of the large numbers of people in these areas. The percentage of respondents in the Finance and Human Resources groups are relatively lower, once again because of the relative number of people in these areas.

Table 4.4 depicts the distribution of the major grade groups of the total population.

**TABLE 4.4**

**DISTRIBUTION OF MAJOR GRADE GROUPS**

(TOTAL POPULATION)

<table>
<thead>
<tr>
<th>Major grade groups</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid percent</th>
<th>Cumulative percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management</td>
<td>81</td>
<td>6,4</td>
<td>6,6</td>
<td>6,6</td>
</tr>
<tr>
<td>A-band</td>
<td>493</td>
<td>39,3</td>
<td>40,3</td>
<td>46,9</td>
</tr>
<tr>
<td>B-band</td>
<td>531</td>
<td>42,3</td>
<td>43,4</td>
<td>90,3</td>
</tr>
<tr>
<td>C-band</td>
<td>119</td>
<td>9,5</td>
<td>9,7</td>
<td>100,0</td>
</tr>
<tr>
<td>Total</td>
<td>1224</td>
<td>97,5</td>
<td>100,0</td>
<td></td>
</tr>
<tr>
<td>Missing from system</td>
<td>32</td>
<td>2,5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1256</td>
<td>100,0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The major grade groups in this survey comprise the “B- and C-bands”. At the business units they make up the largest proportion of the population. The percentage of respondents in the “management” category is the lowest by virtue of the ratio of management to the rest of the employees. The percentage of respondents in the “A-band” category is also relatively low by virtue of the fact that this grade group is systematically being phased out in the various business units. The aim of the business units is to move people in this category progressively up to the “B-band” category.

Table 4.5 depicts the distribution of union affiliation of all the employees in the sample.
TABLE 4.5
DISTRIBUTION OF UNION AFFILIATION OF ALL THE EMPLOYEES IN THE SAMPLE

<table>
<thead>
<tr>
<th>Union</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid percent</th>
<th>Cumulative percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUM</td>
<td>368</td>
<td>29.3</td>
<td>31.3</td>
<td>31.3</td>
</tr>
<tr>
<td>NUMSA</td>
<td>194</td>
<td>15.4</td>
<td>16.5</td>
<td>47.8</td>
</tr>
<tr>
<td>CEA</td>
<td>34</td>
<td>2.7</td>
<td>2.0</td>
<td>50.7</td>
</tr>
<tr>
<td>SAWU</td>
<td>12</td>
<td>1.0</td>
<td>1.0</td>
<td>51.7</td>
</tr>
<tr>
<td>MWU</td>
<td>375</td>
<td>29.9</td>
<td>31.9</td>
<td>83.7</td>
</tr>
<tr>
<td>Non-member</td>
<td>192</td>
<td>15.3</td>
<td>16.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>1175</td>
<td>93.6</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Missing from system</td>
<td>81</td>
<td>6.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1256</td>
<td>100.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Most of the respondents are affiliated to the Mineworkers Union (MWU), the National Union of Mineworkers (NUM) and the National Union of Mineworkers of South Africa (NUMSA) which have traditionally been the major trade unions in this company. The other two minority trade unions, Company Employees Association (CEA) and the South African Workers Union (SAWU)) have the least number of respondents affiliated to them. It is also noted that a significant percentage (16.3%) of the respondents in the survey are not affiliated to any particular union.

This is graphically presented in Figure 4.1
Table 4.6 presents a comparison of the three business units (BUs) regarding their qualification distribution.

**TABLE 4.6**

A COMPARISON OF THE BUSINESS UNITS (BUs) REGARDING THEIR QUALIFICATION DISTRIBUTIONS

<table>
<thead>
<tr>
<th>Highest qualification</th>
<th>Business Unit (BU)</th>
<th>Total</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BU 1</td>
<td>BU 2</td>
<td>BU 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>79</td>
<td>7</td>
<td>116</td>
<td>202</td>
<td></td>
</tr>
<tr>
<td>% within business unit</td>
<td>18,9%</td>
<td>2,3%</td>
<td>23,3%</td>
<td>16,6%</td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>52</td>
<td>28</td>
<td>61</td>
<td>141</td>
<td></td>
</tr>
<tr>
<td>% within business unit</td>
<td>12,5%</td>
<td>9,4%</td>
<td>12,2%</td>
<td>11,6%</td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>118</td>
<td>86</td>
<td>135</td>
<td>339</td>
<td></td>
</tr>
<tr>
<td>% within business unit</td>
<td>28,3%</td>
<td>28,8%</td>
<td>27,1%</td>
<td>27,9%</td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>45</td>
<td>33</td>
<td>63</td>
<td>141</td>
<td></td>
</tr>
<tr>
<td>% within business unit</td>
<td>10,8%</td>
<td>11,0%</td>
<td>12,7%</td>
<td>11,6%</td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>84</td>
<td>87</td>
<td>79</td>
<td>250</td>
<td></td>
</tr>
<tr>
<td>% within business unit</td>
<td>20,1%</td>
<td>29,1%</td>
<td>15,9%</td>
<td>20,6%</td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>39</td>
<td>58</td>
<td>44</td>
<td>141</td>
<td></td>
</tr>
<tr>
<td>% within business unit</td>
<td>9,4%</td>
<td>19,4%</td>
<td>8,8%</td>
<td>11,6%</td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>417</td>
<td>299</td>
<td>498</td>
<td>1214</td>
<td></td>
</tr>
<tr>
<td>% within business unit</td>
<td>100,0%</td>
<td>100,0%</td>
<td>100,0%</td>
<td>100,0%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-square</td>
<td>90,758(a)</td>
<td>10</td>
<td>0,000</td>
</tr>
<tr>
<td>N of valid cases</td>
<td>1214</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(a) 0 cells (0,0%) have expected count less than 5. The minimum expected count is 34,73
The chi-square is highly significant \( p = 0.000 \), which indicates that the three business units (BUs) differ as far as their educational profile is concerned. From an inspection of the frequency percentages it would appear that the qualification level is higher at “BU 2” as about 48.5% have a diploma or degree as compared to only 29.5% at “BU 1” and only 24.7% at “BU 3”.

This distribution of the qualification levels of all employees in the sample is graphically presented in Figure 4.2

Table 4.7 presents a comparison of main functional areas per business unit (BU)
### TABLE 4.7
A COMPARISON OF MAIN FUNCTIONAL AREAS PER BUSINESS UNIT (BU)

<table>
<thead>
<tr>
<th>Main functional areas</th>
<th>Business Unit (BU)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BU 1</td>
<td>BU 2</td>
</tr>
<tr>
<td>Operating</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>141</td>
<td>75</td>
</tr>
<tr>
<td>% within business unit</td>
<td>36,9%</td>
<td>33,9%</td>
</tr>
<tr>
<td>Maintenance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>136</td>
<td>69</td>
</tr>
<tr>
<td>% within business unit</td>
<td>35,6%</td>
<td>31,2%</td>
</tr>
<tr>
<td>Finance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>83</td>
<td>60</td>
</tr>
<tr>
<td>% within business unit</td>
<td>21,7%</td>
<td>27,1%</td>
</tr>
<tr>
<td>Human resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>22</td>
<td>17</td>
</tr>
<tr>
<td>% within business unit</td>
<td>5,8%</td>
<td>7,7%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>382</td>
<td>221</td>
</tr>
<tr>
<td>% within business unit</td>
<td>100,0%</td>
<td>100,0%</td>
</tr>
</tbody>
</table>

Value   Df  Asymp. Sig. (2-sided)

Pearson Chi-square: 19,020(a) 6 .004

N of valid cases: 1013

(a) 0 cells (0,0%) have expected count less than 5. The minimum expected count is 12,00

It would appear that most of the main functional areas in the above table are about equally distributed across the three stations except for the division “Operating” that appears to have a higher representation in “BU 3” (43,2%) compared to the other two business units.

The distribution of the total population according to functional areas is graphically presented in Figures 4.3 and 4.4.
FIGURE 4.3: DISTRIBUTION ACCORDING TO FUNCTIONAL AREAS (PERCENTAGE)

FIGURE 4.4: DISTRIBUTION ACCORDING TO FUNCTIONAL AREAS (COUNT)
Table 4.8 presents a comparison of the major grade groups per business unit (BU).

### TABLE 4.8
**A COMPARISON OF MAJOR GRADE GROUPS PER BUSINESS UNIT (BU)**

<table>
<thead>
<tr>
<th>Main grade groups</th>
<th>Business Unit (BU)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BU 1</td>
<td>BU 2</td>
</tr>
<tr>
<td>Management</td>
<td>Count</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>% within business unit</td>
<td>7,3%</td>
</tr>
<tr>
<td>C-band</td>
<td>Count</td>
<td>151</td>
</tr>
<tr>
<td></td>
<td>% within business unit</td>
<td>36,6%</td>
</tr>
<tr>
<td>B-band</td>
<td>Count</td>
<td>191</td>
</tr>
<tr>
<td></td>
<td>% within business unit</td>
<td>46,2%</td>
</tr>
<tr>
<td>A-band</td>
<td>Count</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>% within business unit</td>
<td>9,9%</td>
</tr>
<tr>
<td>Total</td>
<td>Count</td>
<td>413</td>
</tr>
<tr>
<td></td>
<td>% within business unit</td>
<td>100,0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-square</td>
<td>67.958(a)</td>
<td>6</td>
<td>0,000</td>
</tr>
<tr>
<td>N of valid cases</td>
<td>1213</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(a) 0 cells (0,0%) have expected count less than 5. The minimum expected count is 19,70

It seems that C-band is more represented in “BU 2”, while B-band is more represented in “BU 3” and that “BU 2” has no A-band.

The distribution of the total population into the major grade groups is graphically presented in Figure 4.5
4.5 GENERAL PROCEDURE FOR EXECUTION, DATA GATHERING AND DATA CAPTURING

The Trust Audit, which was done at the various business units, was to be used as a Human Resource (HR) Key Performance Indicator (KPI) on the business unit managers’ contracts negotiated with their executive director. At business unit level the coordination of the Trust Audit survey was done by relevant Industrial Relations (IR) practitioners.

The general procedure for carrying out the Trust Audit survey at the various business units was as follows:

- Determining the sample sizes and compiling the sample, as well as identifying the individuals to be involved in the survey. This has been discussed under section 4.3 – sample design.
• Making all the necessary arrangements to inform the people about the survey
  - Why – Human Resource (HR) Key Performance Indicator (KPI), part of the business unit (BU) manager’s contract
  - What does it measure and what will the benefits be
  - When
  - What will happen with the results
distribute the questionnaires and to collect them again

• Commencing with the questionnaires, that is, distributing the questionnaires to the employees involved and collecting them again for processing and interpretation.

As alluded to earlier, data was gathered through the completion of the Trust Audit Questionnaire. The following data gathering process was followed at all the business units:

• The survey consisted of questionnaires – for BU (B-upper) to E band – and focus groups for A to BL (B-lower) bands.
• Training was done by an external consultant to train business unit facilitators in facilitating the A and BL focus group process.
• Data was analysed and interpreted.

The findings, discussed in Chapter 5, represent an overall summary of responses. It was thus possible to determine the relative level of trust within the different business units. The questionnaire will be described in the following section.

4.6 THE RESEARCH INSTRUMENT

The research instrument used in the study was a structured questionnaire containing 79 items generated to measure various constructs relating to trust, personality and management practices.
4.6.1 Rationale and background

During 1995/1996, the Centre of Industrial and Organisational Psychology at Unisa conducted research to investigate the possible antecedents of trust, which led to the assumption that trust within companies is probably created by personal factors and managerial practices (Martins, 2000). No questionnaire existed in the field of Industrial Psychology that measured these specific concepts in relation to trust; a questionnaire was thus developed. In compiling the questionnaire, the personality factors – which will be discussed under section 4.6.3.1 – were viewed as possible antecedents of interpersonal trust among superiors and subordinates (Martins, 2000). The questionnaire itself will now be discussed.

4.6.2 The questionnaire

The questionnaire consists of four sections, which can be described as follows:

Section 1: Biographical information on the participant and the person he or she reports to was collected, specifically data pertaining to age, years of experience, level of participation in current company, gender, highest qualification, work function, home language, marital status and financial support obligation.

Section 2: Personality characteristics of the manager as perceived by the participant, where the participant had to rate his manager on a scale of one to nine, where one is a strong follower, five is unsure and nine is a strong leader (35 questions).

Section 3: Management practices linked to the trust relationship as perceived by the participant are measured by asking the participant to indicate the extent to which he (dis)agrees with 5 statements, followed by 30 statements on things which managers and supervisors do to be effective, rated on a five-point scale where 1 is never and 5 is always (35 questions).

Section 4: Measurement of the changes implemented by management and how the participant perceives them. The participant has to rate his supervisor or manager as generally highly efficient or very
inefficient, above average efficient, moderately efficient, somewhat efficient or very inefficient. As a second stage to this section, the participant must then rate the changes that have occurred in the company during the past year and the manner in which the changes have been implemented on a four-point scale where 4 is very satisfied and 1 is very dissatisfied (9 questions).

4.6.3 Dimensions measured by the questionnaire

4.6.3.1 Personality aspects

Martins (2000) states that the Five-Factor Model of personality has proved to be a robust and reliable measure in the world of work in particular. Although the correlations are often fairly small, these factors are considered to be valid predictors of work-related behaviour.

The “Big Five” personality dimensions can be described as follows:

Conscientiousness
This includes traits such as being persistent, determined, hardworking, and dependable, thorough and responsible. The opposite pole is “lazy”.

Agreeableness
This reflects being liked, courteous, good-natured, cooperative, forgiving, and soft-hearted. The opposite pole is, of course, “disagreeable”.

Emotional stability
This reflects the absence of anxiety, depression, anger, worry and insecurity. The opposite pole is called “neuroticism”.

Resourcefulness
This reflects being imaginative, creative, broad-minded and intelligent. The opposite pole is “closed mindedness”.

Extroversion
This reflects sociability, friendliness, talkativeness and activity. The opposite pole of the dimension is “introversion” (Martins, 1998).
4.6.3.2 Managerial practices

This managerial dimension consists of four sub-dimensions, namely:

Credibility
This includes a willingness to listen, consider proposals, allow others the freedom to express feelings, tolerate mistakes and ensure that employees enjoy prestige and credibility in the organisation.

Team management
This dimension refers to the effective management of team and individual goal accomplishment and the handling of conflict within groups.

Information sharing
This dimension indicates the willingness to give individual feedback on performance and to reveal company-related information in an honest manner.

Work support
This is the willingness to support employees when needed and to provide job-related information for the accomplishment of objectives (Martins, 1998).

4.6.3.3 Trust relationship

This dimension reflects the relationship with the immediate supervisor in terms of openness, honesty and intentions to motivate employees (Martins, 1998).

With regard to the measurement of trust, five questions in the research instrument (questionnaire) are directly related to the trust dimension. These five questions deal with various aspects of trust between employees and their immediate supervisor, and relate to openness, honesty, fairness, intentions and belief. They are:

- I have an open, trusting relationship with the person I report to.
- The person I report to openly and honestly reveals important work-related facts to me.
- The person I report to is fair in judging my performance.
- The person I report to demonstrates good intentions and motives towards me.
- I can believe what the person I report to says (Martins, 1998).
4.6.4 **Validity and reliability of the questionnaire**

**4.6.4.1 Validity**

Kerlinger (1986:417) explains validity as follows: “Validity is often defined by asking the questions: Are you measuring what you think you are measuring? If so, your measure is valid; if not, it is not valid. The emphasis is on what is being measured.”

Lemke and Wiersma (1976) define validity as “the degree to which a test measure what it is intended to measure”.

The content validity of the trust questionnaire was evaluated by means of factor and path analysis using structural equation modelling. The EQS-software package was used to analyse the data. The results of these procedures indicated that the questionnaire measured what it was supposed to measure (Martins, 2000).

The goodness-of-fit index (GFI) was 0.95, the adjusted-goodness-of-fit index (AGFI) was 0.91 and the parsimony-goodness-of-fit was 0.50 (Martins, 2000). A GFI with a value close to 0.90 reflects a good fit, an AGFI with a value of 0.90 a good model fit and PGFI varies between 0 (no fit) to 1 (perfect fit). It can therefore be deduced that a good model fit was established (Martins, 2000).

**4.6.4.2 Reliability**

Lemke and Wiersma (1976) provide a definition of reliability as “the degree to which a test is consistent in its measurement”.

For a large part the present study assumes that the selected questionnaires are valid and reliable. This research reports the internal consistency reliability, the so-called Cronbach Alpha coefficient (Lemke & Wiersma, 1976) for each of the psychological scales. To assist with these reliability analyses, single factor solutions are extracted by means of factor analysis (Kerlinger, 1986; Kim & Mueller, 1978). By considering the factor loadings of each individual item – the size and sign of the loading – the researcher can confirm the significance and intended direction of the scale of an item.
This proves useful when decisions have to be taken as to which items should rather be omitted from the scale (if any at all) and which items should be re-scaled and which items should not be re-scaled. If the item analysis loadings indicated that an item has a very low loading, such items were left out. Such revisions to the items of a scale, if any, will be pointed out.

The reliability of the questionnaire, which indicates how accurately the questionnaire measures what it is supposed to measure, has proven to be highly satisfactory with alpha coefficients ranging between 0,85 and 0,95 for the “Big Five” personality characteristics as well as management practices (Martins, 2000). Table 4.9 shows these results.

### TABLE 4.9

**RESULTS OF THE ITEM ANALYSIS (RELIABILITY)**

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>No. of questions</th>
<th>Cronbach’s alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conscientiousness</td>
<td>8</td>
<td>0,94</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>8</td>
<td>0,95</td>
</tr>
<tr>
<td>Emotional stability</td>
<td>5</td>
<td>0,91</td>
</tr>
<tr>
<td>Resourcefulness</td>
<td>7</td>
<td>0,90</td>
</tr>
<tr>
<td>Extraversion</td>
<td>7</td>
<td>0,91</td>
</tr>
<tr>
<td>Credibility</td>
<td>13</td>
<td>0,94</td>
</tr>
<tr>
<td>Group management</td>
<td>9</td>
<td>0,92</td>
</tr>
<tr>
<td>Information sharing</td>
<td>4</td>
<td>0,85</td>
</tr>
<tr>
<td>Work support</td>
<td>3</td>
<td>0,86</td>
</tr>
<tr>
<td>Trust relationship</td>
<td>5</td>
<td>0,92</td>
</tr>
</tbody>
</table>

From the table it becomes apparent that the internal consistence reliability of all the constructs is high.

### 4.6.5 Validity of the trust model

Structural equation modelling (SEM) has been used to assess validity of the conceptual model of the manifestation of trust. SEM is a linear cross-sectional statistical modelling technique which includes confirmatory factor analysis, path analysis and regression analysis. The EQS software program was utilised to test the trust model using structural equation modelling (Martins, 2000).
A confirmatory analysis was conducted to determine whether the data confirmed the supposition that each of the proposed latent variables represents separate constructs (Martins, 2000).

The comparative fit index (CFI) = 0.89, the Bentler and Bonet normed fit index (BDNFI) = 0.89 and the Bentler and Bonet non-normed fit index (BBNNFI) = 0.85. All are very close to the recommended perfect fit; 0 (no fit) to 1 (perfect fit).

The statistically significant standardised parameter estimates for the revised theoretical model are presented in Figure 4.6.

![Diagram](image)

Figure 4.6: Empirical evaluation of the trust relationship model
(Source: Martins, 2000)
4.6.6 Justification for using the instrument

The trust questionnaire used in gathering the data analysed in this research effort has been used by Martins (2000) to deduce the conceptual model for the manifestation of trust in organisations.

Martins (2000) established positive correlations for Personality, as depicted by the “Big Five” theory of Personality, namely, conscientiousness, agreeableness, emotional stability, resourcefulness and extraversion with personality as such. The factors credibility, team management, information sharing and work support have also been found to correlate highly with Management Practices. Personality, per se, proved to have a low relationship with trust (factor intercorrelation – 0,24), whereas management practices correlated significantly with trust (factor intercorrelation - 0,56).

The primary objectives of this research was to do a comparative study of the Trust Audit results – obtained during 2000 – of three business units of a South African company with a view to determining whether there are any significant differences between them regarding the “Big Five” personality dimensions and the “Managerial Practices” dimensions.

The model that Martins (2000) proposed was therefore further analysed, using the same data as was utilised for the initial research.

4.7 STATISTICAL METHODS AND STRATEGIES FOR ANALYSING QUANTITATIVE DATA

The research effort focused on the following variables: conscientiousness, agreeableness, emotional stability, resourcefulness, extraversion, credibility, team management, information sharing, work support and trust relationship. The construct validity of these factors has been verified in previous research as discussed in section 4.6.4.1 of this chapter only on the internal consistency reliability of these factors.
The statistical tools used in this research were:

- Analysis of Variance (ANOVA),
- Post hoc Schéffe tests
- Pearson product moment correlations

4.7.1 Analysis of Variance (ANOVA)

To compare the mean scores of the three business units with respect to the various dimensions of the trust questionnaire, the Analysis of Variance approach (Kerlinger, 1986) was used. The one-way Analysis of Variance $F$-test is a statistical technique for testing differences in the means of several groups.

The question to be answered by ANOVA is whether the samples all come from populations with the same $\mu$ or whether at least one of the samples originate from a population with a different mean. The one-way ANOVA is an analysis of variance where groups are defined on only one independent variable with more than two levels, that is, involving more than two groups.

There are a few assumptions underlying the uses of the $F$-test:

- Normality
  - The scores within each population are normally distributed.
- Homogeneity of variances
  - Variances of scores in the population are equal.
- Independence
  - The measurement scores in the different groups are independent of one another – this is achieved through random sampling.

The $F$-test is a fairly “robust” measure, so if the assumptions are violated to a limited degree, the final results will not be influenced (Wolfaard, 1998).

4.7.1.1 Logic of ANOVA

To conduct ANOVA, the researcher treats the total variability in a set of scores as being divisible into two components:
• Variability within groups
  - This measures the normal variability or random error in the data.
  - Here the researcher finds an error effect, that is, variability that is the result of random sampling and chance occurrences.

• Variability between groups
  - This measures the differences between group means.
  - Here the researcher finds a treatment effect coming into play, that is, measure of the effect of the experimental treatment on the subject.

As alluded to earlier, the statistic to determine these effects is the $F$-statistic, or $F$-test or $F$-ratio. The $F$-ratio is the ratio of variability between groups to variability within groups.

It is expressed by the equation:

$$ F = \frac{\text{Variability between groups}}{\text{Variability within groups}} = \frac{\text{Treatment effect}}{\text{Error effect}} $$

When the treatment effect exceeds the error effect by some critical value, the $F$-test is significant, and the researcher concludes that there are significant differences between group means (Wolfaard, 1998).

### 4.7.2 Post hoc Schéffe tests

When the $F$-test in the one-way analysis of variance proves significant at, say the 5% level, the researcher knows that there are statistically significant differences between the groups as far as the dependent variable is concerned. Often, however, this simply says that three or more groups are different with respect to their mean scores and the researcher still may not know which pairs of groups (of the possible pairings of groups) are different regarding their mean scores. To this purpose, when the overall $F$-test of the analysis of variance procedure is significant, a so-called post hoc test procedure is applied to test which pair-wise group differences are significant. The procedure used in this present study is the Schéffe test.
4.7.3 Pearson product moment correlations

The final statistical procedure used is the Pearson Product Moment Correlation coefficient commonly known as Pearson’s r. Essentially, a correlation coefficient (r) expresses the degree of correspondence, or relationship, between two sets or variables (Anastasi, 1988). The Pearson product moment correlation coefficient (Hays, 1963) was calculated as a measure of the linear relation between any two variables when two or more scales were considered to be measured on an interval scale. The correlation coefficient (r) indicates the estimated extent to which the changes in one variable are associated with changes in the other variable on a range of +1,00 to -1,00. A correlation of +1,00 indicates a perfect positive relationship; a correlation of 0,00 indicates no relationship, and a correlation of -1,00 indicates a perfect negative relationship. In the case of a positive correlation between two variables, the higher the score on one variable, the higher the score tends to be on the other variable. If the correlation is negative, then the higher the score on the one variable, the lower the scores on the other variable tends to be.

4.7.4 Level of statistical significance

Conventionally, the levels 0,05 and 0,01 are used by most researchers as levels of significance for statistical tests performed. In choosing a level of significance for the present research, the following viewpoints were taken into account:

- In the human sciences, researchers are as concerned about missing a significant result or making a type-II error as they are about falsely concluding a significant result. Hays (1963) points out that when both types of errors (type I and type II) are equally important, significance levels such as 0,20 (and possibly even 0,30) are more appropriate than the conventionally used 0,05 and 0,01 levels.

- As the total number of statistical tests to be performed on the same sample increases, the probability of a type I error also increases. One approach to counter this accumulating effect is to set the level of significance smaller for the individual statistical test so as to compensate for the overall type I error effect. Say the overall research significance level is 0,30, then the significance level for the individual test might be 0,05 or 0,01. There is no easy way to come to a decision as to what exactly this level of significance should be. The final choice remains to a large extent arbitrary.
• In the present study the sample size is relatively large (about 1256) so that statistical tests may be considered powerful. The power of a statistical test refers to its ability to detect a significant result. As the sample size increases, the p-values become smaller given particular effects. It may thus be prudent to set small levels of significance in the case where sample sizes are large, so that if a result is statistically significant, it stands a chance of being of practical significance as well.

In view of all these considerations, it was decided to use a significance level of 0.05 for any one particular statistical test in the present study. It is acknowledged that this choice remains an arbitrary one, in spite of the arguments presented above for a smaller or larger level of significance.

4.8 CHAPTER SUMMARY

In this chapter, the methodology and analysis of this research were discussed. The sample that was used in the research was described and the procedure used to obtain the sample was discussed. The statistical methods that were used to analyse the data and the relationship among variables were also described.

The result of the analysis will be presented in the following chapter.
CHAPTER 5
DISCUSSION OF RESULTS

5.1 INTRODUCTION

The results of the empirical research proposed in Chapter 4 will be presented and interpreted in this chapter. The results are presented in tables as well as in graphic format using histograms.

In discussing the results of the survey the cut-off point of 3.20 will be used as a guideline. Research by the HSRC (1994) demonstrates that an average of 3.20 (64%) can be seen as a reasonable cut-off point to differentiate between positive and negative perceptions.

5.2 OVERALL RESULTS OF CONSTRUCTS TESTED

This research examines the constructs: conscientiousness, agreeableness, emotional stability, resourcefulness, extraversion, credibility, team management, information sharing, work support and trust relationship.

It was decided to scale each of the constructs such that the score of any respondent on the scale range from 0 (least) to 100 (most). The descriptive statistics for these scales for the total population is given in Table 5.1
TABLE 5.1
MEANS AND STANDARD DEVIATIONS OF CONSTRUCTS
(TOTAL POPULATION)

<table>
<thead>
<tr>
<th>Dimension</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agreeableness</td>
<td>1188</td>
<td>72,23</td>
<td>21,36</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>1168</td>
<td>73,67</td>
<td>21,52</td>
</tr>
<tr>
<td>Extraversion</td>
<td>1173</td>
<td>72,63</td>
<td>19,36</td>
</tr>
<tr>
<td>Resourcefulness</td>
<td>1198</td>
<td>70,48</td>
<td>19,92</td>
</tr>
<tr>
<td>Emotional stability</td>
<td>1198</td>
<td>71,26</td>
<td>21,44</td>
</tr>
<tr>
<td>Credibility</td>
<td>1157</td>
<td>63,97</td>
<td>22,60</td>
</tr>
<tr>
<td>Team management</td>
<td>1195</td>
<td>67,81</td>
<td>22,79</td>
</tr>
<tr>
<td>Information sharing</td>
<td>1204</td>
<td>58,97</td>
<td>27,11</td>
</tr>
<tr>
<td>Work support</td>
<td>1223</td>
<td>67,47</td>
<td>26,14</td>
</tr>
<tr>
<td>Trust relationship</td>
<td>1226</td>
<td>68,23</td>
<td>24,50</td>
</tr>
</tbody>
</table>

From the descriptive statistics for the total population it becomes apparent that information sharing is perceived negatively while credibility is just about on the cut-off point between positive and negative perceptions.

5.3 RELATIONSHIPS BETWEEN CONSTRUCTS

The nature and strength of the relationships between the various constructs were investigated by calculating the Pearson product moment correlations between each pair of constructs. The relationship between the various constructs is presented in Table 5.2.

It is clear from Table 5.2 that all the variables are highly correlated with each other. The highest correlation (0.86) was found between emotional stability and agreeableness. The lowest correlation (0.58), that is still moderately positive, was found between extraversion and information sharing, work support and trust relationship respectively.

These results indicate that there is a strong positive relationship between, for example, “emotional stability” and “agreeableness” in the first instance; and that there is a moderately positive relationship between “extraversion” and “information sharing”, “work support” and “trust relationship” respectively.
<table>
<thead>
<tr>
<th></th>
<th>Agreeableness</th>
<th>Conscientiousness</th>
<th>Extraversion</th>
<th>Resourcefulness</th>
<th>Emotional stability</th>
<th>Credibility</th>
<th>Team management</th>
<th>Information sharing</th>
<th>Work support</th>
<th>Trust relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agreeableness</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>0.79(**)</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extraversion</td>
<td>0.73(**)</td>
<td>0.73(**)</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resourcefulness</td>
<td>0.77(**)</td>
<td>0.80(**)</td>
<td>0.76(**)</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional stability</td>
<td>0.86(**)</td>
<td>0.79(**)</td>
<td>0.73(**)</td>
<td>0.79(**)</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Credibility</td>
<td>0.74(**)</td>
<td>0.71(**)</td>
<td>0.63(**)</td>
<td>0.71(**)</td>
<td>0.72(**)</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Team management</td>
<td>0.67(**)</td>
<td>0.72(**)</td>
<td>0.65(**)</td>
<td>0.72(**)</td>
<td>0.69(**)</td>
<td>0.89(**)</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information sharing</td>
<td>0.62(**)</td>
<td>0.62(**)</td>
<td>0.58(**)</td>
<td>0.64(**)</td>
<td>0.61(**)</td>
<td>0.85(**)</td>
<td>0.84(**)</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work support</td>
<td>0.66(**)</td>
<td>0.66(**)</td>
<td>0.58(**)</td>
<td>0.64(**)</td>
<td>0.63(**)</td>
<td>0.83(**)</td>
<td>0.81(**)</td>
<td>0.76(**)</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Trust relationship</td>
<td>0.72(**)</td>
<td>0.68(**)</td>
<td>0.58(**)</td>
<td>0.67(**)</td>
<td>0.68(**)</td>
<td>0.80(**)</td>
<td>0.73(**)</td>
<td>0.72(**)</td>
<td>0.74(**)</td>
<td>1.00</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed)
A change in the one variable implies a change in the other. However, this correlation does not imply causality – a correlation coefficient alone cannot establish a causal relationship (Wolfaardt, 1998). A correlation between ‘emotional stability’ and ‘agreeableness’ does not mean that ‘emotional stability’ is caused by ‘agreeableness’.

We can also interpret these correlations in terms of variance by squaring them. The proportion of variance, for example, in the ‘emotional stability’ score that is due to the variance in the ‘agreeableness’ score (i.e. common or shared variance), and vice versa, is measure by $r^2$ (the coefficient of determination) (Wolfaardt, 1998). In the case of ‘emotional stability’ and ‘agreeableness’, the correlation coefficient ($r$) is 0,86. The coefficient of determination ($r^2$) is equal to 0.74. The percentage of shared variance in this case is 74% ($r^2 \times 100$). This means that 74% of the variance of the ‘emotional stability’ measure is explained or accounted for by the variance of the ‘agreeableness’ measure. The other 26% is due to other factors.

In the case of the moderately positive relationship, 34% of variance of the ‘extraversion’ measure is explained or accounted for by the variance of the ‘information sharing’, ‘work support’ and ‘trust relationship’ measures respectively. The other 66% are due to other factors.

5.4 FINDINGS

The findings of the research are presented in the next sections.

5.4.1 The “Big Five” overall results for the total population

Table 5.3 shows the “Big Five” overall results for the total population.
TABLE 5.3
THE “BIG FIVE” OVERALL RESULTS

<table>
<thead>
<tr>
<th>Dimension</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agreeableness</td>
<td>1188</td>
<td>72.23</td>
<td>21.36</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>1168</td>
<td>73.67</td>
<td>21.52</td>
</tr>
<tr>
<td>Extraversion</td>
<td>1173</td>
<td>72.63</td>
<td>19.36</td>
</tr>
<tr>
<td>Resourcefulness</td>
<td>1198</td>
<td>70.48</td>
<td>19.92</td>
</tr>
<tr>
<td>Emotional stability</td>
<td>1198</td>
<td>71.26</td>
<td>21.44</td>
</tr>
</tbody>
</table>

- All five dimensions have been evaluated positively (above a mean of 64%).
- The most positive dimensions are conscientiousness, extraversion and agreeableness, which indicate that most managers/supervisors are seen as hardworking, dependable, thorough, sociable, friendly, active, courteous, cooperative and forgiving.
- The lowest dimension shows that not all managers/supervisors are seen as resourceful (imaginative, creative, broad-minded and intelligent).

Figure 5.1 gives an overview of the “Big Five” results of the total population.
5.4.1.1 Results of the different qualification groups

Table 5.4 gives an overview of the “Big Five” results of the different qualification groups. The following are noted from these results:

- Overall the average results of the different qualification groups were evaluated above 64%.

- The “less than Std 6” and “Std 6-7” groups evaluated the **extraversion** and **agreeableness** dimensions as the highest. The lowest dimension for both qualification groups shows that not all managers/supervisors are seen as **emotionally stable**.

- The “Std 8-10”, “Certificate”, “Diploma”, and “Degree+” qualification groups all evaluated the **conscientiousness** dimension as the highest. The lowest dimension for the “Std 8-10”, “Diploma” and “Degree+” qualification groups show that not all managers are seen to be **resourceful**. The lowest dimension for the “Certificate” group shows that not all managers/supervisors are seen to be **emotionally stable**.
### TABLE 5.4
THE “BIG FIVE” - COMPARISON BETWEEN THE QUALIFICATION GROUPS

<table>
<thead>
<tr>
<th></th>
<th>Less than Std 6</th>
<th>Std 6 - 7</th>
<th>Std 8 - 10</th>
<th>Certificate</th>
<th>Diploma</th>
<th>Degree +</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>M</td>
<td>SD</td>
<td>N</td>
<td>M</td>
<td>SD</td>
<td>N</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>178</td>
<td>72.36</td>
<td>25.05</td>
<td>132</td>
<td>71.03</td>
<td>24.47</td>
<td>328</td>
</tr>
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<td>247</td>
<td>70.63</td>
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<td></td>
<td>138</td>
<td>72.66</td>
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<td>25.37</td>
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<td>71.17</td>
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Figure 5.2 graphically represents the “Big Five” results of the different qualification groups.

![Figure 5.2: The "Big Five" results of the qualification groups](image)

To compare the mean scores of the different qualification groups, with respect to the “Big Five” dimensions of the trust questionnaire, the analysis of variance approach (Kerlinger, 1986) was used. The one-way Analysis of Variance $F$-test is a statistical technique for testing differences in the means of several groups.

The results of the Analysis of Variance (ANOVA) $F$-test is presented in Table 5.5.
### TABLE 5.5
ANOVA – QUALIFICATION GROUPS

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<th>p-value</th>
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<td>459.59</td>
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<td>Between Groups (Combined)</td>
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</table>

The above analyses show that the qualification groups are significantly different on the 5% level with regards to conscientiousness. A post hoc Schéffe test was applied to test which pair-wise group differences are significant. See Table 5.6 for results.
### TABLE 5.6
POST HOC SCHÉFFE – HIGHEST QUALIFICATION: CONSCIENTIOUSNESS

<table>
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<tr>
<th>Highest Qualification</th>
<th>Highest Qualification</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>p-value</th>
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<td>2.53</td>
<td>0.997</td>
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<td>Std 8 - 10</td>
<td>-4.55</td>
<td>1.98</td>
<td>0.383</td>
</tr>
<tr>
<td>Std 6 - 7</td>
<td>Certificate</td>
<td>-6.96</td>
<td>2.42</td>
<td>0.143</td>
</tr>
<tr>
<td>Std 6 - 7</td>
<td>Diploma</td>
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<td>2.10</td>
<td>0.656</td>
</tr>
<tr>
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<td>Degree +</td>
<td>-8.10(*)</td>
<td>2.42</td>
<td><strong>0.048</strong></td>
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<tr>
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<td>Less than std 6</td>
<td>1.41</td>
<td>2.53</td>
<td>0.997</td>
</tr>
<tr>
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<td>Std 8 - 10</td>
<td>-3.13</td>
<td>2.30</td>
<td>0.869</td>
</tr>
<tr>
<td>Std 6 - 7</td>
<td>Certificate</td>
<td>-5.55</td>
<td>2.69</td>
<td>0.514</td>
</tr>
<tr>
<td>Std 6 - 7</td>
<td>Diploma</td>
<td>-2.40</td>
<td>2.41</td>
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<tr>
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<tr>
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<td>3.13</td>
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<tr>
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<td>Certificate</td>
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<td>2.18</td>
<td>0.942</td>
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<tr>
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<td>Diploma</td>
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<td>1.82</td>
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<tr>
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<td>2.42</td>
<td>0.143</td>
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<td>2.18</td>
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<td>2.41</td>
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<td>Std 8 - 10</td>
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<td>1.82</td>
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<tr>
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<tr>
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<td>2.69</td>
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<td>Std 8 - 10</td>
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<td>2.18</td>
<td>0.752</td>
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<td>Certificate</td>
<td>1.14</td>
<td>2.59</td>
<td>0.999</td>
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<td>Degree +</td>
<td>Diploma</td>
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<td>2.29</td>
<td>0.624</td>
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</table>

Based on observed means

* The mean difference is significant at the .05 level
This analysis indicates that the qualification groups that differ significantly with regard to conscientiousness are the “less than Std 6” and the “Degree +” group. On further analysis it is found that the significant difference is due to their respective mean scores on the conscientiousness dimension, vis-à-vis 69.42% for the “less than Std 6 group” and 77.52% for the “Degree +” group.

5.4.1.2 The results of the main functional groups

Table 5.7 gives an overview of the “Big Five” results of the main functional groups.

Table 5.7
THE “BIG FIVE” RESULTS OF THE MAIN FUNCTIONAL GROUPS

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<th>Operating</th>
<th>Maintenance</th>
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<th>Human Resources</th>
<th>Total</th>
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<td>SD</td>
<td>N</td>
<td>M</td>
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<td>20.56</td>
<td>346</td>
<td>75.13</td>
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<td>69.18</td>
<td>23.26</td>
<td>351</td>
<td>71.79</td>
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</tbody>
</table>

The following are noted from these results:
- Overall the average results of the different functional groups were evaluated above 64%.
- The “Operating”, “Maintenance” and “Finance” groups evaluated the conscientiousness dimension as the highest.
• The “Human Resources” group evaluated the **extraversion** dimension as the highest.
• The lowest dimension for all four functional groups shows that not all managers are seen to be **resourceful**.

Figure 5.3 graphically represents the “Big Five” results of the main functional groups.

To compare the mean scores of the main functional groups, with respect to the “Big Five” dimensions of the trust questionnaire, the analysis of variance approach (Kerlinger, 1986) was used.

The results of the Analysis of Variance (ANOVA) \(F\)-test are presented in Table 5.8.
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The analyses show that the main functional groups are significantly different on the 5% level with regards to agreeableness, conscientiousness and extraversion.
Consequently, a post hoc Schéffe test procedure was applied to test which pair-wise group differences are significant. These post hoc Schéffe test was performed for all three dimensions mentioned above. The results of the post hoc Schéffe tests are presented in Tables 5.9 to 5.11.

**TABLE 5.9**

**POST HOC SCHÉFFE – MAIN FUNCTIONAL GROUPS:**

**AGREEABLENESS**

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<th>(I) Main functional group</th>
<th>(J) Main functional group</th>
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<th>Std. Error</th>
<th>p-value</th>
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<td></td>
<td>Maintenance</td>
<td>0,33</td>
<td>3,20</td>
<td>1,000</td>
</tr>
<tr>
<td></td>
<td>Finance</td>
<td>0,18</td>
<td>3,36</td>
<td>1,000</td>
</tr>
</tbody>
</table>

Based on observed means
* The mean difference is significant at the 0,05 level

This analysis indicates that the functional groups that differ significantly with regard to the agreeableness dimension are the “Operating” and the “Maintenance” groups. On further analysis we find that the significant difference is due to their respective mean scores on the agreeableness dimension, vis-à-vis 69,40% for the “Operating group” and 73,48% for the “Maintenance group”.
The post hoc Schéffe test results for the conscientiousness dimension is given in Table 5.10.

**TABLE 5.10**

**POST HOC SCHÉFFE – MAIN FUNCTIONAL GROUPS: CONSCIENTIOUSNESS**

<table>
<thead>
<tr>
<th>(I) Main functional group</th>
<th>(J) Main functional group</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance</td>
<td>Operating</td>
<td>-5.54(*)</td>
<td>1.66</td>
<td><strong>0.012</strong></td>
</tr>
<tr>
<td></td>
<td>Finance</td>
<td>-4.89</td>
<td>1.98</td>
<td>0.109</td>
</tr>
<tr>
<td></td>
<td>Human Resources</td>
<td>-1.62</td>
<td>3.26</td>
<td>0.969</td>
</tr>
<tr>
<td>Operating</td>
<td>Maintenance</td>
<td>5.54(*)</td>
<td>1.66</td>
<td><strong>0.012</strong></td>
</tr>
<tr>
<td></td>
<td>Finance</td>
<td>0.66</td>
<td>2.01</td>
<td>0.991</td>
</tr>
<tr>
<td></td>
<td>Human Resources</td>
<td>3.91</td>
<td>3.27</td>
<td>0.698</td>
</tr>
<tr>
<td>Finance</td>
<td>Operating</td>
<td>4.89</td>
<td>1.98</td>
<td>0.109</td>
</tr>
<tr>
<td></td>
<td>Maintenance</td>
<td>-0.66</td>
<td>2.01</td>
<td>0.991</td>
</tr>
<tr>
<td></td>
<td>Human Resources</td>
<td>3.26</td>
<td>3.45</td>
<td>0.826</td>
</tr>
<tr>
<td>Human Resources</td>
<td>Operating</td>
<td>1.62</td>
<td>3.26</td>
<td>0.969</td>
</tr>
<tr>
<td></td>
<td>Maintenance</td>
<td>-3.92</td>
<td>3.27</td>
<td>0.698</td>
</tr>
<tr>
<td></td>
<td>Finance</td>
<td>-3.26</td>
<td>3.45</td>
<td>0.826</td>
</tr>
</tbody>
</table>

*The mean difference is significant at the 0.05 level

Based on observed means

This analysis indicates that the functional groups that differ significantly with regard to conscientiousness dimension are the “Operating” and the “Maintenance” groups. On further analysis we find that the significant difference is due to their respective mean scores on the conscientiousness dimension, vis-à-vis 69.75% for the “Operating group” and 75.29% for the “Maintenance group”.

The post hoc Schéffe test results for the extraversion dimension is given in Table 5.11.
TABLE 5.11
POST HOC SCHÉFFE – MAIN FUNCTIONAL GROUPS: EXTRAVERSION

<table>
<thead>
<tr>
<th>(I) Main functional group</th>
<th>(J) Main functional group</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance</td>
<td>Operating</td>
<td>-5.62(*)</td>
<td>1.44</td>
<td><strong>0.002</strong></td>
</tr>
<tr>
<td></td>
<td>Finance</td>
<td>-4.18</td>
<td>1.71</td>
<td>0.115</td>
</tr>
<tr>
<td></td>
<td>Human Resources</td>
<td>-4.78</td>
<td>2.78</td>
<td>0.400</td>
</tr>
<tr>
<td>Operating</td>
<td>Maintenance</td>
<td>5.62(*)</td>
<td>1.44</td>
<td><strong>0.002</strong></td>
</tr>
<tr>
<td></td>
<td>Finance</td>
<td>1.44</td>
<td>1.73</td>
<td>0.875</td>
</tr>
<tr>
<td></td>
<td>Human Resources</td>
<td>0.85</td>
<td>2.79</td>
<td>0.993</td>
</tr>
<tr>
<td>Finance</td>
<td>Operating</td>
<td>4.18</td>
<td>1.71</td>
<td>0.115</td>
</tr>
<tr>
<td></td>
<td>Maintenance</td>
<td>-1.44</td>
<td>1.73</td>
<td>0.875</td>
</tr>
<tr>
<td></td>
<td>Human Resources</td>
<td>-0.59</td>
<td>2.94</td>
<td>0.998</td>
</tr>
<tr>
<td>Human Resources</td>
<td>Operating</td>
<td>4.78</td>
<td>2.78</td>
<td>0.400</td>
</tr>
<tr>
<td></td>
<td>Maintenance</td>
<td>-0.85</td>
<td>2.79</td>
<td>0.993</td>
</tr>
<tr>
<td></td>
<td>Finance</td>
<td>0.59</td>
<td>2.94</td>
<td>0.998</td>
</tr>
</tbody>
</table>

Based on observed means
* The mean difference is significant at the 0.05 level

This analysis indicates that the functional groups that differ significantly with regard to the extraversion dimension are the “Operating” and the “Maintenance” groups. On further analysis we find that the significant difference is due to their respective mean scores on the extraversion dimension, vis-à-vis 69.51% for the “Operating group” and 75.13% for the “Maintenance group”.
5.4.2 The Managerial Practices: overall results for the total population

Table 5.12 shows the Managerial Practices overall results for the total population.

<table>
<thead>
<tr>
<th>TABLE 5.12</th>
</tr>
</thead>
<tbody>
<tr>
<td>THE MANAGERIAL PRACTICES OVERALL RESULTS</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dimension</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credibility</td>
<td>1157</td>
<td>63.97</td>
<td>22.60</td>
</tr>
<tr>
<td>Team management</td>
<td>1195</td>
<td>67.80</td>
<td>22.79</td>
</tr>
<tr>
<td>Information sharing</td>
<td>1204</td>
<td>58.97</td>
<td>27.11</td>
</tr>
<tr>
<td>Work support</td>
<td>1223</td>
<td>67.47</td>
<td>26.14</td>
</tr>
<tr>
<td>Trust relationship</td>
<td>1226</td>
<td>68.23</td>
<td>24.50</td>
</tr>
</tbody>
</table>

The following are noted from these results:

- Not all five dimensions have been evaluated positively (above a mean of 64%).
- **Information sharing** has been evaluated negatively while credibility is just on the cut-off point (64%) between positive and negative perceptions.
- The dimensions that have been evaluated positively (>64%) are **team management**, **work support** and **trust relationship**.
- The lowest dimensions are **credibility** and **information sharing**.

Figure 5.4 graphically represents these results.
5.4.2.1 Results of the different qualification groups

- Table 5.13 gives an overview of the Managerial Practices results of the different qualification groups.
# TABLE 5.13

**THE MANAGERIAL PRACTICES - COMPARISON BETWEEN THE QUALIFICATION GROUPS**

<table>
<thead>
<tr>
<th></th>
<th>Less than Std 6</th>
<th>Std 6 - 7</th>
<th>Std 8 - 10</th>
<th>Certificate</th>
<th>Diploma</th>
<th>Degree +</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>M</td>
<td>SD</td>
<td>N</td>
<td>M</td>
<td>SD</td>
<td>N</td>
</tr>
<tr>
<td>Credibility</td>
<td>178</td>
<td>68.81</td>
<td>25.21</td>
<td>131</td>
<td>64.69</td>
<td>25.04</td>
<td>317</td>
</tr>
<tr>
<td>Team management</td>
<td>186</td>
<td>71.15</td>
<td>25.56</td>
<td>132</td>
<td>68.41</td>
<td>25.96</td>
<td>332</td>
</tr>
<tr>
<td>Information sharing</td>
<td>193</td>
<td>67.26</td>
<td>27.66</td>
<td>137</td>
<td>60.81</td>
<td>31.03</td>
<td>334</td>
</tr>
<tr>
<td>Work support</td>
<td>197</td>
<td>73.60</td>
<td>25.94</td>
<td>137</td>
<td>70.50</td>
<td>26.79</td>
<td>337</td>
</tr>
<tr>
<td>Trust relationship</td>
<td>198</td>
<td>68.21</td>
<td>28.21</td>
<td>136</td>
<td>70.29</td>
<td>24.33</td>
<td>334</td>
</tr>
</tbody>
</table>
The following are noted from these results:

- Overall, the average results of the different qualification groups were mixed; with **credibility** (63.90%) falling just below the cut-off point of 64% and **information sharing** (58.90%) perceived negatively.

- The dimensions **team management** and **trust relationship** are viewed positively (above 64%) by all qualification groups.

- **Information sharing** has been perceived as the lowest dimension by all qualification groups.

- The “less than Std 6” and “Std 6-7” qualification groups viewed **work support** as the highest dimension.

- The “Std 8-10”, “Diploma”, and “Degree+” qualification groups viewed **trust relationship** as the highest dimension.

- The “Certificate” group viewed **team management** as the highest dimension.

- The “Std 8-10” and “Diploma” groups perceived **credibility** (<64%) as problematic.

- The “Diploma” group perceived **work support** (60.82%) as problematic.

These results are graphically represented in Figure 5.5
To compare the mean scores of the different qualification groups, with respect to the Managerial Practices dimensions of the trust questionnaire, the analysis of variance approach (Kerlinger, 1986) was used. The results of the Analysis of Variance (ANOVA) $F$-test is presented in Table 5.14

### TABLE 5.14

ANOVA – Managerial Practices: Qualification Groups

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Sum of Squares (Between Groups)</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credibility</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Between Groups (Combined)</td>
<td>5</td>
<td>2043.88</td>
<td>4.04</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>1124</td>
<td>506.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1129</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Team management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Between Groups (Combined)</td>
<td>5</td>
<td>1065.00</td>
<td>2.05</td>
<td>0.069</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>1162</td>
<td>519.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1167</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information sharing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Between Groups (Combined)</td>
<td>5</td>
<td>4307.87</td>
<td>5.99</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>1172</td>
<td>719.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1177</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Between Groups (Combined)</td>
<td>5</td>
<td>3967.25</td>
<td>5.94</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>1188</td>
<td>668.18</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1193</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust relationship</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Between Groups (Combined)</td>
<td>5</td>
<td>651.29</td>
<td>1.09</td>
<td>0.367</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>1190</td>
<td>600.38</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1195</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The aforementioned analyses shows that a statistically significant difference was found between qualification groups regarding their means on the 5% level with regards to credibility, information sharing and work support. Consequently a post hoc Schéffe test procedure was applied to test which pair-wise group differences are significant. These post hoc Schéffe test was performed for all three dimensions mentioned above. The results of the post hoc Schéffe tests are presented in Tables 5.15 to 5.17.

The results in Table 5.15 (post hoc Schéffe test for credibility) indicates that the qualification groups that differ significantly with regard to credibility are the “less than Std 6” and the “Diploma” groups. On further analysis we find that the significant difference is due to their respective mean scores on the credibility dimension, vis-à-vis 68.81% for the “less than Std 6” group and 59.72% for the “Diploma” group.

In general it would appear that the lower qualification groups (in particular the “less than Std 6” and “Std 6-7” groups) view management/supervision as more credible compared with the perception of the higher qualification groups (with the exception of the “Degree+” group, who also views management/supervisors as more credible).
TABLE 5.15
POST HOC SCHÉFFE – HIGHEST QUALIFICATION:
CREDIBILITY

<table>
<thead>
<tr>
<th>(I) Highest Qualification</th>
<th>(J) Highest Qualification</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Std 6 - 7</td>
<td>Std 6 - 7</td>
<td>4.11</td>
<td>2.59</td>
<td>0.773</td>
</tr>
<tr>
<td>Std 8 - 10</td>
<td>Std 8 - 10</td>
<td>6.37</td>
<td>2.11</td>
<td>0.104</td>
</tr>
<tr>
<td>Certificate</td>
<td>Certificate</td>
<td>4.06</td>
<td>2.54</td>
<td>0.769</td>
</tr>
<tr>
<td>Diploma</td>
<td>Diploma</td>
<td>9.09(*)</td>
<td>2.23</td>
<td>0.006</td>
</tr>
<tr>
<td>Degree +</td>
<td>Degree +</td>
<td>2.19</td>
<td>2.61</td>
<td>0.983</td>
</tr>
<tr>
<td>Less than std 6</td>
<td>Less than std 6</td>
<td>-4.11</td>
<td>2.59</td>
<td>0.773</td>
</tr>
<tr>
<td>Std 6 - 7</td>
<td>Std 6 - 7</td>
<td>2.26</td>
<td>2.34</td>
<td>0.968</td>
</tr>
<tr>
<td>Certificate</td>
<td>Certificate</td>
<td>-0.06</td>
<td>2.74</td>
<td>1.000</td>
</tr>
<tr>
<td>Diploma</td>
<td>Diploma</td>
<td>4.97</td>
<td>2.45</td>
<td>0.533</td>
</tr>
<tr>
<td>Degree +</td>
<td>Degree +</td>
<td>-1.92</td>
<td>2.80</td>
<td>0.993</td>
</tr>
<tr>
<td>Std 6 - 7</td>
<td>Std 6 - 7</td>
<td>-6.37</td>
<td>2.11</td>
<td>0.104</td>
</tr>
<tr>
<td>Std 8 - 10</td>
<td>Std 8 - 10</td>
<td>-2.26</td>
<td>2.34</td>
<td>0.968</td>
</tr>
<tr>
<td>Certificate</td>
<td>Certificate</td>
<td>-2.32</td>
<td>2.28</td>
<td>0.960</td>
</tr>
<tr>
<td>Diploma</td>
<td>Diploma</td>
<td>2.72</td>
<td>1.93</td>
<td>0.853</td>
</tr>
<tr>
<td>Degree +</td>
<td>Degree +</td>
<td>-4.18</td>
<td>2.36</td>
<td>0.677</td>
</tr>
<tr>
<td>Certificate</td>
<td>Less than std 6</td>
<td>-4.06</td>
<td>2.54</td>
<td>0.769</td>
</tr>
<tr>
<td>Std 6 - 7</td>
<td>Std 6 - 7</td>
<td>0.06</td>
<td>2.74</td>
<td>1.000</td>
</tr>
<tr>
<td>Std 8 - 10</td>
<td>Std 8 - 10</td>
<td>2.32</td>
<td>2.28</td>
<td>0.960</td>
</tr>
<tr>
<td>Diploma</td>
<td>Diploma</td>
<td>5.03</td>
<td>2.40</td>
<td>0.495</td>
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<td>Degree +</td>
<td>-1.86</td>
<td>2.75</td>
<td>0.994</td>
</tr>
<tr>
<td>Diploma</td>
<td>Less than std 6</td>
<td>-9.09(*)</td>
<td>2.23</td>
<td>0.006</td>
</tr>
<tr>
<td>Std 6 - 7</td>
<td>Std 6 - 7</td>
<td>-4.97</td>
<td>2.45</td>
<td>0.533</td>
</tr>
<tr>
<td>Std 8 - 10</td>
<td>Std 8 - 10</td>
<td>-2.72</td>
<td>1.93</td>
<td>0.853</td>
</tr>
<tr>
<td>Certificate</td>
<td>Certificate</td>
<td>-5.03</td>
<td>2.40</td>
<td>0.495</td>
</tr>
<tr>
<td>Degree +</td>
<td>Degree +</td>
<td>-6.90</td>
<td>2.47</td>
<td>0.169</td>
</tr>
</tbody>
</table>

Based on observed means

* The mean difference is significant at the .05 level
TABLE 5.16
POST HOC SCHÉFFE – HIGHEST QUALIFICATION: INFORMATION SHARING

<table>
<thead>
<tr>
<th>(I) Highest Qualification</th>
<th>(J) Highest Qualification</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Std 6 - 7</td>
<td>Std 6 - 7</td>
<td>6.45</td>
<td>3.00</td>
<td>0.463</td>
</tr>
<tr>
<td>Std 8 - 10</td>
<td>Std 8 - 10</td>
<td>10.47(*)</td>
<td>2.42</td>
<td>0.002</td>
</tr>
<tr>
<td>Certificate</td>
<td>Certificate</td>
<td>8.12</td>
<td>3.00</td>
<td>0.200</td>
</tr>
<tr>
<td>Diploma</td>
<td>Diploma</td>
<td>13.33(*)</td>
<td>2.58</td>
<td>0.000</td>
</tr>
<tr>
<td>Degree +</td>
<td>Degree +</td>
<td>8.24</td>
<td>3.02</td>
<td>0.191</td>
</tr>
</tbody>
</table>

| Std 6-7                   | Std 6-7                   | -6.45                 | 3.00       | 0.463   |
| Std 8-10                  | Std 8-10                  | 4.02                  | 2.72       | 0.823   |
| Certificate               | Certificate               | 1.67                  | 3.25       | 0.998   |
| Diploma                   | Diploma                   | 6.88                  | 2.86       | 0.328   |
| Degree +                  | Degree +                  | 1.79                  | 3.26       | 0.998   |

| Std 8-10                  | Std 8-10                  | -10.47(*)             | 2.42       | 0.002   |
| Std 6-7                   | Std 6-7                   | -4.02                 | 2.72       | 0.823   |
| Certificate               | Certificate               | -2.35                 | 2.73       | 0.980   |
| Diploma                   | Diploma                   | 2.86                  | 2.26       | 0.900   |
| Degree +                  | Degree +                  | -2.23                 | 2.75       | 0.985   |

| Certificate               | Std 6-7                   | -8.12                 | 3.00       | 0.200   |
| Std 6-7                   | Std 6-7                   | -1.67                 | 3.25       | 0.998   |
| Std 8-10                  | Std 8-10                  | 2.35                  | 2.73       | 0.980   |
| Diploma                   | Diploma                   | 5.22                  | 2.87       | 0.652   |
| Degree +                  | Degree +                  | 0.12                  | 3.27       | 1.000   |

| Diploma                   | Std 6-7                   | -13.33(*)             | 2.58       | 0.000   |
| Std 6-7                   | Std 6-7                   | -6.88                 | 2.86       | 0.328   |
| Std 8-10                  | Std 8-10                  | -2.86                 | 2.26       | 0.900   |
| Certificate               | Certificate               | -5.22                 | 2.87       | 0.652   |
| Degree +                  | Degree +                  | -5.09                 | 2.89       | 0.683   |

| Degree +                  | Std 6-7                   | -8.24                 | 3.02       | 0.191   |
| Std 6-7                   | Std 6-7                   | -1.79                 | 3.26       | 0.998   |
| Std 8-10                  | Std 8-10                  | 2.23                  | 2.75       | 0.985   |
| Certificate               | Certificate               | -0.12                 | 3.27       | 1.000   |
| Diploma                   | Diploma                   | 5.09                  | 2.89       | 0.683   |

Based on observed means

* The mean difference is significant at the .05 level
The results indicate that there are significant differences between the following groups:

- “Less than Std 6” and “Std 8 – 10”, and
- “Less than Std 6” and “Diploma”.

The significant difference is due to their respective mean scores on the information sharing dimension, vis-à-vis 67.26% for the “less than Std 6” group and 56.79% for the “Std 8 – 10” group in the first case and 67.26% for the “less than Std 6” group and 53.93% for the “Diploma” group in the second case. The “less than Std 6” group perceives information sharing as positive (>64%) while the “Std 8 – 10” and “Diploma” groups perceive it as negative (<64%).
**TABLE 5.17**

**POST HOC SCHÉFFE – HIGHEST QUALIFICATION: WORK SUPPORT**

<table>
<thead>
<tr>
<th>Highest Qualification (I)</th>
<th>Highest Qualification (J)</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Std 6 - 7</strong></td>
<td>Std 6 - 7</td>
<td>3.11</td>
<td>2.88</td>
<td>0.948</td>
</tr>
<tr>
<td><strong>Std 8 - 10</strong></td>
<td>Std 8 - 10</td>
<td>6.22</td>
<td>2.32</td>
<td>0.207</td>
</tr>
<tr>
<td>Certificate</td>
<td>Certificate</td>
<td>5.59</td>
<td>2.85</td>
<td>0.571</td>
</tr>
<tr>
<td>Diploma</td>
<td>Diploma</td>
<td>12.78(*)</td>
<td>2.47</td>
<td><strong>0.000</strong></td>
</tr>
<tr>
<td>Degree +</td>
<td>Diploma</td>
<td>7.61</td>
<td>2.88</td>
<td>0.223</td>
</tr>
<tr>
<td><strong>Less than std 6</strong></td>
<td>Less than std 6</td>
<td>-3.11</td>
<td>2.88</td>
<td>0.948</td>
</tr>
<tr>
<td><strong>Std 6-7</strong></td>
<td>Std 6-7</td>
<td>-6.22</td>
<td>2.32</td>
<td>0.207</td>
</tr>
<tr>
<td>Certificate</td>
<td>Certificate</td>
<td>-0.63</td>
<td>2.59</td>
<td>1.000</td>
</tr>
<tr>
<td>Diploma</td>
<td>Diploma</td>
<td>6.57</td>
<td>2.17</td>
<td>0.104</td>
</tr>
<tr>
<td>Degree +</td>
<td>Diploma</td>
<td>4.51</td>
<td>3.13</td>
<td>0.839</td>
</tr>
<tr>
<td><strong>Std 8-10</strong></td>
<td>Less than std 6</td>
<td>-6.22</td>
<td>2.32</td>
<td>0.207</td>
</tr>
<tr>
<td>Std 6 - 7</td>
<td>Std 6 - 7</td>
<td>-3.12</td>
<td>2.62</td>
<td>0.923</td>
</tr>
<tr>
<td>Certificate</td>
<td>Certificate</td>
<td>-0.63</td>
<td>2.59</td>
<td>1.000</td>
</tr>
<tr>
<td>Diploma</td>
<td>Diploma</td>
<td>6.57</td>
<td>2.17</td>
<td>0.104</td>
</tr>
<tr>
<td>Degree +</td>
<td>Diploma</td>
<td>1.39</td>
<td>2.63</td>
<td>0.998</td>
</tr>
<tr>
<td><strong>Certificate</strong></td>
<td>Less than std 6</td>
<td>-5.59</td>
<td>2.85</td>
<td>0.571</td>
</tr>
<tr>
<td>Std 6 - 7</td>
<td>Std 6 - 7</td>
<td>-2.48</td>
<td>3.10</td>
<td>0.986</td>
</tr>
<tr>
<td>Std 8 - 10</td>
<td>Std 8 - 10</td>
<td>0.63</td>
<td>2.59</td>
<td>1.000</td>
</tr>
<tr>
<td>Diploma</td>
<td>Diploma</td>
<td>7.20</td>
<td>2.73</td>
<td>0.223</td>
</tr>
<tr>
<td>Degree +</td>
<td>Diploma</td>
<td>2.02</td>
<td>3.10</td>
<td>0.995</td>
</tr>
<tr>
<td><strong>Diploma</strong></td>
<td>Less than std 6</td>
<td>-12.78(*)</td>
<td>2.47</td>
<td><strong>0.000</strong></td>
</tr>
<tr>
<td>Std 6 - 7</td>
<td>Std 6 - 7</td>
<td>-9.68(*)</td>
<td>2.76</td>
<td><strong>0.031</strong></td>
</tr>
<tr>
<td>Std 8 - 10</td>
<td>Std 8 - 10</td>
<td>-6.57</td>
<td>2.17</td>
<td>0.104</td>
</tr>
<tr>
<td>Certificate</td>
<td>Certificate</td>
<td>-7.20</td>
<td>2.73</td>
<td>0.223</td>
</tr>
<tr>
<td>Degree +</td>
<td>Diploma</td>
<td>-5.18</td>
<td>2.76</td>
<td>0.622</td>
</tr>
<tr>
<td><strong>Degree +</strong></td>
<td>Less than std 6</td>
<td>-7.61</td>
<td>2.88</td>
<td>0.223</td>
</tr>
<tr>
<td>Std 6 - 7</td>
<td>Std 6 - 7</td>
<td>-4.51</td>
<td>3.13</td>
<td>0.839</td>
</tr>
<tr>
<td>Std 8 - 10</td>
<td>Std 8 - 10</td>
<td>-1.39</td>
<td>2.63</td>
<td>0.998</td>
</tr>
<tr>
<td>Certificate</td>
<td>Certificate</td>
<td>-2.02</td>
<td>3.10</td>
<td>0.995</td>
</tr>
<tr>
<td>Diploma</td>
<td>Diploma</td>
<td>5.18</td>
<td>2.76</td>
<td>0.622</td>
</tr>
</tbody>
</table>

*Based on observed means*

* The mean difference is significant at the .05 level
The results indicate that there are significant differences between the following groups:

- “Less than Std 6” and “Diploma”, and
- “Std 6-7” and “Diploma”.

The significant difference is due to their respective mean scores on the work support dimension, vis-à-vis 73.60% for the “less than Std 6” group and 60.82% for the “Diploma” group in the first case and 70.50% for the “Std 6-7” group and 60.82% for “Diploma” group in the second case. In general all the qualification groups, with the exception of the “Diploma” group, perceive work support as positive (>64%); the “Diploma” group perceive it as negative (<64%).

5.4.2.2 The results of the main functional groups

Table 5.18 gives an overview of the Managerial Practices results of the main functional groups.

<table>
<thead>
<tr>
<th>TABLE 5.18</th>
<th>THE MANAGERIAL PRACTICES: RESULTS OF THE MAIN FUNCTIONAL GROUPS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Operating</td>
</tr>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Credibility</td>
<td>363</td>
</tr>
<tr>
<td>Team</td>
<td>373</td>
</tr>
<tr>
<td>management</td>
<td></td>
</tr>
<tr>
<td>Information</td>
<td>380</td>
</tr>
<tr>
<td>sharing</td>
<td></td>
</tr>
<tr>
<td>Work</td>
<td>383</td>
</tr>
<tr>
<td>support</td>
<td></td>
</tr>
<tr>
<td>Trust</td>
<td>384</td>
</tr>
<tr>
<td>relationship</td>
<td></td>
</tr>
</tbody>
</table>
The following are noted from these results:

- Overall the average results of the different qualification groups were mixed; with **credibility** (63.54%) falling just below the cut-off point of 64% and **information sharing** (58.93%) perceived negatively. The dimensions **team management**, **work support** and **trust relationship** are viewed positively (above 64% on average) by all functional groups.

- The lowest dimension, as perceived by all functional groups, shows that management/supervisors are not seen to be **sharing information**. This dimension has been viewed negatively (<64%) by all functional groups.

- The “Operating” and “Human Resources” groups viewed **trust relationship** as the highest dimension. This dimension has been viewed positively (>64%) by all functional groups.

- The “Maintenance” and “Finance” groups viewed **team management** as the highest dimension. In contrast the “Operating” and “Human Resources” groups viewed team management as problematic (<64%).

- The “Operating” and “Human Resources” groups perceived **credibility** as problematic (<64%). This dimension has been viewed positively (>64%) by the “Maintenance” and “Finance” groups.

These results are graphically represented in Figure 5.6
To compare the mean scores of the different functional groups with respect to the Managerial Practices dimensions of the trust questionnaire, the analysis of variance approach (Kerlinger, 1986) was used.

The results of the Analysis of Variance (ANOVA) $F$-test is presented in Table 5.19.
<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Credibility</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>5164,06</td>
<td>3</td>
<td>1721,35</td>
<td>3,25</td>
<td>0,021</td>
</tr>
<tr>
<td>(Combined)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within Groups</td>
<td>500558,57</td>
<td>945</td>
<td>529,69</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>505722,63</td>
<td>948</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Team management</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>12396,86</td>
<td>3</td>
<td>4132,29</td>
<td>7,71</td>
<td>0,000</td>
</tr>
<tr>
<td>(Combined)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within Groups</td>
<td>522027,84</td>
<td>974</td>
<td>535,96</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>534424,70</td>
<td>977</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Information sharing</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>10273,39</td>
<td>3</td>
<td>3424,47</td>
<td>4,51</td>
<td>0,004</td>
</tr>
<tr>
<td>(Combined)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within Groups</td>
<td>746830,36</td>
<td>983</td>
<td>759,75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>757103,75</td>
<td>986</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Work support</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>6312,03</td>
<td>3</td>
<td>2104,01</td>
<td>3,02</td>
<td>0,029</td>
</tr>
<tr>
<td>(Combined)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within Groups</td>
<td>694576,79</td>
<td>996</td>
<td>697,37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>700888,82</td>
<td>999</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Trust relationship</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>2623,54</td>
<td>3</td>
<td>874,51</td>
<td>1,40</td>
<td>0,241</td>
</tr>
<tr>
<td>(Combined)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within Groups</td>
<td>622632,40</td>
<td>997</td>
<td>624,51</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>625255,94</td>
<td>1000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The functional groups show statistically significant differences on the following dimensions:

- Credibility
- Team management
- Information sharing
- Work support

Consequently a post hoc Schéffe test procedure was applied to test which pair-wise group differences are significant. These post hoc Schéffe test was performed for all four dimensions mentioned above. The results of these tests are presented in Tables 5.20 to 5.25.

**TABLE 5.20**

**POST HOC SCHÉFFE – FUNCTIONAL GROUPS: CREDIBILITY**

<table>
<thead>
<tr>
<th>(I) Main functional group</th>
<th>(J) Main functional group</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating</td>
<td>Maintenance</td>
<td>-4.49</td>
<td>1.73</td>
<td>0.082</td>
</tr>
<tr>
<td></td>
<td>Finance</td>
<td>-5.34</td>
<td>2.06</td>
<td>0.081</td>
</tr>
<tr>
<td></td>
<td>Human Resources</td>
<td>-1.40</td>
<td>3.41</td>
<td>0.982</td>
</tr>
<tr>
<td>Maintenance</td>
<td>Operating</td>
<td>4.49</td>
<td>1.73</td>
<td>0.082</td>
</tr>
<tr>
<td></td>
<td>Finance</td>
<td>-0.85</td>
<td>2.08</td>
<td>0.982</td>
</tr>
<tr>
<td></td>
<td>Human Resources</td>
<td>3.09</td>
<td>3.43</td>
<td>0.846</td>
</tr>
<tr>
<td>Finance</td>
<td>Operating</td>
<td>5.34</td>
<td>2.06</td>
<td>0.081</td>
</tr>
<tr>
<td></td>
<td>Maintenance</td>
<td>0.85</td>
<td>2.08</td>
<td>0.982</td>
</tr>
<tr>
<td></td>
<td>Human Resources</td>
<td>3.94</td>
<td>3.60</td>
<td>0.753</td>
</tr>
<tr>
<td>Human Resources</td>
<td>Operating</td>
<td>1.40</td>
<td>3.41</td>
<td>0.982</td>
</tr>
<tr>
<td></td>
<td>Maintenance</td>
<td>-3.09</td>
<td>3.43</td>
<td>0.846</td>
</tr>
<tr>
<td></td>
<td>Finance</td>
<td>-3.94</td>
<td>3.60</td>
<td>0.753</td>
</tr>
</tbody>
</table>

Based on observed means
The post hoc tests do not show any significant differences, but when looking at the homogeneous subsets (Table 5.21) we can see differences between

- the mean scores of the “Operating” (60,77%) and “Finance” (66,11%) groups, and
- the mean scores of the “Operating” (60,77%) and “Maintenance” (65,26%) groups.

The aforementioned pair-wise group differences are, however, not significant.

Table 5.21 presents the results for the homogeneous subsets.

<table>
<thead>
<tr>
<th>Functional groups</th>
<th>N</th>
<th>Subset 1</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating</td>
<td>363</td>
<td>60,77</td>
<td></td>
</tr>
<tr>
<td>Human resources</td>
<td>52</td>
<td>62,17</td>
<td></td>
</tr>
<tr>
<td>Maintenance</td>
<td>343</td>
<td>65,26</td>
<td></td>
</tr>
<tr>
<td>Finance</td>
<td>191</td>
<td>66,11</td>
<td>0,311</td>
</tr>
</tbody>
</table>

Means for groups in homogeneous subsets are displayed
Based on Type III Sum of Squares
The error term is Mean Square (Error) = 529,69
Uses Harmonic Mean Sample Size = 132,73
The group sizes are unequal. The harmonic mean of the group sizes is used

The post hoc Schéffe test results for the team management dimension is given in Table 5.22
### TABLE 5.22
POST HOC SCHÉFFE – FUNCTIONAL GROUPS:
TEAM MANAGEMENT

<table>
<thead>
<tr>
<th>(I) Main functional group</th>
<th>(J) Main functional group</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance</td>
<td>Operating</td>
<td>-6.80(*)</td>
<td>1.72</td>
<td><strong>0.001</strong></td>
</tr>
<tr>
<td>Financial</td>
<td>Operating</td>
<td>-7.35(*)</td>
<td>2.04</td>
<td><strong>0.005</strong></td>
</tr>
<tr>
<td>Human Resources</td>
<td>Operating</td>
<td>1.18</td>
<td>3.37</td>
<td>0.989</td>
</tr>
<tr>
<td></td>
<td>Finance</td>
<td>-0.55</td>
<td>2.06</td>
<td>0.995</td>
</tr>
<tr>
<td></td>
<td>Human Resources</td>
<td>7.98</td>
<td>3.38</td>
<td>0.136</td>
</tr>
<tr>
<td></td>
<td>Operating</td>
<td>6.80(*)</td>
<td>1.72</td>
<td><strong>0.001</strong></td>
</tr>
<tr>
<td>Maintenance</td>
<td>Finance</td>
<td>-0.55</td>
<td>2.06</td>
<td>0.995</td>
</tr>
<tr>
<td></td>
<td>Human Resources</td>
<td>7.98</td>
<td>3.38</td>
<td>0.136</td>
</tr>
<tr>
<td></td>
<td>Operating</td>
<td>7.35(*)</td>
<td>2.04</td>
<td><strong>0.005</strong></td>
</tr>
<tr>
<td>Finance</td>
<td>Maintenance</td>
<td>0.55</td>
<td>2.06</td>
<td>0.995</td>
</tr>
<tr>
<td></td>
<td>Human Resources</td>
<td>8.53</td>
<td>3.56</td>
<td>0.125</td>
</tr>
<tr>
<td></td>
<td>Operating</td>
<td>-1.18</td>
<td>3.37</td>
<td>0.989</td>
</tr>
<tr>
<td>Human Resources</td>
<td>Maintenance</td>
<td>-7.98</td>
<td>3.38</td>
<td>0.136</td>
</tr>
<tr>
<td></td>
<td>Finance</td>
<td>-8.53</td>
<td>3.56</td>
<td>0.125</td>
</tr>
</tbody>
</table>

Based on observed means
* The mean difference is significant at the 0.05 level.

The results indicate that there are significant differences between the following groups:
- “Operating” and “Maintenance” and
- “Operating” and “Finance”

The significant difference is due to their respective mean scores on the team management dimension, vis-à-vis 63.88% for the “Operating” group and 70.68% for the “Maintenance” group in the first case and 63.88% for the “Operating” group and 71.24% for the “Finance” group in the second case. In general the “Finance” and “Maintenance” groups perceive team management as positive (>64%) while the “Operating” group perceive it as negative (<64%) or on the cut-off point between negative and positive.
The post hoc Schéffe test results for the information sharing dimension is given in Table 5.23.

**TABLE 5.23**

**POST HOC SCHÉFFE – FUNCTIONAL GROUPS: INFORMATION SHARING**

<table>
<thead>
<tr>
<th>(I) Main functional group</th>
<th>(J) Main functional group</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance</td>
<td>-4,67</td>
<td>2,04</td>
<td>0,155</td>
<td></td>
</tr>
<tr>
<td>Finance</td>
<td>-8,40(*)</td>
<td>2,41</td>
<td><strong>0,007</strong></td>
<td></td>
</tr>
<tr>
<td>Human Resources</td>
<td>-0,97</td>
<td>4,01</td>
<td>0,996</td>
<td></td>
</tr>
<tr>
<td>Operating</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finance</td>
<td>-3,73</td>
<td>2,44</td>
<td>0,507</td>
<td></td>
</tr>
<tr>
<td>Human Resources</td>
<td>3,70</td>
<td>4,03</td>
<td>0,839</td>
<td></td>
</tr>
<tr>
<td>Maintenance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating</td>
<td>4,67</td>
<td>2,04</td>
<td>0,155</td>
<td></td>
</tr>
<tr>
<td>Finance</td>
<td>-3,73</td>
<td>2,44</td>
<td>0,507</td>
<td></td>
</tr>
<tr>
<td>Human Resources</td>
<td>3,70</td>
<td>4,03</td>
<td>0,839</td>
<td></td>
</tr>
<tr>
<td>Finance</td>
<td>8,40(*)</td>
<td>2,41</td>
<td><strong>0,007</strong></td>
<td></td>
</tr>
<tr>
<td>Maintenance</td>
<td>3,73</td>
<td>2,44</td>
<td>0,507</td>
<td></td>
</tr>
<tr>
<td>Human Resources</td>
<td>7,42</td>
<td>4,23</td>
<td>0,379</td>
<td></td>
</tr>
<tr>
<td>Finance</td>
<td>0,97</td>
<td>4,01</td>
<td>0,996</td>
<td></td>
</tr>
<tr>
<td>Human Resources</td>
<td>-3,70</td>
<td>4,03</td>
<td>0,839</td>
<td></td>
</tr>
<tr>
<td>Finance</td>
<td>-7,42</td>
<td>4,23</td>
<td>0,379</td>
<td></td>
</tr>
</tbody>
</table>

Based on observed means
* The mean difference is significant at the 0,05 level.

The results indicate that there are significant differences between the following groups:
- “Operating” and “Finance”

The significant difference is due to their respective mean scores on the information sharing dimension, vis-à-vis 55,51% for the “Operating” group and 63,91% for the “Finance” group.

The post hoc Schéffe test results for the work support dimension is given in Table 5.24.
### TABLE 5.24
**POST HOC SCHÉFFE – FUNCTIONAL GROUPS:**
**WORK SUPPORT**

<table>
<thead>
<tr>
<th>(I) Main functional group</th>
<th>(J) Main functional group</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance</td>
<td>-4.47</td>
<td>1.94</td>
<td>0.151</td>
<td></td>
</tr>
<tr>
<td>Finance</td>
<td>-5.63</td>
<td>2.29</td>
<td>0.110</td>
<td></td>
</tr>
<tr>
<td>Human Resources</td>
<td>0.75</td>
<td>3.84</td>
<td>0.998</td>
<td></td>
</tr>
<tr>
<td>Operating</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintenance</td>
<td>4.47</td>
<td>1.94</td>
<td>0.151</td>
<td></td>
</tr>
<tr>
<td>Finance</td>
<td>-1.16</td>
<td>2.32</td>
<td>0.969</td>
<td></td>
</tr>
<tr>
<td>Human Resources</td>
<td>5.22</td>
<td>3.85</td>
<td>0.607</td>
<td></td>
</tr>
<tr>
<td>Finance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintenance</td>
<td>5.63</td>
<td>2.29</td>
<td>0.110</td>
<td></td>
</tr>
<tr>
<td>Human Resources</td>
<td>6.38</td>
<td>4.04</td>
<td>0.477</td>
<td></td>
</tr>
<tr>
<td>Human Resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating</td>
<td>-0.75</td>
<td>3.84</td>
<td>0.998</td>
<td></td>
</tr>
<tr>
<td>Maintenance</td>
<td>-5.22</td>
<td>3.85</td>
<td>0.607</td>
<td></td>
</tr>
<tr>
<td>Finance</td>
<td>-6.38</td>
<td>4.04</td>
<td>0.477</td>
<td></td>
</tr>
</tbody>
</table>

**Based on observed means**

The post hoc tests do not show any significant differences.

#### 5.4.2.3 The results of the major grade groups

Table 5.25 gives an overview of the Managerial Practices results of the main functional groups.
### TABLE 5.25
THE MANAGERIAL PRACTICES:
RESULTS OF THE MAJOR GRADE GROUPS

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Management</th>
<th>C-band</th>
<th>B-band</th>
<th>A-band</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N  M  SD</td>
<td>N  M  SD</td>
<td>N  M  SD</td>
<td>N  M  SD</td>
<td>N  M  SD</td>
</tr>
<tr>
<td>Credibility</td>
<td>77 70.80 15.68</td>
<td>464 61.22 21.24</td>
<td>487 63.93 23.68</td>
<td>105 70.02 25.86</td>
<td>1133 63.85 22.64</td>
</tr>
<tr>
<td>Team management</td>
<td>78 74.00 16.96</td>
<td>483 64.68 21.15</td>
<td>499 69.18 23.48</td>
<td>109 70.29 28.22</td>
<td>1169 67.74 22.81</td>
</tr>
<tr>
<td>Information sharing</td>
<td>77 63.47 20.08</td>
<td>480 54.58 24.87</td>
<td>514 60.41 28.61</td>
<td>109 67.14 29.70</td>
<td>1180 58.86 27.03</td>
</tr>
<tr>
<td>Work support</td>
<td>78 67.95 22.68</td>
<td>485 62.97 25.61</td>
<td>522 70.32 25.76</td>
<td>114 72.88 28.74</td>
<td>1199 67.44 26.06</td>
</tr>
<tr>
<td>Trust relationship</td>
<td>81 75.25 18.51</td>
<td>490 66.63 23.25</td>
<td>520 68.28 25.29</td>
<td>110 68.59 29.71</td>
<td>1201 68.11 24.58</td>
</tr>
</tbody>
</table>

The following are noted from these results:

- Overall, the average results of the different grade groups were mixed; with **credibility** (63.85%) falling just below the cut-off point of 64% and **information sharing** (58.86%) perceived negatively. The dimensions **team management**, **work support** and **trust relationship** are viewed positively (above 64% on average) by all grade groups.

- The lowest dimension, as perceived by all grade groups, shows that management/supervisors are not seen to be **sharing information**. This dimension is viewed negatively (<64%) by all grade groups except the “A-bands” who perceive it as positive (>64%).

- The “Management” and “C-band” groups viewed **trust relationship** as the highest dimension. This dimension has been viewed positively (>64%) by all grade groups.

- All grade groups viewed **team management** as positive (>64%).
- The “C-band” and “B-band” groups perceived credibility as problematic (<64%). This dimension has been viewed positively (>64%) by the “Management” and “A-band” groups.
- All grade groups – with the exception of the “C-bands” – viewed work support as positive (>64%). The “C-band” group viewed it as negative (<64%).

These results are graphically represented in Figure 5.7

![FIGURE 5.7: MANAGERIAL PRACTICES : RESULTS OF THE MAJOR GRADE GROUPS](image)

To compare the mean scores of the different grade groups with respect to the Managerial Practices dimensions of the trust questionnaire, the analysis of variance approach (Kerlinger, 1986) was used.

The results of this test is presented in Table 5.26
Table 5.26 shows that there are statistically significant differences on all trust variables.
Consequently, a post hoc Schéffe test procedure was applied to test which pair-wise group differences are significant. These post hoc Schéffe tests were performed for all five dimensions mentioned above. The results of these tests are presented in Tables 5.27 to 5.31.

**TABLE 5.27**

**POST HOC SCHÉFFE – MAJOR GRADE GROUPS: CREDIBILITY**

<table>
<thead>
<tr>
<th>(I) Major grade groups</th>
<th>(J) Major grade groups</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-band</td>
<td>9.58(*)</td>
<td>2.76</td>
<td>0.008</td>
<td></td>
</tr>
<tr>
<td>Management</td>
<td>B-band</td>
<td>6.88</td>
<td>2.75</td>
<td>0.101</td>
</tr>
<tr>
<td>A-band</td>
<td>0.79</td>
<td>3.37</td>
<td>0.997</td>
<td></td>
</tr>
<tr>
<td>Management</td>
<td>-9.58(*)</td>
<td>2.76</td>
<td>0.008</td>
<td></td>
</tr>
<tr>
<td>C-band</td>
<td>B-band</td>
<td>-2.70</td>
<td>1.46</td>
<td>0.329</td>
</tr>
<tr>
<td>A-band</td>
<td>-8.80(*)</td>
<td>2.43</td>
<td>0.005</td>
<td></td>
</tr>
<tr>
<td>Management</td>
<td>-6.88</td>
<td>2.75</td>
<td>0.101</td>
<td></td>
</tr>
<tr>
<td>B-band</td>
<td>C-band</td>
<td>2.70</td>
<td>1.46</td>
<td>0.329</td>
</tr>
<tr>
<td>A-band</td>
<td>-6.09</td>
<td>2.42</td>
<td>0.096</td>
<td></td>
</tr>
<tr>
<td>Management</td>
<td>-0.79</td>
<td>3.37</td>
<td>0.997</td>
<td></td>
</tr>
<tr>
<td>A-band</td>
<td>C-band</td>
<td>8.80(*)</td>
<td>2.43</td>
<td>0.005</td>
</tr>
<tr>
<td>B-band</td>
<td>6.09</td>
<td>2.42</td>
<td>0.096</td>
<td></td>
</tr>
</tbody>
</table>

Based on observed means
* The mean difference is significant at the 0.05 level.

The results indicate that there are significant differences between the following groups:

- “Management” and “C-band” and
- “C-band” and “A-band”

The significant difference is due to their respective mean scores on the credibility dimension, vis-à-vis 70.80% for the “Management” group and 61.22% for the “C-band” group in the first case, and 61.22% for the “C-band” group and 70.02% for the “A-band” group in the second case.
The post hoc Schéffe test results for the team management dimension is given in Table 5.28.

### TABLE 5.28
**POST HOC SCHÉFFE – MAJOR GRADE GROUPS:**
**TEAM MANAGEMENT**

<table>
<thead>
<tr>
<th>(I) Major grade groups</th>
<th>(J) Major grade groups</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management</td>
<td>C-band</td>
<td>9.32(*)</td>
<td>2.77</td>
<td>0.010</td>
</tr>
<tr>
<td></td>
<td>B-band</td>
<td>4.83</td>
<td>2.76</td>
<td>0.383</td>
</tr>
<tr>
<td></td>
<td>A-band</td>
<td>3.72</td>
<td>3.36</td>
<td>0.747</td>
</tr>
<tr>
<td>Management</td>
<td>B-band</td>
<td>-9.32(*)</td>
<td>2.77</td>
<td>0.010</td>
</tr>
<tr>
<td>C-band</td>
<td>B-band</td>
<td>-4.50(*)</td>
<td>1.45</td>
<td>0.022</td>
</tr>
<tr>
<td></td>
<td>A-band</td>
<td>-5.61</td>
<td>2.40</td>
<td>0.142</td>
</tr>
<tr>
<td>Management</td>
<td>C-band</td>
<td>-4.83</td>
<td>2.76</td>
<td>0.383</td>
</tr>
<tr>
<td>B-band</td>
<td>C-band</td>
<td>4.50(*)</td>
<td>1.45</td>
<td>0.022</td>
</tr>
<tr>
<td></td>
<td>A-band</td>
<td>-1.11</td>
<td>2.40</td>
<td>0.975</td>
</tr>
<tr>
<td>Management</td>
<td>A-band</td>
<td>-3.72</td>
<td>3.36</td>
<td>0.747</td>
</tr>
<tr>
<td>A-band</td>
<td>C-band</td>
<td>5.61</td>
<td>2.40</td>
<td>0.142</td>
</tr>
<tr>
<td></td>
<td>B-band</td>
<td>1.11</td>
<td>2.40</td>
<td>0.975</td>
</tr>
</tbody>
</table>

Based on observed means
* The mean difference is significant at the 0.05 level.

The results indicate that there are significant differences between the following groups:
- “Management” and “C-band”
- “C-band” and “B-band.”

The significant difference is due to their respective mean scores on the team management dimension, vis-à-vis 74.00% for the “Management” group and 64.68% for the “C-band” group in the first case, and 64.68% for the “C-band” group and 69.18% for the “B-band” group in the second case.
The post hoc Schéffe test results for the information sharing dimension is given in Table 5.29.

### TABLE 5.29

**POST HOC SCHÉFFE – MAJOR GRADE GROUPS:**
**INFORMATION SHARING**

<table>
<thead>
<tr>
<th>(I) Major grade groups</th>
<th>(J) Major grade groups</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management</td>
<td>C-band</td>
<td>8.89</td>
<td>3.28</td>
<td>0.063</td>
</tr>
<tr>
<td></td>
<td>B-band</td>
<td>3.07</td>
<td>3.27</td>
<td>0.830</td>
</tr>
<tr>
<td></td>
<td>A-band</td>
<td>-3.67</td>
<td>3.98</td>
<td>0.838</td>
</tr>
<tr>
<td>Management</td>
<td>Management</td>
<td>-8.89</td>
<td>3.28</td>
<td>0.063</td>
</tr>
<tr>
<td>C-band</td>
<td>B-band</td>
<td>-5.83(*)</td>
<td>1.70</td>
<td>0.008</td>
</tr>
<tr>
<td></td>
<td>A-band</td>
<td>-12.56(*)</td>
<td>2.84</td>
<td>0.000</td>
</tr>
<tr>
<td>Management</td>
<td>Management</td>
<td>-3.07</td>
<td>3.27</td>
<td>0.830</td>
</tr>
<tr>
<td>B-band</td>
<td>C-band</td>
<td>5.83(*)</td>
<td>1.70</td>
<td>0.008</td>
</tr>
<tr>
<td></td>
<td>A-band</td>
<td>-6.74</td>
<td>2.82</td>
<td>0.128</td>
</tr>
<tr>
<td>Management</td>
<td>Management</td>
<td>3.67</td>
<td>3.98</td>
<td>0.838</td>
</tr>
<tr>
<td>A-band</td>
<td>C-band</td>
<td>12.56(*)</td>
<td>2.84</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>B-band</td>
<td>6.74</td>
<td>2.82</td>
<td>0.128</td>
</tr>
</tbody>
</table>

Based on observed means
* The mean difference is significant at the 0.05 level.

The results indicate that there are significant differences between the following groups:
- “C-band” and “B-band” and
- “C-band” and “A-band”.

The significant difference is due to their respective mean scores on the information sharing dimension, vis-à-vis 54.58% for the “C-band” group and 60.41% for the “B-band” group in the first case, and 54.58% for the “C-band group” and 67.14% for the “A-band” group in the second case.
The post hoc Schéffe test results for the work support dimension is given in Table 5.30.

**TABLE 5.30**
**POST HOC SCHÉFFE – MAJOR GRADE GROUPS: WORK SUPPORT**

<table>
<thead>
<tr>
<th>(I) Major grade groups</th>
<th>(J) Major grade groups</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management</td>
<td>B-band</td>
<td>-2.38</td>
<td>3.13</td>
<td>0.902</td>
</tr>
<tr>
<td>A-band</td>
<td></td>
<td>-4.93</td>
<td>3.79</td>
<td>0.639</td>
</tr>
<tr>
<td>C-band</td>
<td>Management</td>
<td>-4.98</td>
<td>3.15</td>
<td>0.476</td>
</tr>
<tr>
<td>B-band</td>
<td>-2.38</td>
<td>3.15</td>
<td>0.902</td>
<td></td>
</tr>
<tr>
<td>A-band</td>
<td>-4.93</td>
<td>3.79</td>
<td>0.639</td>
<td></td>
</tr>
<tr>
<td>Management</td>
<td>C-band</td>
<td>7.35(*)</td>
<td>1.63</td>
<td>0.000</td>
</tr>
<tr>
<td>B-band</td>
<td>-2.38</td>
<td>3.13</td>
<td>0.902</td>
<td></td>
</tr>
<tr>
<td>A-band</td>
<td>-4.93</td>
<td>3.79</td>
<td>0.639</td>
<td></td>
</tr>
<tr>
<td>Management</td>
<td>B-band</td>
<td>2.37</td>
<td>3.13</td>
<td>0.902</td>
</tr>
<tr>
<td>C-band</td>
<td>7.35(*)</td>
<td>1.63</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>A-band</td>
<td>-2.56</td>
<td>2.67</td>
<td>0.821</td>
<td></td>
</tr>
<tr>
<td>Management</td>
<td>A-band</td>
<td>4.93</td>
<td>3.79</td>
<td>0.639</td>
</tr>
<tr>
<td>C-band</td>
<td>9.91(*)</td>
<td>2.69</td>
<td>0.004</td>
<td></td>
</tr>
<tr>
<td>A-band</td>
<td>2.56</td>
<td>2.67</td>
<td>0.821</td>
<td></td>
</tr>
<tr>
<td>B-band</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on observed means
* The mean difference is significant at the 0.05 level.

The results indicate that there are significant differences between the following groups:
- “C-band” and “B-band” and
- “C-band” and “A-band”.

The significant difference is due to their respective mean scores on the work support dimension, vis-à-vis 62.97% for the “C-band” group and 70.32% for the “B-band” group in the first case, and 62.97% for the “C-band” group and 72.88% for the “A-band” group in the second case.
The post hoc Schéffé test results for the trust relationship dimension is given in Table 5.31.

**TABLE 5.31**
**POST HOC SCHÉFFÉ – MAJOR GRADE GROUPS: TRUST RELATIONSHIP**

<table>
<thead>
<tr>
<th>(I) Major grade groups</th>
<th>(J) Major grade groups</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management</td>
<td>C-band</td>
<td>8.62(*)</td>
<td>2.94</td>
<td>0.036</td>
</tr>
<tr>
<td></td>
<td>B-band</td>
<td>6.97</td>
<td>2.93</td>
<td>0.130</td>
</tr>
<tr>
<td></td>
<td>A-band</td>
<td>6.66</td>
<td>3.59</td>
<td>0.330</td>
</tr>
<tr>
<td></td>
<td>Management</td>
<td>-8.62(*)</td>
<td>2.94</td>
<td>0.036</td>
</tr>
<tr>
<td>C-band</td>
<td>B-band</td>
<td>-1.65</td>
<td>1.54</td>
<td>0.768</td>
</tr>
<tr>
<td></td>
<td>A-band</td>
<td>-1.96</td>
<td>2.59</td>
<td>0.903</td>
</tr>
<tr>
<td></td>
<td>Management</td>
<td>-6.97</td>
<td>2.93</td>
<td>0.130</td>
</tr>
<tr>
<td>B-band</td>
<td>C-band</td>
<td>1.65</td>
<td>1.54</td>
<td>0.768</td>
</tr>
<tr>
<td></td>
<td>A-band</td>
<td>-0.31</td>
<td>2.57</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>Management</td>
<td>-6.66</td>
<td>3.59</td>
<td>0.330</td>
</tr>
<tr>
<td>A-band</td>
<td>C-band</td>
<td>1.96</td>
<td>2.59</td>
<td>0.903</td>
</tr>
<tr>
<td></td>
<td>B-band</td>
<td>0.31</td>
<td>2.57</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Based on observed means
* The mean difference is significant at the 0.05 level.

The results indicate that there are significant differences between the following groups:

- “Management” and “C-band”.

The significant difference is due to their respective mean scores on the trust relationship dimension, vis-à-vis 75.25% for the “Management” group and 66.63% for the “C-band” group.

In the following section the individual business units will be compared regarding the personality and trust variables.
5.4.3 The “Big Five”: comparing business units regarding personality variables

This section will compare the different business units regarding the “Big Five” personality variables. The results of the “Big Five” personality variables are displayed in Table 5.32

<table>
<thead>
<tr>
<th>TABLE 5.32</th>
<th>THE “BIG FIVE” RESULTS – COMPARING BUSINESS UNITS (BUs)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BU 1</td>
</tr>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>409</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>397</td>
</tr>
<tr>
<td>Extraversion</td>
<td>405</td>
</tr>
<tr>
<td>Resourcefulness</td>
<td>409</td>
</tr>
<tr>
<td>Emotional stability</td>
<td>407</td>
</tr>
</tbody>
</table>

The following are noted from these results:

- The respective business units (BUs) have evaluated all five dimensions positively (above a mean of 64%).
- All three BUs viewed conscientious as the highest dimension.
- BU 1 viewed emotional stability as the lowest dimension.
- BUs 2 and 3 viewed resourcefulness as the lowest dimension.

Figure 5.8 gives an overview of the “Big Five” results of the respective business units.
To compare the mean scores of the different business units, with respect to the “Big Five” dimensions of the trust questionnaire, the analysis of variance approach (Kerlinger, 1986) was used.

The results of the Analysis of Variance (ANOVA) $F$-test is presented in Table 5.33.
### TABLE 5.33
ANOVA – THE “BIG FIVE” RESULTS OF THE BUSINESS UNITS (BUs)

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Agreeableness</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups (Combined)</td>
<td>6526,03</td>
<td>2</td>
<td>3263,02</td>
<td>7,22</td>
<td>0,001</td>
</tr>
<tr>
<td>Within Groups</td>
<td>531819,70</td>
<td>1176</td>
<td>452,23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>538345,73</td>
<td>1178</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Conscientiousness</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups (Combined)</td>
<td>15851,51</td>
<td>2</td>
<td>7925,76</td>
<td>17,53</td>
<td>0,000</td>
</tr>
<tr>
<td>Within Groups</td>
<td>522690,10</td>
<td>1156</td>
<td>452,15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>538541,61</td>
<td>1158</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Extraversion</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups (Combined)</td>
<td>7852,84</td>
<td>2</td>
<td>3926,42</td>
<td>10,63</td>
<td>0,000</td>
</tr>
<tr>
<td>Within Groups</td>
<td>429496,11</td>
<td>1163</td>
<td>369,30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>437348,95</td>
<td>1165</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Resourcefulness</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups (Combined)</td>
<td>4315,31</td>
<td>2</td>
<td>2157,65</td>
<td>5,46</td>
<td>0,004</td>
</tr>
<tr>
<td>Within Groups</td>
<td>467298,26</td>
<td>1183</td>
<td>395,01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>471613,57</td>
<td>1185</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Emotional stability</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups (Combined)</td>
<td>12365,39</td>
<td>2</td>
<td>6182,70</td>
<td>13,67</td>
<td>0,000</td>
</tr>
<tr>
<td>Within Groups</td>
<td>535675,69</td>
<td>1184</td>
<td>452,43</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>548041,08</td>
<td>1186</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5.33 shows that there are statistically significant differences on all “Big Five” personality variables.
Consequently, a post hoc Schéffe test procedure was applied to test which pair-wise group differences are significant. These post hoc Schéffe tests were performed for all five dimensions mentioned above. The results of the tests are presented in Tables 5.34 to 5.38.

**TABLE 5.34**

**POST HOC SCHÉFFE – “BIG FIVE” RESULTS OF BUSINESS UNITS BUs):
AGREEABleness**

<table>
<thead>
<tr>
<th>(I) Business unit (BU)</th>
<th>(J) Business unit (BU)</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BU 1</td>
<td>BU 2</td>
<td>-5,71(*)</td>
<td>1,62</td>
<td>0,002</td>
</tr>
<tr>
<td>BU 1</td>
<td>BU 3</td>
<td>-0,55</td>
<td>1,43</td>
<td>0,928</td>
</tr>
<tr>
<td>BU 2</td>
<td>BU 1</td>
<td>5,71(*)</td>
<td>1,62</td>
<td>0,002</td>
</tr>
<tr>
<td>BU 2</td>
<td>BU 3</td>
<td>5,15(*)</td>
<td>1,58</td>
<td>0,005</td>
</tr>
<tr>
<td>BU 3</td>
<td>BU 1</td>
<td>0,55</td>
<td>1,43</td>
<td>0,928</td>
</tr>
<tr>
<td>BU 3</td>
<td>BU 2</td>
<td>-5,15(*)</td>
<td>1,58</td>
<td>0,005</td>
</tr>
</tbody>
</table>

Based on observed means
* The mean difference is significant at the 0,05 level.

The results indicate that there are significant differences between the following business units:
- BUs 1 and 2, and
- BUs 2 and 3

The significant difference is due to their respective mean scores on the agreeableness dimension, vis-à-vis 70,56% for BU 1 and 76,27% for BU 2 in the first case, and 71,12% for BU 3 and 76,27% for BU 2 in the second case. In general BU 2 employees rated management higher with regards to agreeableness.

The post hoc Schéffe test results for the conscientiousness dimension is given in Table 5.35.
Based on observed means
* The mean difference is significant at the 0.05 level.

The results indicate that there are significant differences between the following business units:
- BUs 1 and 2, and
- BUs 2 and 3.

The significant difference is due to their respective mean scores on the conscientiousness dimension, vis-à-vis 71,08% for BU 1 and 79,99% for BU 2 in the first case, and 71,82% for BU 3 and 79,99% for BU 2 in the second case. In general, BU 2 employees rated management higher with regards to conscientiousness.

The post hoc Schéffe test results for the extraversion dimension is given in Table 5.36.

<table>
<thead>
<tr>
<th>(I) Business unit (BU)</th>
<th>(J) Business unit (BU)</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BU 1</td>
<td>BU 2</td>
<td>-8.91(*)</td>
<td>1.64</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>BU 3</td>
<td>-0.74</td>
<td>1.45</td>
<td>0.877</td>
</tr>
<tr>
<td>BU 2</td>
<td>BU 1</td>
<td>8.91(*)</td>
<td>1.64</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>BU 3</td>
<td>8.17(*)</td>
<td>1.59</td>
<td>0.000</td>
</tr>
<tr>
<td>BU 3</td>
<td>BU 1</td>
<td>0.74</td>
<td>1.45</td>
<td>0.877</td>
</tr>
<tr>
<td></td>
<td>BU 2</td>
<td>-8.17(*)</td>
<td>1.59</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Based on observed means
* The mean difference is significant at the 0.05 level.

The results indicate that there are significant differences between the following business units:
- BUs 1 and 2, and
- BUs 2 and 3.

The significant difference is due to their respective mean scores on the conscientiousness dimension, vis-à-vis 71,08% for BU 1 and 79,99% for BU 2 in the first case, and 71,82% for BU 3 and 79,99% for BU 2 in the second case. In general, BU 2 employees rated management higher with regards to conscientiousness.

The post hoc Schéffe test results for the extraversion dimension is given in Table 5.36.
### TABLE 5.36
POST HOC SCHÉFFE – “BIG FIVE” RESULTS OF BUSINESS UNITS (BUs): EXTRAVERSION

<table>
<thead>
<tr>
<th>(I) Business unit (BU)</th>
<th>(J) Business unit (BU)</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BU 1</td>
<td>BU 2</td>
<td>-6.11(*)</td>
<td>1.48</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>BU 3</td>
<td>-0.22</td>
<td>1.30</td>
<td>0.986</td>
</tr>
<tr>
<td>BU 2</td>
<td>BU 1</td>
<td>6.11(*)</td>
<td>1.48</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>BU 3</td>
<td>5.88(*)</td>
<td>1.43</td>
<td>0.000</td>
</tr>
<tr>
<td>BU 3</td>
<td>BU 1</td>
<td>0.22</td>
<td>1.30</td>
<td>0.986</td>
</tr>
<tr>
<td></td>
<td>BU 2</td>
<td>-5.88(*)</td>
<td>1.43</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Based on observed means
* The mean difference is significant at the 0.05 level.

The results indicate that there are significant differences between the following business units:

- BUs 1 and 2, and
- BUs 2 and 3.

The significant difference is due to their respective mean scores on the extraversion dimension, vis-à-vis 70.97% for BU 1 and 77.08% for BU 2 in the first case, and 71.20% for BU 3 and 77.08% for BU 2 in the second case. In general, BU 2 employees rated management higher with regards to extraversion.

The post hoc Schéffe test results for the resourcefulness dimension is given in Table 5.37.
TABLE 5.37
POST HOC SCHÉFFE – “BIG FIVE” RESULTS OF BUSINESS UNITS (BUs):
RESOURCESFULLNESS

<table>
<thead>
<tr>
<th>(I) Business unit (BU)</th>
<th>(J) Business unit (BU)</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BU 1</td>
<td>BU 2</td>
<td>-4.49(*)</td>
<td>1.52</td>
<td>0.013</td>
</tr>
<tr>
<td></td>
<td>BU 3</td>
<td>-0.14</td>
<td>1.34</td>
<td>0.994</td>
</tr>
<tr>
<td>BU 2</td>
<td>BU 1</td>
<td>4.49(*)</td>
<td>1.52</td>
<td>0.013</td>
</tr>
<tr>
<td></td>
<td>BU 3</td>
<td>4.35(*)</td>
<td>1.47</td>
<td>0.013</td>
</tr>
<tr>
<td>BU 3</td>
<td>BU 1</td>
<td>0.14</td>
<td>1.34</td>
<td>0.994</td>
</tr>
<tr>
<td></td>
<td>BU 2</td>
<td>-4.35(*)</td>
<td>1.47</td>
<td>0.013</td>
</tr>
</tbody>
</table>

Based on observed means
* The mean difference is significant at the 0.05 level.

The results indicate that there are significant differences between the following business units:
- BUs 1 and 2, and
- BUs 2 and 3.

The significant difference is due to their respective mean scores on the resourcefulness dimension, vis-à-vis 69.32% for BU 1 and 73.81% for BU 2 in the first case, and 69.46% for BU 3 and 73.81% for BU 2 in the second case. In general BU 2 employees rated management higher with regards to resourcefulness.

The post hoc Schéffe test results for the emotional stability dimension is given in Table 5.38.
TABLE 5.38
POST HOC SCHÉFFE – “BIG FIVE” RESULTS OF BUSINESS UNITS (BUs):
EMOTIONAL STABILITY

<table>
<thead>
<tr>
<th>(I) Business unit (BU)</th>
<th>(J) Business unit (BU)</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BU 1</td>
<td>BU 2</td>
<td>-8.06(*)</td>
<td>1.62</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>BU 3</td>
<td>-1.33</td>
<td>1.43</td>
<td>0.648</td>
</tr>
<tr>
<td>BU 2</td>
<td>BU 1</td>
<td>8.06(*)</td>
<td>1.62</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>BU 3</td>
<td>6.73(*)</td>
<td>1.57</td>
<td>0.000</td>
</tr>
<tr>
<td>BU 3</td>
<td>BU 1</td>
<td>1.33</td>
<td>1.43</td>
<td>0.648</td>
</tr>
<tr>
<td></td>
<td>BU 2</td>
<td>-6.73(*)</td>
<td>1.57</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Based on observed means
* The mean difference is significant at the 0.05 level.

The results indicate that there are significant differences between the following business units:
- BUs 1 and 2,
- BUs 2 and 3.

The significant difference is due to their respective mean scores on the emotional stability dimension, vis-à-vis 68.66% for BU 1 and 76.72% for BU 2 in the first case, and 69.99% for BU 3 and 76.72% for BU 2 in the second case. In general, BU 2 employees rated management higher with regards to emotional stability.

In general, all three business units viewed the “Big Five” personality factors positively (>64%). As alluded to earlier by Martins (2000), these personality factors were viewed as possible antecedents of personal trust among superiors and subordinates. It would appear that the levels of personal trust among superiors and subordinates are much higher at BU 2 compared with those at BUs 1 and 3 respectively. Another observation is that the levels of personal trust amongst...
superiors and subordinates at BUs 1 and 3 are almost on a par – no significant differences are found.

5.4.4 Managerial Practices: comparing business units on the basis of trust variables

This section will compare the different business units on the trust variables. The results of the Managerial Practices variables are displayed in Table 5.39

| TABLE 5.39 |
| MANAGERIAL PRACTICES – COMPARING BUSINESS UNITS (BUs) |

<table>
<thead>
<tr>
<th></th>
<th>BU 1</th>
<th></th>
<th>BU 2</th>
<th></th>
<th>BU 3</th>
<th></th>
<th>Total</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>M</td>
<td>SD</td>
<td>N</td>
<td>M</td>
<td>SD</td>
<td>N</td>
<td>M</td>
</tr>
<tr>
<td>Credibility</td>
<td>399</td>
<td>61.19</td>
<td>22.76</td>
<td>280</td>
<td>67.29</td>
<td>20.94</td>
<td>467</td>
<td>64.33</td>
</tr>
<tr>
<td>Team management</td>
<td>409</td>
<td>65.99</td>
<td>23.36</td>
<td>292</td>
<td>70.99</td>
<td>20.25</td>
<td>483</td>
<td>67.33</td>
</tr>
<tr>
<td>Information sharing</td>
<td>414</td>
<td>56.42</td>
<td>27.69</td>
<td>291</td>
<td>61.49</td>
<td>25.09</td>
<td>488</td>
<td>59.62</td>
</tr>
<tr>
<td>Work support</td>
<td>419</td>
<td>65.97</td>
<td>27.31</td>
<td>296</td>
<td>69.62</td>
<td>23.54</td>
<td>497</td>
<td>67.32</td>
</tr>
<tr>
<td>Trust relationship</td>
<td>421</td>
<td>65.72</td>
<td>24.66</td>
<td>295</td>
<td>73.75</td>
<td>21.08</td>
<td>498</td>
<td>67.07</td>
</tr>
</tbody>
</table>

The following are noted from these results:

- Overall the average results of the different business units were mixed; with credibility (63.96%) just on the cut-off point of 64% and information sharing (59.00%) perceived negatively. The dimensions team management, work support and trust relationship are viewed positively (above 64% on average) by all business units.
- The lowest dimension, as perceived by all business units (BUs), show that management/supervisors are not seen to be sharing information. This dimension has been viewed negatively (<64%) by all business units.
• BU 2 viewed **trust relationship** as the highest dimension. This dimension has been viewed positively (>64%) by all the business units.

• BUs 1 and 3 viewed **team management** as the highest dimension. This dimension has been viewed positively (>64%) by all business units.

• BU 1 perceived **credibility** as problematic (<64%). This dimension has been viewed positively (>64%) by BUs 2 and 3.

Figure 5.9 gives an overview of the Managerial Practices results of the respective business units.

![Figure 5.9: Managerial Practices: Comparing Business Units](image)

To compare the mean scores of the different business units, with respect to the Managerial Practices dimensions of the trust questionnaire, the analysis of variance approach (Kerlinger, 1986) was used.

The results of the Analysis of Variance (ANOVA) $F$-test is presented in Table 5.40.
<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Credibility</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups (Combined)</td>
<td>6233,94</td>
<td>2</td>
<td>3116,97</td>
<td>6,13</td>
<td>0,002</td>
</tr>
<tr>
<td>Within Groups</td>
<td>581044,28</td>
<td>1143</td>
<td>508,35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>587378,22</td>
<td>1145</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Team management</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups (Combined)</td>
<td>4422,94</td>
<td>2</td>
<td>2211,47</td>
<td>4,26</td>
<td>0,014</td>
</tr>
<tr>
<td>Within Groups</td>
<td>613594,14</td>
<td>1181</td>
<td>519,56</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>618017,08</td>
<td>1183</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Information sharing</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups (Combined)</td>
<td>4754,21</td>
<td>2</td>
<td>2377,11</td>
<td>3,24</td>
<td>0,040</td>
</tr>
<tr>
<td>Within Groups</td>
<td>874116,29</td>
<td>1190</td>
<td>734,55</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>878870,50</td>
<td>1192</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Work support</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups (Combined)</td>
<td>2321,38</td>
<td>2</td>
<td>1160,69</td>
<td>1,70</td>
<td>0,184</td>
</tr>
<tr>
<td>Within Groups</td>
<td>826511,76</td>
<td>1209</td>
<td>683,63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>828833,14</td>
<td>1211</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Trust relationship</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups (Combined)</td>
<td>12289,96</td>
<td>2</td>
<td>6144,98</td>
<td>10,33</td>
<td>0,000</td>
</tr>
<tr>
<td>Within Groups</td>
<td>720309,65</td>
<td>1211</td>
<td>594,81</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>732599,61</td>
<td>1213</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 5.40 shows that there are statistically significant differences on following trust variables:

- Credibility
- Team management
- Information sharing
- Trust relationship

Consequently a post hoc Schéffe test procedure was applied to test which pair-wise group differences are significant. These post hoc Schéffe tests were performed for all four of the dimensions mentioned above. The results of these tests are presented in Tables 5.41 to 5.45.

### TABLE 5.41
**POST HOC SCHÉFFE – MANAGERIAL PRACTICES OF BUSINESS UNITS (BUs): CREDIBILITY**

<table>
<thead>
<tr>
<th>(I) Business unit (BU)</th>
<th>(J) Business unit (BU)</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BU 1</td>
<td>BU 2</td>
<td>-6,10(*)</td>
<td>1,76</td>
<td>0,003</td>
</tr>
<tr>
<td>BU 1</td>
<td>BU 3</td>
<td>-3,15</td>
<td>1,54</td>
<td>0,123</td>
</tr>
<tr>
<td>BU 2</td>
<td>BU 1</td>
<td>6,10(*)</td>
<td>1,76</td>
<td>0,003</td>
</tr>
<tr>
<td>BU 2</td>
<td>BU 3</td>
<td>2,95</td>
<td>1,70</td>
<td>0,223</td>
</tr>
<tr>
<td>BU 3</td>
<td>BU 1</td>
<td>3,15</td>
<td>1,54</td>
<td>0,123</td>
</tr>
<tr>
<td>BU 3</td>
<td>BU 2</td>
<td>-2,95</td>
<td>1,70</td>
<td>0,223</td>
</tr>
</tbody>
</table>

Based on observed means
* The mean difference is significant at the 0,05 level.
The results indicate that there are significant differences between the following business units:

- BUs 1 and 2

The significant difference is due to their respective mean scores on the credibility dimension, vis-à-vis 61.19% for BU 1 and 67.29% for BU 2.

The post hoc Schéffe test results for the team management dimension is given in Table 5.42.

**TABLE 5.42**

**POST HOC SCHÉFFE – MANAGERIAL PRACTICES OF BUSINESS UNITS (BUs) : TEAM MANAGEMENT**

<table>
<thead>
<tr>
<th>(I) Business unit (BU)</th>
<th>(J) Business unit (BU)</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BU 1</td>
<td>BU 2</td>
<td>-5.00(*)</td>
<td>1.75</td>
<td>0.017</td>
</tr>
<tr>
<td>BU 1</td>
<td>BU 3</td>
<td>-1.35</td>
<td>1.53</td>
<td>0.679</td>
</tr>
<tr>
<td>BU 2</td>
<td>BU 1</td>
<td>5.00(*)</td>
<td>1.75</td>
<td>0.017</td>
</tr>
<tr>
<td>BU 2</td>
<td>BU 3</td>
<td>3.66</td>
<td>1.69</td>
<td>0.097</td>
</tr>
<tr>
<td>BU 3</td>
<td>BU 1</td>
<td>1.35</td>
<td>1.53</td>
<td>0.670</td>
</tr>
<tr>
<td>BU 3</td>
<td>BU 2</td>
<td>-3.66</td>
<td>1.69</td>
<td>0.097</td>
</tr>
</tbody>
</table>

Based on observed means
* The mean difference is significant at the 0.05 level.

The results indicate that there are significant differences between the following business units:

- BUs 1 and 2.

The significant difference is due to their respective mean scores on the team management dimension, vis-à-vis 65.99% for BU 1 and 70.99% for BU 2.
The post hoc Schéffe test results for the information sharing dimension is given in Table 5.43.

**TABLE 5.43**

**POST HOC SCHÉFFE – MANAGERIAL PRACTICES OF BUSINESS UNITS (BUs) : INFORMATION SHARING**

<table>
<thead>
<tr>
<th>(I) Business unit (BU)</th>
<th>(J) Business unit (BU)</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BU 1</td>
<td>BU 2</td>
<td>-5.07</td>
<td>2.07</td>
<td>0.050</td>
</tr>
<tr>
<td>BU 1</td>
<td>BU 3</td>
<td>-3.20</td>
<td>1.81</td>
<td>0.210</td>
</tr>
<tr>
<td>BU 2</td>
<td>BU 1</td>
<td>5.07</td>
<td>2.07</td>
<td>0.050</td>
</tr>
<tr>
<td>BU 2</td>
<td>BU 3</td>
<td>1.87</td>
<td>2.01</td>
<td>0.647</td>
</tr>
<tr>
<td>BU 3</td>
<td>BU 1</td>
<td>3.20</td>
<td>1.81</td>
<td>0.210</td>
</tr>
<tr>
<td>BU 3</td>
<td>BU 2</td>
<td>-1.87</td>
<td>2.01</td>
<td>0.647</td>
</tr>
</tbody>
</table>

Based on observed means

There do not appear to be any significant differences. It is noted that the differences between the means of BU 1 and BU 2 are on the 5% limit. Looking at the homogeneous subsets (Table 5.44) we find that there are some differences in the means of BU 1 (56.42%) and BU 2 (61.49%).
### TABLE 5.44
HOMOGENEOUS SUBSETS: INFORMATION SHARING

<table>
<thead>
<tr>
<th>Business Units (BUs)</th>
<th>N</th>
<th>Subset 1 Mean</th>
<th>Subset 2 Mean</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BU 1</td>
<td>414</td>
<td>56.42</td>
<td></td>
<td>0.266</td>
</tr>
<tr>
<td>BU 3</td>
<td>488</td>
<td>59.62</td>
<td>59.62</td>
<td>0.636</td>
</tr>
<tr>
<td>BU 2</td>
<td>291</td>
<td>61.49</td>
<td></td>
<td></td>
</tr>
<tr>
<td>p-value</td>
<td></td>
<td>0.266</td>
<td>0.636</td>
<td></td>
</tr>
</tbody>
</table>

Means for groups in homogeneous subsets are displayed
Based on Type III Sum of Squares
The error term is Mean Square (Error) = 734.55
Uses Harmonic Mean Sample Size = 380
The group sizes are unequal. The harmonic mean of the group sizes is used

The post hoc Schéffe test results for the trust relationship dimension is given in Table 5.45.

### TABLE 5.45
POST HOC SCHÉFFE – MANAGERIAL PRACTICES OF BUSINESS UNITS (BUs): TRUST RELATIONSHIP

<table>
<thead>
<tr>
<th>(I) Business unit (BU)</th>
<th>(J) Business unit (BU)</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BU 1</td>
<td>BU 2</td>
<td>-8.03(*)</td>
<td>1.85</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>BU 3</td>
<td>-1.34</td>
<td>1.61</td>
<td>0.707</td>
</tr>
<tr>
<td>BU 2</td>
<td>BU 1</td>
<td>8.03(*)</td>
<td>1.85</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>BU 3</td>
<td>6.68(*)</td>
<td>1.79</td>
<td>0.001</td>
</tr>
<tr>
<td>BU 3</td>
<td>BU 1</td>
<td>1.34</td>
<td>1.61</td>
<td>0.707</td>
</tr>
<tr>
<td></td>
<td>BU 2</td>
<td>-6.68(*)</td>
<td>1.79</td>
<td>0.001</td>
</tr>
</tbody>
</table>

Based on observed means
* The mean difference is significant at the 0.05 level
The results indicate that there are significant differences between the following business units:

- BUs 1 and 2, and
- BUs 2 and 3

The significant difference is due to their respective mean scores on the trust relationship dimension, vis-à-vis 65.72% for BU 1 and 73.75% for BU 2 in the first case, and 67.07% for BU 3 and 73.75% for BU 2 in the second case. In general BU 2 employees rated management higher with regards to trust relationship.

### 5.5 INTEGRATION AND INTERPRETATION OF RESULTS

The findings of this research highlight some general patterns of perception of personality characteristics as well as some general patterns for managerial practices in the three business units.

The findings indicate overall positive results (>64%) for all three business units for the personality aspects (Big Five). As alluded to earlier by Martins (2000), these personality factors were viewed as possible antecedents of personal trust between superiors and subordinates. It would appear that the levels of personal trust between superiors and subordinates are much higher at BU 2 compared with those at BUs 1 and 3 respectively. Another observation is that the levels of personal trust between superiors and subordinates at BUs 1 and 3 are almost on a par – no significant differences are found. The results of the various qualification groups and main functional groups shows congruence with what is seen at the different business units regarding the “Big Five” personality aspect.

The most positive “Big Five” dimensions are **conscientiousness**, **extraversion** and **agreeableness**, which indicate that most managers/supervisors are seen to be hardworking, dependable, thorough, responsible, sociable, friendly, active, courteous, good natured, cooperative and forgiving. The lowest dimension (although still positive, i.e. >64%) shows that not all managers/supervisors are seen as **resourceful** (imaginative, creative, broad-minded and intelligent).
The overall results for the three business units do not indicate positive results for the Managerial Practices. This overall trend is mirrored in the various qualification groups, the main functional groups and the major grade groups. There seems to be an indication that not enough information sharing (on average <64%) takes place and that this has a negative effect within the work environment. Although not as low as the information sharing dimension, the credibility dimension (on average <64%) is also lower than the others, indicating that better credibility of people that are reported to, could improve trust and result in optimal functioning within the working environment.

The dimensions team management (referring to effective management of team and individual goal accomplishment and handling of conflict within groups), work support (indicating that management/supervisors are seen to be willing to support employees when needed and to provide job-related information for the accomplishment of objectives) and trust relationship (reflecting the relationship with the immediate supervisor in terms of openness, honesty, fairness and intentions to motivate employees) are viewed positively (above 64% on average) by all business units.

A further analysis of the results of the different grade groups is that those in higher grades (with specific reference to the management group, who – at 75,25% – has the highest score for the trust relationship dimension) seems to have more trust in their direct supervisor. This finding may indicate some support for Lewicki and Bunker’s (1996) argument for knowledge as an important factor in the escalation of trust. Bews and Uys (2002) ascribe this to the fact that employees on the higher levels may be more exposed to top management during their day-to-day activities at the business units. They would consequently be in a better position to gather first-hand knowledge of top management than employees in the more junior grades.

The next section will look at other research carried out, which might support the findings of this research.
5.5.1 Research supporting findings of this dissertation

According to the results of studies undertaken by Martins (1994) in various South African companies, of 3991 employees surveyed, only 52.3% perceived their relationship with management as positive. He found that employees in the services and manufacturing sector perceived the trust relationship as the worst, namely 36.5% and 34.9% respectively. Bews and Martins (1996:45) refers to Martins (1994) who suggests that the low level of trust between management and employees could have been as a result of:

- the inability to coordinate actions
- the inability to act decisively
- management’s low level of training in performance appraisal systems
- poor communication processes

Bews and Martins’ (1996) research also suggests that trusting relationships are built on openness, sharing information, telling the truth and clarifying expectations. The authors further assert that this, in turn, builds loyalty and when strengthened by fairness that includes consistency and integrity, leads to trust. They argue for a relationship between management competence and openness. They posit that by sharing information, telling the truth and clarifying expectations, the incompetent manager feels that he loses control. On the contrary, the competent manager uses openness on which to build loyalty and trust and ultimately remains in control.

In 1998 Martins once again performed a trust audit in South African companies. A total of 1698 people from 17 different companies participated in the survey. The purpose of the trust audit was to:

- compare trust levels of participating companies;
- compare trust levels at the different job levels;
- discuss strengths and weaknesses regarding trust levels, and
- make suggestions/recommendations on how to increase or maintain the levels of trust in an organisation (Martins, 1998:28).

The dimensions measured included personality aspects (i.e. conscientiousness, agreeableness, emotional stability, resourcefulness and extraversion), managerial
practices (i.e. credibility, team management, information sharing and work support) and the trust relationship.

The results of Martins’ (1998) study indicated the trends in the entire group, but also distinguished between the employee group and the managerial group. Some comparison was also made between different companies. The results for the entire group indicated that the most positive “Big Five” dimensions were conscientiousness, extraversion and agreeableness, which indicate that most managers/supervisors are seen to be hardworking, dependable, thorough, responsible, sociable, friendly, active, courteous, good natured, cooperative and forgiving. The lowest dimension (although still positive, i.e. >64%) showed that not all managers/supervisors were seen as resourceful. These results were congruent with the finding of this dissertation.

Furthermore, the results of the Martins (1998) study indicated that the distribution was fairly similar between the managerial and employee groups with regards to the “Big Five” personality dimensions. Martins (1998) found that the only dimension that did show some difference was that of resourcefulness, where employees indicate a lower rating than the managerial group. He sees this as an indication of how the two groups evaluate the resourcefulness of their immediate supervisor. He also found some differences between individual companies with regards to the “Big Five” dimensions.

In the results of the Managerial Practices of the entire group, Martins (1998) found that the rating for information sharing (less than 64%) was considerably lower than that for the other dimensions. He saw the same pattern when the result of the managerial and employee groups were separated, indicating that both groups felt that there is a lack of information sharing by the people they report to. The other Managerial Practices dimensions were found to be very similar for the two groupings. Although not as low as the information sharing dimension, the credibility dimension was also lower than the other, indicating that better credibility of the persons that are reported to could improve trust and optimal functioning within the working environment. These findings are similar to those in the dissertation.
With regards to the trust relationship, Martins (1998) found that the employee group had a slightly lower score. He interprets this as there being a slightly lower trust relationship between employees and the persons to whom they report, than between managerial level staff and the persons to whom they report. Similar to the findings of the dissertation, the dimensions team management, work support and trust relationship are viewed positively (above 64% on average) by the entire group.

According to Martins (1998:31) the companies with low trust reported the following negative consequences:

- Mistakes are viewed as an embarrassment
- Low integrity
- No consistency in performance
- Low loyalty
- No openness to new ideas and approaches
- Low credibility
- No concern for others
- Poor communication

and subsequently a perception that managerial competence is inadequate.

These findings obtained by Martins during trust audits in both 1994 and 1998 in various South African companies show strong congruence with, and hence lend some support for, the findings of this dissertation.

As alluded to earlier in this dissertation, trust is powerful in its ability to control the success of organisations of all sizes and in all industries. In successful companies, trust is the basic foundation on which widespread commitment, cooperative teamwork, and positive energy are built. But to what extent does trust exist in most organisations? The researcher highlighted some studies done in the South African context to answer this question. The attention will now turn briefly to international surveys in order to see how these organisations are doing.
In a survey conducted by Development Dimensions International (DDI) during 1995, 56% of non-management employees in 57 service and manufacturing organisations worldwide viewed lack of trust as a problem in their organisations. Linda Miller (1995:21), product manager and trust expert at DDI, explained why trust could be viewed as a problem in organisations. “Organisations are in the throes of constant change, and the business environment is changing all the time. Therefore there is uncertainty as to what is going on and why, which can result in employee mistrust of an organisation if change is not handled properly.”

Some 1108 management and non-management workers completed the survey, which asked about behaviours that build or reduce trust and general perceptions about trust. These behaviours can be considered to be similar to factors of trustworthiness or dimensions – the nomenclature used in this dissertation. The survey found that 70% of the respondents trusted their peers more often than their leaders, senior management or other departments. An interesting finding was that 95% of respondents rated their own trustworthiness as very high (6.37 on a scale of 7).

Miller (1995:22) gave the following view on why so many respondents could have rated their own trustworthiness high while rating trust in organisations low: “Individuals feel that they are trustworthy, but they also create trust reducers without even realising it. For example, many people break small promises everyday for various legitimate reasons, but they don’t realise what impact they have on other people’s trust in them. If this becomes a pattern, over time it will develop into a problem.”

To foster trust, companies need to focus on trust as a business need. Miller (1995) sees this focus on trust as being through formal efforts, such as training in communication, coaching and team building. She asserts that if people don’t trust the people they work with or the organisation they work for, it is difficult for them to get things done, and they will be reluctant to take risks.

Furthermore, she believes that organisations need to recognise behaviours and situations that breed mistrust, including having an active grapevine; an involved approval process; high turnover; lack of team work and collaboration; turf protection;
and employees who won’t offer information, only take low risks, have poor initiative, and don’t follow through on promises.

According to the respondents, leaders reduce trust when they are more concerned with their own welfare (indicating a lack of work support), convey inconsistent messages to workers (i.e. low on information sharing), and avoid taking responsibility for action (i.e. they are not seen as conscientious). The information sharing dimension is also strongly coming out in this survey as one of the problematic areas. By contrast, employees said trust is fostered with honest and open communication. They also wanted their leaders to show confidence in their abilities and to listen to what they have to say (Miller, 1995). This view is congruent with that of Bews and Martins (1996) who suggest that trusting relationships are built on openness, sharing information, telling the truth and clarifying expectations.

The next section will explore research that deals specifically with the facilitators of trustworthiness (or dimensions). Of particular significance is the study conducted by Bews and Martins (2002) to evaluate the facilitators of trustworthiness. Bews (1999) developed an integrated model for intra-organisational trust. The validity of an aspect of this model, in respect of the proposed facilitators of trustworthiness, was empirically tested in a South African financial institution. The results of this test were then compared with the results of a similar and recent study also undertaken in a South African context.

Bews and Martins (2002:18) found a statistically significant and positive relationship between the facilitators of trustworthiness and interpersonal trust, and that benevolence presented as the strongest predictor of trust followed by competency, integrity, history of interactions, personality characteristics and openness.

Martins’ (2000) study supports the positive relationship found between the personality characteristics (agreeableness and conscientiousness) and interpersonal trust. Bews and Martins (2002) believe that both agreeableness and conscientiousness appear to be significant manifestations of trust.
Aspects of the Bews and Martins’ (2002) study appear to support certain of the assumptions of Mishra (1996) and Mayer et al. (1995) and confirm aspects of the findings of Cloete and Engelbrecht (2000). Both Mishra (1996) and Mayer et al. (1995) highlight the importance of benevolence in the facilitation of trustworthiness. Cloete and Engelbrecht (2000:26) tested the integrated model of Mayer et al. (1995) and found that a “high and significant (p<0,01) positive relationship exists between interpersonal trust and each of the facilitators of trustworthiness (ability: r = 0,77; benevolence: r = 0,88; integrity: r = 0,92).”

While Cloete and Engelbrecht (2000:26) found that a combination of ability, integrity and benevolence explained 86% of the variance in trust, Bews and Martins’ (2002) findings are that a combination of benevolence, competency and integrity explained 87.2% of the variance in trust. Both Cloete and Engelbrecht’s (2000) study and the results of Bews and Martins’ (2002) study seem to indicate some support for accepting certain facilitators as essential to the development of intra-organisational trust.

The aforementioned research just confirms that trust matters. Numerous research studies indicate that organisations with high levels of trust will be more successful, adaptive and innovative than organisations with low levels of trust or pervasive distrust. The implications include not only employee morale and productivity, but extend to stakeholders and the ability to form the networks, alliances and virtual relationships so significant for the 21st century (Shockley-Zalabak et al., 2000).

5.6 CHAPTER SUMMARY

This chapter focused on the discussion of the results of the research done in Chapter 4. The chapter started off with a reflection on the overall results of the constructs tested and established the relation between these constructs. The findings of the comparative analysis were then discussed.

All participants perceived the “Big Five” personality dimensions as positive. It would also appear that the levels of personal trust between superiors and subordinates are much higher in BU 2 than in BUs 1 and 2. The most positive
dimension was conscientiousness, which indicates that most managers/supervisors are hardworking, careful, confident, cheerful and active.

Overall, not all the participants perceived the Management Practices and trust as positive. The job grades, some of the qualification groups and some departments (or functional groups) still perceive credibility and information sharing as developmental areas. The most positive dimensions were team management which reflects the relationship with immediate supervisor in terms of openness, honesty, fairness and intention to motivate employees.

Finally the researcher attempted to interpret and integrate these findings by referring to other research that supports the findings in this dissertation.

The next chapter will conclude this research and will briefly elaborate on the limitations of the research as well as make some recommendations in an attempt to remedy the problematic or developmental areas.
CHAPTER 6
CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

The research topic focused on trust and specifically employees’ and management’s perceptions of the levels of trust in the organisation. In the concluding chapter the researcher briefly reflects on the research process, discusses the theoretical and empirical findings, elaborates on some of the limitations of this research, endeavours to provide some recommendations in an attempt to address trust-related issues as highlighted by the research findings, and finally draws some conclusions regarding the topic of trust.

6.1.1 The research process

After stating the motivation for this research and the central problems to be addressed, and discussing the paradigm perspective and the research design and methodology, the researcher then proceeded to first look at trust from a theoretical perspective in order to lay the foundation for contextualising the phenomenon of trust. The nature and importance of trust and the bases of trust within organisations were examined, attempts were made to clarify definitions of trust, elaborate on the dimensions of organisational trust, examine the dynamics of trust, deliberate on some of the benefits of trust, briefly examine trust within teams and its relation to performance effectiveness, explore the trust-distrust dynamics, expound on the limits of trust and finally consider management/leadership’s role in trust.

Next an attempt was made to add to the understanding of how people trust one another. The development of trust between people has been considered a critical element in developing and maintaining successful relations and the complex systems with which they interact. In order to expound on this subject, the researcher focused on the dynamics of trust, models for developing and maintaining trust and the violation of trust and on strategies for developing, maintaining and restoring trust at the interpersonal and organisational levels.
Having laid the theoretical foundations for the study, the researcher then proceeded to present the research methodology. The sample that was used was discussed and the procedure used to obtain the sample was described. The statistical techniques used to analyse the data were also described. Finally, the results of the empirical research were presented and interpreted.

What remains in this chapter is to briefly discuss the findings (theoretical and empirical), look at some of the limitations of this research and finally present some recommendations to address the problems or developmental areas highlighted by this research.

6.2 FINDINGS (THEORETICAL AND EMPIRICAL)
This section will look briefly at the findings of the research, both theoretical and empirical.

6.2.1 Theoretical results
The theoretical research was aimed at addressing the following central questions:
- What is trust?
- Why is trust such an important component of teamwork?
- How can we develop trust?
- What are the consequences if trust is violated?
- How can we restore trust?
- What is the impact of management/leadership on trust in employees?

The researcher found that trust is an essential ingredient in all organisations and business ventures and that it involves trust between companies as well as within companies. A better understanding of the building blocks of organisational trust should help employers and employees to create avenues for reconciliation and, therefore, trust between the most important stakeholders of any company (Martins, 1998). What became apparent was that in the modern workplace business is trusted less than ever before. That is why it is important for anyone involved in business to understand what trust is and how to build it (Reynolds, 1997). Conversely, business leadership should also develop an acute awareness of the roots of mistrust in
organisations and implement measures to eliminate and/or mitigate its impact on the business and its stakeholders. Management is thus facing a fundamental dilemma in today’s hypercompetitive world. On the one hand trust is needed as people are more likely to support change if they believe that they will not suffer as a result of the change. On the other hand, in change situations drastic measures have to be taken, which will eventually erode the fundamentals of trust (Shaw, 1997).

According to Shaw (1997), organisations have provide three basic conditions in order to expand the radius of trust: they have to achieve results (to prove that they can meet the expectations); they have to act with integrity; and they have to demonstrate concern (to show that they want to meet the expectations).

It also became apparent in the research (see Bews and Uys, 2002) that the intensity of any trust relationship will depend on certain facilitators of trustworthiness (which was referred to as dimensions for the purpose of this research). According to Bews and Uys (2002:22) these facilitators play an active role in lubricating or, in their more negative form, impeding the flow of trust. They are referred to with respect to trustworthiness rather than trust per se, as it is these facilitators that the trustor uses to evaluate the trustworthiness of the trustee. Bews and Uys (2002) proposed that depending on the contextual factors that may influence the perceived importance of each dimension (facilitator), the trustor evaluates the trustworthiness of the trustee via an interrelationship of the aforementioned dimensions.

The researcher also found that two issues (see Kramer & Tyler, 1996) have emerged as central to the analysis of trust. One is understanding the dynamics of trust in organisations. On the macro-level this involves a concern for the influence of social organisation on patterns of trust. On the meso-level, it involves an exploration of social networks. Finally, on the micro-level, it involves consideration of the psychological bases of trust and distrust. The second issue is understanding why people trust. Consideration of this issue involves micro-level comparisons of rational and social motivations for trust (Kramer & Tyler, 1996).

The benefits of trust became evident throughout the research, although within organisational settings, trust was primarily discussed on three levels, namely trust
and transaction costs, trust and spontaneous sociability, and trust and voluntary
deferece (Kramer, 1999).

The acknowledgement that trust is important for the functioning of organisations has increased the amount of research showing how this importance is reflected in the behaviour of its members. New emphasis is given on interpersonal and group dynamics at the workplace, where trust is seen as one of the critical elements. Without trust, teams cannot reap the gains of collaboration and cooperation. This is a costly defect in any organisation since much planning and decision making depends on group effectiveness; managing in a turbulent environment requires that people come together to coordinate resources, initiate and advance ideas, gain commitment to common goals and collectively manage complex goals (see Arrow, 1974; Bailey & Cohen, 1997; Costa et al., 2001; George & Jones, 1998; Hay, 2002; Hunt & Morgan, 1994; Katzenbach & Smith, 1993; Sabel, 1993; Safizadeh, 1991; West, 1994; Whitney & Deming, 1994). Leaders will have to learn how to manage teams effectively in such an environment.

Managers/leaders will have to inspire trust in subordinates and demonstrate that they will be responsive to the conditions that must be met before a subordinate can safely internalise the dominant value of the organisation. They will also have to become aware of the type of managerial responses that create alarm within subordinates (Culbert & McDonough, 1986). Trustworthy managerial behaviour has an important influence on the development of trust in relationships between managers and subordinates. Managers who engage in this type of behaviour will increase the likelihood that employees will reciprocate and trust them, providing a necessary foundation for employees’ “trust-in management” (Whitener et al., 1998). Managers/leaders will have to empower their people if organisations are to survive. Empowerment is one of the keys to understanding trust and trusting relationships in an organisation (Culbert & McDonough, 1986).

The research also highlighted the various ways in which trust develops, is maintained, how it can be violated and how it can be restored. The trust repair process requires commitment from both parties in order to make the process viable (see Lewicki & Bunker, 1996).
A framework for building trust was elaborated on. This framework had three key leveraging points, namely, leadership practices, organisational architecture and organisational culture. The key imperatives in building high-trust organisations and teams were considered to be achieving results, acting with integrity and demonstrating concern (Shaw, 1997).

It also became apparent that the dilemmas of trust had to be managed. One way of understanding the dilemmas of trust is to consider the trade-offs among the three imperatives – achieving results, acting with integrity, and demonstrating concern (Shaw, 1997).

It is the researcher’s opinion that the theoretical body of evidence presented managed to answer these questions (posed in section 6.2.1) to a large extent. In the process, an attempt was made to elucidate the various facets of trust and how it impacts on relationships at the inter-personal, intra-organisational and inter-organisational level. The research provided some insight into the trust phenomenon, attempted to clarify some misconceptions and gave some idea of the various strategic options available to develop, maintain and restore trust in an ever-changing business environment. It must be mentioned that the theoretical treatise of the subject was limited to the discussion of aspects of the trust phenomenon that had a more direct bearing on the research. What was attempted was to give an overview of trust that would serve as a framework for the empirical research.

The theoretical research findings just confirm the nature and importance of trust. Numerous research studies indicate that organisations with high levels of trust will be more successful, adaptive and innovative than organisations with low levels of trust or pervasive distrust.

The next section briefly elaborates on the empirical findings of this research.
6.2.2 Empirical results

The empirical findings of this research highlighted some general patterns of perception of personality characteristics and some general patterns for managerial practices in the three business units.

The findings indicated overall positive results (>64%) for all three business units for the personality aspects (Big Five). As alluded to earlier, these personality factors were viewed as possible antecedents of personal trust between superiors and subordinates (Martins, 1998). It would appear that the levels of personal trust between superiors and subordinates are much higher in Business Unit (BU) 2 compared with those in BUs 1 and 3 respectively. Another observation is that the levels of personal trust between superiors and subordinates at BUs 1 and 3 are almost on a par – no significant differences are found. The results of the various qualification groups and main functional groups shows congruence with what is seen at the various business units regarding the “Big Five” personality aspect.

The most positive “Big Five” dimensions are conscientiousness, extraversion and agreeableness. The lowest dimension (although still positive, i.e. >64%) shows that not all managers/supervisors are seen as resourceful.

The overall results for the three business units do not indicate positive results for the managerial practices. This overall trend is mirrored in the various qualification groups, the main functional groups and the major grade groups respectively. There seems to be an indication that not enough information sharing (on average <64%) takes place and that this has a negative effect on the work environment. Although not as low as the information sharing dimension, the credibility dimension (on average <64%) is also lower than the others.

The dimensions team management, work support and trust relationship are viewed positively (above 64% on average) by all business units. A further finding when looking at the results of the different grade groups is that those in higher grades seems to have more trust in their direct supervisor.
The empirical results of this research have been supported by research carried out by Martins (1994; 1996; 1998).

The next section will briefly elaborate on some of the limitations of this study.

6.3 LIMITATIONS OF THE STUDY

As is often the case, several potential limitations of this study should be recognised and taken into account when interpreting its findings.

First, it is necessary to recognise that this study uses cross-sectional data to examine a phenomenon that is inherently dynamic. This could prevent testing for causal relationships. As alluded to earlier, investigations of the possible antecedents of trust (or mistrust), has led to the assumption that trust within companies is probably created by personality factors and managerial factors (Martins, 2000). Although, the different constructs tested in this research are treated merely as antecedents of trust, the result of this study do not preclude reverse causation. For example, trusting individuals (earlier alluded to as those with a higher propensity to trust) may ascribe higher levels of trustworthiness to their immediate supervisors. More research into trust development and the nature of cause-effect relationships is necessary.

A second limitation is that the study is based on single source survey data. All the constructs in the survey were measured through the eyes of the subordinates using questionnaires. Possibly, more research using multiple methods and sources of data is needed. The relatively high intercorrelations between the constructs that were found here are also commonly found in other studies using the same types of scales.

A third potential limitation concerns the dimensions tested in this research. It was not possible in the empirical study to test (measure) all the dimensions (or facilitators of trustworthiness) that were identified in the literature study. However, this is a possibility for further research and would be a step in the direction of an enhanced model. In conclusion, it appears that compiling an instrument that specifically measures the level of trust could show great promise if all aspects that could not be tested in this research were included. This would enable organisations to determine the degree to which all these dimensions impact on the level of trust in organisations.
A final potential limitation concerns the validity of the empirical results. Whether these results can be generalised to other South African organisations remains an empirical question.

While recognising the aforementioned limitations, the potential contribution of this research to a better understanding of trust is important.

The next section will look at recommendations to address problem or developmental areas highlighted in this study.

6.4 RECOMMENDATIONS
In general, Martins (1998:31) believe that the following can be taken into account by companies who are operating in the changing South African environment:

1. The trust indicator as it was defined in this audit has a significant impact on the managerial practices in companies.

2. Companies that wish to improve their trust relationships would be advised to focus on the following trust indicators:
   • Actively work towards an open and trusting relationship with employees
   • Openly and honestly reveal important work-related facts to employees
   • Be fair in judging performance
   • Demonstrate good intentions in the motivation of employees
   • Be consistent in communicating with employees
   • Improve information sharing at all levels.

3. Companies that wish to develop a climate of trust could focus on the following:
   • Promoting aggressive business targets
   • Developing aligned performance accountabilities
   • Building ownership
   • Ensuring superior talent at every level
   • Maintaining systems to share information
   • Instituting a few rigorous controls.
4. There are no short cuts when it comes to dealing with trust. Relationships and trust building require time. Ultimately, trust is neither a useful commodity nor a luxury. It is the indispensable core of effective organisational functioning.

6.4.1 At the organisational level

The following recommendations should go a long way in addressing the fundamental issues surrounding trust and the building of trusting relationships at the organisational level:

- Organisations need to monitor trust levels especially during times of rapid change.
- Policies and practices should be regularly examined for their implicit and explicit messages about trusting relationships. Performance evaluations systems, accounting and reporting practices, decision-making levels, supervision, monitoring of all types of employee behaviours (e.g. use of time, telephone and computers) all have embedded messages about types and levels of trust within the organisation (Condrey, 1995).
- The literature suggests that high trust levels within organisations may aid human resource management’s reform efforts (Condrey, 1995). Organisational trust may, for example, influence individual assessment of performance appraisals. Roberts (1992:22) states that the ratee acceptance of a performance appraisal system “is maximised when the performance measurement process is perceived to be accurate and the system is administered fairly”. Nalbandian (1991:195) notes that “even where work standards are clear, without organisational trust employees will view performance evaluations with suspicion and defensiveness”.
- Linking to the aforementioned point, the performance appraisal system at the business units should be investigated. The following should also be considered regarding the performance appraisal process:
  - Reduction of controls by giving continuous feedback to employees on their performance and reward or punish poor performance.
  - Management/supervisors also need to solicit feedback on their performance. The possibility of a 360 degree performance system needs to
be investigated.

- Train managers/supervisors to give more effective feedback to employees. (Martins & Von der Ohe, 1998).

- Investigate the management skills of middle management/supervisors to ensure managerial efficiency is not compromised (Martins & Von der Ohe, 2000).

- Organisations should also provide training and educational opportunities to enable and enhance trustworthy managerial behaviour. As managers increase the specific skills associated with trustworthy behaviour through training and development opportunities, they are more likely to initiate and exercise it (Whitener et al., 1998).

- Employees can also benefit from awareness of the importance of organisational trust. Increased job satisfaction, the ability to innovate, and the ability to identify with a successful organisation are all related to perceptions of trust. Employee training can focus on how employees contribute to trust networks. Employees are also a primary source of ongoing organisational information about the trust climate (Schockley-Zalabak et al., 2000).

- Parallel training to employees on the building and maintenance of trusting manager-employee relationships might also facilitate the transition to empowered organisations.

- Organisational systems should help managers/leaders overcome the potential barriers to initiating trust. Such systems might include rewarding managers/leaders who initiate trust, and requiring certain managers to take the lead in initiating and providing visible “safety nets”. This might also include rewarding employees who reciprocate (Whitener et al., 1998).

- Proactive efforts at managing diversity may promote a more open organisational climate, and may give employees more freedom to express their true feelings. If people feel that they have a legitimate place in the organisation and that they have a meaningful contribution to make, regardless of their cultural or ideological differences, a culture of trust will begin to emerge and the long journey towards employee commitment will begin. Commitment will only emerge when trust has been engendered, and trust is a direct result of the effective management of diversity (Fuhr, 1992).
To foster trust, companies should focus on trust as a business need. They need to focus on trust by using formal efforts, such as training in communication, coaching and teambuilding. If people don’t trust the people they work with or the organisation they work for, it is difficult for them to get things done, and they will be reluctant to take risks (Miller, 1995).

Train managers/supervisors in how to handle conflict in teams and to manage change in the various business units. This will improve the overall managerial efficiency at these business units (Martins & Von der Ohe, 1998).

Develop and recruit employees that are creative, broad-minded and imaginative to support the business units in the area of resourcefulness (Martins & Von der Ohe, 1998).

In addition to ensuring that openness, loyalty and fairness exist in the organisation, organisations must explore giving employees the opportunity to acquire skills that may not be directly related to jobs. This will improve their employability and deploy-ability in other areas of the company. This can be done by building cross-functional teams that will not only provide the opportunity for individuals to broaden their knowledge base, but will also provide a foundation on which to strengthen interpersonal relationships. Team commitment and loyalty can ultimately lead to commitment and loyalty to the organisation (Bews & Martins, 1996).

The next section will provide some recommendations in an attempt to address issues surrounding management’s impact on trust.

6.4.2 Management’s impact on trust

Address the trust gaps between managers/supervisors and specific unions and job grades. This can be done by means of

- Clarification of mutual expectations (clarify what is expected of both parties)
- Sharing relevant information, for example management decisions and priorities
- Meeting expectations
- Allowing for mutual influence, for example participative problem solving
or goal setting (Martins & Von der Ohe, 1998).

- Leaders/managers should receive training to enable a more comprehensive understanding of what constitutes trust behaviours and to better understand distinctions between interpersonal and organisational trust. Many leaders pride themselves on their personal integrity without understanding that the position they occupy provides few people within the organisation the opportunity to interact on a personal basis. Although their intentions may be trustworthy, the impact of leadership is interpreted through multiple networks of relationships and events. Leadership training can include distinctions between interpersonal and organisational trust, ways of understanding trust within particular organisational contexts, and the opportunity to examine the leadership activities within the organisation for their contributions to the trust environment. Such training should also include information on the importance of fair treatment to all employees (Schockley-Zalabak et al., 2000). At the interpersonal level, managers/leaders should manage ambivalence in peer relations and leader-member interaction. Organisation members must know not only when to trust others and in what respects, but also when to monitor it closely (Lewicki et al., 1998).

- If leaders want to increase citizenship behaviours among their employees, they should work at improving perceptions of fairness and trust. They (leaders) should also work at fostering organisational commitment through the fairness of the procedures they employ (Schockley-Zalabak et al., 2000).

- Organisation effectiveness requires that people internalise a definition of the system that extends to the wider interests of the system as a whole. Thus, if organisations are serious about having people internalise orientations that attend to the wider interests of the system as a whole, then management/leadership must devote sufficient attention to the process of trust. This will ensure that managerial behaviour in promoting trust gets subjected to, and evaluated against, the same type of uncompromised standards that exist for evaluating operational efficiency (Culbert & McDonough, 1986).
• Address the problems pertaining to credibility. The following are proposed:
  • Consider team proposals
  • Implement team decisions
  • Ensure prestige and credibility for employees and teams (Martins & Von der Ohe, 2000).

• Investigate the perception that mistakes can be tolerated, especially those that can lead to improved work procedures or work methods (Martins & Von der Ohe, 2000).

• By means of task teams, involve employees, more in the process of change, for instance the implementation of employment equity and downsizing (Martins & Von der Ohe, 1998).

• Train managers/supervisors how to manage change and how to prepare their subordinates (Martins & Von der Ohe, 2000).

• Organisation members should develop the capacity to manage the ways in which they are trusted and distrusted by others (Lewicki et al., 1998).

• Effective self-regulation is the product of efforts to manage distrust and trust relationships simultaneously. Therefore, organisation members should direct efforts at minimising distrust in some relationships and enhancing trust within others (Ashford & Tsui, 1991).

• Improve the trust relationship between top management and employees by:
  • Sharing relevant information (no hidden agendas)
  • Increasing relevant information
  • Meeting of expectations
  • Demonstrating concern (Martins & Von der Ohe, 1998).

The next section will specifically look at the problem of information sharing as identified by the empirical research and give some recommendations for addressing this issue.
6.4.3 Addressing problems related to information sharing

Katz and Luker (1993:10) assert that the suboptimisation of performance can be seen in:

- Selectivity of information to various people
- Bottlenecks: not facilitating the free flow to lower levels of organisation
- Managing people and plans to own advantage
- Being cautious in telling the truth
- Deliberately withholding information
- Using delaying tactics
- Not giving the full story.

They further believe that managers withhold information for a variety of reasons, particularly because:

- they want to become experts. Managers believe that they can become indispensable and retain their positions through possession of scarce and valuable information.
- they want to keep adverse information under wraps. By giving selective information managers intend to portray themselves in a favourable light for promotion;
- they accept that information or knowledge gives authority. There is a perception amongst managers that those who do not have information or knowledge risk being sidelined through making wrong decisions (Katz & Luker, 1993).

Katz and Luker (1993) propose the following in order to eliminate information control or general lack of information sharing:

- organisations need to look at their mid-management practices:
  - they should do everything in their power to increase trust;
  - they should acknowledge and give others credit for their ideas;
  - freer upward communication should be encouraged and
  - management policy and practices should be changed so that departments can function more competently, more consultatively and with greater empowerment.
• As the pool of managers qualifying for promotion widens, organisations will have to become more intelligent at interviewing techniques and in the selection of managers. It becomes critical that managers are able to share information for the good of the organisation, the good of the team and for the good of their own.

• As the flow of information on which to base decisions and policies is important, managers must be able to tap the resources of subordinates. They can achieve this by opening up the channels of communication, especially to sharing creative thought and expression of ideas (Katz & Luker, 1993).

Other important issues to consider regarding information sharing and trust will be discussed next in order to provide some further guidelines to management.

Five of the most frequent and most serious inhibitors of effective communication have been identified as follows:

• Mistrust
  • As alluded to earlier in this dissertation, mistrust between management and employees is considered a serious problem in many organisations. Perpetual mistrust will render communication ineffective and even negative such that increasing the quantity or quality of communication or varying media and vehicles of communication will be ineffectual. Mistrust may ultimately lead to a filtering and sometimes complete blockage of communication. Organisations therefore need to gain a thorough understanding of why their employees do not trust management before embarking on trust-building strategies.

• Too much facts
  • The mistakes in corporate communication rarely relates to factual accuracy, but rather to issues around its sincerity, authenticity, integrity and its caring. Communication should be inspirational, not merely providing facts and information. Face to face communication is considered a more effective approach to inspiring people and communicating feelings. This implies that managers must have the courage to talk to their employees (Strategic Business Ethics Inc., 2003).
• **Fear**
  
  In the face of fear, employees often do not speak their minds, nor do they listen to others. Fear, like mistrust, thus also serves to filter every message. The risk is that company values and vision may be marginalised in the minds of employees by the ever-present feeling of fear. This places the imperative on leaders to know when fear is paralysing their organisations and to identify where that fear is greatest and the reasons for it. Communication will only flow more effectively in both directions once a culture has been established that eliminates fear.

• **One-way communication**
  
  Listening skills are considered critical for effective communication. The dilemma is that managers are sometimes taught how to communicate but rarely how to listen. Listening requires character, some ethical stature, humility and compassion. It is imperative for the organisation to improve the way it listens if it wishes to improve the way it communicates.

• **Delegation of communication**
  
  Managers must realise that they can delegate the communication of facts, but not of feelings. Delegation can be disastrous in the function of communication. Communication is considered to be at the core of a manager’s job. A manager, who delegates communication, might not be needed after all (Strategic Business Ethics Inc., 2003).

How a company communicates, how trusted its communication is, and its capacity to inspire its people with its communication (or information sharing) all contribute as much to its success as any other of its strategies. Effective communication, however, is not only a function of managerial skill, but also of corporate and managerial character. It is of utmost importance that the volume of communication and its accuracy must be accompanied by good corporate ethic and trusted corporate integrity (Strategic Business Ethics Inc., 2003).
6.5 CONCLUSION

Trust is important for organisations to be successful and thrive in the new economy. New business challenges force organisations to change the way in which the business is run. To build trust an organisation must ensure that the imperatives of trust, that is, achieving results, acting with integrity and demonstrating concern, get the necessary attention (Shaw, 1997).

Various lessons for management/leadership and organisations have been elicited in the process. Among the most salient lessons were that employers should create stimulating and high trust environments that will restore trust. These environments Bews and Martins (1996) believe, will be build on openness, where the truth is communicated to all; where allowances for self-expression is made, together with management support that leads to loyalty and where a high degree of fairness exists. They place an imperative on employees to take every opportunity to develop themselves. Employees must have a willingness to change, continually strive to add value to themselves and show loyalty and commitment to those organisations providing the support for long-term career development. Bews and Martins (1996) conclude that the cost for allowing the perpetuation of the trust gap will continually be felt by both parties unless they broaden their minds, engage one another as partners and accept the challenge of change. As alluded to earlier, managers/leaders’ actions and behaviours provide the foundation for trust and it is actually management’s responsibility to take the first step in initiating a trusting relationship.

It is also important to note that the effective organisation avoids distractions and diversion as it concentrates its resources and energy on its central mission. It places a very high value on its essential elements; particularly the people whose ideas, abilities and efforts make it work truly effective. These organisations do not pour their efforts and talents into defensive action, unproductive rituals and needless internal competition. Instead, they build an environment of mutual trust where all the members can prosper (Shea, 1987). It has also become increasingly evident that the way organisations are going to be successful in the future, uncertain though that future is, is by empowering their people (Culbert & McDonough, 1986; Dowling,
2003). Once again managers/leaders have a pivotal role to play in creating high-trust organisations and engendering trusting relationships. It stands to reason that managers/leaders should be continually aware of and sensitive to the impact of their behaviour on trust as it could have far-reaching implications for them, their people and the organisation.
BIBLIOGRAPHY


[http://hrnetwork.co.za/articles.htm](http://hrnetwork.co.za/articles.htm) (19/04/2002)


Human Science Research Council (1994). *Climate and culture questionnaire*, Johannesburg.


