A DIAGNOSTIC MODEL FOR EMPLOYEE SATISFACTION DURING ORGANISATIONAL TRANSFORMATION

by

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DECLARATION

Student number: 749-706-7

I hereby declare that **"A diagnostic model for employee satisfaction during organisational transformation"** is my own work and that all the sources that I have used or quoted in this thesis, have been indicated and acknowledged by means of complete references.

_____ _____

SIGNATURE DATE

Mrs Ophillia Maphari Ledimo

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"Motho ke motho ka batho!"

This Sepedi idiom means that as human beings we do not live in isolation – we are always surrounded by supportive people in our lives. I would therefore like to honour and express my appreciation of the following individuals and institutions:

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SUMMARY

Organisations are always confronted with the need to transform in order to adapt to environmental changes and have a competitive advantage. The concern is that when an organisation embarks on a transformation process, its individual employees are affected either positively or negatively. Employees can respond to transformation change by either being satisfied or dissatisfied in the organisation. The main aim of this research was to develop a diagnostic model for measuring employee satisfaction during organisational transformation.

The first construct of organisational transformation was conceptualised using the open system paradigm, theoretical definitions and models of organisational change. In this study, organisational transformation is second order and drastic in the sense that it alters the way in which the organisation functions and relates to the external environment focusing on the vision, processes, systems, structure and culture. It is the fundamental and constant change at all levels of the organisation caused by external factors posing as risks for organisational survival.

The second construct of employee satisfaction was conceptualised focusing on the humanistic paradigm, theoretical definitions and models. Employee satisfaction in this study is the individual's positive emotional state of contentment stemming from the organisation's ability to meet his or her needs and expectations based on his or her experience and evaluation of various organisational processes and practices. It influences employees' performance and commitment to the organisation.

A theoretical model was developed as a framework to enable organisations to diagnose or assess their employees' satisfaction during organisational transformation. The model highlighted dimensions essential to diagnose employee satisfaction such as organisational strategy, policies and processes and outcomes, in order to determine employees' contentment and fulfilment in the organisation.

The main aim of the empirical research was to conduct a three year longitudinal study of employee satisfaction during organisational transformation; to operationalise the conceptually developed diagnostic model of employee satisfaction during transformation; and develop a structural equation model (SEM) in order to test the theoretical model. The Employee Satisfaction Survey (ESS) was used in 2003, 2007 and 2008 to measure employee satisfaction. The initial year of the study (2003) comprised 1 140 participants who voluntarily completed the measuring instrument. The second year of the study (2007) involved 920 participants, while the final year of the study (2008) included 759 participants. In terms of the reliability and validity of the ESS, it was determined that in the three years of the study, most of the dimensions had acceptable internal consistency reliability based on the results of the Cronbach alpha test.

The SEM investigated the impact of organisational strategy, policies and procedures and outcomes as the three domains of employee satisfaction during organisational transformation. The confirmatory factor analysis of the latent variables was conducted, and the path coefficients of the latent variables of organisational strategy, policies and processes and outcomes indicated a satisfactory fit for all these variables. The goodness-of-fit measure of the model indicated both absolute and incremental goodness-of-fit. The SEM confirmed the causal relationships between the latent and manifest variables, indicating that the latent variables, organisational

strategy, policies and procedures and outcomes are the main indicators of employee satisfaction.

This research adds to the field of organisational behaviour by proposing a model of employee satisfaction during organisational transformation. The domains of this model should enable organisations to identify developmental areas based on employees' dissatisfaction or areas of strengths based on employees' satisfaction. The diagnostic model will also enable organisations and practitioners to initiative interventions aimed at addressing areas of dissatisfaction as developmental areas and to leverage on its strengths as areas of satisfaction in the organisation.

KEY TERMS

Employee satisfaction; organisational transformation; change; attitude; organisational behaviour; organisational development; diagnostic process; strategy; policies; procedures and practices

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CHAPTER 1 SCIENTIFIC ORIENTATION TO THE RESEARCH

"It must not be about circumstances that dictate to you, where you should find yourself about the standard of life. But you must choose what or where you want to be". (Ngwale, 2011)

1.1 INTRODUCTION

This research focuses on the development of a diagnostic model for employee satisfaction during organisational transformation.

Chapter 1 provides the background to and rationale for this research study, which resulted in the formulation of the problem statement, research questions and aims of the research. The paradigm perspectives that guide the study are also discussed. The structure of the research process is described, highlighting the research methods and design with their different steps. The chapter concludes with an outline of the thesis and a chapter summary.

1.2 BACKGROUND TO AND RATIONALE FOR THE STUDY

The context of this study is organisational behaviour. More specifically, the study focuses on the development of a diagnostic model for employee satisfaction during organisational transformation.

A nation's competitive advantage is dependent on its human resources in terms of skills, attitudes, performance and capacity (O'Neil, 2005).The end of an apartheid era and the birth of a democratic South African government in 1994 led to the development of new labour legislation and international competition for organisations. The new labour legislation includes the policy on affirmative action, the Labour Relations Act 66 of 1995, the Employment Equity Act 55 of 1998 and the Skills Development Act 1997 of 1998, which were promulgated in order to eradicate imbalances in organisations that had been created by the previous regime.

South African organisations are still expected to adhere to the newly introduced labour legislation, which has dramatically changed the former face of labour relations in the sense that it firmly entrenches constitutional rights and duties (Denton & Vloeberghs, 2003). In addition to the changes in legislation, South African organisations have the opportunity to participate in the global market. The challenge of this opportunity is that organisations are compelled to become more competitive to retain and protect local markets against international competitors and ensure that they are able to compete internationally (Denton & Vloeberghs, 2003). Organisations are thus expected to adapt to the global and national forces of change that impact on their employee and organisational performance. These forces include changes in technology, business markets, politics, society, economics, the labour market, human resource processes and organisational systems (Werner, 2007).

In the light of the above discussion, most organisations are faced with the difficult but vital task of implementing transformation processes (Denton & Vloeberghs, 2003). Meyer and Botha (2000) contend that transformational change processes are radical and nonincremental and associated with high-risk decision making. According to Cummings and Worley (2008, p. 505), a transformation process "...occurs in response to or in anticipation of major changes in the organisation's environment and technology". An adaptive organisation anticipates changes in its environment and responds proactively (Werner, 2007). The focus of transformation in an organisation is to improve its organisational performance by establishing a competitive advantage over its competitors. Transformational change relates mainly to the redefinition of organisational values, dramatic restructuring and variations of business process re-engineering.

When an organisation embarks on a transformation process, its individual employees are affected positively or negatively. Employees can respond to organisational change by being satisfied or dissatisfied in the organisation. Employees are the internal customers of the organisation, when they are satisfied with conditions in the current working environment; they will be willing to ensure that their organisation is able to achieve its business goals

(Burke, Graham, & Smith, 2005; Chen, Yang, Shiau, & Wang, 2006). The origin of the construct of employee satisfaction is evident in its definition as a pleasurable or positive emotional state resulting from the appraisal of an employee's experiences of the work environment (Locke, 1976).

Employee satisfaction reflects the degree to which the individual's needs and desires are met as well as the extent to which these are perceived by other employees (Küskü, 2003). Comm and Mathaisel (2000) describe employee satisfaction as the gap between the work-related perceptions and expectations of employees in an organisation. This implies that employees' needs, wants and expectations are satisfied across a range of related organisational variables (O'Neil, 2005).

Employee satisfaction influences organisational performance as much as customer satisfaction (Burke *et al*., 2005). According to O'Neil (2005, p. 133), "...the key to satisfied customers and increased profits is the satisfied employee in the customer service or boundary role". Employees have positive energy and are more productive when they are satisfied with their jobs and the environment they work in (Abott, 2003; Küskü, 2003). Central to the benefits of employee satisfaction is a belief in the fundamental importance of the organisation's human capital (O'Neil, 2005). It is crucial for organisations to improve and sustain employee satisfaction because of the visible signs of employee dissatisfaction, which include employee turnover, deviant behaviour and property and production deviance (O'Neil, 2005; Kulas, McInnerney, DeMuth, & Jadwinski, 2007). According to Kulas *et al*. (2007, p. 390), "...it is clear that employee deviance is a costly burden on organisation, but the antecedents and processes through which such deviant behaviour is manifest are not apparent".

The literature indicates that numerous studies were conducted on the construct of employee satisfaction in the organisational sciences, with over 5 000 articles and dissertations published on the topic (Locke, 1976; Küskü, 2003; O'Neil, 2005; Chen *et al*., 2006). Studies conducted on employee satisfaction both internationally and nationally focused on the actual

antecedent factors of employee satisfaction and other factors that enable organisations to attract, motivate and retain employees. These factors include productivity, customer satisfaction, employee loyalty and performance (Abott, 2003; Burke *et al*., 2005; O'Neil, 2005). However, there is a need to conduct a longitudinal study and survey of employee satisfaction during a period of organisational transformation in a South African context.

The construct of employee satisfaction is still a complex issue for the modern-day organisation (O'Neil, 2005). In addition, the existing literature on transformational change in the South African context focuses mainly on the implementation of legislative changes, transformational leadership and change management (Werner, 2007). This study is significant because it will enable the organisation in the case study and other South African organisations to use the survey process as a vital step in benchmarking and tracking employee satisfaction over time. This study builds on two bodies of existing knowledge, namely the established theory on employee satisfaction and on organisational transformation.

The process of conducting an employee satisfaction survey or audit is diagnostic in the sense that it requires a diagnostic model. According to Nadler and Tushman (1980, p. 36), a diagnostic model "...is a roadmap that can be used to make sense of the terrain of organisational behaviour". This roadmap can be used as a tool or theory that indicates which factors are most important or critical in understanding, predicting and controlling organisational behaviour. It can also be used to determine the relationships between factors in terms of how other factors or combinations of factors cause other factors to change (Nadler & Tushman, 1980). An employee satisfaction diagnostic model is critical to guide organisational psychologists in the analysis of and possible action to enhance employee satisfaction. According to French and Bell (1999, p. 105), a diagnostic model or process "...identifies strengths, opportunities and problem areas". Employee satisfaction surveys are used as diagnostic methods to collect data that will enable an organisation to develop a picture of its strengths, opportunities, threats and developmental areas in relation to its employees' satisfaction.

According to Chen *et al.* (2006, p. 486), "...the purposes of employee satisfaction surveys are not only to discover employee satisfaction levels, but also to determine necessary improvements via the results of employee satisfaction surveys". Sanchez (2007) highlights the fact that employee surveys are mainly designed to enhance organisational communication and measure employee views on a wide range of work-related topics.

Organisations invest large amounts of time, energy and financial resources in conducting employee surveys in an effort to diagnose the existing levels of employee satisfaction. It is also necessary for any organisation to have a baseline of its existing employees' satisfaction levels so that improvement and reinforcement measures can be implemented (O'Neil, 2005). The main challenge of most organisations is to act on and implement the views of their employees. If employees' views are ignored, this could also reduce the existing levels of employee satisfaction because employees may feel that their inputs are being ignored. Organisations are able to gain a competitive advantage when they understand and act on what it takes to maximise employee satisfaction (Chen *et al.,* 2006; O'Neil, 2005).

Furthermore, organisations can attract, retain and motivate their human resources when they conduct satisfaction surveys and implement interventions that address the satisfaction issues faced by employees (O' Neil, 2005, p. 135). A diagnostic model of employee satisfaction during a period of organisational transformation has become a necessity and can serve as a useful benchmark for all further employee-related improvement initiatives.

1.3 ORGANISATIONAL BACKGROUND

The organisation that was investigated in this study is a parastatal whose core business operation is utility or water services. Figure 1.1 provides an overview of the context of the organisation under investigation, based on the macro-, meso- and micro-levels.

Firstly, at macro-level, this organisation is confronted with constant social, political, legal, labour and economic forces of change, which is what most South African businesses have to contend with nowadays. These factors include new labour legislation, a diverse workforce and global competition. This organisation is expected to adapt its internal processes to cope with these external demands.

Figure 1.1: Context of the transformation process and employee satisfaction in the organisation under investigation

Secondly, at meso-level, several change interventions were implemented in this organisation in order to adapt to the external and internal forces of change.

Thirdly, at micro-level, the individual as an employee in this organisation is directly affected by these organisational changes and is also expected to embrace the transformation process. Stemming from these organisational changes, two issues were identified that merited conducting this study.

Firstly, the researcher felt that the organisation needed to gain insight into differences in its employees' satisfaction during the period of organisational transformation. The effect of transformation on employees cannot be ignored because human resources are the greatest asset of every successful business. Secondly, the organisation is expected to retain and sustain its employees' satisfaction if it is to remain effective and profitable; hence the need for it to be aware of its employees' current levels of satisfaction with organisational factors.

It is therefore imperative for the organisation to develop a diagnostic model of employee satisfaction during the process of transformation which will inform future practice and research.

1.4 PROBLEM STATEMENT

South African organisations are faced with the main challenge of transforming their business processes, policies, systems and practices. According to Bergh and Theron (2006, p. 257), "...organisations are currently in a state of transition or renewal, adapting to environmental changes brought about by socio-political or socio-economic factors". These transformational changes are mostly led by major changes in the organisational strategy owing to the external forces faced by organisations in the social, economic and political arena. Sociopolitical transformation in South African organisations has changed traditional managerial and employee satisfaction (Miller, 2003). Roodt and Odendaal (2003) highlight the fact that organisational changes affect employee attitudes and behaviour, the result of which is employees responding favourably or unfavourably by either being satisfied or dissatisfied with their organisation.

The main purpose of transformation in organisations is to align the business processes to national labour policies and international practices. According to Cummings and Worley (2008, p. 506), "organisation transformation implies radical changes in how members perceive, think and behave at work". The implementation of changes to support a new strategic direction requires

employees to manage the transition from the current strategic orientation to the desired future strategic orientation.

Transformation of organisations' business processes, policies, systems and practices requires them to become more effective in understanding employee satisfaction during a period of transformation. According to Miller (2003, p, 66), "there is a pressing need for specifically South African research to identify and explore the values, attitudes, and job satisfaction of South African managers and employees". Employee satisfaction and organisational transformation as separate constructs have received abundant attention internationally and nationally from organisational psychologists and other academics. However, the description of employee satisfaction during transformation has remained a vague but essential component of organisational success.

To gain an understanding of employee satisfaction during organisational transformation, organisational behaviour theorists need to move beyond the development of models and theories that are unable to assimilate these constructs, and begin to offer empirically derived evidence to substantiate the integration of these theories into organisational settings. This research could assist in this process by pragmatically approaching employee satisfaction theory through an organisational survey and longitudinal analysis of employee satisfaction during a period of transformational change in order to determine whether the evidence supports the development of a diagnostic model as a means to improve organisational effectiveness.

A review of the current literature on employee satisfaction and organisational transformation indicated the following research problems (Miller, 2003; Spector, 2006; Armond 2010):

- The *first research problem* is a theoretical need for a longitudinal study of changes in employee satisfaction during organisational transformation as a construct in the South African context.
- The *second research problem* is the need to determine whether individuals from different gender, department, job level and race groups

differ in their employee satisfaction during organisational transformation.

- The *third research problem* is the need to develop a diagnostic model of employee satisfaction during organisational transformation.

The results of this research study could provide organisational psychologists with the empirical data needed to expand the current theories and models on employee satisfaction and organisational transformational, since current empirical data associated with the study of these constructs merits further research, especially in the South African context.

1.4.1 General research questions

Against this background, the general research questions that require further research was formulated as follows:

What are the differences in the longitudinal study of employee satisfaction during organisational transformation? To what extent do individuals differ regarding employee satisfaction based on their race, gender, job level and department groups in the three years of study? To what extent can a diagnostic model for employee satisfaction during organisational transformation be developed?

1.4.2 Research questions relating the literature review

From the above, the following research questions were formulated in terms of the literature review:

- *First literature review question*: How is the construct of organisational transformation conceptualised in the literature?
- *Second literature review question*: How is the construct of employee satisfaction conceptualised in the literature?
- *Third literature review question*: What is the theoretical impact of organisational transformation on employee satisfaction?

- *Fourth literature review question*: Can a conceptual diagnostic model of employee satisfaction during organisational transformation be developed in the literature?

1.4.3 Research questions relating to the empirical study

The following research questions were formulated in terms of the empirical study:

- *First empirical question*: To what extent do differences exist in the three years of study of employee satisfaction during organisational transformation in a sample of respondents in a South African context?
- *Second empirical question*: To what extent do gender, race, job level and department groups differ significantly in the three years of study of employee satisfaction during organisational transformation in a sample of respondents in a South African context?
- *Third empirical question*: To what extent can a diagnostic model of employee satisfaction during organisational transformation be developed for the practice of industrial and organisational psychology?
- *Fourth empirical question:* What recommendations can be made for further research on the basis of the findings of this research study?

1.5 AIMS OF THE RESEARCH

Based on the above research questions, the following aims were formulated:

1.5.1 General aim of the research

The general aim of this research was as follows:

To conduct a three year longitudinal study of differences in employee satisfaction during organisational transformation; to determine whether individuals from different gender, job level, race and department groups differ significantly in relation to their employee satisfaction in the three years of

study; and to develop and test a diagnostic model for employee satisfaction during organisational transformation.

1.5.2 Specific aims of the literature review

The following aims were formulated for the literature review:

- *First literature review aim*: to conceptualise the construct of organisational transformation from a theoretical perspective
- *Second literature review aim*: to conceptualise the construct employee satisfaction from a theoretical perspective
- *Third literature review aim*: to determine the theoretical impact of organisational transformation on employee satisfaction
- *Fourth literature review aim*: to develop a conceptual diagnostic model of employee satisfaction during organisational transformation

1.5.3 Specific aims of the empirical study

In terms of the empirical study, the specific aims were formulated as follows:

- *First empirical aim*: to conduct three-year longitudinal study on differences in employee satisfaction during organisational transformation using a sample of respondents in a South African organisation
- *Second empirical aim*: to determine whether gender, job level, race and department groups differ significantly in the three years of study of employee satisfaction during organisational transformation in a sample of respondents in a South African organisation
- *Third empirical aim*: to develop and test an employee satisfaction diagnostic model for the practice of industrial and organisational psychology
- *Fourth empirical aim*: to make recommendations for further research on the basis of the findings of this research study

1.6 STATEMENT OF SIGNIFICANCE

In-depth studies have been conducted on employee satisfaction, transformation and diagnostic models in diverse groups and organisations. However, a longitudinal study of changes in employee satisfaction during organisational transformation, particularly in South Africa, merits further investigation by researchers. Studies conducted on employee satisfaction and organisational transformation in South Africa explored the two constructs on the basis of correlational, criterion group and cross-sectional designs. These once-off time studies on employee satisfaction and transformation focused on the antecedent factors and effects and to a lesser extent on the longitudinal study of employee satisfaction during organisational transformation.

According to Welman, Kruger, and Mitchell (2009, p. 95), "...a longitudinal design is relevant when we want to investigate changes due to the passage of time". A longitudinal study of employee satisfaction during transformation should be significant for organisations facing transformation processes to help them understand and develop interventions in order to manage their employees effectively.

This study of employee satisfaction during organisational transformation could be of particular relevance to South African organisations at this point in time because several of them are facing imminent organisational changes. In addition, the conceptual employee satisfaction diagnostic model needs to be tested or validated if it is to be used in the field of organisational behaviour in order to understand, predict and control the employee satisfaction of individuals, groups and organisations.

1.7 PARADIGMATIC PERSPECTIVE OF THE RESEARCH

The research model of Mouton and Marais (1994) was adopted to conduct the research process. This model represents social sciences research and provided the framework for undertaking this study.

Babbie and Mouton (2009, p. 645) define a paradigm as a "...model or framework for observation and understanding, which shapes both what we see and how we understand it". A paradigmatic perspective can be described as all-encompassing systems of interrelated practices and thinking that define for researchers the nature of their enquiry (Terre Blanche, Durrheim, & Painter, 2006).

The intellectual climate, the market of intellectual resources, the theoretical framework and theories, models and constructs were used to discuss the paradigm perspectives of this study. Terre Blanche *et al*. (2006) argue that pretending that social sciences research is conducted within a single paradigm leads to inaccurate measurement and research design. This study was therefore conducted within the framework of a multiparadigmatic approach (Mouton & Marais, 1994).

1.7.1 The intellectual climate

Thematically, three paradigmatic perspectives were applicable in this study. The literature review on organisational transformational was presented from the systems paradigm perspective. The literature review on employee satisfaction was presented from the paradigm of humanistic psychology. The functionalistic paradigm was applied in the empirical study.

1.7.1.1 Literature review

The literature was presented from the following paradigmatic perspective:

a The open systems perspective

The organisation is a system that is in constant contact with its external environment. The open systems theory promotes a better understanding of the internal and external organisational environment (Van Tonder, 2004). The literature review of this study on organisational transformation focused on the role of environmental factors in organisational change. An organisation as an

open system draws its sustenance from the environment, and in turn affects that environment through its output (McShane & Von Glinow, 2005).

The basic assumptions of the open systems perspective that were relevant to this study were as follows (Van Tonder, 2004; McShane & Von Glinow, 2005):

- The organisation as a system has a structure that is defined by its subsystems and processes.
- The various subsystems of a system or departments of an organisation have functional and structural interrelationships.
- Organisations tend to function in the same way. This involves the inputs and outputs of material which are processed to manufacture a product or service.
- The functional relationships that exist between the subsystems or departments suggest the flow and transfer of energy.
- Organisations often exchange energy beyond their defined boundary with the outside environment, and other systems, through different inputs and outputs processes. Open systems have boundaries that permit internal and external transfer of their input and output processes.
- Functional relationships can only occur because of the presence of a driving force.
- The subsystems or departments that make up a system/organisation show some degree of integration or equilibrium – in other words, the parts work well together.
- A change in one subsystem or department creates disequilibrium in the whole system or organisation.

b The humanistic perspective

The individual employee in the organisation was the unit of analysis in this study (Welman *et al*., 2009). The humanistic perspective provides a better understanding of human behaviour in this context, in terms of the way in which individuals construct meaning of their world (Möller, 1995; Bergh &

Theron, 2006). Central to the humanistic perspective is the positive nature, self-actualisation and uniqueness of individuals (Meyer, Moore, & Viljoen, 1997). In this study, the literature review on employee satisfaction focused on the theories of motivation with specific reference to Maslow's needs theory which emphasises the individual's need for self-actualisation.

The following basic assumptions of the humanistic perspective were relevant to this study (Möller, 1995; Meyer *et al.*, 1997):

- The person in his or her humanity is an integrated whole and more than the sum of his or her parts. This means that a scientific study of the individual functions of the person does not lead to any understanding of the person as a whole.
- The person is a dignified being and is only a person when seen in a human context. This implies that the interpersonal experiences of the person cannot be ignored if there is to be any understanding of a person.
- The person is a conscious being with self-awareness. The fact that a person is a conscious being is of vital importance to the humanistic theorists.
- The person has choices and seeks self-actualisation. This implies that a person has the freedom of choice to realise his or her own potential independently.
- The person is a unique and intentional being who is actively involved in attaching meaning to his or her environment and setting goals.

1.7.1.2 Empirical research

Empirical research is a practical systematic process of collecting, analysing, and interpreting data in order to gain an understanding of the phenomenon under investigation (Leedy & Ormrod, 2010). The functionalistic paradigm was applied in the empirical research of this study. According to Cilliers (2000), the functionalistic paradigm is practical and enables the researcher to understand human behaviour in a way that leads to useful empirical data.

The basic assumptions of the functionalist perspective that were applicable to this study are as follows (Morgan, 1980; Savicki, 2002):

- The functionalist perspective is based on the assumption that society has a concrete, real and systematic character, which is oriented towards producing an ordered and regulated state of affairs.
- Its basic orientation is primarily regulative and pragmatic.
- Its main focus is on understanding society in order to generate valuable empirical knowledge.
- The functionalist perspective emphasises an approach to social theory that understands the role of an individual in society.
- Human behaviour is always seen to be contextually bound in a real world of concrete and tangible social relationships.

1.7.2 Metatheoretical statements

1.7.2.1 Industrial and organisational psychology

Bergh and Theron (2009, p. 20) define industrial and organisational psychology as "...a branch of psychology that utilises psychological knowledge in the work context to assess, utilise, develop and influence individual employees, groups and related organisational processes".

It is an applied field of psychology in its study of human behaviour in the workplace that has become a professional practice in its own right (Bergh & Theron, 2009). The main objective of this field is to understand employees' behaviour and work environments in order to enhance the quality of work life and work performance.

1.7.2.2 Organisational psychology

Organisational psychology focuses on work organisations as systems that involve individual employees and work groups, as well as the structure and dynamics of organisations (Bergh & Theron, 2009). Organisational

psychology also means organisational behaviour. Odendaal and Roodt (2009, p. 9) define organisational behaviour "...as an applied behavioural science built upon contributions from a number of behavioural science disciplines". These behavioural science disciplines are psychology, sociology, social psychology, anthropology and political sciences (Odendaal & Roodt, 2009).

Bergh and Theron (2009, p. 21) list the following as major functions of organisational psychology in organisations:

- assessing or researching employee or work-related attitudes (e.g. job satisfaction) with regard to organisational climate, culture and trust, with a view to improving such attitudes
- being involved in organisational change and transformation of organisations (e.g. restructuring) and in productivity enhancement interventions
- being involved in designing and implementing various types of programmes such as identification of management potential, training in job competencies, affirmative action, career management and counselling, performance evaluation and employee health enhancement

1.7.2.3 Personnel psychology

Personnel psychology is a subfield of industrial and organisational psychology. According to Bergh and Theron (2009, p. 21), personnel psychology is "...primarily involved in the assessment, and appraisal, of employees, personnel selection, and placement and promotion of employees in and for organisations".

The core focus of personnel psychology is the individual employee. Individual differences in and between employees are important in personnel psychology in order to predict the optimal fit between the employee and the organisation (Bergh & Theron, 2009). This study focused on assessing individual differences of employee groupings regarding their satisfaction during

transformation which, in turn, would indicate the fit between these groups and the organisation.

1.7.2.4 Psychometrics

Foxcroft and Roodt (2005, p. 4) define psychometrics as a subfield of psychology that entails "...the systematic and scientific way in which psychological measures are developed and technical measurement standards (e.g. validity and reliability) required of measures". Standardised procedures are vital features of psychological measures in ensuring that the procedures of administering psychological measures are uniform from one administrator and setting to another (Gregory, 2007).

Psychometrics is the development of psychological measuring instruments and the statistical analysis of assessment results to determine the value of psychological assessments and assessment instruments (Bergh & Theron, 2009). It emphasises the objective measurement and quantitative analysis of human behaviour. In this study, surveys were used as an objective method of measuring the individual employee's satisfaction in the organisation.

1.7.2.5 Theories and models

The thematic focus of the research is organisational transformation and employee satisfaction. The literature review on organisational transformation will be presented from the perspectives of organisational psychology. Various models and theoretical approaches of relevance will be discussed, namely Lewin's change model (Lewin, 1951); Nadler and Tushman's congruency model (Nadler & Tushman, 1977); Levy and Merry's integrated model of transformation change (Levy & Merry, 1986); and Kotter's change model (Kotter, 1996).

The literature on employee satisfaction will be presented from both the perspective of personnel psychology and organisational psychology. Different models and theoretical approaches of relevance will be discussed, for

example: achievement motivation theory (McClelland, 1962); equity theory (Adams, 1963); expectancy theory (Vroom, 1964); two-factor theory (Herzberg,1968); goal-setting theory (Locke, 1968); Maslow's needs theory (Maslow, 1970); and ERG theory (Alderfer, 1972). In addition to these theories, the literature review will discuss employee satisfaction models such as the following: the employee satisfaction model (Fosam, Grimsley, & Wisher, 1998); a causal model of employee satisfaction (Eskildsen & Dahlgaard, 2000); Kano's model in the context of employee satisfaction (Matzler, Fuchs, & Schubert, 2004); and the employee satisfaction model for higher education (Chen *et al*., 2006).

The literature integration will focus on the development and description of the conceptual diagnostic model for employee satisfaction during organisational transformation. Furthermore, the integration will discuss the theoretical impact of organisational transformation on employee satisfaction.

1.7.2.6 Conceptual descriptions

The changes in employees' satisfaction during organisational transformation were evaluated in this research. The following is a description of the constructs of this study:

- Organisational transformation refers to changes in the organisation's structure, processes, culture and orientation to its environment (Levy & Merry, 1986; French, Bell, & Zawacki, 2000; Meyer & Botha, 2000).

- Employee satisfaction refers to the degree to which the employees' needs and desires are met by the organisation, and the extent to which these are perceived by other employees (Locke, 1976; Comm & Mathaisel, 2003; Küskü, 2003; Martins & Coetzee, 2007).

- Organisational development refers to a normative discipline which prescribes a specific model to effect planned change at all levels in the organisation, the main objective being to change behaviour and

achieve total organisational effectiveness (French *et al*., 2000; Meyer & Botha, 2000).

- Organisational diagnosis is a process based on the behavioural science of collecting valid data about human experiences in the organisation, which includes the entry, data collection, formulation of hypotheses, analysis, feedback and recommendations (French *et al*., 2000; Cummings & Worley, 2008).

1.8 RESEARCH DESIGN

"Research design refers to a plan or structured framework of how the researcher intends conducting the research process in order to solve the research problem" (Babbie & Mouton 2009, p. 647). It is a structured plan of the research study aimed at maximising the internal and external validity of the research results (Mouton & Marais, 1994).

The research design of this study is described below focusing on research types, reliability, validity, variables and research unit.

1.8.1 Types of research

Exploratory research was conducted during the initial stage of the research, that is, the literature review. The purpose of exploratory research is to determine the feasibility of conducting research and generating new information (Neuman, 2007). This study is exploratory because it investigated various theoretical perspectives on organisational transformation and employee satisfaction.

In terms of the empirical study, the quantitative research approach was adopted in this study. Babbie and Mouton (2009, p. 646) highlight the main features of a quantitative research approach as follows: "...[the] emphasis [is] on the quantification of the constructs' variables in describing and analysing

human behaviour as well as controlling sources of error in the research process".

This study was also characterised by the features of the quantitative research and descriptive research method. According to Neuman (2007, p. 15), "...the purpose of a descriptive research is to gather new data in a detailed and accurate way". Descriptive research was used to conduct the empirical study using a longitudinal survey design. The advantage of a longitudinal research is that it measures changes and the progression of the dependent variable of one group of respondents' at more than one point in time (Salkind, 2009). It also allows for comparability of the same group of respondents. The disadvantage is that it is extremely expensive to conduct a longitudinal study compared to cross-sectional studies which are generally inexpensive (Leedy & Ormrod, 2010; Salkind, 2009).

A longitudinal survey research was used to gather data three successive times during a process of organisational transformation. The aim of the survey was to the research the respondents' employee satisfaction. In other words, data were collected for a period of three years during the seven years of the transformation process. The ultimate goal of this study was to use the survey results to develop a diagnostic model of employee satisfaction during organisational transformation.

1.8.2 Validity

The validity of the research study refers to the degree to which conclusions are sound (Terre Blanche *et al.,* 2006, p. 90).The research design of the research project is important in enhancing the study's internal and external validity. Internal validity is the ability to eliminate alternative explanations of the dependent variables, while external validity means the ability to generalise research findings to outside settings of the research (Neuman, 2007).

The researcher ensured the validity of literature study by focusing on the purpose of the study, the theoretical paradigms used in the research and the

selection of models and theories of relevance to the constructs of employee satisfaction and organisational transformation. According to Terre Blanche *et al.* (2006, p. 90), the validity of quantitative studies is based on the "...use of tried and tested measures, and statistical techniques to ensure that accurate conclusions can be drawn from the research results".

In terms of the empirical research of this study, the researcher made certain the validity of the research by using the quantitative research design which entails generating plausible rival hypotheses, selecting the appropriate and standardised measuring instrument to gather data and statistically analysing the data on the construct of employee satisfaction.

1.8.3 Reliability

According to Gregory (2007), reliability is the consistency and dependability of the results of a research study. The administration of the psychometric tools is essential in order to eliminate sources of error in the respondents' scores and to enhance the overall reliability of the study (Foxcroft & Roodt, 2005).

In this study, the researcher focused on the effects of the test-taker characteristics, the characteristics of the assessment practitioner and the assessment situation to eliminate possible sources of error (Foxcroft & Roodt 2005, p. 83). Gregory (2007, p. 101) states that "...a completely unreliable measure will yield a reliability coefficient close to 0.0 while a completely reliable measure will produce a reliability coefficient of 1.0". The reliability of this empirical study was ensured through the sampling method and the reliability coefficient of the measuring instrument.

Neuman (2007, p. 116) proposes the following methods to improve the reliability of both a literature review and an empirical study: "...clear conceptualisation of the constructs; using a precise level of measurement, using multiple indicators, and using pilot tests". These methods were adopted in the current study.

1.8.4 Unit of analysis

The unit of analysis for this study was the individual employed in the organisation investigated in this study (Neuman, 2007; Mouton & Marais, 1994). The individual was the first unit of analysis in terms of individual measurement and individual employees' responses are recorded during the survey research. This research focused on measuring the individuals' employee satisfaction during the process of transformation in their organisation. The group was the second unit of analysis for the analysis of data. The subgroups were the third unit of analysis in terms of studying the differences between biographical groups. The aim of this was to develop a diagnostic model of employee satisfaction based on the comparative analysis of the results.

1.8.5 Variables

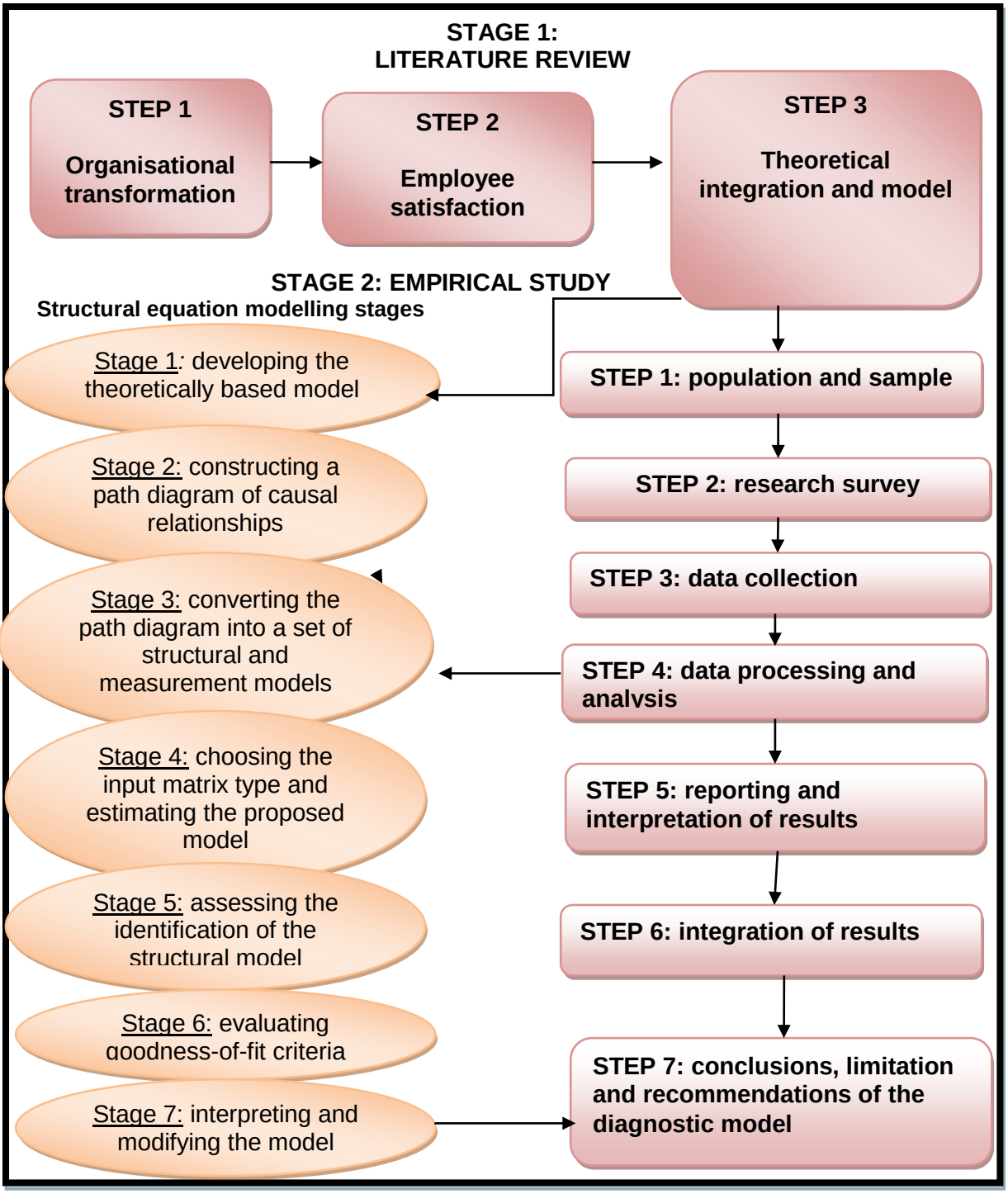
A variable is the central idea in quantitative research. According to Leedy and Ormrod (2010, p. 224), a variable is "...any quality or characteristic in a research investigation that has two or more possible values". The independent variable is the cause variable, while the dependent variable is the effect (Neuman, 2007). In terms of this research study, the organisational context of transformation was the independent variable. Transformation in this organisation entailed the new strategy, the salary administration system, training programmes, the restructuring of departments and the development of policies.

The criterion data of the construct employee satisfaction constituted the dependent variable. This research focused on determining whether significant empirical differences existed in the three years of study of employee satisfaction during organisational transformation.

1.9 RESEARCH METHOD

According to Babbie and Mouton (2009, p. 75) the "...research method focuses on the research process, the kind of tools and procedures to be used". Figure 1.3 depicts the flow of the research process in this research study.

Figure 1.3: Flow diagram of the stages of this research study



This research study is divided into two stages, namely the literature review and the empirical study.

1.9.1 Stage 1: literature review

The literature review is the initial stage of the research process that focused on a theoretical review of the concepts of organisational transformation and employee satisfaction. It also includes the theoretical integration of the two concepts and the presentation of a theoretical diagnostic model of employee satisfaction during organisational transformation.

Step 1: organisational transformation

Organisational transformation is conceptualised. The paradigmatic and conceptual foundations of organisational transformation are discussed on the basis of relevant models and theories. In particular, the driving forces, dimensions and impact of transformation in organisations are explained. The literature review on organisational transformation concludes with a brief discussion of the role of leadership during organisational transformation.

Step 2: employee satisfaction

Employee satisfaction is conceptualised. The paradigmatic and conceptual foundations of employee satisfaction are explored on the basis of the theoretical background, models and theories. Furthermore, the various theories of motivation and the employee satisfaction models as well as the benefits and antecedent factors of employee satisfaction are explained. The literature review of employee satisfaction concludes with a discussion of the development and diagnosis of employee satisfaction in organisations.

Step 3: theoretical integration

This step relates to the theoretical integration of the constructs of organisational transformation and employee satisfaction. A conceptual diagnostic model of employee satisfaction during organisational

transformation is presented and described, followed by a theoretical discussion of the impact of organisational transformation on employee satisfaction.

1.9.2 Stage 2: empirical study

The empirical study was conducted in a South African organisation. The following is a description of seven steps of the empirical study:

Step 1: population and sample

The empirical study was conducted among a population of employees in a utility and parastatal organisation based in Gauteng province, South Africa. The total number of all employees in this organisation is approximately ±2 650 people. This research study used the nonprobability sampling method known as convenience sampling. Employees were invited to voluntarily complete the survey as a paper-and-pencil assessment.

Step 2: research survey

The research survey was divided into two sections. Section A contained a biographical questionnaire to collect data on the sample's gender, department, job levels and race.

Section B included the Employee Satisfaction Survey (ESS) (Martins & Coetzee, 2007).The ESS was used to measure the following 13 dimensions: vision and mission, values, communication, teamwork, relationships, leadership, health and safety, employment equity and diversity, training, human resources management, job satisfaction, HIV/AIDS and change management.

Step 3: data collection

The data were collected in two simultaneous processes. The first process involved data collection in prearranged group administration sessions at depot level. The participants completed the survey in a paper-and-pencil-based version. The second process included the online format of the survey to enable the participants to complete the electronic version. The electronic survey where submitted to an external web server.

Step 4: data processing and analysis

The responses of the research respondents on paper where captured and the electronic responses imported into an electronic spreadsheet format. The data were analysed using the Statistical Package for Social Sciences (SPSS) system to perform the statistical and quantitative procedures (SPSS Inc., 2006).

This step included the formulation of the research hypothesis in order to achieve the objectives of the study.

The following statistical analyses of data were conducted:

(1) Descriptive statistics were applied.
(2) Inferential statistics were employed to make inferences about the data.
(3) The structural equation model procedure was used to test the conceptual diagnostic model of employee satisfaction during organisational transformation.

Step 5: reporting and interpretation of results

Tables and figures including the relevant statistical data were used to systematically report the results of this study. The results are also interpreted to describe and critically discuss the findings in depth.

Step 6: integration of results

The findings of the literature review were integrated with the empirical study results. The purpose of this step was to form a comprehensive picture of the research findings.

Step 7: conclusions, limitations and recommendations

The last step of this empirical study involves the formulation of conclusions based on the empirical study results and integration with the literature review. The limitations of this study are discussed. Lastly, recommendations based on the overall results of this study are presented in terms of the development of an organisational diagnostic model of employee satisfaction during organisational transformation.

1.10. CHAPTER LAYOUT

The chapters in this thesis are as follows:

Chapter 2: Organisational transformation

The aim of this chapter is to conceptualise the construct of organisational transformation. Firstly, the paradigmatic and conceptual foundations of organisational transformation are discussed, followed by the differentiation of transformation, transition and organisational development. The theoretical approaches and models of organisational transformation are explored. The driving forces, dimensions and impact of organisational transformation are highlighted and the chapter concludes with a discussion of the role of leadership during organisational transformation.

Chapter 3: Employee satisfaction

The aim of this chapter is to conceptualise the construct of employee satisfaction. Firstly, the paradigmatic and conceptual foundations of employee

satisfaction are discussed, followed by an exploration of different approaches and models of employee satisfaction, the dimensions, antecedent factors and the benefits of employee satisfaction. The process of diagnosing employee satisfaction is also explained. The chapter concludes with a theoretical integration of organisational transformation and employee satisfaction variables.

Chapter 4: Empirical research

This chapter focuses on the empirical study of the research methodology applied in the research study. Firstly, the population and sample are presented, the research survey is discussed and the choice of the survey is justified. This is followed by a description of data collection and processing. In conclusion, the research hypotheses for the study are formulated.

Chapter 5: Research results

The purpose of this chapter is to discuss the statistical results and integrate the findings of the empirical research with the literature review. Descriptive and inferential statistics are used to report the statistical results in this study. Structural equation modelling is used to test the conceptual diagnostic model of employee satisfaction during organisational transformation. The chapter concludes with a summary and integration of the research results.

Chapter 6: Conclusions, limitations and recommendations

The final chapter integrates the research results and draws conclusions. The limitations of this study are discussed and recommendations made for the field of industrial and organisational psychology, both applied and in terms of further research. The chapter concludes with final comments in order to integrate the research.

1.11 CHAPTER SUMMARY

This chapter explained the background to and rationale for this research study. The reason for the study was based on the existing need to conduct a three-year study to monitor the differences in employee satisfaction during a process of organisational transformation, in order to develop and test a diagnostic model of employee satisfaction during organisational transformation.

This chapter provided an overview of the background of the organisation under investigation. The problem statement, statement of significance, research questions, research aims, paradigm perspectives, research hypotheses, design and method were discussed. The chapter layout was explained.

Chapter 2 involves a literature review of the construct of organisational transformation from the open systems paradigm.

CHAPTER 2 ORGANISATIONAL TRANSFORMATION

2.1 INTRODUCTION

This chapter includes a theoretical analysis of the literature review on the construct of organisational transformation. The aim of this chapter is to focus on step 1 of the literature review, namely to conceptualise the construct of organisational transformation. Firstly, the paradigmatic and conceptual foundations of organisational transformation will be discussed, followed by the differentiation of transformation, transition and organisational development. The theoretical approaches and models of organisational transformation are explored. The driving forces, dimensions and impact of organisational transformation will be explained, and the chapter will conclude with a discussion of the role of leadership in organisational transformation.

2.2 PARADIGMATIC PERSPECTIVE

The relevant paradigm perspectives that delimit the scope of this chapter are the systems and open systems perspectives. These perspectives are discussed in detail below.

2.2.1 Systems perspective

A major premise of the systems perspective is based on the principle that organisations are structured. This is the dominant perspective in current thinking about organisations because it creates a better understanding of the internal and external organisational environment (Van Tonder, 2004). Harvey and Brown (1996) describe a system as a set of interrelated parts unified by design to achieve some purpose or goal. Although organisations as systems can also be described as a set of objects, it is necessary to determine the relationships between these objects, and their attributes (Van Tonder & Roodt, 2008). This implies that an organisation can be viewed as a number of interrelated, interdependent parts or objects, each of which contributes to the total organisational functioning and the achievement of its goals.

Van Tonder and Roodt (2008) highlight the general features of a system as the constant pursuit of equilibrium or homeostasis, the progression towards order and stability and the notion of boundaries as an important defining attribute of a system. The concept of systems interdependency is critical because a change in one part of an organisation as a system has consequences in other parts of the organisation. It is therefore essential to study an organisation experiencing transformation as a system that is an organised unit composed of two or more interdependent parts, components or subsystems and delineated by identifiable boundaries from its external environment.

Based on the literature review, the following assumptions serve as the basic qualities of an organisation as a system:

- An organisation is developed to accomplish an objective or purpose for its existence (Harvey & Brown, 1996; Van Tonder & Roodt, 2008; McShane & Von Glinow, 2005).
- The elements or divisions of an organisation must have an established arrangement (Cummings & Worley, 2009; McShane & Von Glinow, 2005).
- Interrelationships must exist between all the elements of an organisation (Harvey & Brown,1996; Van Tonder & Roodt, 2008)
- The basic ingredients of a process (the flows of information, energy and material) are more vital than the basic elements of an organisation (Van Tonder & Roodt, 2008; McShane & Von Glinow, 2005).
- Organisational objectives are more important than the objectives of its elements, and there is thus a de-emphasis of the parochial objectives of the elements (Harvey & Brown, 1996; Van Tonder & Roodt, 2008; Cummings & Worley, 2009).

In addition to the above qualities, the basic elements of a system are inputs. These are the resources that are applied to the process function; processes are the activities and functions that are performed to produce goods and services; and outputs are the products and services produced by an

organisation (Harvey & Brown, 1996). In other words, the relationship between the system and the environment is not simply a matter of the intake and output of matter and energy, but extensive transactional business.

Organisations as systems are not immune to environmental factors causing change – they are bound to go through a process of change. Van Tonder (2004, p. 39) mention the following developmental changes that manifest in a system:

- All systems are characterised by differentiation and integration processes that occur simultaneously and on a system-wide basis. Differentiation means continuous development of an entity's features with increasing specialisation and complexity as consequences. Integration relates to functional relations between system components, subsystems, systems and suprasystems.
- The system develops from a relatively unstructured and unsophisticated state to a progressively structured and sophisticated state.
- Increasing differentiation is continuously reintegrated in increasingly more complex or higher-level functioning units.
- Optimal differentiation does not, however, imply optimal integration, and these processes may thus become synchronised.
- Effective integration is visible in the adaptive capability of the system. When the interaction of the interdependent system components is aligned and continuous, optimal integration occurs.

This implies that organisations have to experience changes in order to grow, function effectively and achieve their strategic objectives. In essence, organisational survival is dependent on the ability to manage and deal with change at organisational, group and individual level.

2.2.2 Open systems theory

The open systems theory is fundamental in the study of organisations, not only as systems but as systems that are able to interact with the external environment. According to Harvey and Brown (1996), an open system influences and is influenced by the external environment through the process of interdependency, which results in dynamic equilibrium. This dynamic equilibrium is described as the achievement and maintenance of steady states to the extent that the intrusion of the outer energy will not disrupt internal form and order (Van Tonder, 2004).

The literature indicates that an organisation as an open system means that it is in constant interaction with its environment, from which it takes raw materials, energy and information, which are then transformed into products or services, and which in turn are exported into the environment (Van Tonder, 2004; McShane & Von Glinow, 2005). This transformation process of matter and energy between the organisation and the external environment is reciprocal and continuous.

The nature of the transformation process is mostly evident in the following characteristics of an open system (Harvey & Brown, 1996, p. 37):

- *Goal-seeking open systems*. Open systems exchange information, energy or material with their environment. Interaction between elements results in some final state or goal.
- *Entropy*. Every transformation process involves the degradation or use of energy and resources. The tendency towards entropy is the movement towards disorder and ultimate termination of functioning. To keep an open system functioning there must be an infusion of energy and resources.
- *Steady state*. The notions that an open system is goal seeking implies that is adaptive and self-regulating. The open system seeks a state of dynamic equilibrium.

- *Feedback.* The feedback of information on performance is used to adjust and control performance. Feedback is informational input which indicates that the open system is deviating from its goals and needs in order to readjust.

Based on the above characteristics of the open systems approach, an organisation can anticipate five immediate and long-term consequences of organisational transformation (French & Bell, 1999 p. 87):

(1) Issues, events, forces and incidents are not viewed as isolated phenomena but are seen in relation to other issues, events and forces. A holistic approach is adopted in this process.
(2) Most phenomena have more than one cause. The open systems approach encourages analysis of events in terms of multiple causation as opposed to a single causation.
(3) Changing one part of the system influences other parts, and multiple effects should therefore be expected instead of a single effect from activities.
(4) The forces in the field at the time of the events are the relevant forces for analysis.
(5) In order to change a system, one has to change the whole system, not only its components.

These five consequences are also the result of the implementation of systematic and revolutionary organisational changes. According to Cummings and Worley (2009, p. 507), “these changes can be characterised as systematic and revolutionary because the entire nature of the organisation is altered fundamentally”.

Van Tonder (2004, pp. 46–47) also draw the following conclusions about organisational change on the basis of the open systems theory:

- Change has a systematic character. Changes in a specific suprasystem, system or subsystem will inevitably contribute to a change in other suprasystems, systems or subsystems.

- Change and organisational change are not unidirectional. There are never simply a source of change and a passive change recipient.
- It is impossible to separate change in the environment from change in the organisation.
- Information circulation plays a prominent role during change processes.
- Organisations cannot avoid the accompanying rapid, turbulent and revolutionary change.

2.3 CONCEPTUAL FOUNDATIONS OF ORGANISATIONAL TRANSFORMATION

The following concepts of relevance to the study will be discussed: the definition of change, organisational change, first- and second-order change and the definition of transformation.

2.3.1 Change

Change is intrinsic to an organisation and entails deviation from the organisation's present form. Theorists of change describe it as a path or an event to a known state, with orderly, incremental and continuous steps (Harigopal, 2006; Marks, 2007). French and Bell (1999, p. 2) also emphasise the fact that "...change means the new state of things is different from the old state of things". Change can therefore be implemented at any of the three levels in an organisation, namely at individual, group and organisational level.

Scholars of organisational development have described the implementation of change in the organisation as being mainly characterised by time, scale, processes and scope (French & Bell, 1999, Marks, 2007; Van Tonder & Roodt, 2008). This implies that change can be planned or unplanned, large or small in scale, evolutionary or revolutionary and can affect few or many elements of the organisation. According to Meyer and Botha (2000), change

in an organisation is not implemented in vain – the purposes of change events play a crucial role in an organisation's effectiveness and success.

Van Tonder and Roodt (2008, p. 49) describe the three different and broad change strategies as follows:

- The rational-empirical approach is based on the assumption that people who understand the logic of change will ultimately change their behaviour according to what the change dictates. This approach entails confronting the client system with empirical facts about which they have to make rational decisions.
- The normative-re-educative approach is based on the assumption that people would rather adhere to the prevailing social or group norms. This process refers to a process in which prevailing group norms are replaced with other norms.
- The power-coercive approach occurs when changes are literally enforced in a top-down manner by an organisation's management. It is a unilateral implementation of change based on the positional power or authority of the change initiator.

Since these strategies are essential in order to implement change, organisations have the responsibility to determine their approach to ensure effective change implementation.

2.3.2 Organisational change

It is evident in the above description of the concept of change that it occurs in organisations – the need, for the purposes of this study, is to also define the concept of organisational change. Cummings and Worley (2009, p. 4) define organisational change as a "...broader concept than organisational development, which can be applied to any kind of change including technical, managerial innovations, organisational decline as well as the evolution of a system over time". It is a complex process involving a variety of approaches and issues (McShane & Von Glinow, 2005).

The literature also describes organisational change as a process aimed at achieving predetermined goals through the movement of employees from a current state to a desired future state through a set of planned and integrated interventions (Swart 2000; Werner, 2007). McShane and Von Glinow (2005, p. 515) introduced three of the leading approaches to organisational change, as elucidated below.

- The action research approach is a data-based, problem-oriented process that diagnoses the need for change, introduces the interventions and then evaluates and stabilises the desired changes.
- Appreciative enquiry is an organisational change process that directs attention away from the groups' own problems and focuses participants on the groups' potential and positive elements.
- Parallel learning structures are highly participative groups constructed alongside the formal organisation with the purpose of increasing the organisation's learning and producing meaningful organisational change.

Numerous scholars have highlighted the fact that organisational change is usually aimed at achieving a specific purpose or objective in the organisation. According to Leban and Stone (2007, p. 93), the following are the five primary reasons why organisations implement change:

- Change is initiated by the leader of the organisation rather than consultants or human resources specialists.
- It is closely linked to strategic business issues not only questions of organisational process or style.
- It can be traced directly to external forces such as new sources of competition.
- It affects the entire organisation or system.
- It is profound for the organisation and its members because it usually influences organisational values regarding employees, customers, competition or products.

2.3.3 First- and second-order organisational change

Organisational change can take the form of first- or second-order change. First-order change is defined as minor improvements and adjustments that do not change the organisation's core, and it occurs as the organisation naturally grows and develops (Levy & Merry, 1986). This type of change implies that there are no fundamental shifts in the assumptions that employees hold about how the organisation can improve its functioning (Parumasur & Barkhuizen, 2009). This type of change is also described as planned or developmental change which is undertaken to improve the organisation's current methods of operation (Harigopal, 2006). It implicitly reinforces present understandings in the organisation.

Second-order change involves major modifications in the organisation (Levy & Merry, 1986; Parumasur & Barkhuizen, 2009). Organisational transformation is one form of second-order change since it involves revolutionary changes in the organisation. Second-order change addresses the scope and inherent nature of transformation and its effects are at the organisation's paradigm level. Table 2.1 below distinguishes between second- and first-order changes.

Table 2.1: Characteristics of first- and second-order organisational change (Levy & Merry, 1986, p. 9)

First-order change	Second-order change
• A change in one or a few dimensions, components or aspects • A change in one or a few levels (individual or group levels) • A change in one or two behavioural aspects (attitudes, values) • A quantitative change • A change in content • Continuity, improvements and development in the same direction • Incremental changes • Logical and rational • Does not change the world view, the paradigm • Within the old state of being (thinking and acting)	• Multidimensional, multicomponent and multiaspectual • Multilevel change (individuals, groups and the whole organisation) • Changes in all the behavioural aspects (attitudes, norms, values, perceptions, beliefs, world views and behaviours) • A qualitative change • A change in context • Discontinuity, taking a new direction • Revolutionary • Seemingly irrational, based on a different logic • Results in new world view, new paradigm • Results in new state of being (thinking and acting)

The following section focuses on organisational transformation as second-order change.

Table 2.2: Definitions and descriptions of organisational transformation

AUTHORS	CORE DEFINITIONS AND DESCRIPTIONS
Levy & Merry (1986, p. 5)	"Organizational transformation is second-order change that is multidimensional, multilevel, qualitative, discontinuous, radical organisational change involving a paradigm shift." It implies that transformation as second-order change is the conversion of the frameworks and assumptions of the organisation.
Harvey & Brown (1996, p. 44)	"Organisational transformation is the action of changing the organisation's form, shape or appearance, or changing organisational energy from one form to another."
French & Bell (1999, p. 234)	"Organisational transformation, or second-order change, ussually requires a multiplicity of interventions and takes place over a fairly long period of time."
Meyer & Botha (2000, p. 12)	"Another approach in defining transformation is to state that OT is an integrative disciplinary approach that facilitates continuous learning and change at all levels within the organisation and is guided by the vision and challenges of the macro environment with the main objective being that of achieving employee wellbeing, equity and total organisational effectiveness."
Swart (2000, p. 223)	It is defined as a change in the organisation's external look.
Harigopal (2006, p. 48)	Transformational change refers to changes involving the entire or a greater part of the organisation due to a severe threat to its survival. "It could be a change in the shape (size and complexity), structure (systems, ownership and the like), or nature (basic, assumptions, culture, technology, etc.) of the organisation".
Cummings & Worley (2009, p. 505)	"The process of transformation focuses on radical changes in terms of how employees perceive, think and behave in the organisation."

2.3.4 Organisational transformation

The theoretical developments of organisational transformation have led to several definitions of this concept. The various definitions and descriptions of the concept of organisational transformation are summarised in table 2.2 above.

The literature in the above table on some of the earlier and most recent definitions of the concept of transformation reflects four elements, namely the cause, type, purpose and effect of transformation in organisations.

The first element, namely cause, includes terms such as “challenges of the macroenvironment” (Meyer & Botha, 2000) and a “severe threat to its survival” (Harigopal, 2006). This implies that transformation occurs because of causal factors in the organisation.

The second element, namely type, derives from words such as “second-order”, “radical”, “multidimensional” and “continuous change” (Levy & Merry, 1986; French & Bell, 1999; Meyer & Botha, 2000; Cummings & Worley, 2009).

The third element, namely purpose, involves terms such as “paradigm shift”, “changing organisational form”, “external look”, “structure”, “energy”, “mission”, “strategy”, “leadership” and “culture” (Harvey & Brown 1996; Swart, 2000; Harigopal, 2006). This element also relates to changes in terms of the way employees perceive, think and behave in the organisation (Cummings & Worley, 2009).

The final element, namely “effect” refers to terms such as “organisational survival”, “effectiveness”, “conversion of frameworks” and “employee wellbeing” (Levy & Merry, 1986; Meyer & Botha, 2000; Harigopal, 2006).

Based on the above analysis of the various definitions of the concept of organisational transformation, the following integrated definition is formulated for the purposes of this study:

> Organisational transformation is the fundamental and constant change at all levels of the organisation caused by external factors posing risks for the organisation's existence. It involves drastic altering of the way in which the organisation functions and relates to the external environment focusing on the vision, processes, systems, structure and culture. The result of this type of change includes optimal performance of employees, groups and organisations.

2.4 ORGANISATIONAL TRANSFORMATION, TRANSITION AND DEVELOPMENT

The concepts of transformation, transition and development are often used interchangeably, which leads to confusion. It is therefore necessary to explain their differences in order to establish a clear description of organisational transformation. Organisational development and organisational transformation are both approaches that are applied to manage organisational change (Harvey & Brown, 1996). However, organisational development differs from organisational transformation in terms of objectives, planning, research model, levels of interventions, strategy, discipline, frequency and technology.

Some of the existing literature describes the field of organisational development as an organisational improvement strategy in order to enhance the functioning of individuals, teams and organisation and to empower employees to continually improve their effectiveness (French & Bell, 1999; Holbesche, 2006). In other words, organisational development is primarily aimed at managing organisational change in such a way that skills and knowledge are transferred in order to build the organisation's capacity, achieve its goals and solve its problems (Cummings & Worley, 2009).

French and Bell (1999) also argue that organisational change is one of the themes underlying the theory and practice of organisational development.

Table 2.3: Fundamental differences between organisational development and organisational transformation (Meyer & Botha, 2000, p.13)

Dimension of process	Organisational development	Organisational transformation
Planned change	Reactive	Proactive
Objective	Employee wellbeing and organisational efficiency	Employee wellbeing and total organisational effectiveness
Action research model	Problem solving	Paradigm shifting and large systems change to take on challenges in the environment (including the principles of re-engineering)
Level of interventions	Individual or group or organisational-unidimensional	Individual and group and organisational-multidimensional
Strategy	Planned change, unfreezing change and refreezing	Planned change with alignment of vision and mission. OD becomes a strategy in itself
Discipline	Behavioural sciences only	Systems thinking, integrative and multidisciplined
Frequency	Ad hoc interventions to deal with problem	Continuous learning, principles of the learning organisation institutionalised
Technology	Basic OD interventions	“e”–learning prominent

The above table 2.3 indicates the differences between organisational development and transformation.

While organisational development is linked to organisational change, the literature on organisational transformation argues that transformation is an organisational strategy to achieve stability in the organisation's macro-environment (Weber & Weber, 2001; Meyer & Botha, 2000; Cummings & Worley, 2008). This differentiates the organisational transformation process from the organisational development process because it focuses on changing the current assumptions on how the organisation functions and relates to its environment. In essence, it also leads to a fundamental shift in the way in which the organisation operates instead of adopting a problem-solving approach to the internal issues facing the organisation. Hence organisational transformation alters the qualitative nature of an organisation (Holbesche, 2006; Cummings & Worley, 2008).

Organisational transformation is also different from organisational transition. The literature on organisational transition defines transition as mergers, acquisitions, downsizings and restructurings that organisational leaders use to accelerate the achievement of strategic objectives (Levy & Merry, 1986; Meyer & Botha, 2000; Marks, 2007). Cummings and Worley (2008) argue that transition involves activity planning, commitment planning and change management structures. This suggests that transition relates to organisation development since it is an analytical, rational and pragmatic strategy to move from an existing organisational state to a desired future state. According to Levy and Merry (1986, p. 176) transition focuses on "...analysing and evaluating the impact of future state on the present state and deducing what action steps needs to be taken". Transition activities are used by organisational leaders as vehicles for becoming more highly competitive and responsive to environmental demands (Marks, 2007). Table 2.4 describes the fundamental differences between transition and transformation.

Table 2.4: Basic differences between transformation and transition (Levy & Merry, 1986, p.191)

Organisational transition	Organisational transformation
• It helps the organisation to plan and implement the change. • It helps the organisation to elaborate on the new visions and implement, legitimise and institutionalise them. • It focuses on the later stages of second-order change. • It is a rational, analytical, step-by-step and collaborative process. • It focuses on changes in the interactions in the organisation. • It deals with the organisation subsystems and concrete things. • It changes forms, procedures, roles and structures. • It is an incremental process that may include political campaigns and conflicts. • It involves managing and applying. • It is practical and pragmatic. • It utilises the organisation's energy and resources for implementing the change. • It shapes the new form.	• It helps the organisation accept the need for second-order change. • It helps the organisation to discover and accept a new vision and world view and to align members with the vision. • It focuses on the first stages of second-order change. • It is open to the client's needs and is a nonstructured and nonanalytical process. • It focuses on changing the individual's consciousness. • It deals with flow states and abstracts. • It changes perceptions, beliefs and consciousness. • It is a process that may include moments of insight and sudden shifts in perceptions and behaviours. • It involves facilitating and allowing. • It is spiritual in nature. • It energises and empowers individuals and creates critical mass. • It allows death and rebirth.

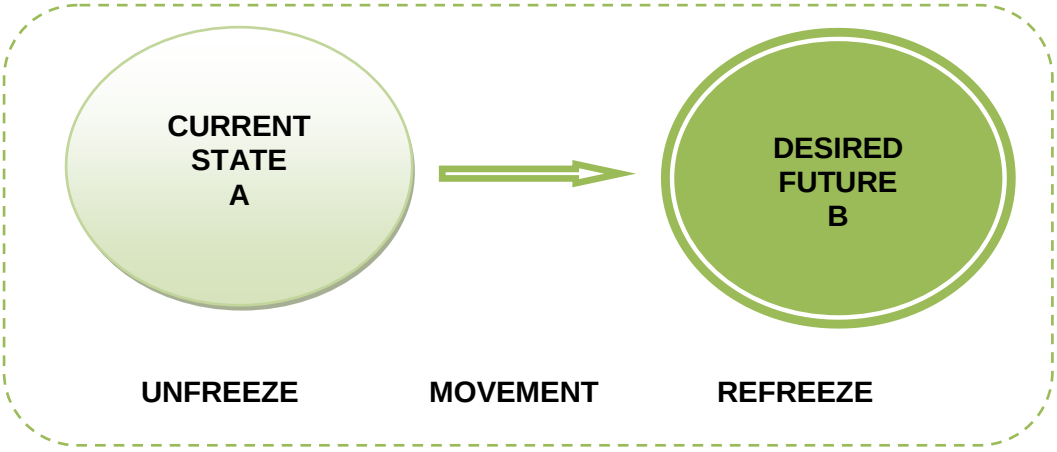
While transition is the process of achieving the known new state over a set period of time, transformation is the emergence of a new state of being out of the remains of the old state (Levy & Merry, 1986). Although transition and transformation are dissimilar, they are both strategies of second-order change.

2.5 THEORETICAL APPROACHES AND MODELS OF ORGANISATIONAL TRANSFORMATION

The figure below depicts the different approaches and models of organisational transformation, which include Lewin's change model, Nadler and Tushman's congruency model, Kotter's change model and Levy and Merry's integrated model of transformation.

2.5.1 Lewin's change model

Figure 2.1: Kurt Lewin's change model (Marshak, 2009, p. 70)



Lewin's change model is one of the earliest theories that provides a general framework and foundation for understanding organisational change (Lewin, 1951). The organisational change process comprises unfreezing, moving and refreezing as the core steps of the model (Lewin, 1951; Marshak, 2009).

Cummings and Worley (2008, p. 24) describe these three steps of the change process as follows:

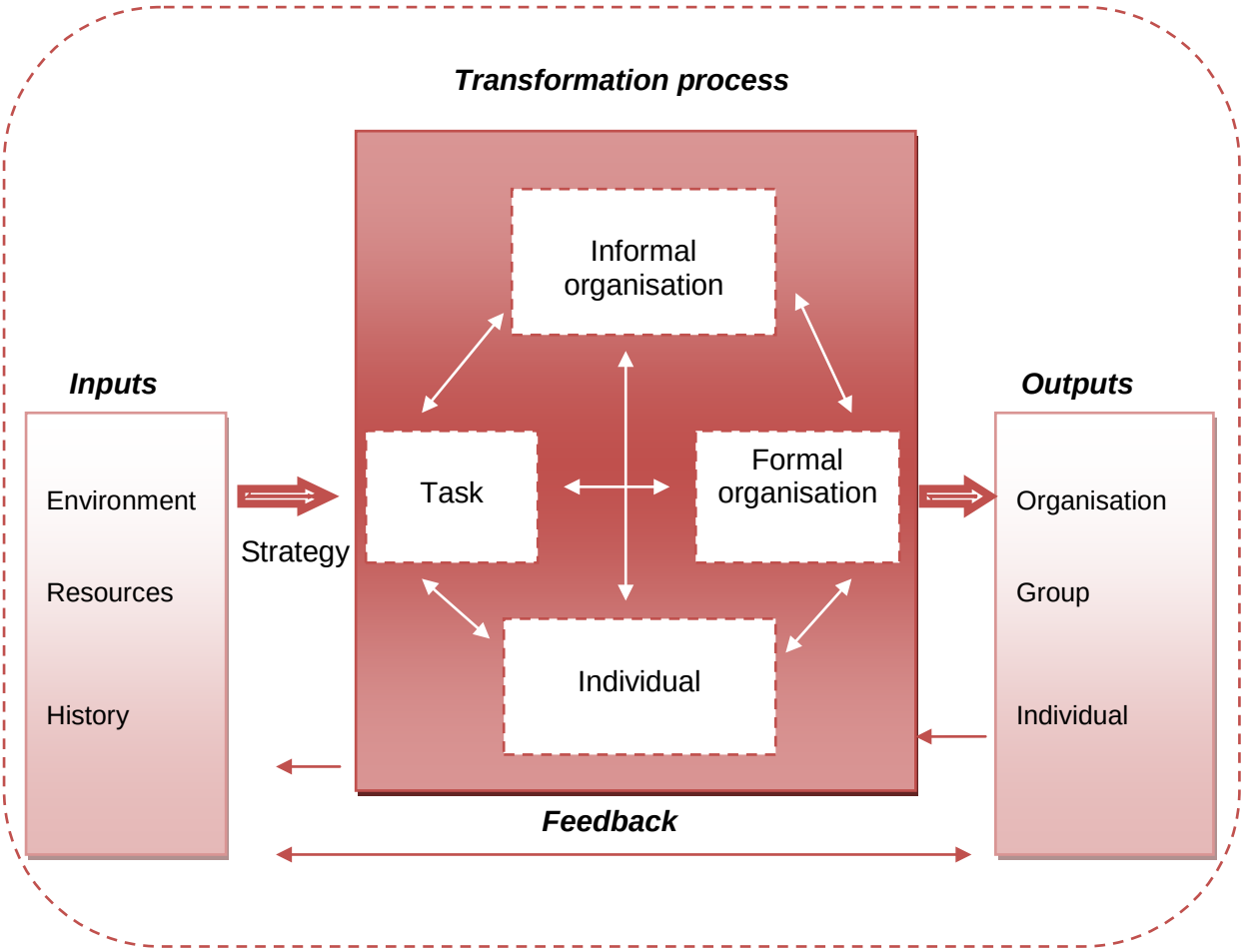
- *Unfreezing.* This initial step involves reducing the forces maintaining the organisation's behaviour at its present level. It entails introducing information that shows the discrepancies between desired behaviours and the behaviour currently exhibited by employees.
- *Moving.* The second step involves shifting the behaviour of the organisation, department or individual to a new level. It entails intervening in the system to develop new behaviours, values and attitudes through transformation in the organisation.
- *Refreezing.* The last step involves stabilising the organisation at a new state of equilibrium. It is the use of a supporting mechanism to reinforce the new organisational state in terms of organisational culture, policies, processes, structures or systems.

Although, Lewin's model is a framework that has been highly influential in the field of organisational change, it is a basic change model of unfreezing-changing/movement-refreezing, describing change as linear, progressive and destination- or goal-directed, based on creating disequilibrium and unusual, managed and planned by people (Leban & Stone, 2007; Marshak, 2009). The main limitation of this model is that it lacks clear guidelines on managing multidimensional change focusing on individuals, groups and the whole organisation.

2.5.2 Nadler and Tushman's congruency model

Nadler and Tushman's (1980) congruence model was developed in 1977, and is based on the principle of "organisational fit". This implies that if the organisation is to perform optimally as a system, it needs to be congruent with its various subsystems (Nadler, 1998; Nadler, Shaw & Walton, 1995).

Figure 2.2 Nadler and Tushman's congruency model (Nadler & Tushman, 1980, p. 47)



This model depicts the organisation as an input-throughput-output system (Nadler & Tushman, 1980; Nadler *et al*, 1995):

- *Inputs.* The inputs into the systems are unchanging. They include the external environment, the resources available to the organisation, the organisation's history and strategies that are developed and then evolve over time. These inputs can serve as constraints or opportunities for organisational processes.
- *Transformation process.* It is the process of changing inputs to outputs based on four components. The first component is task which consists of jobs to be done and the inherent characteristics of the work itself. The second component is the individual and consists of all the unique and similarities of employees in terms of their biographical data, skills,

professional expertise and personality. The third component is formal organisation which includes management, design, structure, systems and processes in the organisation. The fourth component is the informal organisation which refers to its social make-up in terms of unwritten rules, values and methods of doing things in the organisation.

- *Outputs.* The outputs of the transformation process occur at organisational, group and individual level. Organisational output refers to the organisation's ability to use its resources, in order to cope with external changes in its environment over time and achieve its desired goals of production, service and return in investment. Group outputs include the effective performance, collaboration and communication of teams, units or department in the organisation. The individual outputs focus on the actual performance, behaviour and attitudes of organisational members.

Nadler and Tushman's model is based on the open systems perspective. French and Bell (1999) support the premise of this model, namely the fact that the systems components should be aligned to enable the organisation to produce the required outputs.

Figure 2.3: Nadler and Tushman's types of organisational change (Nadler *et al.*, 1995, p. 24)

Incremental (transition)	***Transformational***
Tuning	Reorientation
Adaptation	Recreation

The main advantage of the Nadler and Tushman model is that it further differentiates transformation from transition on the basis of the four typologies of change, namely tuning, adaption, reorientation and recreation. The two facets of change include incremental adjustment and transformational change in figure 2.3.

Hayes (2007, p. 15) describes Nadler and Tushman's four typologies as follows:

- Tuning is change that occurs when there is no immediate requirement to change.
- Adaptation is an incremental and adaptive response to a pressing external demand for change.
- Reorientation involves a redefinition of the organisation and it is anticipation of future opportunities or problems.
- Recreation is a creative change that involves transforming the organisation through the fast and simultaneous change of all its basic elements.

This implies that organisational transformation involves reorientation and recreation types of change, while organisational transition entails tuning and adaptation.

The congruency model is valuable as an analytical tool, firstly, for assessing the characteristics and functions of each of the elements, and secondly, for evaluating the organisational fit (French & Bell, 1998). However, there are limitations in the practical application of the model. Table 2.4 indicates, on the basis of this model, the challenges facing organisational leaders and their correlative potential failures (Nadler, 1998).

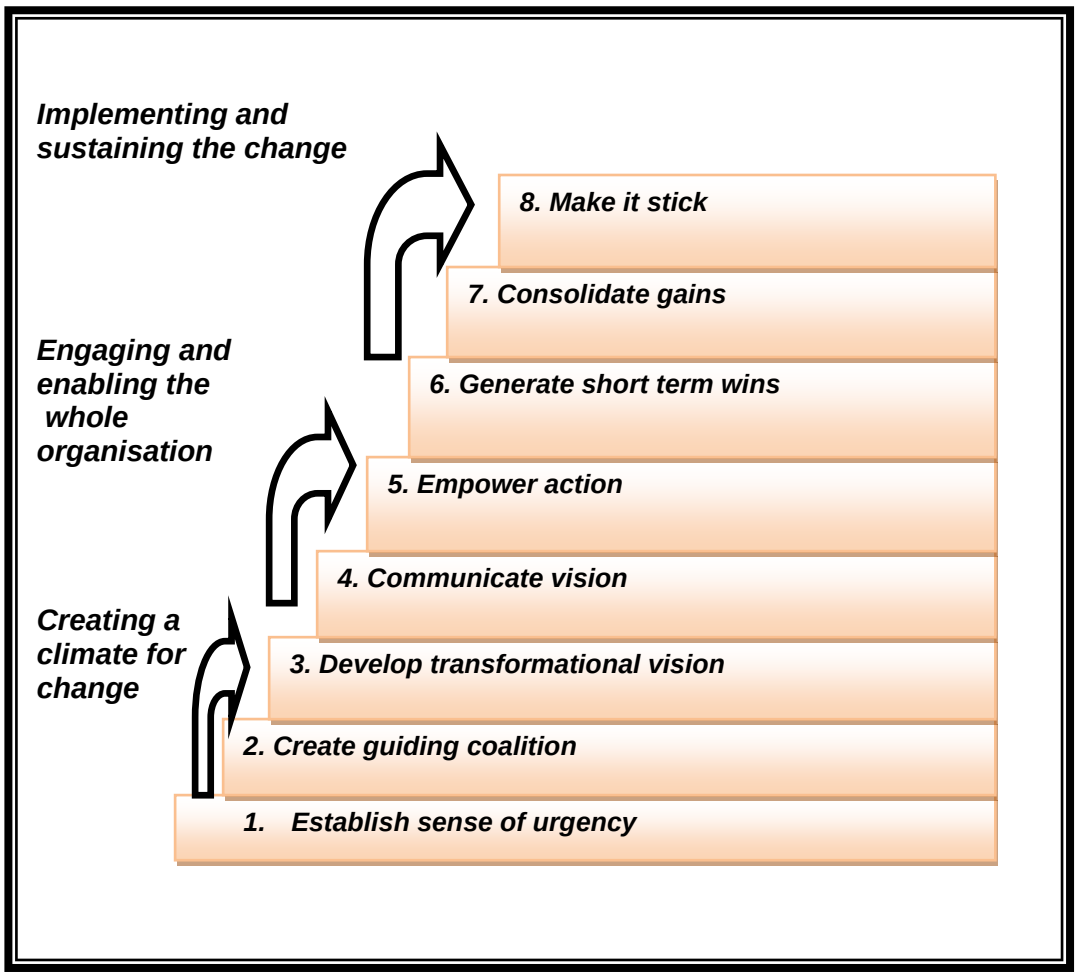
Table 2.4: Challenges and potential failures for leaders (Nadler, 1998, pp. 74 -75)

Basic challenges	Correlative potential failures
Recognition: the ability to identify organisational threats and address them effectively	*Failure of recognition:* creates lack of capacity for the organisation to compete
Strategic: the ability to make an appropriate strategic decision to enable the organisation to survive and prosper	*Making the wrong decisions:* leads to destructive consequences in the organisation
Organisational redesign: the manner in which components of the organisation are reshaped to implement the organisation's strategic imperatives	*Failure of organisational redesign:* the organisation becomes unable to implement its strategic choice

2.5.3 Kotter's change model

Kotter developed the eight-stage model as a way of looking at the change process itself and mapping the organisational system with the process of change (Kotter, 1996). According to Leban and Stone (2007, p. 61), "Kotter's change model is the most widely used model for change because it provides us with a framework and guidance." This model enables organisations to facilitate the change process effectively and to avoid the common pitfalls of change initiatives by providing the necessary steps to follow when implementing change in an organisation. Figure 2.4 depicts of the eight change process steps or stages in terms of Kotter's model.

Figure 2.4: Kotter's eight-stage change process (Leban & Stone, 2007, p. 60)



The eight-stage change process and its three major parts are described as follows (Kotter, 1996; Leban & Stone, 2007):

The initial part of the change process entails *creating a climate for change*. The first four stages focus mainly on establishing a climate for change:

- *Stage 1:* establishing a greater sense of urgency. This stage is characterised by persuading people to seriously examine the competitive realities and identify crises, potential crises or major opportunities.
- *Stage 2:* creating the guiding coalition. This involves putting together a group with enough power to lead the change and convincing the group to work together like a team.

- *Stage 3:* developing a transformational vision and strategy. The main tasks are to create a vision to help direct the change effort and to develop strategies for achieving that vision.
- *Stage 4:* communicating the change vision. This means using every vehicle possible to constantly communicate the new vision and strategies. It also involves role modelling the needed behaviour by the guiding coalition.

The second part of the change process involves *engaging and enabling the whole organisation*. This part of the process is based on stages 5 to 7 of the change process, as highlighted below.

- *Stage 5:* empowering a broad base of people to take action. This involves removing blockers, changing systems or structures that seriously undermine the change vision and encouraging risk taking and nontraditional behaviour, ideas, activities and actions.
- *Stage 6:* generating short-term wins. The purpose is planning for some visible performance improvements, creating those wins and visibly rewarding or recognising people who made the wins possible.
- *Stage 7:* consolidating gains for organisational change and producing more change. This is achieved by using increased credibility to change all systems, structures and policies that do not fit the transformational vision. It is necessary to hire, promote and develop people who can implement the change vision. Reinvigorating the process with new projects, themes and change agent is also a vital aspect of this stage.

The third part of the change process entails *implementing and sustaining the change*. This is the last part of the process and is based on the final stage of the model.

- *Stage 8:* making it stick or institutionalising new approaches in the culture. This stage involves creating better performance through customer- and productivity-oriented behaviour, more and better leadership and more effective management. Articulating the

connections between the new behaviours and the organisation's success is also crucial. It is also necessary to develop means to ensure leadership development and succession.

Although this model has several benefits, there are warnings for organisations using the model without adhering to the prescribed stages or steps. Kotter (1996, p. 16) highlights the following eight mistakes common in organisations implementing change initiatives based on this model:

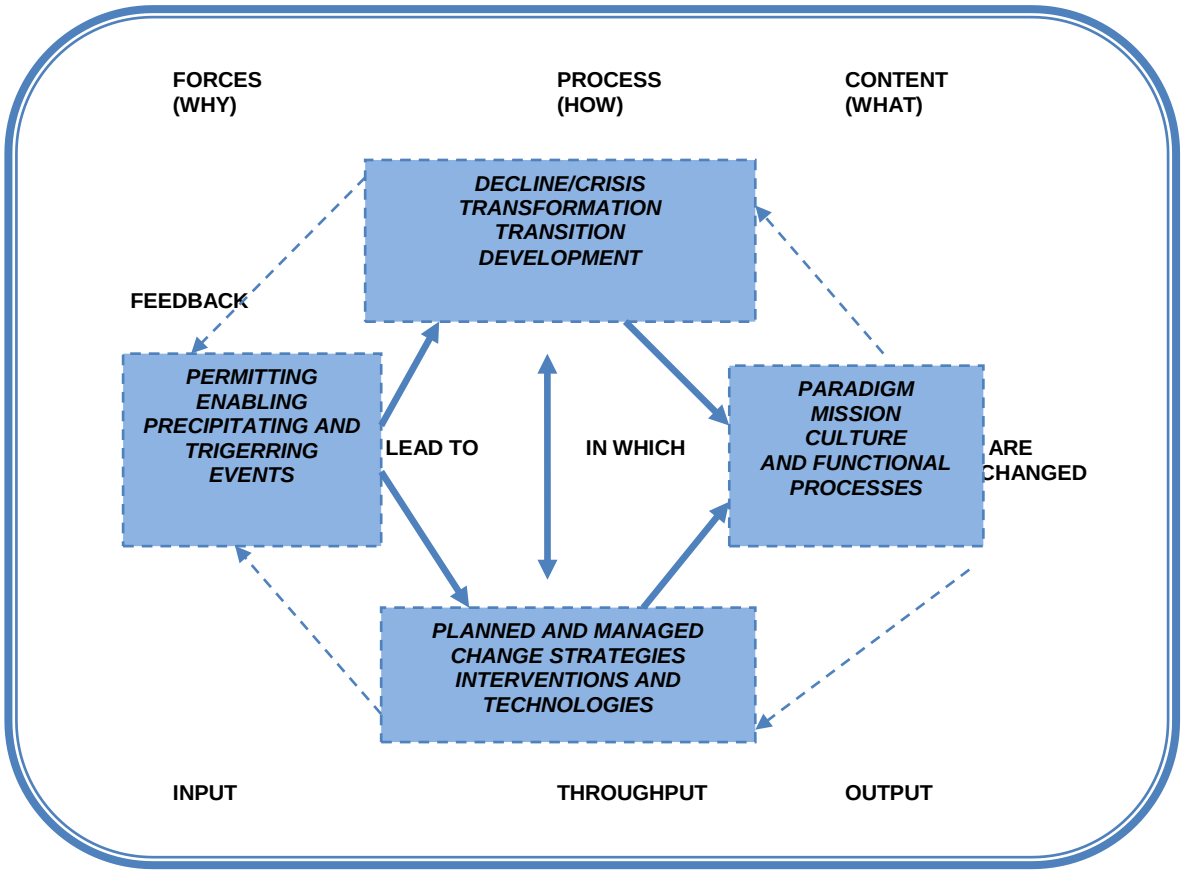
- not establishing a great enough sense of urgency
- not creating a powerful enough guiding coalition
- lacking a vision
- undercommunicating the vision by a factor of 10
- not removing obstacles to the new vision
- not systematically planning for and creating short-term wins
- declaring victory too soon
- not anchoring changes in the corporate culture

It is thus imperative to adhere to the eight stages of the change process because omitting a stage will cause problems (Leban & Stone, 2007). The key lessons for organisations are that the change process goes through a series of phases, each lasting a considerable period of time and any mistakes in one of the phases or stages can have a devastating impact on the momentum of the change processes.

The prescriptive nature of this model also serves as a limitation in the sense that it is inflexible. Hence organisations using this model are not allowed to alter the change stages to suit the unique challenges faced by the organisation. Furthermore, there are no proactive measures in place to minimise the common mistakes identified in the implementation process.

2.5.4 Levy and Merry's integrated model of transformation

Figure 2.5: Levy and Merry's integrated model of organisational transformation (Levy & Merry, 1986, p. 279)



Levy and Merry (1986) designed the above model in an effort to understand and facilitate the process of transformation in an organisation. The model is also based on the open systems perspective of the input, throughput, output and feedback process.

According to Levy and Merry (1986, p. 279), "...taking the open systems perspective makes the model more dynamic and open with feedback loops that affect the conditions, processes and change strategies".

The inputs refer to the driving forces of change, throughput represents the process of transformation in the organisation and output is the change in the organisational dimensions (Levy & Merry, 1986).

This integrated model of transformation is relevant to understanding the concept of transformation in this study, on the basis of the following principles and reasons:

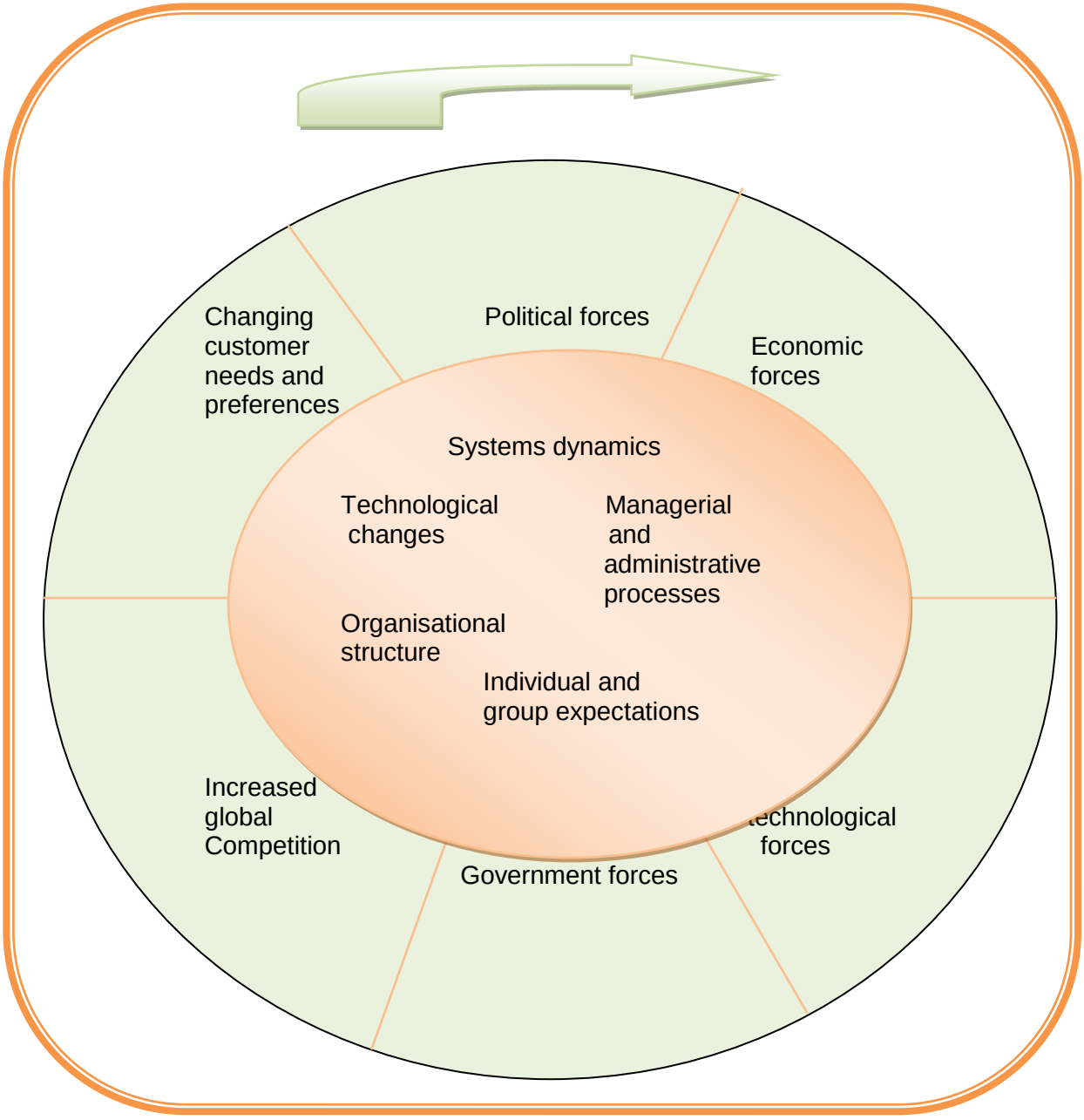
- During the process of organisational transformation, this model allows the use of multitudes of strategies, approaches and technologies available for practitioners and managers wishing to facilitate and manage change effectively.
- This model is flexible. Choosing a specific strategy and approach is dependent on or affected by the specific driving forces for change that exist, by the stage of the organisation in the process of change and by what dimension needs to be changed.
- It also allows the use of any specific approach that may affect the process of change and the content of change in a specific way.

In addition, the systematic nature of this model embraces the main principle of Nadler and Tushman's model, namely the assumption that an organisation is an input-throughput-output system. It also affords organisations the opportunity for reorientation and recreation through change strategies as processes for a paradigm shift (Levy & Merry, 1986; Nadler & Tushman; 1998). Another common factor between these two models is that they both address organisational change from a multidimensional instead of a unidimensional perspective.

2.6 DRIVING FORCES OF ORGANISATIONAL TRANSFORMATION

Transformation is typically driven by some causal factor, either in the form of precipitating or predisposing factor. According to Levy and Merry's model of transformation, the driving forces of change are inputs of transformation processes in organisations (Levy & Merry, 1986).

Figure 2.6: Internal and external driving forces of change (Harigopal, 2006, p. 43)



Organisations are unlikely to undertake transformation unless significant reasons or driving forces to do so emerge (Leban & Stone, 2007; Cummings & Worley, 2008). According to Holbesche (2006, p. 283), "...transformational changes tends to be driven by necessity rather than preference". In relation to this view that transformation is caused by the need stemming from the

external environment, Harigopal (2006, p. 48) suggests the following conditions that lead to organisational transformation:

- the experience or anticipation of a severe threat to survival
- the perceived or felt inadequacy in current organisational strategy, design and functions to meet the external threat

According to Holbesche (2006), transformation occurs when the organisation falls out of step with its changing environment. This is because existing organisational strategies, processes and designs are either obsolete or outdated to meet the demands of the constantly changing external environment. Cummings and Worley (2008, p. 506) also believe that "organisations must experience and anticipate a severe threat to survival before they will be motivated to undertake transformational change". An organisation can either take reactive or proactive measures to counter these threats to its existence. Nowadays, an organisation's success depends on its ability to sense and adapt to rapid changes both in and outside the organisation.

The driving forces cited in the literature that propel organisations to transform focus on the following three kinds of disruptions (Weber & Weber, 2001; Leban & Stone, 2007; Cummings & Worley, 2008):

- rapid changes in the legal, political, economic and technological conditions that shift the basis for competition in an industry; these are commonly regarded as industry discontinuities
- consistent changes in the product life cycle that require different business strategies and innovation to produce products that meet changing customer needs
- internal company dynamics such as changes in size, corporate portfolio strategy or executive turnover

In relation to the above disruptions, the nature of organisational change largely depends on whether the driving forces of change are perceived as obstacles, challenges, threats or opportunities in the organisation (Harigopal,

2006; Leban & Stone, 2007). Hence organisations as systems exist in the context of an external environment, in a dependent relationship in interaction with it in order to survive and grow.

Organisational transformation is mainly prompted by internal and external factors. Harigopal (2006, p. 41) contends that "... a variety of forces inside the organisation also cause change that relates to system dynamics, inadequacy of existing administrative processes, individual or group expectations, technology, structure, profitability issues and resources constraints". These internal forces are factors in the organisation that challenge the organisation to transform.

Contrary to internal factors, the external forces stem from the external environment and operate in the social, political and economic environments. External factors have the major change-shaping impact on influencing organisations to transform (Harigopal, 2006; Leban & Stone, 2007). The pressures of external forces are also enormous and for most organisations it is a question of adapt or die.

The discussion below deals with both the internal and external forces of transformation faced by organisations and also focuses on the implications of these driving forces for organisations, namely globalisation, international competition, technology, political or legal, economic, customer needs and workforce demographics.

2.6.1 Globalisation and international competition

Globalisation means that most organisations' competitors are fairly likely to be in any country across the globe. Heightened competition means that established organisations need to defend themselves from their competitors (Parumasur & Barkhuizen, 2009). This implies that the world economy is becoming a single interdependent economic system.

According to Leban and Stone (2007), the world economy and issues of globalisation directly and indirectly affect all organisations, regardless of their size. Globalisation is rapidly blurring the geographic, market sector or corporate boundaries, and this poses threats and provides opportunities for organisations (Holbesche, 2006). This blurring of boundaries means that public sector organisations are expected to operate according to commercial principles and private sector organisations as good corporate citizens.

The benefits of globalisation for organisations are that it can provide them with unlimited business opportunities, but conversely, pose threats to organisational success (Holbesche, 2006; Leban & Stone, 2007). The challenge for most organisations is to compete with organisations that develop new products and services as well as small entrepreneurial organisations that offer innovative services and products (Parumasur & Barkhuizen, 2009). Globalisation of markets thus involves organisations competing in international markets and local organisations being exposed to foreign competition.

The upshot of the above is that an organisation's longevity depends on its ability to compete and adapt to a changing competitive environment. Harigopal (2006) maintains that the establishment of strategic alliances is yet another change being effected in order to compete in the global arena, because no single organisation has all the knowledge and skills needed to survive in a global market. Those organisations that are unable to reinvent themselves run the risk of failure.

2.6.2 Technology

Technology is also a driving and enabling factor for transformation in organisations. Technological changes influence both products and processes and result in organisations creating new products, services, channels of distribution and even industries (Harigopal, 2006; Holbesche, 2006).

According to Leban and Stone (2007), technology is defined as the set of processes the organisation uses to transform inputs into outputs. Hence changes that impact on the actual process of transforming inputs into outputs are technological changes. These are changes in equipment, work sequences, information-processing systems and degrees of automation. Other forms of technological change in an organisation include introducing new types of automation, new information technology and new enterprise software (Harigopal, 2006; Leban & Stone, 2007).

The literature also indicates that nowadays, technological developments are of a different order to those of the past and they threaten the old way of doing business in an organisation (Holbesche, 2006; Leban & Stone, 2007). Innovations and advancements in technology continually affect organisations and the way they do business and compete with other organisations because the world of today is characterised by dramatic technological shifts which change the very nature of jobs and organisations.

Cummings and Worley (2009, p. 506) argue that "...rapid changes in technologies render many organisational practices obsolete, pushing firms to continually innovate and nimble". This leads to the development of sophisticated information technology which makes organisations more responsive when offering their services and products.

Research suggests that the technological advancements in communication and computer technology have revolutionised the workplace and helped to create a whole range of new products and services (Weber & Weber, 2001; Parumasur & Barkhuizen, 2009). These rapid changes include new forms of communication technology which are already removing the barriers of distance and time (Holbesche, 2006).

Leban and Stone (2007) maintain that technological advancements have enabled organisations to compete globally using information and communication technology to set up operations in remote areas of the world and to market their products and service throughout the world. In essence,

the use of new technology in an organisation may also help the subsystems in the organisation to transform.

2.6.3 Political and legal factors

Political and legal forces include the outcomes of elections, legislation and decisions at all levels of government (Leban & Stone, 2007). These manifest in political realignments where government tends to liberalise and deregulate its policies on national economies (Harigopal, 2006; Holbesche, 2006).

In the South African context, management scholars are aware that most organisations have been excluded from participating in international competition owing to sanctions during the apartheid regime. The establishment of a democratic government created opportunities for local organisations to participate in international competition and the global economy. Parumasur and Barkhuizen (2009) emphasise the fact that the reconstruction of the postapartheid economy in terms of the development of human capital and the improvement of South Africa's competitiveness in the global market has enabled the country to be ranked 44th in the overall global competitiveness index.

Although global competition is beneficial because it affects political and legal changes, Holbesche (2006) indicates that there are limitations for organisations, in the sense that the reductions in international trade barriers are enabling new overseas competitors in mature production and service sectors to challenge the established markets. This highlights the fact that the forging of free trade cooperation between nations with large markets or emerging economic blocks is another source of organisational change. Organisations are thus required to comply with legislation and be prepared to cope with the constant changes in the regulatory environment (Leban & Stone, 2007).

2.6.4 Economic forces

Uncertainty about future trends in the economy is a major cause of transformation in organisations – economic forces have an impact on the organisation's ability to achieve its goals and objectives. These forces manifest in fluctuating interest rates, declining productivity, uncertainties arising for inflation rates or deflation, low capital investments, recessions, fluctuating oil prices and the lowering of consumer confidence (Harigopal, 2006; Leban & Stone, 2007).

The literature indicates that economic forces include the general economic health of the country and region in which an organisation operates, unemployment rates, the availability of supplies and the labour market (Leban & Stone, 2007; Parumasur & Barkhuizen, 2009). These issues have a marked impact on different economies and therefore on the organisation.

Economic shocks such as the volatility of the rand in South Africa and the high inflation rate are economic factors that necessitate transformation (Parumasur & Barkhuizen, 2009). According to Harigopal (2006), the national financial systems of a country are so interrelated that a change in one has a ripple effect on others.

In addition, the electricity shortages and outages in South Africa in 2008 resulted in a loss of productivity and affected organisations to such an extent that the situation was regarded a national emergency. Organisations are thus compelled to transform their business approaches in order to adapt to these economic changes.

2.6.5 Customer needs and preferences

The needs, expectations and preferences of customers are continually changing. Organisations are also transforming their processes using information technology to make up time and ensure an effective response time to customer demands (Parumasur & Barkhuizen, 2009).

In an increasingly global marketplace, the proliferation of new customers, channels, suppliers and means of production means that organisations have to transport new products to the market quickly and cost effectively, and the process of product or service innovation has to be continuous (Holbesche, 2006).

According to Harigopal (2006), current customers tend to prefer a single product to satisfy their multiple needs as opposed to an assortment of products to satisfy their needs. Customers are also increasingly demanding top-quality goods and services, tailored to their needs, but at a reasonable price. Organisations are thus compelled to adapt and constantly innovate their products offerings in order to meet such demands.

While modern customers tend to be more demanding and better informed about products and services, the challenge is that they are less loyal to particular products or organisations. This is because of the wide availability of competitors' products and services – customers now have both choice and power. It has been suggested that the media explosion is also driving the needs and desires of people who now have more options than ever before (Harigopal, 2006; Holbesche, 2006).

Consumers are protected through consumer rights legislation to ensure that they get better value for their money. In South Africa, the National Consumer Commission (NCC) was established in terms of section 85 of the Consumer Protection Act Number 68 of 2008 to enforce this Act in order to eradicate unfair business practices and protect vulnerable consumers. It is through such legislation and the NCC that consumers are empowered to hold organisations such as producers, distributors and retailers liable for satisfying their needs and expectations.

Customer satisfaction standards and norms stemming from global competition and legislation compel organisations to contain the costs of upgrading their products and produce innovations that flourish for a short while before they become obsolete (Holbesche, 2006).

Hence organisations have to transform in order to adhere to consumer satisfaction standards and norms.

2.6.6 Workforce demographics

It is essential to monitor demographic trends in order to consider their implications for the workplace. Demographic changes are the key drivers of the increasing demand for flexible working patterns as well as for style of management that embraces people working on the basis of various forms of contract (Holbesche, 2006; Leban & Stone, 2007).

Despite amendments in working hours and contracts, changes in sexual and family roles have also led to more minorities and women in the workforce. The nature of the South African workforce is also changing because of the implementation of equal employment opportunities and affirmative action policies in organisations. Organisations are thus expected to manage a multicultural workforce characterised by a diverse population in terms of age, gender, ethnicity, race, education and disabilities.

Leban and Stone (2007, p. 10) identified the following as some of the key global demographic trends in organisations:

- an ageing population that is increasing health-care costs
- an ageing workforce
- demographic shifts leading to a shortage of skilled workers
- the retirement of a large number of Baby Boomers (born around 1945) at more or less the same time
- growth in the number of employees who have both elder-care and child-care responsibilities at the same time
- an increase in the age at which individuals choose to retire
- generational issues
- growth in the number of employees with elder-care responsibilities
- the implications of minority groups for the workforce
- growth in the number of employees whose first language is not English

Table 2.6: Forces of change and their implications for South African organisations (Parumasur & Barkhuizen, 2009, p. 481)

Forces of change	Implications
Nature of the workforce: a greater degree of cultural diversity in organisations and an increase in professionals and many new entrants with inadequate skills	*Need for:* effective management of cultural diversity, intellectual capital management and strategic human resource management
Technology: faster and cheaper computers, total quality management (TQM) and re-engineering programmes	*Need for:* effective technology and relationship management, effective implementation of the principles of TQM and effective knowledge management
Economic shocks: increased oil prices and therefore fuel prices, volatility of the South African rand and high inflation rate, electricity shortages and attacks on the USA	All indicate the need for sustainable development.
Competition: Global competitors, mergers and acquisitions and the growth of internet commerce	All indicate the need for strategic planning and management. All indicate the need to maintain business excellence.
Social trends: delayed marriages by young people, increasing divorce rate, smaller families, quality of life and increased focus on leisure, popularity of sport utility cars, attitudes towards smokers and HIV/AIDS	All indicate the need for early recognition of market opportunities.
World politics: opening of markets in China and postapartheid entry into the global arena	All indicate the need to identify, sustain and exploit a competitive advantage.

Demographic changes in the ageing workforce create the growing demand for knowledge and skills to cope with changing workplace requirements and skills shortages that exist in key areas (Holbesche, 2006). According to Parumasur and Barkhuizen (2009), in South Africa, the diversity of the workforce population requires human resource policies and practices to transform in order to attract and keep the diverse workforce.

In a nutshell, South African organisations are not immune to the internal and external driving forces of change. Table 2.6 depicts both the national and international forces of change affecting South African organisations.

2.7 DIMENSIONS OF ORGANISATIONAL TRANSFORMATION

Levy and Merry (1986, p. 279) identified the four dimensions of transformation as "...functional processes, mission and purpose, culture and the organisation's paradigm". The organisation's paradigm provides the context and logic for its culture, purpose, mission and functional processes. This implies that transformation of the organisational paradigm ultimately leads to transformation of the organisation's culture, purpose and mission as well as functional processes. However, transformation of any of the other dimensions does not necessarily mean all dimensions need transformation (Levy & Merry, 1986).

The various dimensions of transformation are explored below.

2.7.1 Functional processes

The first dimension of organisational transformation is functional processes. Levy and Merry (1986) view functional transformation as changes in the organisational structure, management, technology, decision-making processes, recognition and rewards and communication patterns.

Transformation of processes in the organisation may include removing all the bureaucracy or introducing new technology (Holbesche, 2006). Organisations make structural changes in order to reduce costs and remain profitable. In the literature, structure-focused changes in an organisation are referred to as changes that alter any of the basic components of an organisation's structure or overall design (Harvey & Brown, 1996; Harigopal, 2006). This implies that the organisation changes in respect of its shape (size or complexity) and structures (systems or ownership).

Most organisations are being downsized or decentralised and jobs redesigned, resized and flattened in order to be competitive. Hence structural changes in the organisation may also include relocation and removal of a management tier (Harigopal, 2006; Holbesche, 2006). These structural changes in terms of expansion, contraction, resizing and technological inputs also have negative and positive implications for human resource management. This is because of increased global competition that has virtually compelled many organisations to have lean and mean structures in order to deal with the forces of change.

Functional processes include employee-related transformation. Employees are under pressure to master new challenges, use new tools and keep up with the changing systems and technologies (Harigopal, 2006). Employee-related transformation is concerned with human resource planning and enhancing employee competence. Offshore outsourcing of work is also an example of employee-related changes because work is moved to places where skilled persons are available, and as a result, it is possible to do the work cost effectively.

Employee-related changes involve the effects of social trends on employees such as the impact of HIV/AIDS on the economy which is both a public health and macroeconomic problem (Parumasur & Barkhuizen, 2009). The loss of human life as a result of the disease could lead to a collapse of a country's economy. Organisations are supposed to develop programmes and policies to address HIV/AIDs, using reactive and proactive interventions.

2.7.2 Strategy

The second dimension of organisational transformation is strategy which includes the organisation's mission and purpose (Levy & Merry, 1986). It is evident in the discussion in section 2.6 above that growing competition compels organisations to respond by revising their strategies and the way they operate. According to Hayes (2007), organisations are experiencing periods of strategic shifts and misalignment with their environment to the point where the only way forward requires some form of transformation to their purpose of existence or strategy.

Because environmental shifts influence the organisation's business model by creating new requirements for success, the organisation is expected to rethink its strategy and change its structure, administrative support, culture, staffing and processes (Leban & Stone, 2007).

An organisation faced with environmental shifts or disruptions is forced to embark on a process of transformational change. According to Hayes (2007, p. 13), "...transformation of the organisation's strategy occurs during the period of disequilibrium in the organisation". This implies that an organisation needs to formulate a strategic direction in response to its disequilibrium and environment shifts.

The process of strategy formulation involves more explicitly stated programmes for direction of action and statements about "what business are we in", and the nature of the strategies for achieving the organisational mission, goals and policies (Levy & Merry, 1986). Slater and Mayne (2000) contend that strategy formulation is a discreet and repetitive process, characterised by the two phases. The initial phase of strategy formulation is a data gathering process and analysis of the relevant information, while the second phase involves the actual development of strategy (Slater & Mayne, 2000). These phases are necessary in order to redefine the organisation's mission and purpose.

2.7.3 Culture

Organisational culture is the third dimension of organisational transformation (Levy & Merry, 1986). According to Martins and Martins (2009, p. 424), organisational culture refers to "...a system of shared meaning held by organisational members, distinguishing the organisation from other organisations". It is thus able to influence the way in which organisational members perceive, think and behave at work.

Cummings and Worley (2007) argue that organisational culture includes the basic pattern assumptions, values, beliefs, norms and artefacts shared by organisational members. These elements of organisational culture are considered to be the correct way of thinking about and acting on problems and opportunities faced by the organisation (McShane & Von Glinow, 2005).

The literature indicates that there are different typologies of organisational culture. Hofstede cited by Van Tonder and Roodt (2008) identified the different types of organisational culture, based on national and regional cultures, namely power distance, uncertainty avoidance, individualism versus collectivism, masculinity versus femininity and the long-term versus short term. Schein cited by Martins and Martins (2009) also identified four types of organisational culture, namely power-oriented, role- oriented, achievement-oriented and support-oriented organisational cultures. According to Parumasur (2008, p. 329), Deal and Kennedy classified organisational culture into four types, namely tough-guy macho, work-hard-play-hard, bet-your-company and the process organisational culture. Although there is as yet no consensus on the types of organisational culture in the literature, organisations tend to adopt their preferred cultures during the process of transformation which is based on these various types of culture.

Organisations are compelled to transform their cultures because their very survival depends on this. Werner (2007, p. 28) summarises the functions of organisational culture as follows:

- It creates a corporate identity that distinguishes one organisation from another.
- As a result, it gives organisational members a sense of identity.
- Identifying with the organisation creates greater commitment to organisational goals and objectives.
- It guides employees in terms of acceptable behaviours and attitudes, especially when they have to make decisions and solve problems.
- It creates social systems stability with its associated emotional security.
- It serves as a yardstick for evaluating and correcting deviant behaviours and for rewarding desired behaviours.

Because organisations are dynamic and change over time, their organisational culture also changes over time. Transformation of organisational culture mostly focuses on symbolic action and elements such as myths, rituals and ceremonies; the look and arrangement of physical setting and the style of management and relationships (Levy & Merry, 1986; Van Tonder & Roodt, 2008).

Martins and Martins (2009, p. 441) emphasise the fact that although it is extremely difficult to transform organisational culture, it is possible to change organisational culture when most or all of the following conditions exist:

- *A dramatic crisis*. This is a shock that undermines the status quo and calls into question the relevance of the current organisational culture.
- *Turnover in leadership*. New top leadership, which can provide an alternative set of key values, may be perceived to be more capable of responding to the crisis.
- *Young and small organisations*. The younger the organisation, the lesser entrenched its culture will be and managers will be able to communicate a new culture in a small organisation.

- *Weak organisational culture*. When organisation culture is held more widely it is difficult to change it. Weak cultures are more amenable to change than strong cultures.

In addition, according to Cummings and Worley (2009, pp. 527–528), although the knowledge of changing organisational culture is still in a formative stage, the following practical guidelines are essential for changing an organisational culture:

- *Formulating a clear strategic vision.* Effective change of organisational culture should start with a clear vision of the organisation's new strategy and the shared values and behaviour needed to make it work.
- *Displaying top management commitment*. Organisational culture change must be managed from the top of the organisation. Management have to be strongly committed to new values and need to create constant pressure for change.
- *Modelling organisational culture change at the highest levels*. Senior management must communicate the new culture through their own actions, and their behaviour should reflect the kind of values and behaviours needed.
- *Modifying the organisation to support organisational change.* Organisational culture change requires supporting modifications in organisational structure, human resource systems, information and control systems and management style.
- *Selecting and socialising newcomers and terminating deviants*. The most effective method of changing organisational culture is to change organisational membership. Organisational members can be selected and terminated in terms of their fit with the new organisational culture.
- *Developing ethical and legal sensitivity*. Changing organisational culture can raise significant tensions between the organisation and individual interests, resulting in ethical and legal problems for practitioners. It is essential to educate managers about the legal and ethical pitfalls inherent in culture change.

Transforming the organisational culture requires the organisational leadership to make employees aware of the urgency of the transformation, the need to unfreeze the existing culture by removing artefacts that represent that culture and refreeze the new culture by introducing artefacts that communicate and reinforce the new organisational values.

2.7.4 Organisational paradigm

The fourth dimension is the organisation's world view or paradigm (Levy & Merry, 1986). The external and internal causal factors of transformation lead many organisations to shift their paradigm. Levy and Merry (1986, p. 13) define organisational paradigm as "...the metarules, presuppositions or underlying assumptions that unnoticeably define and shape structures, policies and operations". In other words, a paradigm shift includes the implicit ideals and ideas the organisation lives by – that is, the philosophy that provides a logical framework for organisational structures, policies and operations.

While transformation of the organisation's paradigm is described as an intensive and costly process, the process of paradigmatic transformation in organisations includes the following cycles (Levy & Merry 1986, p. 19):

- It includes periods of crisis and chaos.
- It involves political campaigns, conflicts, perturbations and power structuring.
- Typical of this process are the call for back to basics and the denial or avoidance of new ideas that represent a new paradigm.
- The process of paradigmatic change is characterised by behavioural patterns such as denial, avoidance, resistance and anger in its first phases.
- The advanced stages of paradigmatic change process are characterised by restrictions and multidimensional debate.
- The last stages of paradigmatic change process are characterised by mourning.

According to Cummings and Worley (2009, p. 508) an organisation that is "undertaking transformational change is involved in second-order or gamma types of change, which involves discontinuous shifts in mental or organisational frameworks". Paradigm shift transformation involves changing behaviours or the human relations aspects of change before institutionalising new practices through systems changes.

Levy and Merry (1986, p. 32) suggest the following methods of facilitating paradigmatic transformation:

- raising awareness of the process or the developmental stages of paradigmatic change
- raising awareness of the content of the current paradigm and of the existence of alternative paradigms
- raising awareness of the necessity of paradigmatic change for the organisation's survival
- facilitating the departure from the old paradigm
- facilitating the creation of a shared vision that actually represents a new paradigm
- facilitating the alignment of organisational members with the new vision and facilitating their commitment to change

The process of paradigm change involves learning and discovering the new paradigm. Organisations are responsible for learning how to enact the new behaviours required in implementing the new strategic direction. Cummings and Worley (2009) emphasise the fact that learning during a paradigm shift is essential for the organisation to be able to manage continuous change or to keep pace with a dynamic environment, and it provides the built-in capacity to continually fit the organisation into its environment.

Learning needs to take place at all levels of the organisation – management and employees. This learning process requires organisational members to behave differently, assess their behaviour and modify it to suit the necessary change process. The process is therefore qualitative and involves unlearning

old behaviours. It is also directed by the organisation's future vision (Levy & Merry, 1986; Holbesche, 2006; Cummings & Worley, 2009).

2.8 THE IMPACT OF TRANSFORMATION ON ORGANISATIONS

Transformation of the organisation's paradigm, culture, functional process and strategy dimensions can have a positive or negative effect on the organisation. The impact of organisational transformation is discussed below and focuses on all levels, namely individual, group and organisation.

2.8.1 Individual and group levels

Individuals and groups in organisations are expected to be part of the transformation process. According to Van Tonder and Roodt (2008, p. 49), change at an individual and group level entails the following:

- At individual level, any change event requires an individual to make changes on four different psychological aspects, namely the cognitive, the affective, the conative and ultimately manifest behavioural aspects.
- At group level, change entails changes in a group with reference to group structure, status and group roles.

Transformation has both positive and negative effects for individuals and groups in organisations; hence, it can be perceived as an opportunity for or a threat to individuals.

The literature indicates the following as the advantages of organisational transformation for individual employees (Levy & Merry, 1986; Harigopal, 2006):

- *Beliefs and processes.* It is useful for helping organisational members to discard dysfunctional beliefs and processes, hold on to what is needed for the future and move on towards a realisation of a new desired future.

- *New vision.* It is useful for the alignment of organisational members with a new vision and for gathering members' commitment to engage in the process of change.
- *Job security.* One's job may become more important because of changes.
- *Monetary and other benefits.* Salary increases, enhanced perks, improved working conditions and opportunities for development may emanate from change.
- *Status and authority.* Individual employees may gain a new job title, new office or special assignment.
- *Job nature.* Because of changes, individuals may view their jobs as challenging or easier.
- *Engagement.* This involves affording individuals the opportunity to contribute to and determine the change process.

Individuals tend to accept and welcome organisational transformation when it benefits them. However, during the period of transformation, individuals and groups are expected to cope with multiple and concurrent changes. This expectation may have negative consequences. Individuals' reactions to transformation mainly start with shock and denial; move to anger; bargaining; or attempts to postpone the inevitable – on to depression; and finally to acceptance (Burke, 2002; Hayes, 2007).

Hayes (2007, p. 20) lists the following negative effects of organisational transformation on individuals:

- Individual members experience adaptive breakdown.
- Their psychological contract with the organisation becomes violated.
- Their performance, commitment, physical and psychological wellbeing are affected.
- Managers, supervisors and co-workers have to deal with fellow organisational members who are dissatisfied with organisational changes.

- The relationship between the individuals and the organisation is destroyed instead of modified.
- The assumptions that individual members make about themselves and how they relate to the world around them are mostly undermined.

These negative reactions create deep resistance in people, which results in individuals and groups in the organisation finding themselves opposing the transformation process. Individuals may demonstrate the following types of resistance (Burke, 2002; Cummings & Worley, 2008):

- *Blind resistance.* Some people are afraid and intolerant of any change. They need the reassurance and time to become accustomed to the idea of change.
- *Political resistance.* Some people believe that they will lose something of value if the change is implemented.
- *Ideological resistance.* Some people genuinely believe that the planned change is ill-fated and is in violation of their deeply held values.

The resistance shown by individuals and groups in the organisation is a natural phenomenon (Werner, 2007). According to Burke (2002, p. 103), resistance can assume the following forms:

- *Turf protection and competition*. The work group, function, department or business unit fighting for its survival during transformation tends to rationalise, use facts and guilt-inducing behaviour to justify their continuation.
- *Changing allegiance and ownership*. To avoid change, a group may opt to become a separate unit and formally separate from the organisation.
- *The demand for new leadership*. When the leader is capable of leading the process of transformation, some group members may revolt as a way of resisting change.

Although individuals may resist change, some tend to accept it irrespective of the consequences. The following are some of the reasons why individuals may choose to resist transformation while others accept it (Harigopal, 2006):

- *Personal loss.* Individuals may be afraid that it will result in their loss of something of value (job security, pride and satisfaction, job nature, friendships and associations and freedom).
- *Negative attitudes*. Individuals who resist transformation are usually those with negative attitudes towards their organisation or leaders because of a lack of trust.
- *Lack of involvement*. Certain individuals resist it because they have not been involved in the transformation process and their ideas have not been sought.
- *Personal criticism.* It may be considered a personal offence, questioning one's capabilities and performance and a challenge of one's authority.
- *Loss of status and authority*. It may lead to relegation of one's job to lower levels in the hierarchy or the loss of one's authority and power.
- *Inappropriate timing.* Here the transformation process is generally implemented at a bad time and individuals are overburdened with extra work.
- *Cognitive rigidity*. Some individuals may not see the need for transformation and find old practices that have evolved over time effective.
- *Challenging authority*. Some individuals resist challenging the authority of those who are in favour of the process.

In addition to the above reasons, Cummings and Worley (2008, p. 166) indicate that at individual level, change can arouse considerable anxiety about letting go of the known and moving to an uncertain future. Individuals may be unsure whether their existing skills and contributions will be valued in the future. They may also have significant questions about whether they can learn to function effectively and achieve the benefits in the new situation.

Another form of loss that leads to resistance can develop from one's experience of lack of choice or right for self-determination - that is, the imposition of transformation or being forced to move to a new state of being or acting (Burke, 2002).

At group level, group inertia and group norms may act as constraints or dictate resistance to the process. The literature suggests that groups in the organisation that control sizable resources tend to see transformation as a threat (Cummings & Worley, 2008; Parumasur & Barkhuizen, 2009). This suggests that transformation of organisational processes and practices may threaten the expertise of specialised groups. It is therefore essential to manage and provide adequate support for individuals to deal with their negative emotions towards organisational transformation, because human affect influences action. Successful management of resistance is a key factor in any transformation process.

Harigopal (2006, p. 297) maintains that dealing with human emotions during transformation involves the following:

- Creating feelings of psychological safety about change. This involves creating a culture in the organisation where individuals seek transformation and are not afraid to think and act differently.
- Creating positive feelings about the desired state and the transformation process. This entails building a positive image for employees of the envisaged process to reflect a better future.
- Focusing on the benefits of transformation at individual, group and organisational levels.
- Demonstrating some of the benefits of transformation change early in the process.
- Addressing avoidance to learning. This involves supporting the process with adequate resources, processes and facilities.

Building a transformation consciousness is essential to promote an understanding among individuals in the organisation about the process (Harigopal, 2006; Werner, 2007). According to Burke (2002, p. 95), there are three ways to help individuals and groups deal with transformation:

- Conceptually, it entails affording individuals the opportunity to think about their experiences of the process.
- Achieving closure is most relevant to the disengagement phase and involves letting go of the past.
- Participation means encouraging people to become involved in helping to make the process work.

Another essential aspect of managing resistance to change lies in understanding human behaviour. Harigopal (2006, p. 273) indicates that it is important to understand the underlying nature of human responses to transformation, as highlighted below:

- It means learning new skills and new routines and acquiring new relationships, while abandoning the familiar, accustomed and proven ways of doing things. Individuals tend to see this as discontinuity to be avoided or coped with.
- Individuals may not resist transformation - they may resist being transformed.
- It is always a threat when it is done to people, but an opportunity when it is done by people.
- It is intensely personal for transformation to occur in any organisation - each individual must think, feel or do something different.
- It gives rise to emotions which vary from being intensely negative to being appreciably positive.
- The strategy to make people accept transformation depends on the individuals choosing it.
- It is as good as the willingness of the individuals affected by it.

It is only when organisational leaders and practitioners understand human behaviour that they will be able to maximise the benefits of transformation at individual and group levels. They will also be able to minimise the negative consequences of transformation that are being faced by individuals and groups in organisation during the process.

2.8.2 Organisational level

As in the case of individuals and groups, the process of transformation tends to have either a positive or negative impact on organisations. In terms of the positive impact, Levy and Merry (1986, p. 175) emphasise the following advantages of transformational change in an organisation:

- It is useful for facilitating second-order change in organisations that are in a state of crisis or chaos, unaware of the need for a radical shift in their ideology, culture, purpose and procedures.
- It is useful for infusing deteriorating organisations with high spirits and enthusiasm.
- It is useful in helping organisations that are in crisis to be aware of internal and external processes affecting the organisation and to accept the need for a radical change.
- It is useful for creating or discovering a new direction for the organisation.

The main purpose of transformational change in an organisation is to gain a competitive advantage over its competitors. According to Leban and Stone (2007, p. 94), "...organisations today need to continually review and make adjustments so that they can increase their probability of success". Cummings and Worley (2008, p. 506) add that "...to establish competitive advantage, organisations must achieve a favoured position vis-à-vis their competitors or perform internally in ways that are unique, valuable, and difficult to imitate". This implies that transformational change involves the decisions that an organisation makes to enhance its competitive performance.

Research studies have confirmed that transformation in organisations has visible and concrete benefits in the form of sustained product quality, enhanced market image, increased customer satisfaction and long-term profitability (Leith, 1996; Weber & Weber, 2001; Saka, 2003; Kunnannat, 2007).

In addition, Cummings and Worley (2008, p. 506) compiled the following list of activities for organisations to enable them to establish a competitive advantage through transformation:

- *Uniqueness.* Transformational change requires an organisation to understand and apply its unique resources and processes to capabilities that allow it to perform better than others.
- *Value.* An organisation is able to achieve a competitive advantage when its unique resources and processes are valuable because of their ability to satisfy customer demands for high quality or performance dimensions.
- *Difficult to imitate.* When unique and valuable resources are protected by an organisation, its competitors find it difficult to imitate, duplicate or identify its distinctive competence.

Contrary to the positive impact, transformation can also have a negative impact on an organisation. The negative impact is evident when organisations resist transformation initiatives. Organisations are similar to individual and groups in the sense that they can experience resistance to transformation.

The literature indicates that resistance to transformation at an organisational level derives from the following factors (Saka, 2003; Cummings & Worley, 2008; Parumasur & Barkhuizen, 2009):

- *Technical resistance.* The habit of following common procedures and the consideration of sunk costs invested in the status quo.
- *Political resistance.* This happens when transformation threatens powerful stakeholders such as top executive management or staff, or past decisions of leaders are called into question.

- *Cultural resistance:* It takes the form of systems and procedures that reinforce the status quo, promoting conformity to existing values, norms and assumptions about how things should operate.
- *Structural inertia.* Organisations have built-in mechanisms to produce stability. When an organisation is faced with transformation, its structural inertia acts as a counterbalance to sustain stability.
- *Limited focus of transformation efforts.* Organisations comprise a number of interdependent subsystems. Transformation in one subsystem affects the other subsystems.
- *Threats to established power relationships.* Any redistribution of decision-making authority may threaten long-established power relationships in the organisation.

In order to deal with resistance at organisational level, Burke (2002, p. 113) argues that it is important "...achieving closure regarding the previous way of doing things, providing conceptual frameworks to help people understand more clearly what is happening to them and involving organisational members in the process of planning and implementing change". The methods used at individual and group levels are also applicable at the larger system or organisational level.

Resistance to transformation needs to be managed. Parumasur and Barkhuizen (2009, p. 487) propose the following six tactics to deal with resistance at an organisation level:

- *Education and communication.* This basically assumes that the source of resistance is misinformation and poor communication. It is essential to share and create awareness of the logic of transformation.
- *Participation.* An organisation can best achieve its business results when its workforce is engaged and committed to achieving its goals and objectives.
- *Facilitation and support.* The drawback of this tactic is that it is time consuming. Change agents can offer a range of supportive efforts such as counselling and therapy to deal with fears and anxieties.

- *Negotiation.* Change agents can deal with potential resistance to change by exchanging something of value to reduce the resistance.
- *Manipulation and cooptation.* Manipulation refers to covert influence attempts, while cooptation is a form of both manipulation and participation. Leaders of the resistance group are given a crucial role in facilitating the process.
- *Coercion.* This occurs when those who are resisting the process are threatened or directly forced to accept it.

It is therefore the responsibility of the leadership and management to ensure that the proposed tactics of managing resistance are implemented in the organisation.

2.9 THE ROLE OF LEADERHIP IN ORGANISATIONAL TRANSFORMATION

Transformation does not occur in a vacuum - it needs leaders to facilitate it. Leadership is defined as the social process of influencing people to work voluntarily, enthusiastically and persistently towards a purposeful group or organisational goal (Leith, 1996; Meyer & Botha 2000; McShane & Von Glinow, 2005; Werner, 2007). It is the ability to influence, motivate and enable others to contribute towards the effectiveness and success of the organisation of which they are members.

Organisational leaders in the form of executive, senior and line managers are responsible for instigating and driving the process of transformation in their respective organisations. According to Cummings and Worley (2008, p. 508), management decide "...when to initiate transformation change, what the change should be, how it should be implemented, and who should be responsible for directing it". Holbesche (2006, p. 284) maintains that transformation "...needs strong leadership to identify new directions for the organisation and to build momentum for change though the future state of the organisation remains largely undefined." Transformational leadership is a

leadership style that is related to organisational transformation, and these leaders are also expected to facilitate the process of transformation.

Schlechter (2009, p. 326) defines transformational leadership as leaders who are able to "...inspire followers to transcend their own self interests for the good of the organisation and are capable of having a profound and extraordinary effect on their followers". In other words, transformational leaders are described as leaders who able to motivate employees to do more than is expected and to engage with a high spirit in transforming the organisation (Levy & Merry, 1986; McShane & Von Glinow, 2005; Holbesche, 2006).

According to Levy and Merry (1986, p. 54) transformational leaders have the following capabilities and characteristics:

- They raise organisational members' level of consciousness about the importance and value of designated outcomes and ways of achieving these outcomes.
- They enable organisational members to transcend their own self-interests for the sake of their team, organisation and the larger society.
- They raise organisational members' need level from the need for security to the need for recognition and self-actualisation.
- They are charismatic and arouse enthusiasm, faith, loyalty, pride and trust in themselves and their aims.
- They are people oriented and maintain a developmental and individualistic orientation towards their subordinates.
- They provide intellectual stimulation and enhance the problem-solving and creativity capabilities of their associates.

In addition, McShane and Von Glinow (2005, p. 429) describe transformational leaders on the basis of the following four elements:

- *Creating a strategic vision.* Transformational leaders shape a strategic vision of a realistic and attractive future that bonds employees together and focus their energy on achieving organisational goals.

- *Communicating the vision.* They communicate meaning and elevate the importance of the visionary goal to employees.
- *Modelling the vision.* Transformational leaders enact the vision instead of only talking about it.
- *Building commitment to the vision.* Transformational leaders build employees' commitment towards the vision through words, symbols, and stories.

Hence transformational leaders have a key role to play in challenging the original frame, stimulating the organisation for change, leading the transformation process and designing rewards and other systems that reinforce and institutionalise the process.

The literature identifies the key roles of the organisational leadership during transformation (Levy & Merry, 1986; Leith, 1996; Cummings & Worley, 2008):

- *Envisioning.* Management must articulate a clear and credible vision of the new strategic orientation. This involves a purposive process which creates organisational purpose, provides meaning, involves path finding and visioning, includes clarity, consensus and commitment regarding the organisation's purpose and inspires employees with a clear vision and sense of direction.
- *Energising.* Management have the responsibility to demonstrate personal interest for the transformation and model the behaviours expected of others. This manifests in innovation and creativity which involve taking risks, trial and error, thriving for novelty, valuing experimentation, using intuition and setting high standards of performance.
- *Enabling.* Management need to provide the necessary resources required for implementing transformational change and must use rewards to reinforce new behaviours. This also requires people orientation which refers to working through teams, promoting self-esteem among workers, attending to qualitative elements of products and procedures, attending to feelings and people's needs, empowering

and sharing power, open communication, positive reinforcement and providing a lasting human climate.

Finally, leaders are able to manage a transformation process when they have the following checklist to review their progress (Hayes, 2007, p. 173):

- establishing a sense of urgency
- forming a powerful coalition
- creating a vision that is imaginable, desirable, feasible, focused, flexible and communicable
- communicating the vision
- empowering others to act on the vision
- planning for and creating short-term wins
- consolidating improvements and producing even more change
- institutionalising new approaches

The checklist serves as an assessment tool for leaders to be able to evaluate the nature of their role during the process of their organisation's transformation. These should enable them to determine the progress and limitations encountered in the process.

2.10 CHAPTER SUMMARY

This chapter introduced the concept of organisational transformation by discussing its paradigmatic and conceptual foundations. The differences between transformation, transition and organisational development were highlighted. An overview of the literature pertaining to organisational transformation theoretical models and approaches was also provided. The concept of organisational transformation was discussed on the basis of its driving forces, dimensions and impact at individual, group and organisational level. The chapter concluded with a discussion of the literature relating to role of transformational leadership during organisational transformation.

Chapter 3 focuses on the construct of employee satisfaction.

CHAPTER 3 EMPLOYEE SATISFACTION

3.1 INTRODUCTION

The aim of this chapter is to focus on step 2 of the literature review, namely to conceptualise the construct of employee satisfaction. Firstly, the paradigmatic and conceptual foundations of employee satisfaction will be discussed, followed by an exploration of different approaches and models of employee satisfaction and the dimensions, antecedent factors and benefits of employee satisfaction. The process of diagnosing employee satisfaction will also be explored.

The chapter will conclude with the theoretical integration of organisational transformation and employee satisfaction variables.

3.2 PARADIGMATIC PERSPECTIVE

The paradigmatic foundations of the construct of employee satisfaction will be reviewed from the humanistic perspective and organisational behaviour perspective.

3.2.1 Humanistic perspective

The humanistic perspective provides a better understanding of human behaviour in this context, in terms of the way in which individuals construct meaning of the world. Central to the humanistic perspective is the positive nature, self-actualisation and uniqueness of individuals (Meyer *et al.*, 1997).

Theoretical descriptions of the basic assumptions of the humanistic perspective include the following (Möller, 1995; Meyer *et al.*, 1997; Bergh & Theron, 2006):

- An individual employee is an integrated, organised and unique whole.

- Employees are dignified human beings each with unique qualities that distinguish them from others.
- Individuals are by nature positive.
- Individuals participate in conscious decision-making processes.
- Each individual employee strives for psychological growth, self-actualisation and autonomy.
- The humanistic approach asserts that the psychologically healthy person should be the criterion in examining human functioning.

These assumptions enable the researcher to study individuals as human beings in organisations, focusing on the self-concept. The self-concept refers to the image people have of themselves and the value they attach to themselves in relation to their experience of the external environment (Möller, 1995; Meyer *et al.*, 1997). Critical to the self-image is the belief that individuals are naturally constructive. In other words, they interact with their dynamic organisations and changing external environments in order to pursue their potential and innate abilities. However, the individual's behaviour is determined by his or her subjective perception of the world and the meaning he or she attaches to it. Hence it is essential to describe organisational behaviour, a subdiscipline of organisational psychology, in order to study the impact of individuals' behaviour on organisations.

3.2.2 Organisational behaviour

To understand the concept of organisational behaviour, it is necessary to first define the concepts of organisation and behaviour. An organisation is a collection of people who work together to achieve a wide variety of goals (Van Tonder & Roodt, 2008; Werner, 2007). In other words, it refers to groups of people who work interdependently to achieve a common purpose. The concept of behaviour in an organisation refers to the behaviour of individuals and groups in the organisation as well as the interaction between organisational members and their external environments (McShane & Von Glinow, 2005; Bergh & Theron, 2006; Werner, 2007).

This implies that organisational behaviour enables organisations to predict and understand organisational events, in order to adopt more accurate theories of reality and also influence organisational events.

According to McShane and Von Glinow (2005, p. 4) organisational behavior can defined as "…the study of what people think, feel and do in and around the organisation". Organisational behaviour as a field of study means that it is a distinct area of expertise within a common body of knowledge. Another definition of organisational behaviour by Odendaal and Roodt (2009, p. 7) describes the purpose of organisational behaviour as "…the field of study that investigates the impact that individuals, groups and structure have on behaviour within the organisations, for the purpose of improving an organisation's effectiveness". In other words, it is the systematic study of individuals, teams and structural characteristics that influence behaviour in organisations.

In addition, Werner (2007) highlights the fact that organisational behaviour embraces an understanding of the behaviour of individuals; the process of management; the context in which the process of management takes place; organisational processes; and the accomplishment of work. It also takes into consideration the role of the external environment of which the organisation is a part, in understanding human behaviour.

This subfield of organisational behaviour is based on the following set of basic principles or anchors (McShane & Von Glinow, 2005, p. 18):

- *Multidisciplinary anchor.* This implies that organisational behaviour is based on traditional and emerging disciplines. Traditional disciplines are psychology, sociology, anthropology, political science, economics and industrial engineering. Emerging disciplines are communication, information systems and marketing and women studies.
- *Systematic research anchor.* This includes the scientific method and grounded theory. The scientific method refers to a set of principles and procedures that helps researchers to systematically understand

previously unexplained events and conditions. Grounded theory refers, for instance, to a process of developing theory through the constant interplay between data gathering and the development of theoretical concepts.

- *Contingency anchor.* This anchor states that a particular action may have different consequences in different situations.
- *Multilevels of analysis anchor.* This divides organisational behaviour into three levels of analysis, namely the individual, team and organisational level. The individual level of analysis includes the characteristics and behaviours of employees as well as thought processes that are attributed to them such as motivation, perception, personalities, attitudes and values. The team level of analysis focuses on the way people interact and includes team dynamics, decisions, power, organisational politics, conflict and leadership. At organisational level, the focus is on how people structure their working relationships and how they interact with their external environment.
- *Open system anchor.* This states that the organisation consists of many internal subsystems that need to be continuously aligned with one another.

In relation to the above basic principles, Odendaal and Roodt (2009) indicate that the main topics that are common characteristics of organisational behaviour are motivation, leadership behaviour and power, interpersonal communication, group structure and processes, learning attitude development and perception, change processes, conflict, work design and work stress. According to McShane and Von Glinow (2005, p. 122), employee satisfaction is the "…most widely studied attitude in organisational behaviour". This subfield of organisational behaviour is thus relevant to the study of the construct of employee satisfaction as an attitude and a concept of organisational behaviour.

3.3 CONCEPTUAL FOUNDATION OF EMPLOYEE SATISFACTION

The following concepts of relevance to the study will be defined: employee satisfaction, work attitude and work motivation.

3.3.1 Definition of employee satisfaction

Employee satisfaction has been conceptualised and defined differently by various researchers and authors in the literature. The following are the earliest definitions of the concept in the literature:

- According to Lofquist and Dawis (1969, p. 53), satisfaction is "…a function of the correspondence between the reinforcement from the work environment and the individual's needs".
- Porter, Lawler and Hackman (1975, pp. 53-54) define satisfaction as a feeling about a job that "…is determined by the difference between the amount of some valued outcome that a person receives and the amount of outcome he feels he should receive".
- Locke (1976, p. 1300) states that employee satisfaction can be viewed as "…a pleasurable or positive emotional state resulting from the appraisal of one's job or job experience".
- Arnold and Feldman (1986, p. 86) describe employee satisfaction as "…the amount of overall affect that individuals have toward their jobs".

Central to these definitions is the view that employee satisfaction is a positive emotional response resulting from a comprehensive evaluation of the individual's experience of the work environment or organisational setting. This view serves as the bases of the latest and current definitions of employee satisfaction.

The following definitions of employee satisfaction are the most recent in the literature:

- According to Küskü (2003, p. 347), employee satisfaction reflects "…the degree to which the individual's needs and desires are met and the extent to which this is perceived by the other employees".
- Rad and Yarmohammadian (2006, p. 11) maintain that "…employee job satisfaction is an attitude that people have about their jobs and the organisations in which they perform these jobs".
- According to Spector (2006, p. 217), employee satisfaction is an "…attitudinal variable that reflects how people feel about their jobs overall as well as various aspects of them".
- Martins and Coetzee's (2007, p. 21) definition is also one of the latest in the literature, namely that employee satisfaction is a "…pleasurable or positive emotional state resulting from an employee's appraisal of his or her company environment or company experience".
- Voisard (2008, p. 6) defines employee satisfaction as the "…employee's feelings or state-of-mind regarding the nature of their work and conditions of employment with a particular employer".

A critical analysis of these definitions indicates that all the definitions emphasise the fact that employee satisfaction is an emotional response of the individual's experience with regard to organisational practices and processes. It is an appraisal of the perceived job characteristics, work environment and emotional experiences at work. This perception of satisfaction depends on the intrinsic and extrinsic properties of the job and characteristics of the individual employee (McShane & Von Glinow, 2005; Varkey, Karlapudi, & Hensrud, 2008).This kind of satisfaction represents the feelings of the employee about the job, which is defined as the individual's overall evaluation of working for a specific organisation (Vilares & Coehlo, 2000; Voisard, 2008). In other words, employee satisfaction is described as employees' feelings or state of mind about the nature of their work and conditions of employment with a particular employer.

Work satisfaction is therefore a global construct with specific facets of satisfaction such as satisfaction with work, pay, supervision, benefits, promotion opportunities, working conditions, co-workers and organisational practices (Griffin & Bateman, 1986; Küskü, 2003; O'Neil, 2005). It implies that employees' needs, wants and expectations are satisfied across a range of related practices and processes in the organisation. Hence employee satisfaction is a concept that is used to describe employees' contentment with and fulfilment of their desires and needs in the organisation.

The following definition of employee satisfaction is based on the integration of the earlier and latest definitions discussed in this section:

> Employee satisfaction is the individual's positive emotional state of contentment deriving from the organisation's ability to meet his or her needs and expectations based on his or her experience and evaluation of various organisational processes and practices. It influences employees' performance and commitment to the organisation.

This definition is therefore adopted on the basis of the view of employee satisfaction as a multifaceted concept and its relevance to this study.

3.3.2 Definition of work attitude

Employee satisfaction as an emotional state implies it is a work-related attitude. According to Milner (2009, p. 72), work attitudes are "…evaluative statements either favorable or unfavorable about objects, people, or events". This implies that attitudes can be positive and negative. They thus represent the cluster of beliefs, assessed feelings and behavioural intentions towards a person, object or event (McShane & Von Glinow, 2005; Voisard, 2008).

Attitudes have cognitive, affective and behavioural components. Milner (2009, p. 72) describes the components of attitudes as follows:

- The cognitive component is the aspect of an attitude that is a description of or belief in the way things are. It is the established perception about the attitude object.
- The affective component implies the emotional or feeling segment of an attitude. It represents positive or negative evaluations of the attitude object.
- The behavioural component of an attitude refers to an intention to behave in a certain way towards someone or something. It is the motivation to engage in a particular behaviour with respect to the attitudinal object.

These three components are evident in the construct of employee satisfaction. The cognitive component relates to employees making judgements involving logical reasoning about organisational practices and perception (McShane & Von Glinow, 2005). The affective component as an attitude is the positive emotional state of contentment experienced by employees. The behavioural component of employee satisfaction involves employees' performance and commitment to the organisation.

Although, employee satisfaction is a positive emotional state, one should bear in mind that work-related attitudes tap the positive and negative evaluations that an employee has of certain aspects of the work (Spector, 2006; Milner, 2009). Hence employee satisfaction is a positive attitude, while employee dissatisfaction is a negative attitude. Employee satisfaction is the extent to which individuals like their jobs, while employee dissatisfaction is the extent which they dislike their jobs (Küskü, 2003; Spector, 2006).

3.3.3 Definition of work motivation

Employee satisfaction relates to work motivation because both focus on the organisation's ability to meet employee's needs and expectations. Factors that motivate employees are the same ones that contribute to their satisfaction in the organisation. Research on motivation indicates that motivated employees are generally also satisfied with their work (Eskilden & Dahlghaard, 2000; Küskü, 2003; Chen *et al.* 2006; Roos & Van Eeden, 2007).

Work motivation is arousal, which is the energy that drives a person's behaviour; direction, which involves the choices he or she makes between different behaviours to achieve a goal or to direct his or hers behaviour; and sustainment, which implies a person's willingness to persist at attempts to meet goals or to sustain his or her behaviour (McShane & Von Glinow, 2005; Bagraim, 2007). These forces in individuals affect employees' direction, intensity and persistent voluntary behaviour. Hence employee motivation is an innate force shaped and maintained by a set of highly individualistic factors that may change from time to time, depending on an employee's particular needs and motives.

3.4 THEORETICAL APPROACHES TO EMPLOYEE SATISFACTION

Studies of the concept employee satisfaction use motivational theories in order to understand and explain the concept. According to Bargraim (2007, p.69) "motivation is the force within us that arouses, directs and sustains our behaviour". This definition suggests that there are specific factors that influences different individual to behave in a particular manner. These factors may include needs and goals that are being fulfilled or met by being in a specific organisation. Martins and Coetzee (2007, p. 21), indicates that ''…employee satisfaction is also closely related to employees' needs and work expectations". This implies that employees are likely to be satisfied when their needs and expectations are being met. Hence motivational theories form the basis of conceptualising employee satisfaction. Theories of motivation are critical in understanding the factors that arouse, direct and sustain employee

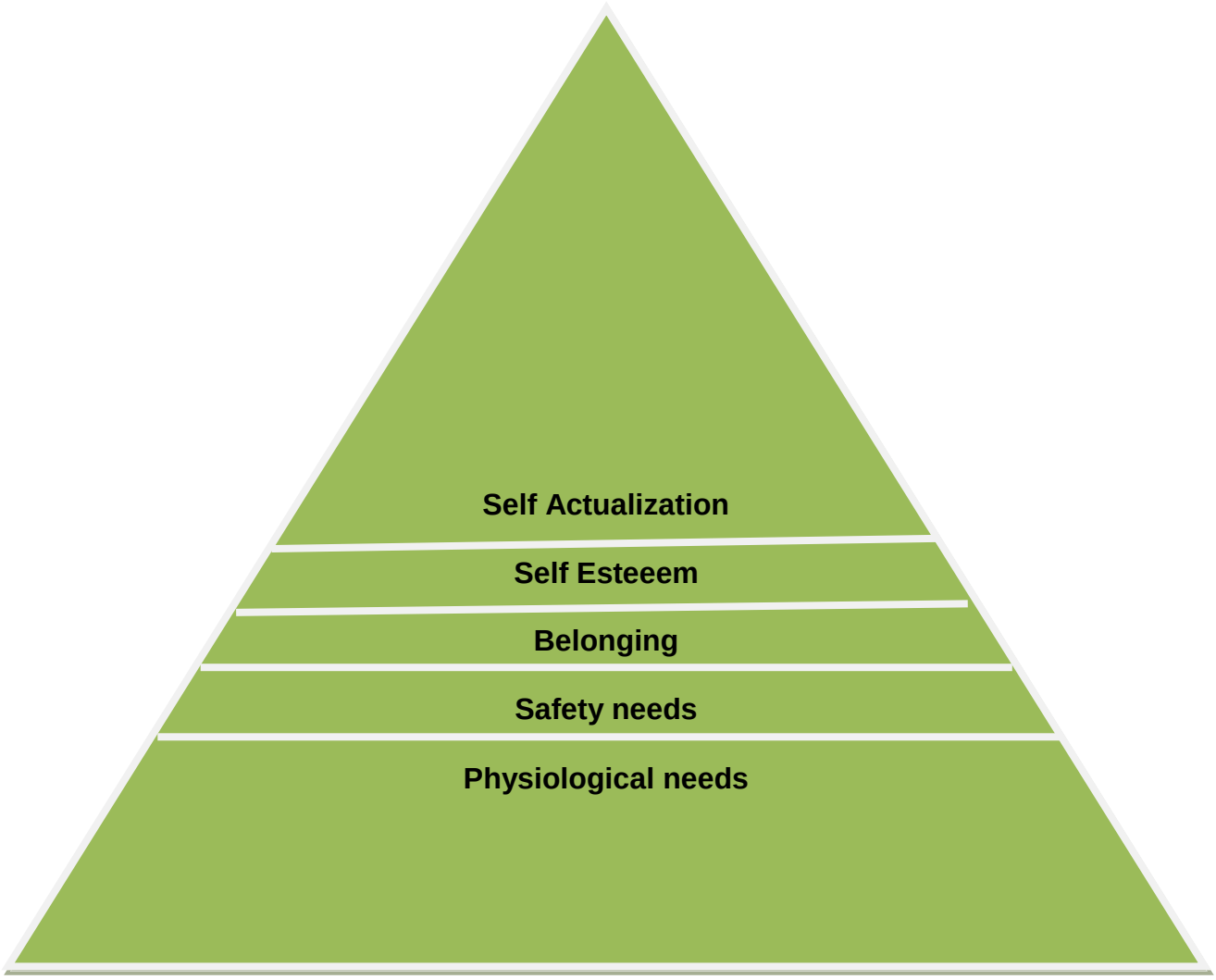
satisfaction. The theories are divided into two groups, namely content theories and process theories. The various theories of motivation will be discussed below.

3.4.1 Content theories

Content theories focus on what motivates individuals and determines their specific needs (Bagraim, 2007). The theories of motivation are Maslow's needs theory, Adlerfer's ERG theory; McClelland's learned needs theory and Herzberg's two-factor theory.

3.4.1.1 Maslow's needs theory

Figure 3.1: Maslow's needs hierarchy (Robbins, 1996, p. 214)



According to Maslow (1970), individuals have five basic needs that require a hierarchical order of satisfaction, namely physiological, safety, belonging, self-esteem and self-actualisation needs; see figure 3.1.

The literature on Maslow' needs hierarchy reflects the common description of this model (Maslow, 1970; Möller, 1995; Robbins, 1996; Meyer *et al.*, 1997; Bagraim, 2007):

- *First level.* Physiological needs are the lowest or basic needs that focus on survival such as air, food, water and shelter.
- *Second level*. Safety needs focus on health and a secure and stable environment.
- *Third level*. A sense of belonging includes the need for affection, love and social relations with others.
- *Fourth level* Esteem involves self-esteem stemming from personal achievement and social esteem which emanates from being respected and recognised by others.
- *Fifth level*. Self-actualisation is the highest need on the hierarchy which represents the need for self fulfilment.

Based on this needs hierarchy, it is evident that this theory is characterised by the satisfaction progression process whereby individuals become increasingly motivated to fulfil a higher need once a lower need has been satisfied (Robbins, 1996; McShane & Von Glinow, 2005). This implies that as an individual satisfies the lower needs, the next higher need in the hierarchy becomes the next primary motivator. Needs are never totally fulfilled, but when they are substantially fulfilled, they cease to motivate the individual (Möller, 1995; Bagraim, 2007).

Although scientific research does not validate Maslow's needs theory because of lack of empirical evidence, his theory received wide recognition in the scientific community owing to its intuitive logic and simplicity of understanding (Möller, 1995; Meyer *et al*., 1997; Odendaal & Roodt, 2009).

3.4.1.2 Adlerfer's ERG theory

The ERG theory was developed by Adlerfer (1972) on the basis of Maslow's needs theory. This theory identifies the three basic human needs as existence, relatedness and growth.

In the literature, these needs are described as follows (Adlerfer, 1972; McShane & Von Glinow, 2005; Bagraim, 2007; Roodt & Odendaal, 2009):

- Existence needs are similar to Maslow's physiological and safety needs. The focus is on a person's need for survival.
- Relatedness needs are similar to Maslow's needs for belonging. The focus is on the individual's need to be loved, accepted and appreciated and to interact with others.
- Growth needs are similar to Maslow's needs for esteem and self-actualisation. They include the individual's desire to apply his or her skills and abilities to the highest level of his or her potential.

According to McShane and Von Glinow (2005, p. 142), the ERG theory is characterised by the "frustration-regression process which is a process whereby a person who is unable to satisfy a higher need becomes frustrated and regresses to the next lower need level". In other words, if the next level of needs is not satisfied, this will result in movement down the hierarchy, and the individual will attach greater importance to the lower need level (Bagraim, 2007).

3.4.1.3 McClelland's learned needs theory

Another theory focusing on human needs is McClelland's learned needs theory, which identifies the secondary needs of individuals that are learned and reinforced in human life (McClelland, 1962).

The following is a literature review of these three secondary needs (McClelland, 1962; McShane & Von Glinow, 2005; Bagraim, 2007):

- The need for achievement (*nAch*) refers to the individual's learned need to achieve challenging goals through his or her abilities.
- The need for affiliation (*nAff*). This refers to the individual's learned need for approval, to conform and meet others' expectations in order to avoid conflict.
- The need for power (*nPow*). This refers to the individuals' learned need to have control over the environment, which may include people or resources.

Bagraim (2007, p. 79) highlighted the fact that each of the needs that McClelland described is associated with different kinds of behaviours:

- Individuals with a high need for affiliation tend to focus their behaviours on building and maintaining positive relationships with others.
- Individuals with a high need for power focus their behaviour on trying to influence others and exert power over them.
- Individuals with a need for achievement focus their behaviour on setting challenging and attainable goals for themselves and they take responsibility for their own behaviour.

In terms of this theory, certain needs and motives experienced by employees are indicative of their energy and dynamism while at work, such as their need for achievement and power, their level of activity under pressure and the extent to which they are motivated by a competitive environment (Roos & Van Eeden, 2007).

Although McClelland's theory has the best research support, few organisations have been willing to invest time and resources in measuring McClelland's concepts because this is an expensive and time-consuming exercise (Bagraim, 2007; Roodt & Odendaal, 2009).

3.4.1.4 Herzberg's two-factor theory

Lastly, Herzberg's two-factor theory is another content theory of motivation. This theory is based on the principle that there are motivational factors that lead to employee's job satisfaction (Herzberg, 1968). Herzberg (1968) proposed the following intrinsic and extrinsic properties that influence employee motivation and satisfaction:

- Intrinsic properties are motivation factors such as achievement, recognition for achievement, the work itself, responsibility and growth or advancement.
- Extrinsic properties are environmental factors such as company policy and administration, supervision, interpersonal relationships, working conditions, salary, status and security.

Table 3.1: Employee satisfaction dimensions compared with Herzberg's two-factor theory (Townsend *et al.*, 2007, p.29)

Employee satisfaction dimensions	Herzberg's dimensions and factors
Supervision	Hygiene factor
My job	Motivating factor
Personal development	Motivating factor
Colleagues	Hygiene factor
Workplace	Hygiene factor
Policies and procedures	Hygiene factor
Communication	
Remuneration	
Transformation	Hygiene factor
Performance management	
Diversity	
Ethics	
Respect	
Commitment to customer service	

Intrinsic and extrinsic properties of motivation that relate to organisational processes and practices as factors of employee satisfaction. Hence Townsend, Sundelowitz and Stanz (2007, p. 29) used their employee satisfaction dimensions and Herzberg's two-factory theory to describe the link between motivation and employee satisfaction (see table 3.1 above). In other words, employee satisfaction dimensions can be described as hygienic or motivating factors according to this theory.

It is also evident in the literature that managers have the responsibility to ensure employee satisfaction. Based on this theory, managers are expected to do the following in their organisations (Bagraim, 2007; Roos & Van Eeden, 2007):

- They must eliminate factors in the work environment that cause job dissatisfaction, and in order to prevent job dissatisfaction hygiene factors must be maintained.
- They must emphasise the factors associated with the work itself such as promotional opportunities for personal growth, recognition, attaining a sense of achievement and responsibility.

Regarding the limitations of this theory, Roodt and Odendaal (2009, p. 147) indicate that the two-factor theory has not been well supported in literature for the following reasons:

- The procedure that Herzberg used is limited by its methodology.
- The reliability of Herzberg's methodology is questionable.
- No overall measure of employee satisfaction was used in his study.
- Herzberg assumes a relationship between satisfaction and productivity, but the research methodology he used focused on satisfaction only and not productivity.

3.4.2 Process theories

The process theories of motivation describe and analyse how people are motivated, focusing on how behaviour is aroused, directed and sustained (Bagraim, 2007; Aamodt 2010). The types of process theory are expectancy theory, goal-setting theory and reinforcement theory, which will be discussed in this section.

3.4.2.1 Expectancy theory

Vroom (1964) introduced the expectancy theory, which is currently an influential motivational theory in the field of organisational behaviour and human resource management.

Figure 3.2: Expectancy theory model (McShane & Von Glinow, 2005, p.148)

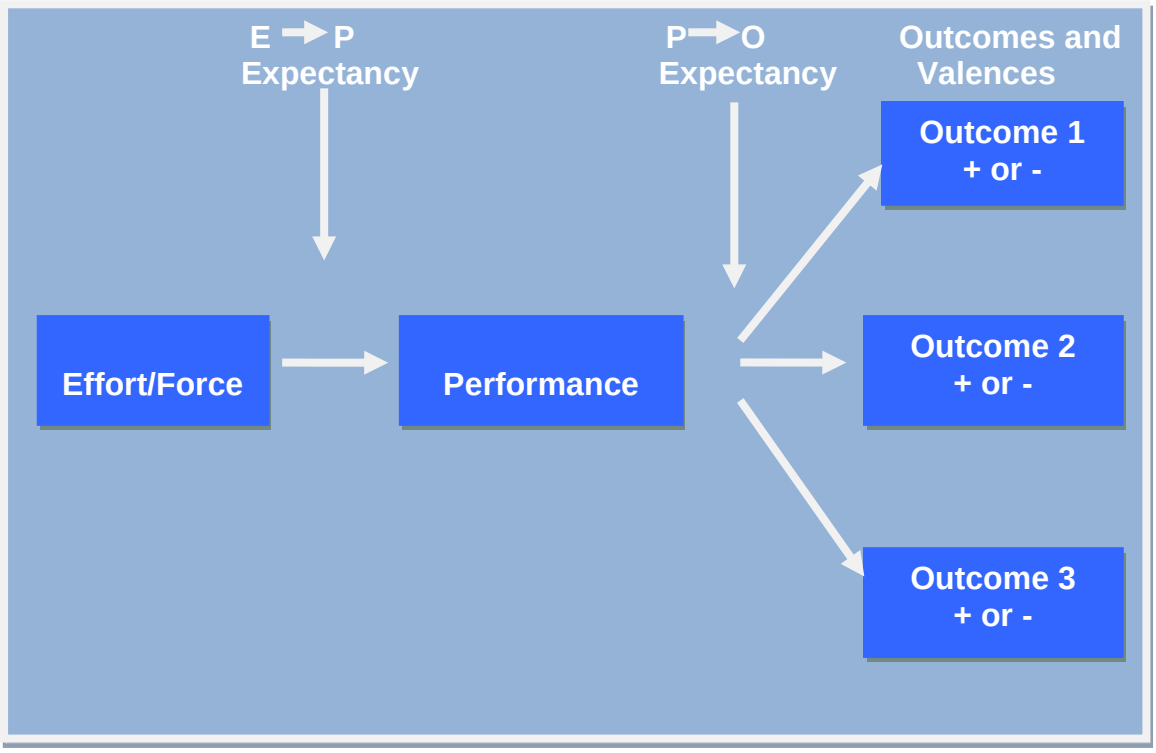


Figure 3.2 presents the model of the expectancy theory which is based on the following three expectations that determine the motivational force or effort of each person (Vroom, 1964; McShane & Von Glinow, 2005; Aamodt 2010):

- Expectancy (E) is the perceived relationship between the amount of effort an employee puts in and the resulting outcome.
- Instrumentality (I) involves the extent to which the outcome of an employee‘s performance, if noticed, results in a particular consequence.
- Valence (V) is the extent to which an employee values a particular consequence.

This theory provides clear guidelines for increasing employee motivation by altering the person’s expectancies in terms of effort to performance, performance to outcome and outcome valence (McShane & Von Glinow, 2005). In other words, employees are motivated when there is a degree of fulfilment or satisfaction of their expectations regarding efforts and rewards. Any perceptions of discontent or dissatisfaction of their expectations concerning performance and rewards may lead to lack of employee motivation.

Although the expectancy theory provides a theoretical explanation of employee motivation using statistical principles, the major criticism involves the component of equation, because when components are multiplied, a zero in any component results in prediction of zero motivation, even when ratings in the other components are high (Aamodt, 2010). Bagraim (2007, p. 90) also highlights the fact that this theory of motivation is actually highly complex and requires a sophisticated knowledge of decision-making theory and statistics.

3.4.2.2 Goal-setting theory

Locke and Latham (1984) developed the goal-setting theory based on the principle that employee behaviour is motivated by an employee’s internal intentions, objectives or goals. According to Spector (2006, p. 208), the goal-

setting theory “predicts that people will exert effort towards accomplishing their goals and that job performance is a function of the goals set”. Hence a goal is what an employee consciously wishes to achieve in terms of this theory (Locke & Latham, 1984; Spector, 2006).

The following factors are important in terms of the goal-setting theory to improve job performance and employee motivation (Locke & Latham, 1984; Locke & Henne, 1986; Spector, 2006):

- Employees must have goal acceptance, which implies that they accept their goals.
- Feedback is vital for employees to enable them to evaluate the direction of their behaviour towards their goals.
- Difficult and challenging goals motivate employees to perform better.
- Specific goals are more effective than vague goals because they allow employees to know when they have been met.

These factors suggest that the goal-setting process is an effective way to communicate with employees about performance issues and set specific, measurable, challenging, understandable and acceptable goals. Hence goal setting potentially improves employee performance in two ways - by stretching the intensity and persistence of an effort and by giving employees clearer role perception so that their effort is channelled towards behaviours that will improve work satisfaction and performance (McShane & Von Glinow 2005; Bagraim, 2007).

Critics of the goal-setting theory indicate that the theory works for simple jobs as opposed to complex ones. This limitation is based on the fact that this theory encourages game playing and it can be interpreted as another way of controlling employees by closely monitoring their performance (Spector, 2006; Bagraim, 2007).

3.4.2.3 Reinforcement theory

The reinforcement motivational theory is based on Skinner's operant conditioning principles (Skinner, 1953). The principle of this theory is that employees engage in behaviours that have positive outcomes and avoid those behaviours with negative outcomes (Skinner, 1953; Bagraim, 2007; Aamodt, 2010).

Based on Skinner's (1953, p. 73) operant conditioning process, the reinforcement theory of motivation entails the following:

- *Positive reinforcement*. A primary or secondary positive reinforcement is something which, when added to the situation by a certain response, increases the probability of the occurrence of that response. In terms of motivation, positive reinforcement may include salary increases for satisfactory performance.
- *Negative reinforcement*. Primary or secondary negative reinforcement is something which, when removed from the situation by a certain response, increases the probability of the occurrence of that response. Negative reinforcement includes negative feedback for poor performance.
- Punishment occurs when a response removes something positive from the situation or adds something negative. Employees may be denied bonuses for poor performance in order to motivate them to perform better.
- Extinction occurs when a response is no longer followed by reinforcement. This implies that a manager may decide to stop giving negative feedback to employees who are underperforming.

It is evident in the psychology literature that the reinforcement theory is popular in terms of behaviour modification in the clinical and counselling psychology context. The application of this theory in organisational psychology has also proven to be effective in understanding employee

behaviour in organisations (Möller, 1995; Meyer *et al.,* 1997; Bergh & Theron, 2009).

However, there are criticisms about the application of the reinforcement theory for employee motivation in organisations. Firstly, it is unethical to bribe employees to perform by rewarding them for satisfactory performance, and secondly, employees may become too dependent on external reinforcement to perform such as rewards for good performance (Bagraim, 2007; Aamodt, 2010).

3.4.2.4 Equity theory

Adams (1963) developed the equity theory of motivation, which is based on the principle that employees generally prefer a condition of equity in their relationship with their employers. According to Locke and Henne (1986, p, 10), "…equity theory as a value theory focused on one value equity or inequity". This refers to outcomes that are the rewards of personal value that an employee receives from working in an organisation. The outcomes therefore relate to inputs which are the employee's contributions to the organisation (Adams, 1963; Locke & Henne, 1986; Spector, 2006). In other words, this theory is based on the principle that employees compare ratios of outcomes to inputs.

According to Aamodt (2010, p. 356), "…the equity theory is based on the principles that employees' levels of motivation and satisfaction are related to how fairly they believe they are treated in comparison with others". This suggests that employees who find themselves in an inequity situation tend to be dissatisfied with their organisation (Adams, 1963; McShane & Von Glinow, 2005; Aamodt, 2010). Hence this theory provides explanations of how employees develop perceptions of fairness in the distribution and exchange of resources in the organisation.

Although the equity theory is able to explain employees' perceptions of equity and inequity, McShane and Von Glinow (2005, p. 161) mention the following limitations:

- The theory is not sufficiently specific to predict employee motivation and behaviour. This implies that it does not indicate which inputs or outcomes are valuable.
- It incorrectly assumes that employees are individualistic, rational and selfish, but employees are social creatures who define themselves as members of various groups.
- Recent studies have found that equity theory accounts for only some of the employees' feelings of fairness or justice in the organisation.

The above discussion of content and process theories of motivation provides the theoretical basis for explaining employee satisfaction. The next section explores the theoretical models of employee satisfaction in relation to the relevant theories of motivation.

3.5 EMPLOYEE SATISFACTION MODELS

Various models of employee satisfaction are identified in the literature on organisational behaviour, and each theory involves a different depiction of employee satisfaction as a construct.

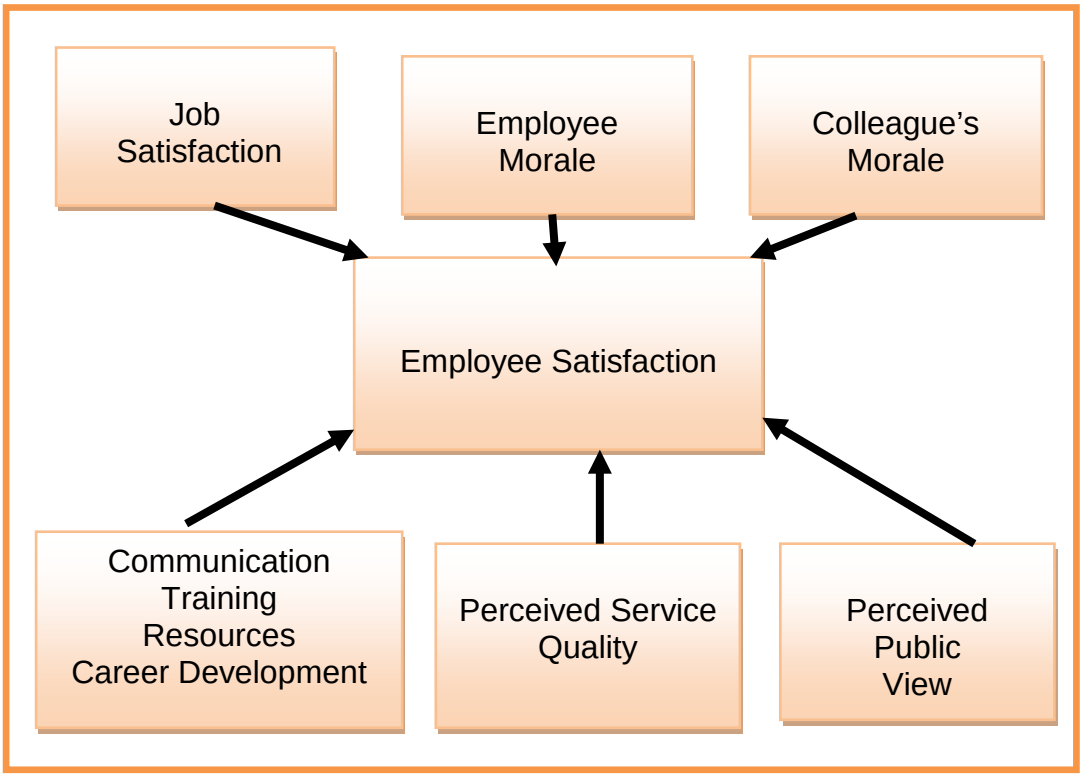
This section focuses on the employee satisfaction model of Fosam *et al.* (1998), the causal model of employee satisfaction (Eskildsen & Dalhgaard, 2000), Kano's model in the context of employee satisfaction (Maltzer, Fuchs, & Schubert, 2004) and the employee satisfaction model for higher education (Chen *et al.*, 2006):

3.5.1 The employee satisfaction model

Fosam *et al.* (1998) developed an employee satisfaction model based on a research study conducted in police organisations. According to Fosam *et al.* (1998, p. 236), "…employee satisfaction is regarded as a pleasurable feeling

resulting from the employee's job experience and loyalty". This model is one of the initial models of employee satisfaction.

Figure 3.3: The employee satisfaction model (Fosam *et al.,* 1998, p. 238)



In terms of figure 3.3 above, employee satisfaction is a patent construct driving or being driven by these manifest variables, namely job satisfaction, employee morale, perceived service quality, perceived public view, communication, training, resources and career development (Fosam *et al*., 1998). In other words, the construct itself is influenced by employee perceptions of quality of service and customer satisfaction, and a component structure underlying the large number of correlated opinion measures of communication and training levels, resourcing adequacy and career development procedures.

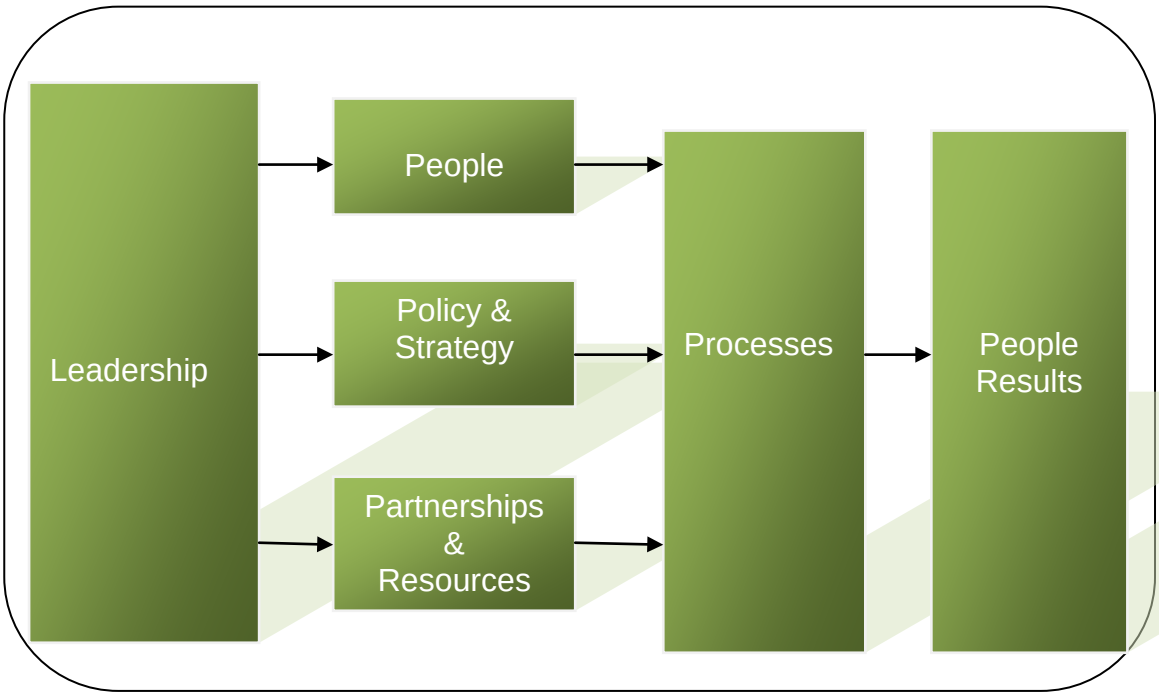
This model provides an indication of employee satisfaction dimensions that can be used to assess this construct. However, its main limitation is that these dimensions are defined only on the basis of police organisations. In the

literature there is lack of evidence of validation studies conducted to determine the application of this model to other work contexts.

3.5.2 The causal model of employee satisfaction

The causal model of employee satisfaction depicted in figure 3.4 is based on the principle that there are five enabling dimensions to improve employee satisfaction. According to Eskilden and Dahlgaard (2000, p. 1082), this model or framework "…focus[es] on identifying the causal relationships that create satisfied employees". This implies that an organisation can cause its employees to be satisfied or dissatisfied in the organisation.

Figure 3.4: The causal model of employee satisfaction (Eskilden & Dahlgaard, 2000, p. 1088)



Eskilden and Dahlgaard (2000, p. 1084) suggest the following five enabler criteria as dimensions that can be used in organisations to improve employee satisfaction:

- *Leadership.* It is a process in which an individual influences a group of individuals to achieve a common goal. It entails leadership for employee involvement and total quality.

- *Policy and strategy.* It is the criterion in which management sets the agenda for the organisation's future behaviour. This refers to organisational planning process, information gathering and analysis.
- *People.* This entails human resource policies, individual goals and competencies.
- *Partnerships and resources.* This criterion includes general resource policies, objectives and standards. The criterion partnerships and resources include areas such as how the organisation identifies and evaluates alternative and emerging technologies and how it harnesses technology in support of improvements.
- *Processes.* This criterion includes quality assurance, benchmarking and Kaizen.

The above dimensions are interrelated and interdependent. In other words, leadership as a dimension plays a key role in influencing other dimensions such as policy and strategy, people and partnerships and resources. This implies that these dimensions influence processes that have an impact on people results such as employee satisfaction and activities. The key limitation of this model is similar to that of Fosam *et al.*'s (1998) employee satisfaction model. This model was also developed using only one organisation - hence the need for more studies to validate the causal model for employee satisfaction for general applicability (Eskilden & Dahlgaard, 2000).

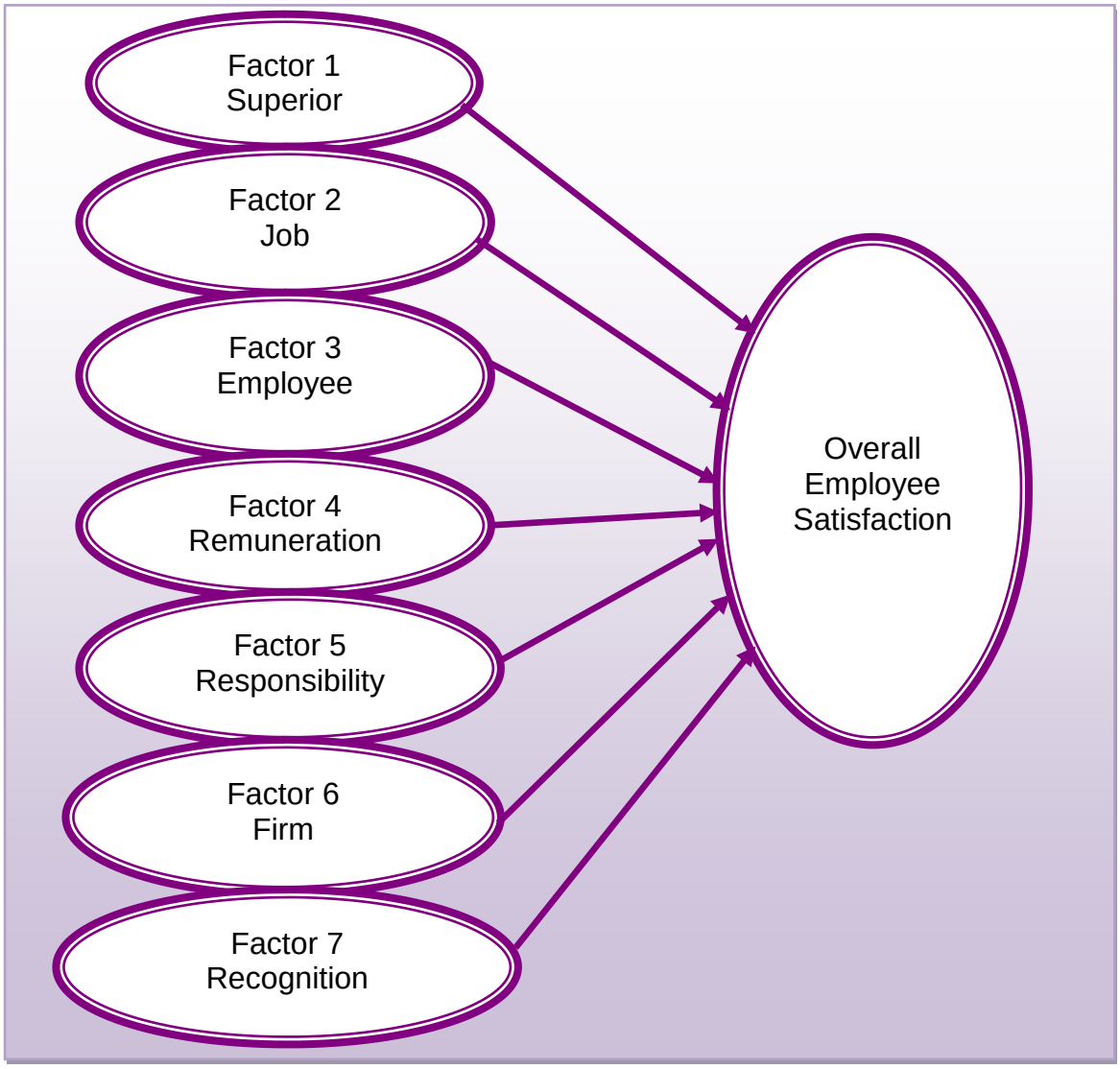
3.5.3 Kano's model in the context of employee satisfaction

Maltzer *et al.* (2004) used Kano's model of customer satisfaction to understand the drivers of employee satisfaction. The main purpose of the study was to determine dimensions in the organisation that lead to employee satisfaction.

In addition, this model is used to categorise the main determinants of employee satisfaction according to its underlying features, namely either a basic, performance or excitement factor (Maltzer *et al.*, 2004). Figure 3.5

depicts Kano's model in the context of employee satisfaction and also indicates the different dimensions in order of importance.

Figure 3.5: Kano's model in the context of employee satisfaction (Maltzer *et al*., 2004, p. 1188)



In terms of this model, there are three categories of factors that have a different impact on the formation of employee satisfaction (Maltzer *et al.* 2004, p. 1183):

- *Basic factors (dissatisfiers).* This category refers to minimum requirements that cause dissatisfaction if they are not fulfilled, but they do not result in employee satisfaction if they are fulfilled or exceeded.

The fulfilment of basic requirements is a necessary but not sufficient condition for satisfaction.

- *Excitement factors (satisfiers).* These include the factors that increase employee satisfaction if they are delivered, but do not cause dissatisfaction if they are not delivered. Excitement factors surprise the employee and generate joy.
- *Performance factors.* These are factors that lead to satisfaction if performance is high and to dissatisfaction if performance is low.

According to Maltzer *et al.* (2004, p. 1195), the following are the positive implications of applying this model of employee satisfaction in organisations:

(1) The importance of job factors or attributes is a function of satisfaction. Managers need to know that a change in satisfaction with a factor may be associated with a change of its importance to employees.
(2) Satisfaction with a job-related factor depends on the expectations employees have. This model is characterised by its strong dynamic nature, which means that excitement factors will become performance and basic factors in the future as employees become accustomed to them and are inclined to expect them.
(3) Job factors rated high in satisfaction but low in importance indicate a possible overstatement. This implies that resources committed to these factors should be used to improve job factors that are high in importance and low in satisfaction.

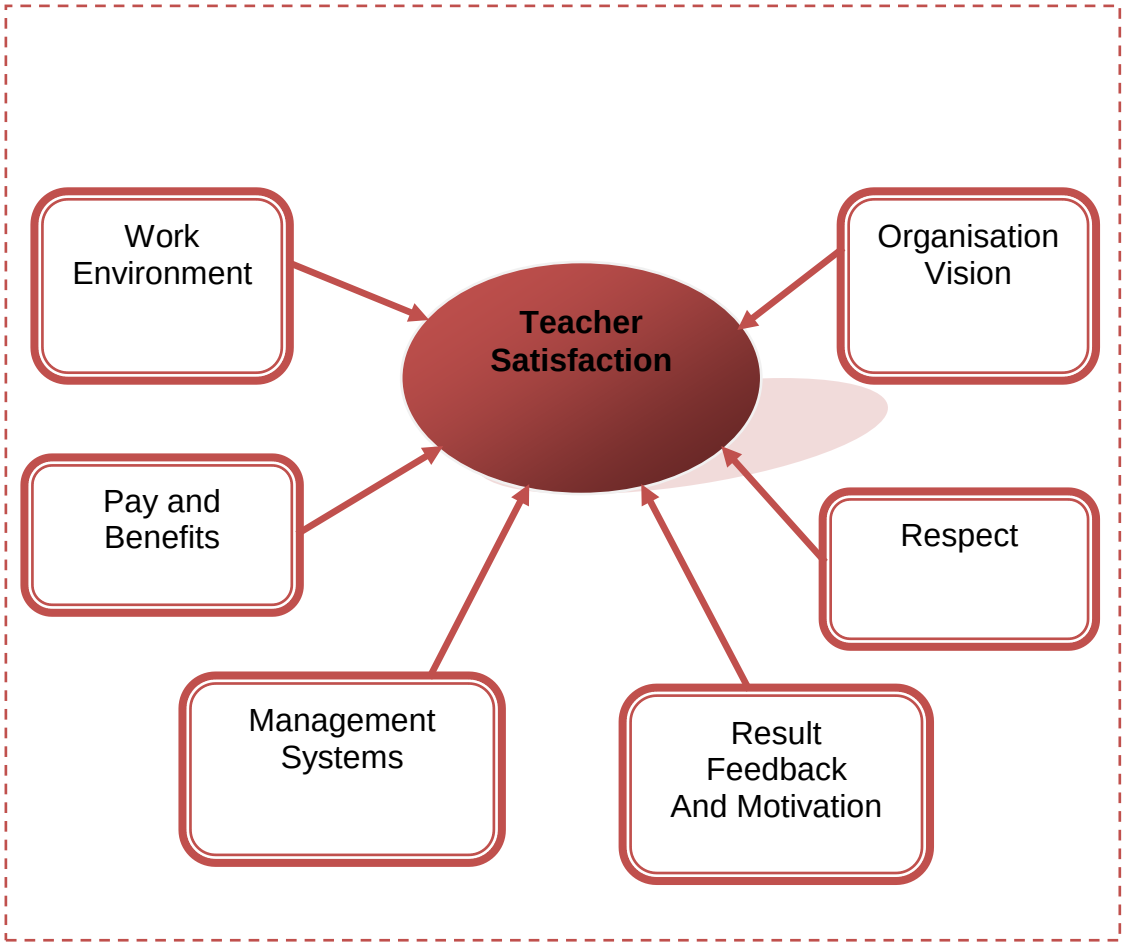
Nonetheless, the challenge in using this model is that factors of employee satisfaction in organisations cannot be classified as basic, performance and excitement factors (Maltzer *et al.,* 2004). This implies that the classifications depend on situational factors of the specific organisation, especially employees' expectations, job market, characteristics and other business dynamics.

3.5.4 The employee satisfaction model for higher education

Chen *et al.* (2006) developed an employee satisfaction model for higher education as depicted in figure 3.6. This model is similar to the previously discussed models, but is also industry specific. It was developed for application in the higher education environment.

However, Chen *et al.* (2006, p 493) highlight the fact that "…to establish an employee satisfaction model for the higher education sectors this study applied the employee satisfaction model designed by Fosam *et al.* (1998), the needs theory of Maslow *et al.* (1998) and the two-factor theory of Herzberg (1966)".

Figure 3.6: The employee satisfaction model for the higher education sector (Chen *et al.*, 2006, p. 492)



In terms of this model, the relevant dimensions to determine employee satisfaction in a higher education are organisational vision, respect, result feedback and motivation, management system, pay and benefits and work environment (Chen *et al.*, 2006).

The main premise of this model is that the satisfaction of higher education employees has many different contributory factors. The dimensions of the model focus on the requirements of employees in the higher education environment only. In other words, employee satisfaction includes qualities and attributes that are necessary to conduct employee satisfaction analysis. The importance of requirements represents the level of significance of the quality attributes for teachers, while the satisfaction of quality attributes refers to the fulfilment of teachers' requirements. This implies that the study of employee satisfaction for higher education teachers should focus on the quality attributes in order of importance and satisfaction (Chen *et al.,* 2006).

In contrast to Chen *et al.*'s (2006) model, Küskü (2001) points out that the factors that lead to employee satisfaction in higher education are different from the factors in a tertiary institution. While Chen *et al.* (2006) focused on teachers; Küskü (2001) explored the needs of academics.

Although there is no graphic representation of Küskü's (2001) dimension in the literature, he identified the following as dimensions of employee satisfaction in an academic environment:

- *General satisfaction*. This dimension is aimed at shaping general employee satisfaction level, using items that would include their organisational loyalty.
- *Management satisfaction*. This dimension includes university and faculty management satisfaction. The purpose is to identify the effect of the top administration both of the university (the rectorate) and of the faculties on general satisfaction.
- *Colleague (other academic or administrative staff) satisfaction*. This is a dimension aimed at determining the ideas, opinions and attitudes of

the staff concerning their colleagues in the same group, doing the same kind of work.

- *Other working group satisfaction*. This dimension is aimed at determining the satisfaction that the academic employee derives from the administrative staff (clerks and service personnel), and the satisfaction that the administrative employee derives from the academic staff.
- *Job satisfaction*. This dimension is aimed at identifying the satisfaction the employee derives from his or her responsibilities and duties in the organisation.
- *Work environment (organisational conditions) satisfaction*. This dimension is used to determine the level of satisfaction employees experience as a result of various aspects of the physical environment – work environment, toilets, laboratories, libraries, canteens – in the institution.
- *Salary satisfaction*. This dimension measures the employees' opinions about salary and other benefits.

Overall, a critical view of the above different models of employee is that each model is organisation and industry specific. There seems to lack a universal or generic model for assessing employee satisfaction across various organisations. Hence the literature shows that some of these models have unique employee satisfaction dimensions which are not found in other models, namely perceived service quality and perceived public view (Fosam *et al.*, 1998); results and partnerships (Eskildsen & Dahlgaard, 2000); employee's responsibility to make indepdent decisions and firm-specific factors (Maltzer *et al.*, 2004); and respect (Chen *et al.*, 2006).

Nevertheless, there are certain common factors identified as employee satisfaction dimensions in these models, namely organisational leadership, vision or strategy; policies on communication, training, resources and career development; salary and employee benefits; job satisfaction; work environment; employee motivation; and performance management (Fosam *et*

al., 1998; Eskildsen & Dahlgaard, 2000; Küskü, 2001; Maltzer *et al.*, 2004; Chen *et al.*, 2006).

It is evident that there are more common factors than unique factors identified as dimensions of employee satisfaction. It is therefore possible to use the common factors as the basis for formulating an employee satisfaction model that can be applicable across various organisations, industries and professional fields.

3.6 BENEFITS OF EMPLOYEE SATISFACTION

Employee satisfaction contributes significantly to an organisation's success. According to Maltzer *et al.* (2004, p. 1179), "…in modern management theory, employee satisfaction is considered one of the most important drivers of quality, customer satisfaction and productivity".

Research indicates that the benefits of employee satisfaction are employee retention, customer satisfaction, improved productivity and quality, employee health and wellbeing and life satisfaction (Maltzer *et al*., 2004; Rad & Yarmohammadian, 2006; Spector, 2006; Varkey *et al.*, 2008).

This section explores the positive effects or benefits of employee satisfaction.

3.6.1 Employee retention

Research studies on employee satisfaction indicate that satisfied employees are committed to their organisations (Rad & Yarmohammadian, 2006; Varkey *et al.,* 2008). Hence employee satisfaction is considered a critical factor in retaining and attracting well-qualified personnel. Voisard (2008) also argues that employees who are satisfied have higher intentions of staying in an organisation and are able to recommend their organisation to others.

According to Spector (2006, p. 235), “studies have shown that dissatisfied employees are more likely than satisfied employee to quit their jobs”. This implies that satisfied employees are less likely to leave their jobs with the result that the organisation is characterised by more experienced employees with better skills to serve its clients and customers. Any organisation that increases employee satisfaction therefore reduces employee turnover, which is crucial for quality-oriented organisations (O’Neil, 2005; McShane & Von Glinow, 2005).

3.6.2 Customer satisfaction

Employee satisfaction is vital because it determines the success or failure of what the customer experiences. Research studies have confirmed that there is a clear reciprocal relationship between employee satisfaction and customer satisfaction (Comm & Mathaisel, 2000; Chen *et al.,* 2006; Voisard, 2008). This suggests that the internal customers of an organisation are its employees, and it is only when employees are satisfied that they will be able to meet customer needs through their performance.

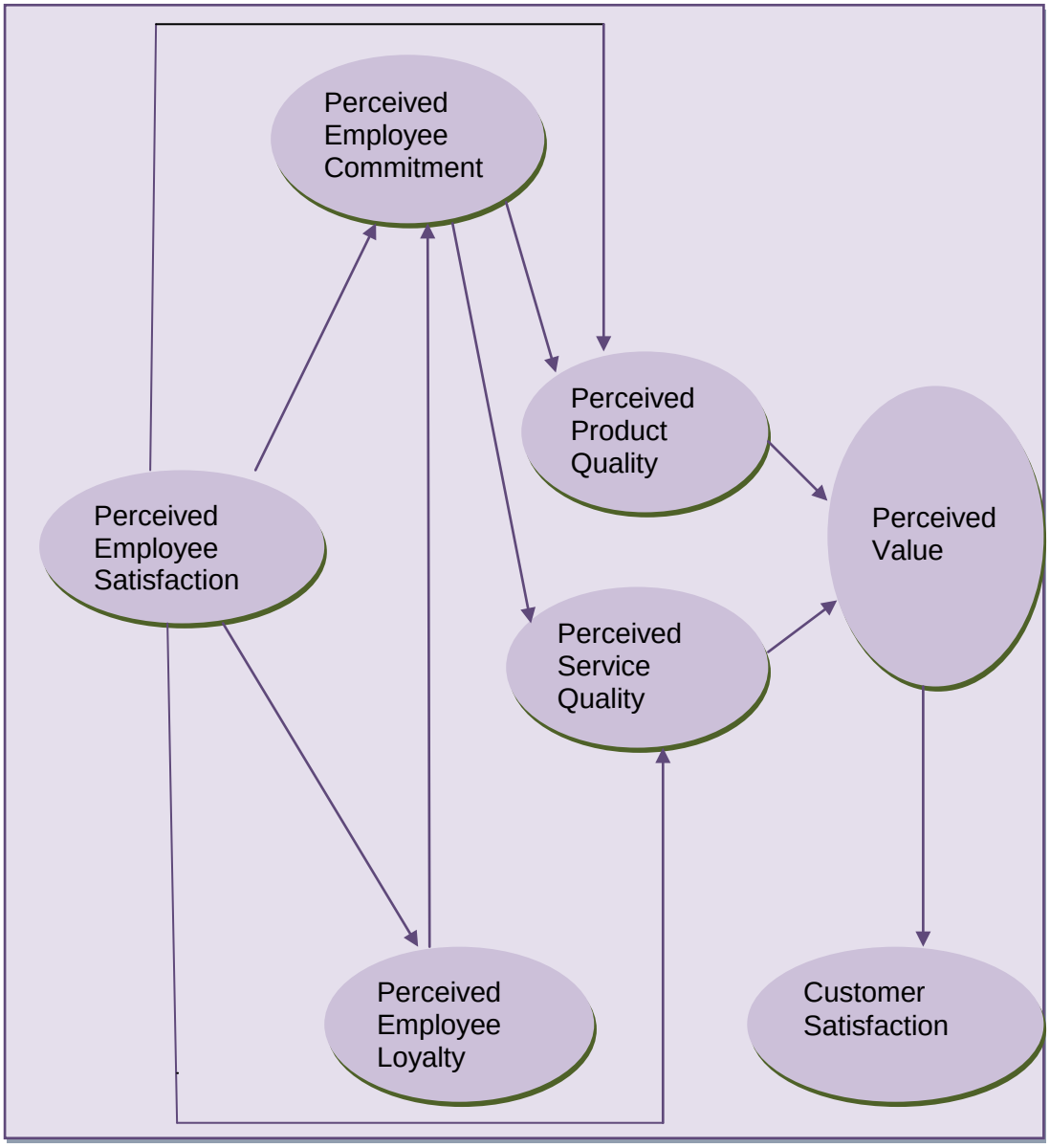
Voisard (2008, p. 48) identifies the following effects of employee satisfaction on customer service and satisfaction:

- Employee satisfaction is an important factor in determining service quality.
- Satisfied employees are more committed to continuous improvement and quality.
- They are also more committed to delivering quality service.
- The higher the degree of employee satisfaction, the greater the chance is of customer satisfaction and customer retention.

Furthermore, a study conducted by Vilares and Coelho (2000, p. 1705) found that perceived employee satisfaction, perceived employee loyalty and perceived employee commitment have an impact on perceived product quality

and on perceived service quality. These findings are indicated in figure 3.7, which depicts the employee and customer satisfaction model.

Figure 3.7: The employee and customer satisfaction model (Vilares & Coelho, 2000, p. 1706)



This model emphasises the fact that employee variables such as employee satisfaction, commitment and loyalty influence a customer's perception of the value of the product and service, which in turn influences customer satisfaction (Vilares & Coehlo, 2000).

Employee satisfaction does not only affect employee commitment and employee loyalty, but also has a critical twofold impact, direct or indirect, on customer satisfaction-related variables.

According to Bulgarella (2005, p. 3), the literature offers several explanations for why employee satisfaction affects customer satisfaction:

- Employees who interact with customers are in a position to develop awareness of and respond to customer goals and needs.
- Satisfied employees are motivated employees - that is, they have the motivational resources to deliver adequate effort and care to customers.
- Satisfied employees are empowered employees - in other words, they have the resources, training and responsibilities to understand and meet customer needs and demands.
- Satisfied employees have high energy and willingness to render satisfactory service. At the very least, they can reflect a more positive perception of the service or product provided.
- Satisfied employees can provide customers with interpersonal sensibility and social account such as adequate explanations for undesirable outcomes. It has been suggested that these components of interactional justice in terms of the quality of interpersonal treatment provided in a negotiation or exchange have a significant impact on customer satisfaction. According to this view, because satisfied employees experience interactional justice, they can deliver it - in other words, satisfied employees have enough emotional resources to show empathy, understanding, respect and concern for others.

In a nutshell, employees who are socially accountable, motivated, energetic and empowered are likely to be satisfied and they will be capable of rendering quality customer service. Their organisation will therefore be able to retain fulfilled customers.

3.6.3 Enhanced performance

Enhanced performance is also one the benefits of employee satisfaction. The literature suggests that satisfied employees tend to be more productive and employees who feel secure in their jobs are more productive than those who are insecure (Spector, 2003; Varkey *et al.*, 2008; Vlosky & Aguillar, 2009).

Voisard, (2008, p. 48) identified the following as the effects of employee satisfaction on improved performance:

- Satisfied employees are more likely to improve their job performance, to be creative and cooperate with others because satisfaction is the inner force that drives employee behaviour.
- Satisfied employees are highly motivated, have good morale at work and work more effectively and efficiently.

While employee satisfaction can influence performance positively, employee dissatisfaction can have an adverse effect on performance because of lack of motivation, conflict, turnover and absenteeism (Varkey *et al.*, 2008). This, in turn, is likely to compromise organisational effectiveness because of poor performance.

3.6.4 Improved quality

A research study by Maltzer *et al.* (2004, p. 1179) found that satisfied employees "…are more committed to continuous improvement and quality". This means that employee satisfaction directly influences process quality. According to Eskilden and Dahlgaard (2000, p. 1082), "…without satisfied and motivated employees it is impossible to produce world-class products".

The results of a study conducted with health-care employees established that employees with higher job satisfaction provide higher-quality patient care and have greater numbers of satisfied patients (Varkey *et al.*, 2008).

Employee satisfaction is also regarded as being strongly related to significant employee and organisational outcomes such as improved quality (Vilares & Coelho, 2000; Spector, 2003).

3.6.5 Employee health and wellbeing

The other positive benefit of employee satisfaction that was identified is employee health and wellbeing. George and Jones (2008, p. 84) concluded that studies on employee satisfaction are strongly related to the fact that employee satisfaction has the potential "…to affect a wide range of behaviors in organisations and contribute to employees' levels of well-being". It is only when organisations view employees as the primary source of their competitive advantage that they will show concern for total employee wellbeing (Bulgarella, 2005).

In terms of the labour laws in their countries, organisations are expected to initiate and implement health promotion programmes and interventions. Most organisations have thus established various interventions at individual, group and organisational level in order to offer counselling, training and prevention programmes aimed at addressing health problems (Bergh & Theron, 2006). Employee dissatisfaction relates to work dysfunctions such as anxiety disorder, stress and depression, which are major causal factors of chronic physical illnesses (Spector, 2006). It is therefore crucial to ensure employee satisfaction in the organisation, since it is beneficial for wellbeing and psychological health at work.

3.6.6 Life satisfaction

Life satisfaction refers to how satisfied a person is with his or her life circumstances (Spector, 2006). Spector (2006, p. 236) formulated the following three hypotheses on the relationship between employee and life satisfaction:

- The *spillover hypothesis* suggests that satisfaction or dissatisfaction in one area of life affects or spills over to another. This predicts a positive

correlation that satisfaction at work leads to satisfaction in other areas of life.

- The *compensation hypothesis* suggests that dissatisfaction in one area of life will be compensated for in another area. This predicts a negative correlation that dissatisfaction in one area leads to dissatisfaction in other areas of life.
- The *segmentation hypothesis* suggests that employees compartmentalise their lives and that satisfaction in one life area has no relation to satisfaction in another. This predicts no correlation because employees are satisfied with some of their different areas of life that are separate.

While the above hypotheses present contradictory predictions, it is argued that studies conducted on the relationship between life satisfaction and employee satisfaction mostly confirm the spillover hypothesis (Spector, 2006). This implies that employee satisfaction has a positive influence on individuals' satisfaction with their lives. Hence dissatisfied employee may be considered to lack fulfilment in their lives.

3.7 ANTECEDENT FACTORS INFLUENCING EMPLOYEE SATISFACTION

An analysis of the literature reveals two categories of antecedent factors of employee satisfaction, namely individual and organisational factors. The subsections below explain these two antecedent factors of employee satisfaction.

3.7.1 Individual antecedent factors

Various research studies have identified personality, biographical and person-job fit as antecedent factors of employee satisfaction at individual level.

3.7.1.1 Personality

Personality variables such as genetic predispositions, external locus of control, affectivity, emotional stability and extroversion have been positively linked to employee satisfaction. According to Aamodt (2010, p. 369), " …people prone to be satisfied with their jobs and with life in general have high self-esteem and a feeling of being competent, are emotionally stable, and believe that they have control over their lives".

A study conducted by Strydom and Roodt (2006) indicates that personality variables such as emotional stability are predictors of job satisfaction not biographical variables. Spector (2006, p. 229) also indicates that individuals with high negative emotions are likely to be "…dissatisfied because they tend to view all aspects of their world in a negative way". It was also found that a person high on the extroversion personality trait is more likely to have a higher level of job satisfaction compared with an employee who is low on the same trait (George & Jones, 2008; Aamodt, 2010).

This implies that employees with a tendency towards positive emotions will be more satisfied with their jobs than those with negative emotions.

3.7.1.2 Biographical factors

Several studies have been conducted to determine the relationships between employee satisfaction and biographical factors such as age, gender, job level and race.

In terms of gender, Spector (2006, p. 231) states that "…most studies conducted to compare men and women in their global job satisfaction have

found few differences". Oshagbemi (2003, p. 1214) highlights the fact that "…some studies have found women to be more satisfied than men, while others have found men to be more satisfied than women". Generally, it is evident that the results of the studies relating to the relationship between employee satisfaction and gender were found to be contradictory, with different findings.

Job level is another biographical factor that refers to an individual's status in an organisation and indicates an employee's job rank or job seniority in a particular occupational classification (Bowen, Cattell, & Michell, 2008). Evidence in the literature seems to suggest that job level is a reliable predictor of job satisfaction, with workers at higher ranks being generally more satisfied with their jobs compared to workers at lower ranks (Oshagbemi, 2003; Spector, 2006; Bowen *et al.*, 2008).

With regard to age, studies have shown that older employees are more satisfied with their jobs than younger employees (Spector, 2006; George & Jones, 2008). These differences are attributed to older employees' better adjustment to work through experience, and the fact that older employees are less interested in task variety (Spector, 2006). According to Oshagbemi (2003, p. 1214), there appears to be extensive evidence of a relationship between age and employee satisfaction - "…however, the nature of this relationship, whether linear or curvilinear, remains unsettled".

In terms of the relationship between race and employee satisfaction, the literature reports fairly mixed findings (Oshagbemi, 2003; Friday & Friday, 2003; Spector, 2006). However, according to Friday and Friday (2003, p. 430, "…some studies have found that black employees reported higher levels of satisfaction than white employees; and there are studies in which white employees reported higher levels of satisfaction than black employees".

It is thus evident that the research studies are inconclusive about biographical factors as antecedent factors of employee satisfaction.

3.7.1.3 Person-job fit

Person-job fit refers to how well employees' values, interest, personality, lifestyle and skills match those of their career, organisations, colleagues and supervisors (Aamodt, 2010; Bergh & Theron, 2006). It is therefore assumed that employees with a good job-fit are generally motivated and satisfied in their organisations.

According to Spector (2006, p. 232), "the person-job fit approach theory states that job satisfaction will occur when there is a good match between the person and the job". This suggests that any misfit between the individual employee and his or her job may lead to employee dissatisfaction.

3.7.2 Organisational antecedent factors

The organisational antecedent factors discovered through numerous research studies of employee satisfaction include job characteristics, rewards, leadership, career growth and challenge, colleagues, supervisors and organisational justice.

3.7.2.1 Job characteristics

The job characteristic approach indicates that features of a job induce psychological states that lead to satisfaction (Hackman & Oldham, 1976; Spector, 2006). These job characteristics are described as the content and nature of the job tasks.

Hackman and Oldham (1976, p.252) mention the following five job characteristics that are related to employee satisfaction:

- *skill variety* - the number of different skills necessary to do a job
- *task identity* - whether or not an employee does an entire job or part of a job
- *task significance* - the impact a job has on other people

- *autonomy* - employees' freedom to do their jobs as they see fit
- *task feedback* - the extent to which it is obvious to employees that they are doing their jobs correctly

The above five core characteristics define the scope or complexity and challenge of a job. This implies that a high scope leads to satisfaction, whereas a low scope leads to boredom and dissatisfaction. These job characteristics are considered crucial in order to enhance employee satisfaction and they are relevant since they all influence the way employees feel about their jobs (Spector, 2006; Voisard, 2008; Aamodt, 2010).

3.7.2.2 Reward systems

Organisational rewards such as salary, employee benefits and performance measures are considered to be the primary source of employee satisfaction. Mottaz (1987) contends that the relative importance of the various rewards for determining employee satisfaction depends on the individual's work values, which refer to what the employee wants, desires or seeks to attain from his or her work and organisation.

Employee satisfaction relates to job expectations regarding remuneration and employee benefits that are equitable (Mottaz, 1987; Vlosky & Aguillar, 2009). It is there evident that an employee's evaluation or appraisal of the work environment is generally considered to be a function of work-related rewards and values. In terms of equitable rewards, employees want pay systems and policies that they perceive as just, unambiguous and in line with their expectations (Milner 2009, p. 83). This implies that the greater the perceived congruence between rewards, performance and work values, the greater the employee satisfaction. Hence employees who perceive huge discrepancies are inclined to be dissatisfied with their work and organisation.

Performance measures such as performance management systems and grading systems are applied in most organisations today, and they play a key role in influencing employees' performance and drive. These systems are used to establish standards, define expectations and track accomplishments. They are also used to motivate employees to implement, plan and achieve specific strategic or operational goals (Milner 2009; Vlosky & Aguillar, 2009). Hence employee satisfaction involves the perceived likelihood of a successful accomplishment, which will result in securing certain outcomes or rewards.

3.7.2.3 Leadership

Generally, leaders in the organisation are expected to create supportive working conditions for all their employees. A study conducted on health-care employees indicated that employee satisfaction is reported to be more closely related to leadership practices, as opposed to issues relating to salaries, benefits and physical environment (Varkey *et al.*, 2008). These leadership practices include the way organisational leadership is able to communicate, reward, provide direction and demonstrate concern for employees (Griffin & Bateman, 1986; Milner, 2009).

Aydin and Ceylan (2009, p. 165) found that employee satisfaction has positive significant correlations with organisational leadership. Employees need to know that the leaders in their organisations are providing a safe and personally comfortable work environment to enable employees to perform well.

3.7.2.4 Career growth and challenge

Employee satisfaction is affected by opportunities for career challenge and growth in organisations. According to Milner (2009, p. 83), "employees prefer jobs that give them mentally challenging work and the opportunity to use their skills, abilities and offer them a variety of tasks, freedom, and feedback on how well they are performing". These opportunities are possible when commonly used methods such as job rotation, enlargement and enrichment

are applied in order to give employees prospects for career growth and challenge in organisations (Vlosky & Aguillar, 2009; Aamodt, 2010).

Another career related challenge is the impact of HIV/AIDs discussed in chapter 2 as one of the environmental factors affecting transformation in organisations. A study conducted by Bodilenyane (2012) on the perceived impact of HIV/AIDs amongst nurses in Botswana indicates that it has a negative effect on job satisfaction. HIV/AIDs is also a pandemic in South Africa, hence organisations are supposed to develop programmes and policies to address HIV/AIDs, using reactive and proactive interventions. Organisations play an important role in being part of the solution to this pandemic rather than be passive on the effect of ill health on their employees' career growth and development (Matlala; 1999; Meyer & Botha, 2000). It is therefore possible that employees are likely to be satisfied when they perceive the positive impact of implementing organisational programmes and policies to enhance their individual wellbeing.

Challenging tasks pressurise individuals to prove their competence to produce top-quality work and contribute to organisational goals, which ultimately results in job satisfaction.

3.7.2.5 Colleagues and supervisors

The literature reports that employees who enjoy working with their supervisors and colleagues tend to be more satisfied with their jobs (Varkey *et al.*, 2008; Vlosky & Aguillar, 2009; Aamodt, 2010). According to Milner (2009, p. 83), "…for most people work fulfills the need for social interaction, having friendly and supportive co-workers leads to increased satisfaction".

Aamodt (2010, p. 373) also indicated that "…satisfaction with supervisors and coworkers is related organisational and team commitment, which in turn result in higher productivity, lower intent to leave the organisation and a greater willingness to help". Supervisors' feedback on employee performance also relates positively to employee satisfaction and influences future performance.

3.7.2.6 Organisational justice

Organisational justice includes distributive, procedural and interactional justice. Aamodt (2010, p. 375) views "…distributive justice as the perceived fairness of the actual decision made in the organisation, procedural justice is the perceived fairness of the methods used to arrive at the decision and interactional justice is the perceived fairness of the interpersonal treatment employees receive". Perceptions of organisational justice are vital determinants of employee satisfaction.

Employee satisfaction is the extent to which employees perceive that they are being fairly treated (Aydin & Ceylan, 2008; Aamodt, 2010). Organisations are therefore expected to meet or fulfil these employee expectations and needs for fairness in order to achieve high levels of employee satisfaction.

3.8 DEVELOPING EMPLOYEE SATISFACTION

An organisation's success depends on its ability to continuously nourish the satisfaction of its employees. Varkey *et al. (*2008) argue that organisations and employers that do not address issues influencing employee satisfaction negatively have difficulty attracting prospective employees, retaining current employees and experiencing higher rates of absenteeism.

While employers are expected to enhance employee satisfaction, employees also have a role to play in ensuring that they are satisfied in their organisation. Vlosky and Aguillar (2009) suggest that in order to improve employee satisfaction, employees are also responsible for maximising their satisfaction in the organisation as follows:

- Employees need to participate in the goal-setting process to ensure that their duties are challenging. This leads to satisfaction.
- They should also be self-motivated and perform their assigned duties to the levels established during the goal-setting process.

- Finally, they must be willing to accept constructive criticism during performance reviews, which will enable them to increase their level of instrumentality in the organisation.

Managers as organisational leadership also need to actively engage in the above processes aimed at improving employee satisfaction. This is generally dependent on the introduction of managerial accountability for people management (Bulgarella, 2005). Furthermore, Martins and Coetzee (2007, p. 30) indicate that management needs to pay attention to the following issues that influence employees' satisfaction:

- the effectiveness of communications about company performance and the employees' contribution to this
- employees' satisfaction and feelings of being treated fairly during performance management and reward processes
- pay and benefits, a sense of job security and career advancement opportunities
- involvement in decisions affecting the job or work
- positive and supportive relations with managers
- levels of job satisfaction stemming from the degree of influence an employee feels he or she has over the job
- work-life balance
- the amount of respect gained and a sense of achievement in doing the job

Another factor identified recently as being necessary to build and enhance employee satisfaction is employee engagement or empowerment. A study conducted by Voisard (2008) found that employee empowerment has a positive effect on employee satisfaction and also has a more relevant effect on employee satisfaction over other employment variables such as salary and employee benefits. It is therefore critical to develop meaningful employee involvement and effective communication channels in the organisation (Bulgarella, 2005; Bagraim, 2007).

Voisard (2008, p.7) defines employee empowerment as "…the employee's perception or beliefs of enhanced involvement in organizational processes and decision making". Employee empowerment initiatives that positively lead to employee satisfaction include the following (Voisard, 2008, p. 15):

- allowing staff to make decisions necessary for effectively accomplishing routine and nonroutine day-to-day duties and responsibilities
- encouraging staff to suggest and implement new and better ways for improving the organisation
- affording staff the opportunity to influence the way the department's goals are achieved
- inviting staff to participate in teams or committees that influence decisions

It is evident that both employees and employers play a key role in developing employee satisfaction in the organisation. It is thus essential for both to be aware of their responsibilities and opportunities in order to engage effectively in this process.

3.9 EMPLOYEE SATISFACTION DIAGNOSIS

Organisations can only improve or promote employee satisfaction once they have conducted a diagnosis or assessment in the organisation. Employee satisfaction surveys in the form of questionnaires are commonly used to diagnose or measure employee satisfaction in organisations. Chen *et al.* (2006, p. 485) confirm that "the most commonly used methods for employee satisfaction surveys are to examine the thoughts and satisfaction of subjects via questionnaires; the dimensions of the questionnaires are used to explain the determinants".

Measuring employee satisfaction in the organisation is critical to its success and increases the organisation's profitability by creating a competitive advantage (Aydin & Ceylan, 2008; Bowen *et al.*, 2008). An employee

satisfaction survey is a source of valuable management information to drive initiatives for change that improve organisational performance, efficiency and customer satisfaction (Lusty, 2007). Chen *et al.* (2006, p 485) list the following reasons for conducting employee satisfaction surveys:

- to determine employee satisfaction levels
- to determine necessary improvements via the results of employee satisfaction surveys
- to determine the gap between the work-related perceptions and expectations of employees
- to determine the improvement quality attributes from the results of the analyses
- to determine the improvement strategies and priorities to satisfy actual employee requirements

Another method of assessing employee satisfaction is focus groups, which refers to groups in the organisation representing management, employees and other relevant stakeholders. Focus groups provide an opportunity to determine areas of satisfaction and dissatisfaction by facilitating discussions. The issues identified during the focus group session normally serve as the basis for developing the questionnaire.

Employee assessment of their satisfaction is a constantly changing variable - hence survey responses provide an approximate estimate of employee satisfaction at the time of the survey (Lusty, 2007; Varkey *et al.*, 2008). According to Bulgarella (2005, pp. 5-6), employee satisfaction is the result of a holistic approach that involves strategic steps such as:

- identifying the root causes of dissatisfaction among employees
- conducting benchmark studies of best practices in selected other companies
- developing employee satisfaction measurement systems that can be used corporate- and worldwide
- monitoring employee satisfaction on a regular basis

It is evident from the discussion of various employee satisfaction models in section 3.5 that different dimensions are used to measure employee satisfaction. These dimensions are mostly characterised by statements that are part of the questionnaires and focus groups.

Voisard (2008, p. 6) identified the following three dimensions as measures of employee satisfaction, namely sense of perceived job worth, of perceived growth opportunities and of perceived fairness in the workplace:

- *Job worth* is defined as the employee's state of mind of steady employment and the perceived balance between his or her job and nonwork life.
- *Growth opportunities* relate to the employee's state of mind of present and future "growth" opportunities with the employer including promotions, advancement and training and/or job experience.
- *Fairness in the workplace* includes a set of separate dimensions including fairness of pay and benefits, of recognition and of management.

In a study conducted in a South African engineering organisation, Martins and Coetzee (2007, p. 23) developed the Employee Satisfaction Survey (ESS) to measure employee satisfaction. In terms of this survey, the dimensions considered to be relevant to measure employee satisfactions levels in this organisation were communication, compensation, diversity, fairness, job satisfaction, opportunities for growth, performance management, respect for employees, respect for management, teamwork and work-life balance.

The employee satisfaction survey used by Martins and Coetzee (2007) and Voisard (2008) appears to be different, even though they measure the same construct of employee satisfaction. This difference also relates to the employee satisfaction models discussed in section 3.5, namely the fact that the dimensions of the construct employee satisfaction are mostly specific and determined by the organisational or industry context. Hence there is no universal and generic measure to diagnose or measure employee satisfaction

in the literature. Another limitation is that organisations, in their endeavour to be specific, tend to design questionnaires from the perspective of managers and leaders. Hence the questionnaire items generally do not reflect real employee requirements and the survey results do not improve actual employee satisfaction levels (Chen *et al*., 2006).

In an attempt to make the results of the diagnosis process meaningful, Lusty (2007, pp. 3-6) suggested the following methods to avoid the pitfalls of an employee satisfaction survey:

- Top management must be committed to make the changes indicated in the survey.
- Communication of the planned survey to employees creates an expectation and shows commitment.
- The value of the results will depend on the wording of the questions. Questions need to identify strengths and diagnose any organisational problems.
- Questions must provide data that enable the organisation to make comparisons between groups.
- Employees must be convinced that they can respond to the questionnaire and still remain anonymous.
- An analysis of the results presents the scale results as averages, not as percentages.
- Arrangements should be made for the results to be available a week or two after the survey closes.
- The organisation must ensure that it understands the significance of any differences it detects in the results.
- Organisations should not be seduced by the illusion of benchmarking or “normative” comparisons.
- Employees should be given feedback of the results to encourage future participation.
- When the survey is conducted by an external service provider, employees will be more reassured about their anonymity; the

organisation will receive more honest feedback and a better response rate, which means more convincing results.

In addition, Sanchez (2007, p. 49) provides a list of the following ten key areas to ensure that employee survey results are meaningful and actionable in the organisation:

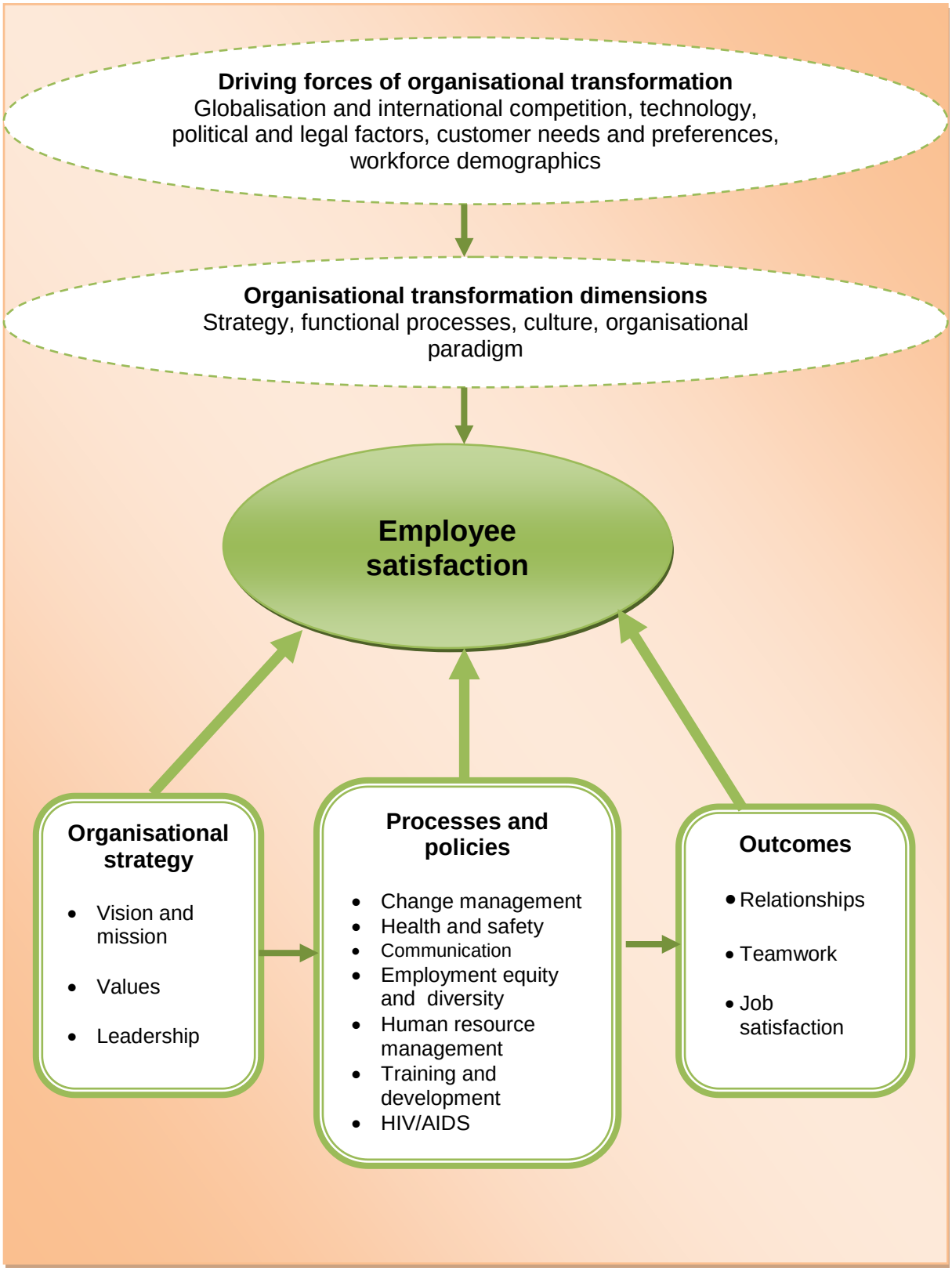
- project planning, starting with a careful plan
- communication and continuity
- questionnaire design: relevant questions should be designed
- perfect timing in the distribution of the questionnaire
- prioritisation of issues
- Engaging senior management
- data delivery
- follow-up support or ensuring effective follow-up
- monitoring and accountability
- linking the survey results to business outcomes

This discussion concludes the literature review conducted for the empirical aims of the research, in particular, to provide a theoretical description of the concept of employee satisfaction.

3.10 THEORETICAL INTEGRATION OF ORGANISATIONAL TRANSFORMATION AND EMPLOYEE SATISFACTION

This section addresses step 3 of the literature review by integrating the theoretical constructs of organisational transformation and employee satisfaction. The purpose of this section of the literature review study was to determine the impact of organisational transformation on employee satisfaction and to develop a conceptual model of employee satisfaction. The diagnostic model of employee satisfaction during organisational transformation is depicted in figure 3.8 and described as follows:

Figure 3.8: A conceptual diagnostic model of employee satisfaction during organisational transformation



3.10.1 Organisational transformation

A detailed analysis of the literature indicated that organisations are subjected to and experience transformation because of driving forces in the external environment. In order for organisations to adapt their internal process to cope with or meet the demands of the driving forces, they have to undergo a process of transformation. Organisational transformation is the result of certain driving forces, which may result in certain dimensions of transformation and may have an impact on employees or the organisation as a whole.

3.10.1.1 Driving forces of organisational transformation

The causes of organisational transformation are depicted as the driving forces. South African organisations have to experience a paradigm shift embracing the characteristics of high performance organisations, in order to be competitive in the international market in terms of their product quality and services to customers (Meyer & Botha, 2000). The following six driving forces of organisational transformation were identified in the literature:

- *Globalisation and international competition* occurs when organisations competing in international markets and local organisations are exposed to foreign competition. This creates threats and opportunities for organisations. Organisations that are able to reinvent themselves through transformation are able to survive in a global market.
- *Technology* implies innovations and advancements in technology that continually affect organisations, in terms of how they do business and compete with other organisations. Technological changes influence both product and process development. It is thus both a driving and an enabling factor for transformation in organisations.
- *Political and legal factors* require organisations to comply and be prepared to cope with the constant changes in the regulatory environment. The outcomes of elections, legislation and decisions at all levels of government that affect organisational policies and processes

are therefore the political and legal forces of transformation in organisations.

- *Economic factors* refer to fluctuating interest rates, declining productivity, uncertainties arising from inflation rates or deflation, low capital investments, recessions, fluctuating oil prices and the lowering of consumer confidence. These factors compel organisations to transform in order to survive.
- Constant changes in *customer needs and expectations* force organisations to adapt and constantly improve their product offerings in order to meet demands. The wide availability of competitors' products and services has given customers more choices and power.
- *Workforce demographics* include a diverse workforce with more minorities and women in the workforce. In order for organisations to manage a multicultural workforce, their human resource policies and practices need to transform in order to attract and retain the diverse workforce.

3.10.1.2 Organisational transformation dimensions

An interface seems to exist between the drivers and dimensions of organisational transformation. Dimensions are areas in which an organisation may decide to transform in response to the driving forces. The dimensions of organisational transformation in this model are as follows:

- The *strategy dimension* implies that the organisation formulates a strategic direction in terms of its response to the driving forces of transformation. An organisation faced with environmental shifts or disruptions is either challenged or forced to change its strategy or mission through a process of transformational change.
- The *functional processes dimension* includes transformation of the organisational structure, management, technology, decision-making processes, recognition and rewards and communication patterns. It is normally evident through downsizing, decentralising, job redesigning, resizing and flattening the organisation in order to be competitive.

- The *culture dimension* is the transformation of an organisation focusing on symbolic action and elements such as values, norms, myths, rituals and ceremonies, the look and arrangement of the physical setting and the style of management and relationships. This occurs when an organisation wishes to create a corporate identity that distinguishes it from other organisations and to guide its employees in terms of acceptable behaviours and attitudes, especially when making decisions and solving problems.
- The *organisational paradigm dimension* refers to transformation of the meta-rules, presuppositions or underlying assumptions that unnoticeably define and shape the structures, policies and operations of an organisation. This involves learning and discovering the new paradigm for the organisation.

3.10.2 Employee satisfaction

The literature review consistently highlighted the fact that there are different dimensions of employee satisfaction. Employee satisfaction in terms of this model is depicted and conceptualised as being characterised by organisational strategy, policies and processes as well as outcomes. The literature also indicated that employee satisfaction is a concept used to describe employees' contentment with and fulfilment of their expectations and needs, resulting from an appraisal of the various aspects of the organisation (Locke, 1976; Küskü, 2003; Martins & Coetzee, 2007; Aamodt, 2010).

In terms of this diagnostic model, employee satisfaction is conceptualised as the employee's appraisal of organisational strategy, policies and processes as well as outcomes to determine his or her contentment and fulfilment in the organisation.

3.10.2.1 Organisational strategy

Strategy includes the organisation's vision, mission, values and leadership. Eskilden and Dahlgaard's (2000) causal model of employee satisfaction indicates that strategy and leadership are a vital aspect of improving employees satisfaction. Organisational strategy is the criterion whereby management set the agenda for the organisation's future behaviour (Eskilden & Dahlgaard, 2000; Aydin & Ceylan, 2008). Values also help to shape the organisation's strategic intent and direction. According to Slater and Mayne (2000, p.45), "…values are norms of behaviour and ethical standards maintained by the company". They are guiding principles about the way in which the organisational mission and vision should be enacted by employees. A study by Chen *et al.* (2006) also indicated that organisational vision is one of the determinants of employee satisfaction in a higher education environment.

In addition, research has shown that employee satisfaction has positive significant correlations with organisational leadership practices (Aydin & Ceylan, 2008; Varkey *et al.*, 2008; Martins & Coetzee, 2007). The leadership practices include the way organisational leadership and management are able to communicate, reward, provide direction and demonstrate concern towards employees (Griffin & Bateman, 1986).

3.10.2.2 Policies and processes

Employees can derive satisfaction or dissatisfaction from the policies and process implemented by their organisation. In terms of the context of this study, policies and processes include change management, health and safety, communication, employment equity and diversity, human resource management, training and development as well as HIV/AIDS initiatives. Policies and processes are used in the diagnosis process to determine the level of satisfaction employees derive from the various aspects of the work environment (Küskü, 2001; Spector, 2006).

Fosam *et al.* (1998) highlighted the fact that employee satisfaction is a patent construct driven by organisational processes and policies such as communication, human resources, training and career development. Human resource policies include rewards and benefits policies. The literature indicates that rewards and benefits are considered to be the primary source of employee satisfaction (Mottaz, 1987; Milner, 2009; Vlosky & Aguillar, 2009; Aadmot, 2010). Employee satisfaction is therefore determined by employees' perceptions of their rewards and benefits as being equitable and congruent with their needs and expectations.

3.10.2.3 Outcomes

Relationships, teamwork and job satisfaction are organisational outcomes or results that affect employee satisfaction. Most employees expect their work to fulfil the need for social interaction. In terms of the literature, outcomes such as teamwork and positive relationships with colleagues and supervisors lead to increased employee satisfaction (Aydin & Ceylan, 2008; Milner, 2009; Aamodt, 2010).

Job satisfaction is also a significant aspect of organisational outcomes. It indicates the satisfaction that employees derive from their job characteristics such as responsibilities and duties in the organisation (Balgobind, 2002; Chen *et al.*, 2006; Küskü, 2001). The literature describes job characteristics as the content and nature of the job tasks in terms of skill variety, task identity, task significance, autonomy and task feedback (Hackman & Oldham, 1976; Spector, 2006). These job characteristics stimulate psychological states that lead to employee satisfaction (Hackman & Oldham, 1976; Spector, 2006; Voisard, 2008).

Furthermore, the scope and complexity of the job also form part of the job characteristics. According to Spector (2006), employee satisfaction is the result of a high job scope, while employee dissatisfaction is the result of a low job scope.

3.10.3 The impact of organisational transformation on employee satisfaction

The literature discussed above on employee satisfaction indicated general consensus that employee satisfaction is influenced by a combination of organisational strategy (vision, mission, values and leadership), policies and procedures (communication, human resources, training and development) and outcomes (teamwork, relationships and job satisfaction). The main assumption of this study is that organisational transformation determines strategy, policies, practices and outcomes, all of which influence employee satisfaction. This effect may be positive resulting in employee satisfaction or negative in the form of employee dissatisfaction.

Employees tend to demonstrate their dissatisfaction with transformation through resistance. Personal loss, negative attitudes, lack of involvement, loss of status and authority, inappropriate timing, cognitive rigidity and challenging authority are some of the behaviours that demonstrate that employees are dissatisfied with transformation (Harigopal, 2006).

The discussion now turns to types of transformation and their impact on employee satisfaction:

3.10.3.1 Strategy

Transformation of the organisation's strategy includes organisational growth. This growth often results in several transformation activities such as changes in, say, leadership styles and strategic direction that have negative effects on profitability and competitiveness, which in turn affects employee satisfaction (Eskilden & Dahlgaard, 2000; George & Jones, 2008). Changes in organisational strategy increase employee uncertainty, which results in decreased levels of employee satisfaction (Nguyen & Kleiner, 2003; Burke *et al.* 2005; Chen *et al.,* 2006). The dissatisfaction is mainly due to the lack of a clear new vision, goals and values for the organisation.

Furthermore, in a study by Mack, Nelson, and Quick (1998), it was found that transformation of organisational strategy causes employees to alter their ways of working, resulting in increasing levels of employee dissatisfaction. This is mainly due to increased uncertainty during the process of change. A change in organisational strategy does not necessarily mean it only affects employee satisfaction negatively. When employees are confident that changes in the organisation are likely to affect them positively, they tend to develop increased levels of satisfaction (Nguyen & Kleiner, 2003).

3.10.3.2 Functional processes

Functional processes transformation is based on changes in employees' responsibilities and tasks and the restructuring of organisational processes. The degree of challenges, the type of tasks and responsibilities or the types of interaction employees have are the commonly used predictors of employee satisfaction (Friday & Friday, 2003; De Nobile & McCormick, 2008). Furthermore, according to Svensen, Neset, and Eriksen (2007), employee satisfaction tends to decrease when previous experiences with transformation of functional processes such as downsizing are negative. This implies that employees who perceive their previous experiences to be positive, experience enhanced employee satisfaction.

Job redesigning as a form of functional process transformation may lead to improved employee satisfaction when the job redesign results in an improved fit between job characteristics and employee needs or expectations (Griffin, 1991; Friday & Friday, 2003). In other words, employee satisfaction increases when the job characteristics fit or are congruent, and when the redesign process is aimed at changing job characteristics that employees are dissatisfied with.

The direct effects of restructuring such as uncertainties and role confusion are likely to have an initial negative bearing on employee satisfaction levels. Organisations therefore need to communicate with all the stakeholders the positive implications of transforming functional process before and during the

change process. The literature also indicates that employees tend to be satisfied with the transformation of functional processes when it provides them with job security, monetary and other benefits, status and authority, challenging job and engagement (Harigopal, 2006; Spector, 2006; Svensen *et al.*, 2007).

3.10.3.3 Culture

Organisational transformations such as mergers and acquisitions have recently been identified as key factors influencing cultural change in organisations. During mergers and acquisitions, different organisations are expected to integrate their cultural differences in order to develop and sustain a common organisational culture (Shraeder & Self, 2003; Manetje, 2006; Marks, 2007). This process of transforming organisational culture entails that employees are expected to unlearn the old culture and learn the new one in the organisation (Manetje, 2006).

Joslin, Waters, and Dudgeon (2010) contend that employees who are able to accept the new cultural conditions created during mergers and acquisitions do experience satisfaction. This is because employees who experience cultural transformations may endure sizeable modifications with respect to work practices, values, beliefs, assumptions and expectations shared in the organisation that underpin behaviour and decision making (Joslin *et al*., 2010). A study conducted by Noblet, Rodwell, and McWilliams (2006) found that cultural and procedural transformation in the public sector had negative effects on employee satisfaction.

Organisations have the responsibility to ensure that they minimise the risk of employee dissatisfaction. Joslin *et al.* (2010, p. 27) suggest that in order to enhance employee satisfaction during culture change, acculturation is a balanced two-way process whereby both organisations are equally affected by the integration. It is necessary to identify the common cultural values existing in the two organisations and use them as the basis of creating a new culture. Communication of the new cultural values and norms in order to

create awareness and secure buy-in from organisational members is also imperative.

3.10.3.4 Paradigm shift

Most South African organisations have to face a paradigm shift embracing the characteristics of high performance organisations with regard to product quality and services to their customers in order to be competitive in the international market (Meyer & Botha, 2000). Proctor (1996, p. 33) describes a paradigm as “a set of rules and regulations that defines boundaries and helps us be successful within those boundaries, where success is measured by the problems solved using these rules and regulations”. The impact of an organisational paradigm shift on employee satisfaction depends largely on how well it has been planned, how positively it has been communicated to employees and how effectively it has been implemented in the organisation (Domberger, 1998; Marks 2007).

Paradigm shift in an organisation is different from continuous improvement. It includes organisational processes that have made it possible to send complex and accurate messages over great distances. It has facilitated moving from primitive methods such as shouting, smoke, fire, drum, flag signals to highly sophisticated mechanisms such as telegraph, telephone, fax, live video by wire, optical fibre and communications satellite (Proctor, 1996). Domberger (1998) also emphasises the fact that the development and implementation of such initiatives tend to generate internal fears and employee dissatisfaction. Employees are likely to be satisfied when they see the benefits of paradigm shifts in their work and organisational performance.

The preceding discussion indicates that the relationship between organisational transformation and employee satisfaction varies. Transformation of an organisation’s paradigm, culture, functional process and strategy can have a positive or negative impact on individuals and groups in the organisation. Hence employee satisfaction or dissatisfaction may be the effect of any organisational transformation initiatives, depending on

employees' perceptions of the initiatives as being neither beneficial nor threatening.

The above discussion of the literature review is critical in the identification of the main dimensions of employee satisfaction, namely organisational strategy, policies and procedures as well as outcomes. These dimensions are essential in the development of a diagnostic model for employee satisfaction in order to determine the theoretical impact of these dimensions through an empirical study.

3.11 CHAPTER SUMMARY

Employee satisfaction was defined in this chapter in an attempt to understand the concept in terms of the various theoretical approaches. The paradigmatic and conceptual foundations of employee satisfaction were discussed. Various approaches and models of employee satisfaction were also explored. The concept of employee satisfaction was analysed in terms of its dimensions, antecedent factors and benefits. The literature review of employee satisfaction concluded with a discussion of the process of diagnosing employee satisfaction.

In conclusion, this chapter presented and discussed a conceptual diagnostic model of employee satisfaction during organisational transformation. A theoretical integration of organisational transformation and employee satisfaction was provided, focusing on the impact of the different organisational transformation dimensions on employee satisfaction.

Chapters 4 deals with the empirical study of the research.

CHAPTER 4 RESEARCH DESIGN AND METHODOLOGY

4.1 INTRODUCTION

This chapter focuses on the research design and methodology with the specific aim of describing the statistical methods used to develop a diagnostic model of employee satisfaction during organisational transformation in a South African organisational setting. Firstly, an overview of the study's population and sample is provided. Secondly, the data collection phase is discussed focusing on the measuring instruments, the reasons for the choice of instruments and the data gathering process. Lastly, the hypotheses formulated for the study are explained, and the chapter concludes with a chapter summary.

The seven steps of the research design and method are outlined below:
Step 1: population and sample
Step 2: research questionnaire
Step 3: data collection
Step 4: data processing and analysis
Step 5: reporting and interpretation of results
Step 6: integration of the research results
Step 7: research conclusions, limitations and recommendations

This chapter discusses steps 1 to 4, while steps 5 to 7 will be addressed in chapters 5 and 6.

4.2 RESEARCH DESIGN AND METHODOLOGY

According to (Mouton, 2009, p. 74), "a research design is a plan or blueprint of how you intend conducting the research. Leedy and Ormrod (2010), indicates that a research methodology is the researcher's framework for achieving the research aim outlining the process of data collection, analysis and interpretation. This section of this study discusses the research design and methodology of this research.

The empirical study rather than the non-empirical study is the research design of this study. According to Mouton (2009, p. 76) an empirical study include primary data which refers "...to new data that the researcher collects rather than use secondary data". This research was guided by the formulation of a general aim based on the theory and literature survey and conceptualised in chapter 1.

The purpose of this study was to conduct a three-year or longitudinal study of the differences in employee satisfaction during organisational transformation; to determine whether individuals from different gender, job level, race and department groups differ significantly in their employee satisfaction; and to develop and test a diagnostic model for employee satisfaction during organisational transformation.

Chapter 3 of this study discussed in detail the constructs of the theoretical diagnostic model for employee satisfaction during organisational transformation.

In order to achieve the purpose of this study, longitudinal survey research was used on three successive occasions to gather data on the respondents' employee satisfaction during the process of organisational transformation. According to Welman *et al*., (2009, p. 95) define a longitudinal design as a "...design that involves examining the same group at different time intervals". Data were thus collected for a period of three years during the seven years of the transformation process. The ultimate goal of this study was to use the survey results to develop and test a diagnostic model of employee satisfaction during organisational transformation.

The advantage of longitudinal survey research is that it measures changes and the progression of the dependent variable of one group of respondents more than once in particular time periods (Mouton, 2009; Salkind, 2009). It also allows for comparability of the same group of respondents. The disadvantage is that it is extremely costly to conduct a longitudinal study compared to cross-sectional studies which are generally inexpensive (Leedy & Ormrod, 2010; Salkind, 2009).

4.3 POPULATION AND SAMPLE

Welman *et al*. (2009, p. 52) define population as "...the study object [that] consists of individuals, groups, organisations, human products and events". The empirical study was conducted among a population consisting of employees of a utility and parastatal organisation based in Gauteng province, South Africa. The total number of all employees in this organisation was approximately 2 650 at the time of the study. While a population is a larger group of research respondents, a smaller group selected from the population to conduct the research is known as a sample (Salkind, 2009). The results obtained from the sample can be used to make generalisations about the entire population when the sample is representative of the total population (Leedy & Ormrod, 2010).

Probability and nonprobability sampling are the two main methods of sampling (Welman *et al*., 2009). In probability sampling, the researcher can indicate the probability of each element of the population being included in the sample (Leedy & Ormrod, 2010). Nonprobability sampling means that some members of the population have little or no chance of being part of the sample (Leedy & Ormrod, 2010).

This research study used the nonprobability sampling method known as convenience sampling. According to Welman *et al*. (2009, p. 68), "...the advantage of non-probability samples is that they are less complicated and more economical than probability samples". Convenience sampling involves choosing a sample by using people in the population who are near and readily available to participate in the research project (Leedy & Ormrod, 2010).

Although, inferences cannot be made about a population using a convenience sample, the sample size is an important characteristic of an empirical study. A convenience sample however does not allow the researcher to generalise the results of the research. Sample design is characterised by two factors, namely the selection process (the rules for including units in the sample) and the estimation process (the sample estimates of population values). Insufficient

sample sizes may lead to biased estimates or significance tests with low statistical power, while excessive sample sizes are a waste of money and time (Hox, 2010).

The sample size is determined by the need to have sufficient statistical power. The following criteria were used to develop a sample size for this study (Tredoux & Durrheim, 2002; Neuman, 2007; Hox, 2010):

- *Level of precision.* Survey methods focus on determining the population proportion with a specified degree of precision and the sample size formula can therefore be used with a power of 0.05. The more heterogeneous a population is, the larger the sample size required to obtain a given level of precision.
- *Confidence level.* In order to derive the asymptotic distribution of the test statistic when models are approximations, it is necessary to invoke a parameter drift assumption. This assumption specifies that model error is proportional to sampling error and that as the sample size (N) increases, both sampling error and model error decrease. If the parameter drift assumption is violated, significance levels (p values) for this test may be invalid, leading to incorrect conclusions about model fit.
- *Degree of variability.* The third criterion, the *degree of variability* in the variables being measured, refers to the distribution of variables in the population.

In this study, through convenience sampling, the different sample sizes emerged annually from the total population. The study was conducted over a period of three years with three different convenient samples. In each year of the study, all the employees of the organisation were invited to voluntarily participate in the survey in order to obtain a sufficient number of participants from the total population.

The initial year of the study in 2003 comprised 1 140 participants who voluntarily completed the measuring instrument. The second year of the study (2007) included 920 participants and the final year (2008) 759 participants. Although the sample sizes were smaller during the second and third years, the size remained close to 30% of the total population. Table 4.1 provides an overview of the sample sizes for the three years of the study.

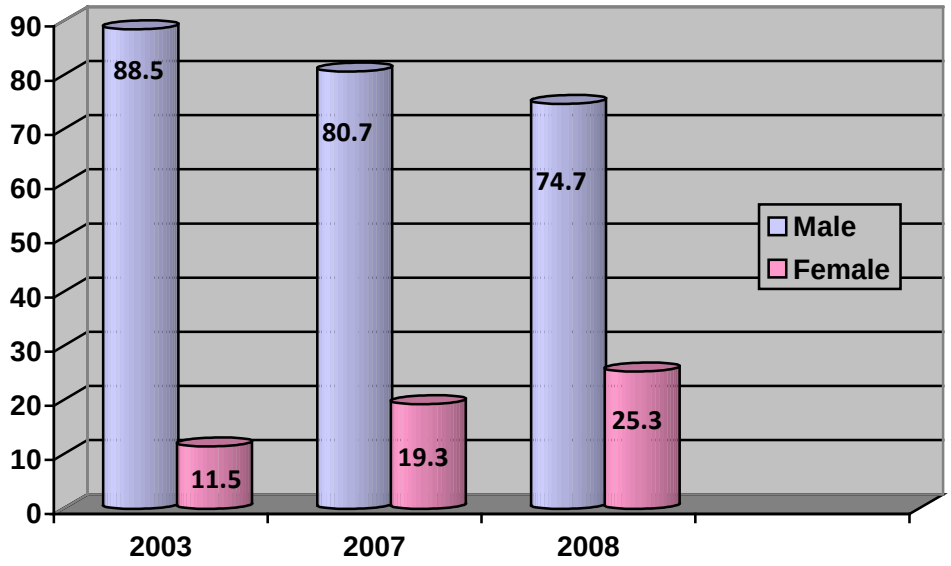
Table 4.1: Sample sizes for the three years of the study

Year of study	Total population	Sample size	Rate of response
2003	± 2 650	N = 1 140	43%
2007	± 2 650	N = 920	35%
2008	± 2 650	N = 759	29%

The profile of each sample is described according to the following biographical variables: gender, race, job level and department. The decision to use these biographical variables in the empirical analysis was based on the literature review of the variables that influence the construct of employee satisfaction. Since the variable, age, was not a focus area of this study, it was excluded from this empirical analysis.

4.3.1 Composition of gender groups in the three samples

Figure 4.1: Gender distribution in the three samples



The gender distributions of the three samples of participants are illustrated in figure 4.1 and table 4.2.

In 2003, there was a total of 88.5% male and 11.5% female participants. In 2007, there were 80.7% males and 19.3% females. In 2008, there were 74.7% males and 25.3% female participants.

Table 4.2: Gender distribution in the three samples

Year of study	Female (%)	Male (%)	Sample size
2003	N = 131 (11.5%)	N = 1009 (88.5%)	*N* = 1 140 *(100%)*
2007	N = 178 (19.3%)	N = 742 (80.7%)	*N = 920 (100%)*
2008	N = 192 (25.3%)	N = 567 (74.7%)	*N = 759 (100%)*

4.3.2 Composition of the race groups in the three samples

Figure 4.2 and table 4.3 indicate the race distribution of the three samples. In 2003, the sample comprised 80.4% African, 3.8% coloured, 2.2% Indian and 13.6% white participants. In 2007, there were 79.7% African, 5% coloured, 2.6% Indian and 12.7% white participants. Finally, in 2008, there were 83.1% African, 5.8% coloured, 2% Indian and 9.1% white participants.

Figure 4.2: Race distribution in the three samples

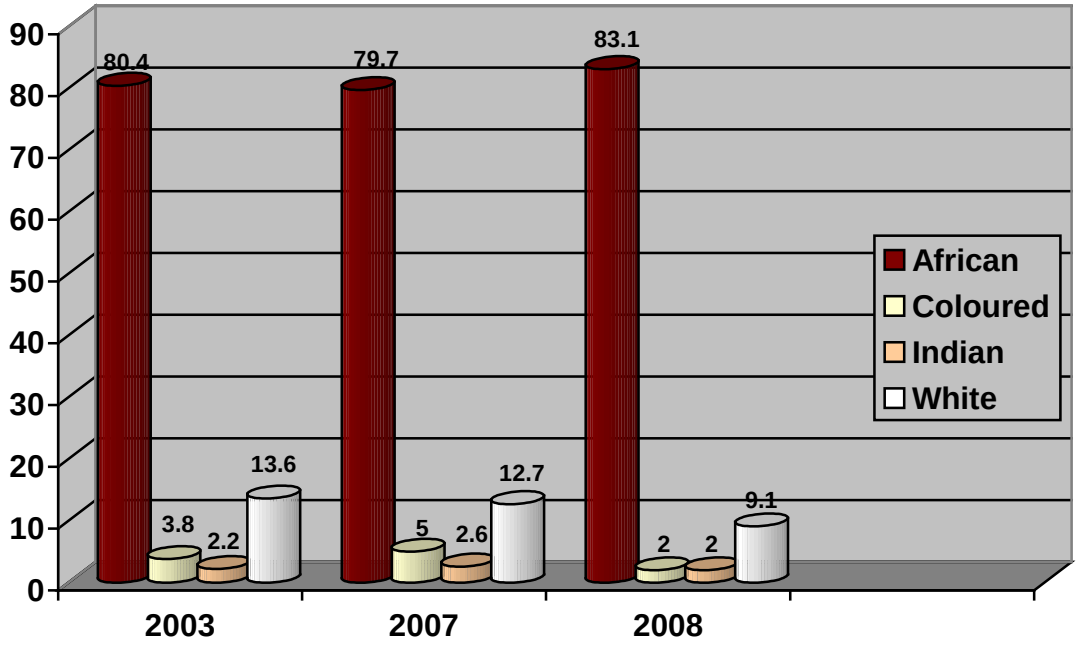


Table 4.3: Race distribution in the three samples

Year of study	African (%)	Coloured (%)	Indian (%)	White (%)	Sample size
2003	N = 917 (80.4%)	N = 43 (3.8%)	N = 25 (2.2%)	N = 155 (13.6%)	*N* = 1 140 *(100%)*
2007	N = 733 (79.7%)	N = 46 (5%)	N = 24 (2.6%)	N = 117 (12.7%)	*N = 920 (100%)*
2008	N = 631 (83.1%)	N = 44 (2%)	N = 15 (2%)	N = 69 (9.1%)	*N = 759 (100%)*

4.3.3 Composition of job level groups in the three samples

The participants were asked to indicate their current position and four possible positions were given. Figure 4.3 and table 4.4 depict the job level distribution of the three samples.

The sample of 2003 participants comprised 1.6% senior managers, 5.1% middle managers, 19.8% supervisors and 73% operational staff. In 2007, the sample consisted of 6.1% senior managers, 16.3% middle managers, 72% supervisors and 5.7% operational staff. In 2008, the sample included 2.9% senior managers, 6.9% middle managers, 20.4% supervisors and 69.8% operational staff.

Figure 4.3: Job level distribution in the three samples

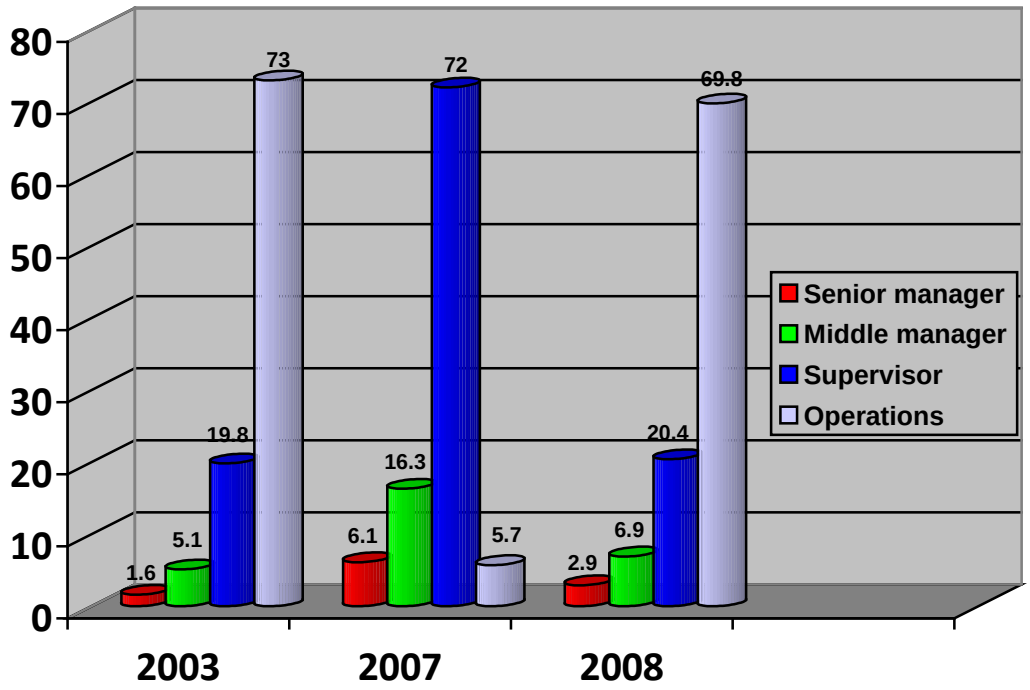


Table 4.4: Job level distribution in the three samples

Year of study	Senior manager (%)	Middle manager (%)	Supervisor (%)	Operational staff (%)	Sample size
2003	N = 18 (1.6%)	N = 58 (5.1%)	N = 225 (19.8%)	N = 839 (73%)	*N* = 1 140 *(100%)*
2007	N 56 (6.1%)	N = 150 (16.3%)	N = 662 (72%)	N = 52 (5.7%)	*N = 920 (100%)*
2008	N = 22 (2.9%)	N = 52 (6.9%)	N = 155 (20.4%)	N = 530 (69.8%)	*N = 759 (100%)*

4.3.4 Composition of department groups in the three samples

Figure 4.4: Department distribution in the three samples

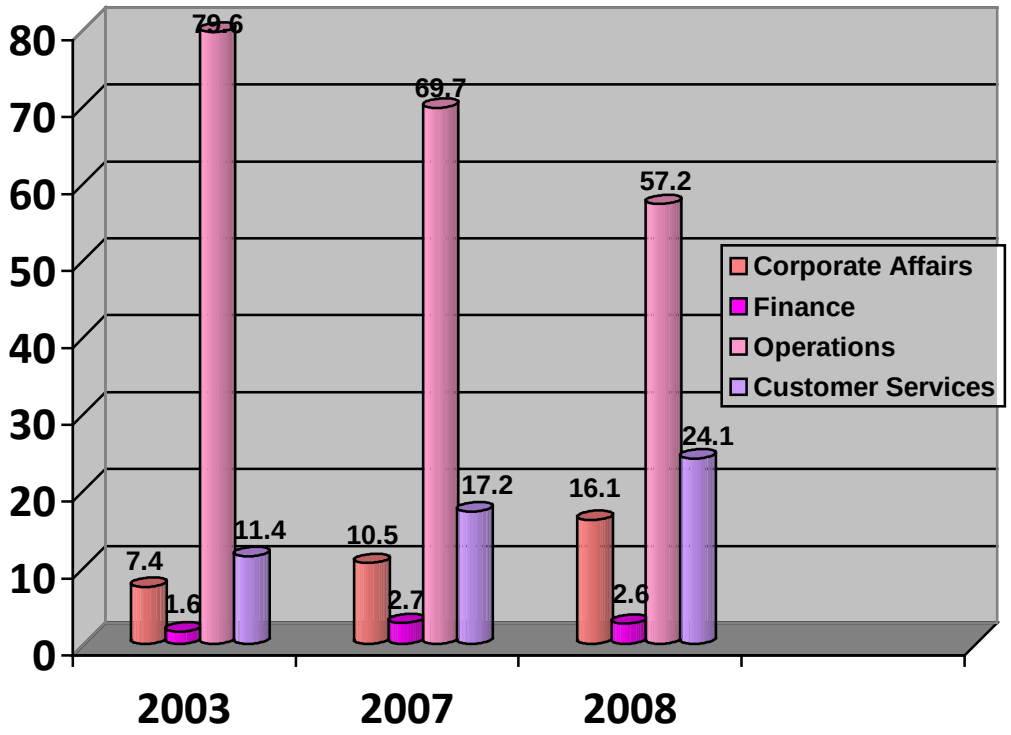


Table 4.5: Department distribution in the three samples

Year of study	Corporate Affairs (%)	Finance (%)	Operations (%)	Customer Services (%)	Sample size
2003	N = 85 (7.4%)	N = 18 (1.6%)	N = 907 (79.6%)	N = 130 (11.4%)	*N* = 1 140 *(100%)*
2007	N = 96 (10.5%)	N = 25 (2.7%)	N = 641 (69.7%)	N = 158 (17.2%)	*N = 920 (100%)*
2008	N = 122 (16.1%)	N = 20 (2.6%)	N = 434 (52.7%)	N = 183 (24.1%)	*N = 759 (100%)*

The distribution of departments in the three samples is indicated in figure 4.4 and table 4.5. In 2003, the sample comprised 7.4% of participants in Corporate Affairs, 1.6% in Finance, 79.6% in Operations and 11.4% in Customer Services. In 2007, 10.5% of the participants were in Corporate Affairs, 2.7% were in Finance, 69.7% were in Operations and 17.2% were in Customer Services. In 2008, 16.1% of the participants were in Corporate Affairs, 2.6% in Finance, 57.2% in Operations and 24.1% in Customer Services.

4.3.5 Summary of the frequency distribution tables of the biographical profile of the samples

In summary, based on the biographical profiles of the three samples, the key features used in the interpretation of the empirical results are as follows: gender, race, job level and department.

According to table 4, the participants in the 2003 sample were predominantly African males employed at operational level in the Operations Department.

Table 4.6: Summary of the frequency distribution: biographical profile of the 2003 sample

Gender	Frequency	Percent	Cumulative frequency	Cumulative percentage
Female	131	11.5%	131	11.5%
Male	1 009	88.5%	1 140	100%
Total	1 140			
Race	**Frequency**	**Percent**	**Cumulative frequency**	**Cumulative percentage**
African	917	80.4%	917	80.4%
Coloured	43	3.8%	960	84.2%
Indian	25	2.2%	985	86.4%
White	155	13.6%	1 140	100%
Total	1 140			
Job level	**Frequency**	**Percent**	**Cumulative frequency**	**Cumulative percentage**
Senior manager	18	1.6%	18	1.6%
Middle manager	58	5.1%	76	6.7%
Supervisor	225	19.8%	301	26.5%
Operations	839	73%	1 140	100%
Total	1140			
Department	**Frequency**	**Percent**	**Cumulative frequency**	**Cumulative percentage**
Corporate Affairs	85	7.4%	85	7.4%
Finance	18	1.6%	101	9%
Customer Services	130	11.4%	231	20.4%
Operations	907	79.6%	1 140	100%
Total	1 140			

Table 4.7 indicates that the participants in the 2007 sample were also predominantly African males employed at operational level and in the Operations Department.

Table 4.7: Summary of the frequency distribution: biographical profile of the 2007 sample

Gender	Frequency	Percent	Cumulative frequency	Cumulative percentage
Female	178	19.3%	178	19.3
Male	742	80.7%	920	100%
Total	920			
Race	**Frequency**	**Percent**	**Cumulative frequency**	**Cumulative percentage**
African	733	79.7%	733	79.7%
Coloured	46	5%	779	84.7%
Indian	24	2.6%	803	87.3
White	117	12.7%	920	100%
Total	920			
Job level	**Frequency**	**Percent**	**Cumulative frequency**	**Cumulative percentage**
Senior manager	56	6.1%	56	6.1%
Middle manager	150	16.3%	206	22.4%
Supervisor	662	72%	862	94.3
Operations	52	5.7%	920	100%
Total	920			
Department	**Frequency**	**Percent**	**Cumulative frequency**	**Cumulative percentage**
Corporate Affairs	96	10.5%	96	10.5%
Finance	25	2.7%	121	13.2%
Customer Services	158	17.2%	279	30.4%
Operations	641	69.7%	920	100%
Total	920			

Table 4.8 indicates that the participants in the 2008 sample were also predominantly African males, employed at operational level in the Operations Department.

Table 4.8: Summary of the frequency distribution: biographical profile of the 2008 sample

Gender	**Frequency**	**Percent**	**Cumulative frequency**	**Cumulative percentage**
Female	192	25.3%	192	25.3%
Male	567	74.7%	759	100%
Total	759			
Race	**Frequency**	**Percent**	**Cumulative frequency**	**Cumulative percentage**
African	631	83.1%	631	83.1%
Coloured	44	2%	675	85.1%
Indian	15	2%	690	87.1%
White	69	9.1%	759	100%
Total	759			
Job level	**Frequency**	**Percent**	**Cumulative frequency**	**Cumulative percentage**
Senior manager	22	2.9%	22	2.9%
Middle manager	52	6.9%	74	9.8%
Supervisor	155	20.4%	229	30.2%
Operations	530	69.8%	759	100%
Total	759			
Department	**Frequency**	**Percent**	**Cumulative frequency**	**Cumulative percentage**
Corporate Affairs	122	16.1%	122	16.1%
Finance	20	2.6%	142	18.7%
Customer Services	183	24.1%	325	42.8%
Operations	434	52.7%	759	100%
Total	759			

4.4 SURVEY INSTRUMENT

The aim of this study was to conceptualise and develop a diagnostic model of employee satisfaction during organisational transformation. The research survey was divided into the following two sections that were chosen to measure the research variables:

- Section A: biographical questionnaire to determine the participants' personal data relating to gender, race, job level and department, which were used for the empirical study
- Section B: the Employee Satisfaction Survey (ESS) to measure employee satisfaction (Martins & Coetzee, 2007)

The ESS was chosen because of its suitability, validity, reliability and cost effectiveness. Validity refers to the extent to which the instrument measures what it is supposed to measure (Leedy & Ormrod, 2010). According to these authors (2010, p. 29) reliability is the "...consistency with which a measuring instrument yields a certain result when the entity being measured has not changed". It is the dependability of the measuring instrument.

The same data collection method was used in each year of the three-year study to ensure the consistency and validity of the survey process.

4.4.1 Biographical questionnaire

The biographical questionnaire was developed to gather information on the following biographical variables:

- gender
- race
- job level
- department

4.4.2 The Employee Satisfaction Survey (ESS)

The discussion below describes in detail the psychometric properties of the ESS which was used to measure employee satisfaction (Martins & Coetzee, 2007). The description focuses on the rationale for choosing this instrument and explains the dimensions, administration, interpretation, validity and reliability thereof.

4.4.2.1 Rationale for using the (ESS)

The ESS is a self-evaluation survey (Martins & Coetzee, 2007). The aim of the survey is to measure the employees' satisfaction level in the organisation, at a personal level, according to the 13 dimensions (Martins & Coetzee, 2007). The ESS is relevant for this study as it measures the construct employee satisfaction as conceptualised and defined theoretical in chapter 3. Furthermore, the survey has been developed based on several studies conducted in South Africa organisations, which is the context of this study.

According to Martins and Coetzee (2007, p. 23), the dimensions of the ESS are as follows:

- vision and mission
- values
- leadership
- communication
- teamwork
- relationships
- health and safety
- employment equity and diversity
- training
- human resource management
- job satisfaction
- HIV/AIDS
- change management

4.4.2.2 Description of the ESS scales

The ESS consists of a set of 75 items, all of which are considered to be of equal value and to which the participants respond by indicating their agreement or disagreement with the statement. The scale used is a summated rating in the form of a five-point Likert-type scale. The purpose of this survey is to stimulate the respondents' thoughts about their own areas of satisfaction which relate to the 13 dimensions of the ESS. Table 4.9 indicates the 13 dimensions and their corresponding allocated items.

Table 4.9: Dimensions and allocated items (Martins & Coetzee, 2007)

ESS dimensions	Allocated items	Number of items
Vision and mission	1, 2, 3 & 4	4
Values	5, 6, 7, 8 & 9	5
Communication	10, 11, 12, 13, 14, 15, 16, 17, 18, 19 & 20	11
Teamwork	21, 22 & 23	3
Relationships	24, 25, 26, 27, 28, 29, 30 & 31	8
Leadership	32, 33, 34, 35, 36, 37 & 38	7
Health and safety	39, 40 & 41	3
Employment equity and diversity	42, 43, 44, 45, 46 & 48	6
Training	49, 50, 51 & 52	4
Human resource management	53, 54, 55 & 56	4
Job satisfaction	57, 58, 59, 60, 61, 62, 63, 64 & 65	9
HIV/AIDS	66, 67 & 68,	3
Change management	69, 70, 71, 72, 73, 74 & 75	7

4.4.2.3 Administration of the ESS

As mentioned above, the ESS is a self-evaluation survey, which can be administered individually or in groups. The respondents are required to rate each of the 75 items on a five-point Likert scale. The rating scales range from one to five as follows:

- A “1” indicates strong disagreement.
- A “2” indicates disagreement.
- A “3” indicates uncertainty.
- A “4” indicates agreement.
- A “5” indicates strong agreement.

The duration for completing the questionnaire is approximately 20 to 30 minutes, although there is no time limit. The ESS is a paper-and-pencil-based questionnaire which can also be administered electronically as an online survey via the internet or intranet.

4.4.2.4 Interpretation of the ESS

Each of the 13 dimensions of the ESS is measured separately and reflects the respondents’ evaluations of these dimensions. A low rating (1) indicates that the respondent strongly disagrees, while a high rating (5) reflects strong agreement (Martins & Coetzee, 2007). A high score implies that the respondent agrees with the statement, and high scores on the ESS represent high levels of employee satisfaction overall. Each of the 13 dimensions can produce a separate score for the dimension and all the dimensions can be added to provide the total score on overall employee satisfaction.

4.4.2.5 The validity and reliability of the ESS

The reliability of the ESS was evaluated in terms of the internal consistency. The Cronbach coefficient alpha was used as a measure of the questionnaire’s internal consistency. According to Martins and Coetzee (2007, p. 23), “…the reliability coefficients of the ESS dimensions range between 0.8562 and

0.9186". In terms of validity, the construct validity of the ESS dimensions is based on the fact that these dimensions overlap with the South African Culture Instrument (SACI), which has been used since 1989 for various organisational culture studies (Martins & Coetzee, 2007).

4.4.2.6 Reason for choosing the ESS

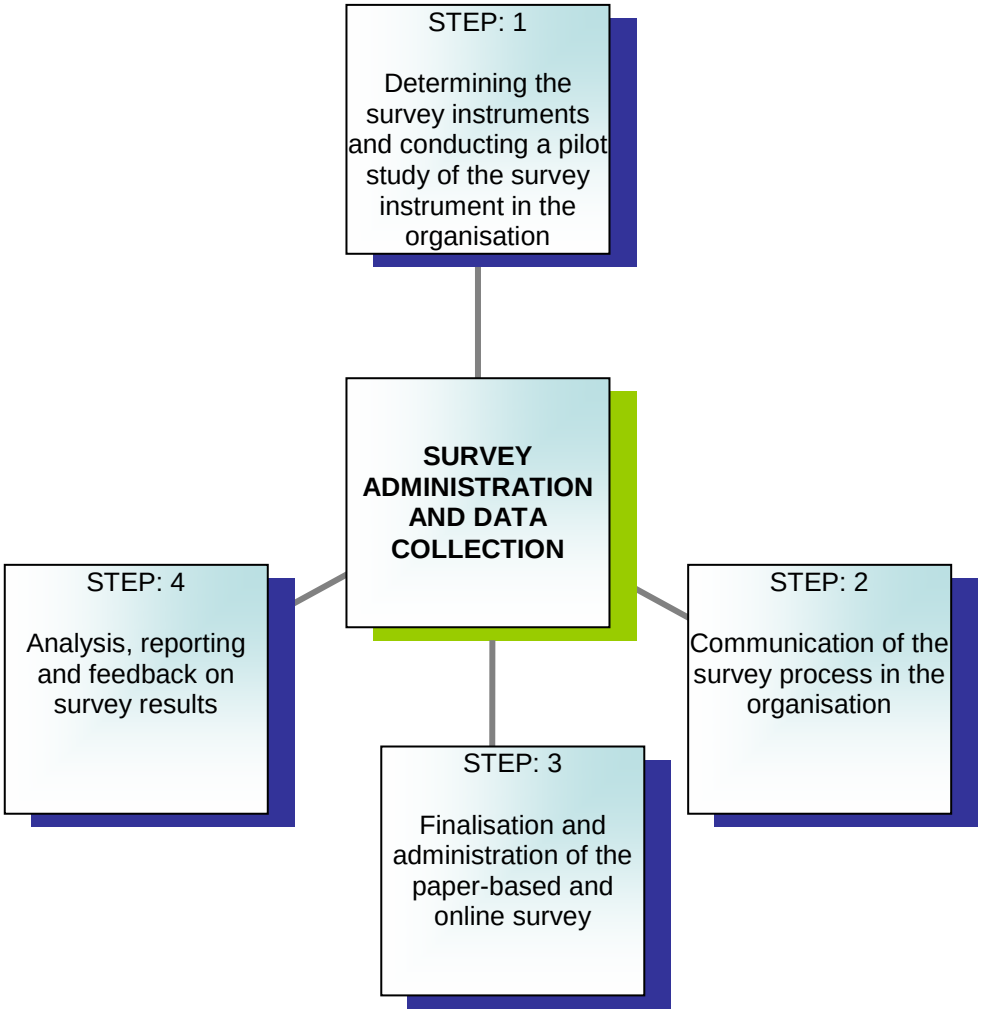
The ESS (Martins & Coetzee, 2007) was used in this study because of its high degree of reliability and validity, as discussed above. It is also affordable and easy to administer. Furthermore, this survey was developed on the basis of intense interviews and focus groups specifically for a South African organisation (Martins & Coetzee, 2007). The 13 dimensions of the ESS provide a multifaceted approach to identifying different areas of employee satisfaction in the organisation.

4.5 RESEARCH PROCEDURE: SURVEY ADMINISTRATION AND DATA COLLECTION

This step involves the collection of data through the administration of the survey. It involves different activities, as outlined in figure 4.5

A project management approach was adopted to manage the survey administration and data collection process based on clear inputs, processes, outputs, time frames and a person who was responsible for the process. As indicated in section 4.2, the project management was facilitated by the external consulting organisation including the HR Department of the organisation. The next section describes the activities of the survey administration and data collection, as outlined in figure 4.5 below.

Figure 4.5: Overview of the survey administration and data collection activities



4.5.1 Step 1: Determining and conducting a pilot study of the survey instrument

As in explained earlier, the ESS was used for this study. It is a self-administered survey with clear instructions for its completion. The items in the survey are formulated in a statement format with a rating scale for each statement. The participants are required to rate statements on the basis of their observations in the organisation of the different dimensions of the employee satisfaction survey.

The paper-and-pencil-based and online methods of survey were regarded as adequate for this study on the strength of the advantages of both methods.

Paper-and-pencil surveys have traditionally served as the primary method for gathering survey information, mainly because paper-and-pencil surveys are a more economical and efficient for collecting large amounts of data relative to other available data collection techniques such as interviewing. According to Evans and Mathur (2005, p. 207), paper-and-pencil "...surveys have several key strengths, including personal interaction, clear instructions, question variety, flexibility and adaptability, ability to use physical stimuli, capability to observe respondents and control over the survey environment". It is because of these benefits that the paper-and-pencil-based survey format was used in this study. In order to minimise the disadvantages of paper-and-pencil surveys such as geographic limitations and incomplete surveys, administrators were used to facilitate the group administration of the survey. The administrators or facilitators were mainly industrial psychologists who could help the participants to complete the questionnaire and were able to reach various depots of the organisation which were in different geographical locations.

An *electronic or online survey* was also deemed suitable for this study because of its numerous advantages. Technological advances, particularly the accessibility of the internet have made it possible to reach vast numbers of participants even more efficiently and economically than using paper-and-pencil surveys only. Evans and Mathur (2005, p. 197) highlight the major strengths of online surveys as flexibility, convenience, low-cost administration, access to a large sample, ease of follow-up, technological innovations in organisations and easy data capturing. It is because of these advantages, that the researcher opted for the electronic survey method in this study. The SurveyTracker software survey package developed in the USA was used for the electronic or online survey process of this study. This software is an effective and supportive tool for electronic surveys (Martins, 2010).

However, the research took cognisance of the disadvantages of the online survey which include, but are not limited to, unclear answering instructions, impersonal, privacy issues and low response rates (Evans & Mathur, 2005). In order to address the disadvantages of the online survey, the study provided participants with clear instructions on how to complete the survey, and follow-up emails were sent to respondents to encourage them to participate. The contact details of the project manager of the consulting company were included on the cover page of the survey in case the respondents required support in coping with the challenges of completing the electronic survey.

4.5.2 Step 2: Communication of the survey process

The organisation's internal methods such as emails, newsletters and staff meetings were used to share information on the planned survey with all the relevant stakeholders, including the staff, management and unions.

Communication of the survey process included a message from the organisation's CEO explaining the purpose of the survey, the issue of confidentiality and anonymity, what the results would be used for, and the action the organisation would be able to take on the basis of the information gathered. The role of the project manager of the consulting organisation in the coordination of the survey administration process was also explained.

Invitation letters were sent to all staff members requesting them to participate in the survey. The ESS also included a cover letter explaining the survey process in terms of its benefits, administration, analysis and feedback on the survey results. It also included instructions and deadlines for completing the survey.

4.5.3 Step 3: Finalisation and administration of the survey

In this study, data were collected in two simultaneous processes (paper- and-pencil and electronic) by an organisational development consulting company. Similar survey administration activities were applied in each survey period

(2003, 2007 and 2008) to ensure the consistency and validity of the survey processes.

The project manager of the consulting organisation coordinated the survey administration process after the CEO had approved the scheduled data collection dates with the HR managers and field workers (mainly industrial psychologists). The field workers facilitated the questionnaire administration with the assistance of university students.

This first process of data collection involved *prearranged group administration* sessions at depot level in a paper-based survey format. All employees were invited through the organisation's various internal communication processes to attend the group administration sessions, which were conducted during working hours. The research participants completed the paper-and-pencil-based version of the survey during 40-minute group administration sessions. To enhance the confidentiality and anonymity of data collection, the field workers collected the completed surveys and immediately submitted them to the project manager. The respondents who were unable to attend the group sessions and completed the surveys individually were given the project manager's email address and fax numbers to enable them to send their surveys.

The second process of data collection included posting the questionnaire on the organisation's internet for the participants to complete the *electronic or online version of the survey.* The project manager of the consulting organisation was again responsible for coordinating the process after consultation with and approval of all the relevant stakeholders in the organisation who included the CEO and HR managers. The project manager worked with the organisation's information systems manager to upload and test the electronic version of the survey on an external internet web server. The purpose of the electronic version was to give members of the research population who had access to a computer and the internet, the option of completing the survey online. An invitation to participate in the research study was sent in a letter via email, with the survey link. The letter of invitation

explained voluntary participation and the importance of the study and gave the participants assurance of total anonymity and confidentiality because the data were submitted to and stored on the project manager's computer server only.

The completed surveys or data were stored anonymously on the external web server. Since the electronic survey was hosted on the external web server, it was impossible to trace the individual participants' surveys on the organisation's internal systems. These processes enhanced and assured the participants of confidentiality and anonymity in the data collection process.

4.5.4 Step 4: Analysis, reporting and feedback on the survey results

The collected data were analysed and a report of the results submitted to the organisation's management. Tables and figures, including the relevant statistical data, were used to systematically report the results of the study. Sections 4.7 and 4.8 explain the process of data capturing and analysis in detail.

Feedback is vital to the success of future surveys in an organisation. Employees feel that their inputs are valued, their trust and commitment to the organisation are strengthened and they are more willing to participate in future surveys. Feedback sessions were therefore conducted in the organisation and all employees were invited to attend feedback sessions scheduled by the project manager for management and staff at depot level. During the feedback sessions, the facilitators described the strengths and developmental areas on the basis of the statistical analysis. In addition, employees were encouraged to share possible solutions and actions required to address the identified challenges and developmental areas during each year of the three surveys.

4.6 ETHICAL CONSIDERATIONS

In terms of the ethical considerations in this study, the research survey included a covering letter. This letter provided information on the importance of the study, the purpose of the survey, the respondents' voluntary participation, confidentiality of the respondents' responses and feedback on the research results (Salkind, 2009). In order to enforce these ethics, during the administration of the survey, the researcher afforded the participants an opportunity to voluntarily complete the survey; they were assured of confidentiality and anonymity as applied in the data collection process of the group administration paper-based and the electronic version of the survey. The researcher also explained to the participants how their responses would be used in the study.

4.7 DATA CAPTURING AND PROCESSING

The data from the paper-and-pencil surveys were captured manually. The data capturers developed a database of the paper-and-pencil survey responses on a spreadsheet. Surveys that were fully completed were considered for this study and incomplete or multiple-rating surveys were excluded or discarded.

In terms of the online survey responses, the web-based server was used to store the data captured by means of the SurveyTracker Software Package. Data processing of the online surveys also included capturing the fully completed surveys.

This process included reviewing and preparing the data for analysis. Data entry and transcription were rechecked and confirmed. The raw database was entered into the Statistical Package for the Social Sciences (SPSS Inc., 2006). Data were checked for missing values. Missing data were coded or identified and list-wise deletion used to remove the missing data.

The data were analysed by means of the Statistical Package for Social Sciences (SPSS) system to execute statistical and quantitative procedures (SPSS Inc., 2006).

4.8 DATA ANALYSIS

The following types of statistical analysis were used to determine the differences in the three-year studies of employee satisfaction during organisational transformation; ascertain whether the biographical groups differed significantly with regard to the variables of gender, job level, race and department; and test the conceptual diagnostic model of employee satisfaction

- Firstly, the *descriptive statistics* in the form of means and standard deviations as measured by the ESS in the three years of study were determined for the total population in order to apply the statistical procedures. The Cronbach alpha coefficients for each of the three years of the study were also determined for the ESS in order to establish the reliability of the survey in this study.
- Secondly, *inferential statistics* were used to make inferences about the data. The nonparametric Mann Whitney and Kruskal-Wallis tests were conducted to determine statistically significant differences between the groups of respondents on the basis of gender, job level, race and department in order to determine whether these groups differed in the three-year studies of employee satisfaction.
- Thirdly, the *structural equation model* was used to develop and test the conceptual employee satisfaction diagnostic model. The following stages of the structural equation modelling were applied (Hair, Anderson, Tatham, & Black, 1998, pp. 592-614):
    - *stage 1:* developing the theoretically based model
    - *stage 2:* constructing a path diagram of causal relationships
    - *stage 3:* converting the path diagram into a set of structural and measurement models

- *stage 4:* choosing the input matrix type and estimating the proposed model
- *stage 5:* assessing the identification of the structural model
- *stage 6:* evaluating goodness-of-fit criteria
- *stage 7:* interpreting and modifying the model if theoretically justified

The following is a detailed discussion of the above three statistical processes used during data analysis.

4.8.1 Descriptive statistics

The descriptive statistics used in this study were the Cronbach alpha coefficient, frequency distribution, means and standard deviation. These statistics are explained below.

4.8.1.1 Reliability analysis and the Cronbach alpha coefficient

The reliability of a measuring instrument such as the ESS is described on the basis of the consistency with which it measures whatever it is supposed to measure (Foxcroft & Roodt, 2002). In this study, the Cronbach alpha coefficient was used to determine the reliability of the measuring instrument (the ESS). The Cronbach alpha coefficient is the estimate of consistency of responses to different items of the measuring instruments, and ranges from 0 (no internal consistency) to 1 (the maximum internal consistency scores) (Tredoux & Durrheim, 2002).

The criteria for reliability coefficient vary for the different tests or instruments, with 0.85 or a higher reliability coefficient required for measures that are used to make decisions about individuals. A 0.65 reliability coefficient is adequate for measures that are used to compare groups (Foxcroft & Roodt, 2002). According to Tredoux and Durrheim (2002, p. 216), “the reliability coefficients of 0.70 are adequate for research instruments”. This means that in this study,

the Cronbach alpha coefficient of 0.70 would be used in the data analysis to determine the acceptable reliability coefficient of the ESS as the measuring instrument.

4.8.1.2 Frequency distribution, means and standard deviations

The mean refers to the arithmetic average of a group of scores, while the standard deviation is the measure of the extent to which a group of scores vary about their mean (Christensen, 1994). In this study, the sample mean was used both as a measure of central tendency and to estimate the population mean.

Standard deviation as a measure of variation helps one understand the variability found in the dataset (Tredoux & Durrheim, 2002). In this study, the standard deviation was used to compare and predict the scores of the three samples.

According to Tredoux and Durrheim (2002, p. 19), “a frequency distribution is a tabular or graphical representation of a data set indicating the set of scores on a variable together with their frequency”. Frequency distributions were used in this study to present the distribution of biographical data. It is an efficient way to summarise the information on the number of times the given score appears within the dataset (Tredoux & Durrheim, 2002). The researcher used the frequency tables in this study to describe the three samples of the population.

4.8.2 Inferential statistics

Inferential statistics were applied in this study to draw inferences or estimate the properties of the population based on the data of the three different samples. The following nonparametric tests were used to test the difference between the mean scores:

4.8.2.1 Nonparametric tests

Nonparametric or distribution-free tests do not rely on parameter estimation or distribution assumptions and are useful when parametric assumptions are violated (Tredoux & Durrheim, 2002). Parametric tests are applicable when the assumptions of normality, randomness and equal variance between the groups are not violated, while nonparametric tests are applicable when these assumptions are violated. According to Tredoux and Durrheim (2002, p. 386) "...nonparametric tests are much more robust than parametric tests".

In this study, the researcher used nonparametric tests during the data analysis mainly because the three samples for 2003, 2007 and 2008 were independent. Although the researcher used the same survey format and process in the three years of study, she could not ensure that the same participants were involved in all three years of study. Nonparametric tests do not assume random sampling (Tredoux & Durrheim, 2002). Hence the convenience samples for each year included different participants who volunteered to participate in the survey.

The Kruskal-Wallis and Mann Whitney tests were the nonparametric tests used in this study. The Mann Whitney U test is used to determine whether two independent samples have the same median, while the Kruskal-Wallis test is an omnibus test equivalent to ANOVA for the equality of independent population medians (Tredoux & Durrheim, 2002). Both tests were used to determine statistically significant differences between the groups of participants on the basis of gender, race, job level and department in order to determine whether the groups differed in terms of employee satisfaction during organisational transformation.

The researcher decided to use the unrelated samples measures for the three samples instead of the repeated measures. The decision not to use the repeated sample measures such as the Friedman's rank test in this study was based on the fact that the researcher could not ensure that the assumption of

homogeneity of variance would not be violated in the three years of study (Tredoux & Durrheim, 2002).

4.8.2.2 Statistical significance level

According to Tredoux and Durrheim (2002, p. 132), the statistical significance level is "the probability with which we are willing to reject the null hypothesis when it is correct". The statistical significance level enables the researcher to determine whether the mean differences and percentile differences are meaningful (Welman *et al.*, 2009). It can also address the question of whether large differences can be attributed to chance.

The most commonly used significance levels in practice are $p < 0.05$ and $p < 0.01$ (Christensen, 1994). Table 4.10 indicates the different levels of significance.

Table 4.10: Levels of significance (Tredoux & Durrheim, 2002, p. 132)

Probability level	Significance
$p > 0.10$	Less significant
$P < 0.01$ to 0.05	Significant
$P < 0.001$ to 0.01	Very significant
$P < 0.001$	Extremely significant

4.8.2.3 Type I and Type II errors

The potential errors in the statistical decision-making process are Type I and Type II errors. Christensen (1994, p. 449) describes Type I error as "...an erroneous rejection of the null hypothesis". This error is controlled by the significance level that is set. This implies that if the 0.05 significance level is set, the probability of being wrong and committing a Type I error is 5 in 100 (Christensen, 1994).

According to Christensen (1994, p. 449), Type II error is "...failure to reject the null hypothesis when it is false". The correct decision is to accept the null hypothesis when it is true, not when it is false. In practice, it is assumed that Type I error is the worst, which is why the stringent 0.05 to 0.01 significance level is used as the decision point for rejection of the null hypothesis (Christensen, 1994).

4.8.3 The structural equation model (SEM)

The central objective of this study was to develop and test a diagnostic model of employee satisfaction during organisational transformation. The proposed conceptual or theoretical diagnostic model of employee satisfaction was presented and discussed in chapter 3. Stages 1 and 2 of the SEM, namely the development of the theoretically based model and the construction of a path diagram of causal relationships were covered in integration of the literature review.

The SEM can address a wide variety of causal relationships. Two most common types of analysis are confirmatory factor analysis and the estimation of a series of structural equations (Hair, Anderson, Tatham & Black, 1995). Confirmatory factor analysis was conducted in this study.

4.8.3.1 Purpose of the SEM

The purpose of the SEM is to mainly allow the researcher to examine the following simultaneously (Kline, 1998):

- the relations between indicators and their associated latent variables representing the constructs in the theory, as represented in the confirmatory factor analysis measurement model
- the relations between the latent variables, as represented in the structural or path model

The aim of the SEM is to understand the patterns of correlation or covariance between a set of variables and to explain as much of their variance as possible on the basis of the specific model.

4.8.3.2 Characteristics of the SEM

The components of a general SEM are the measurement model and the structural model (Bollen, 1989). The *measurement model* prescribes latent variables in confirmatory factor analysis, while the *structural model* prescribes relationships between latent variables and observed variables that are not indicators of latent variables.

A measured variable is a factor that is directly measured, whereas a latent variable is a construct that is not directly or exactly measured. According to Hair *et al.* (1998), there are mainly three types of relationship between the variables as indicated below:

- association, which includes correlation and covariance
- the direct effect relationship, which is a directional relationship between two variables, such as independent and dependent variables
- the indirect effect is the effect of an independent variable on a dependent variable through one or more intervening or mediating variables

4.8.3.3 Advantages and disadvantages of the SEM

The SEM has both advantages and disadvantages which are essential when a researcher needs to make a decision about the use of the model. According to Kline (1998), the following are some of the advantages of the SEM:

- It is used for theory testing and development.
- It is a methodology for representing, estimating and testing a network of relationships between variables (measured variables and latent constructs).
- It is a highly flexible and comprehensive methodology.

- It offers no default model and places few limitations on what types of relation can be specified. SEM model specification requires researchers to support hypotheses with theory or research and specify relationships *a priori*.
- It is a multivariate technique incorporating observed (measured) and unobserved variables (latent constructs).
- The SEM allows researchers to recognise the imperfect nature of their measures.

The main disadvantages of the SEM are that it provides no straightforward tests to determine model fit, complexity, large sample size requirement (> 200); it can be model driven; and there is no single "golden standard" for goodness-of-fit assessment (Kline, 1998; Hu & Bentler, 1998). The SEM cannot test directionality in relationships. The directions of arrows in a SEM represent the researcher's hypotheses of causality in a system (Hair *et al*., 1995). The researcher's choice of variables and pathways represented will limit the SEM's ability to recreate the sample covariance and variance patterns that have been observed. Despite these limitations, the advantages listed above outweigh the disadvantages.

4.8.3.4 Impact of sample size on the SEM

It is necessary to determine the minimum sample size required in order to achieve a desired level of statistical power with a given model prior to data collection. Although the sample size needed is affected by the normality of the data and estimation method researchers use, the generally agreed-on value is ten participants for every free parameter estimated (Hair *et al*., 1998). There is little consensus on the recommended sample size for SEM - the proposed critical sample size is 200 (Kline, 1998). This implies that as a rule of thumb, any number above 200 is understood to provide sufficient statistical power for data analysis.

4.9 SEM STRATEGY

Various SEM strategies can be used, and the researcher's decision about the appropriate strategy to apply is mainly based on the research purpose and research hypothesis. The three different strategies, with specific emphasis on the model development strategy which is applicable in this study, will now be discussed.

4.9.1 Confirmatory modelling strategy

The SEM allows confirmatory modelling which is suited to both theory testing and theory development (Hair *et al*., 1998). Confirmatory modelling usually starts out with a hypothesis that is represented in a causal model. The concepts used in the model must then be operationalised to allow testing of the relationships between the concepts in the model. The limitation of this strategy is that the causal assumptions embedded in the model often have falsifiable implications which can be tested against the data. In addition, although the model is tested against the obtained measurement data to determine how well the model fits the data, the strategy cannot adequately test the proposed model for acceptable fit (Kline, 1998).

4.9.2 Comparative modelling strategy

Comparative modelling is applied when the alternative model is compared with the fit of the baseline model (Bollen, 1989). The baseline model usually specifies complete independencies which are the most restrictive. Hence the measure of fit of the baseline model will be a fairly large model of fit among the observed variables. The indices of comparative modelling are mainly set between the decimals 0 and 1, with 1 representing a perfect fit relative to the baseline model. This implies that in terms of the indices, 0.95 is indicative of good fit relative to the baseline model. The major concern of the comparative modelling strategy is the extent to which its indices are sensitive to sample size, method of estimation and distributional violations (Hu & Bentler, 1998).

Because of the aim of this study, the comparative or competing models strategy was not applicable to it.

4.9.3 Model development strategy

Since the purpose of this study was to use the SEM to develop an employee satisfaction diagnostic model, the model development strategy was relevant for it purposes. According to Hair *et al*. (1998, p. 583), SEM refers to a "...multivariate technique combining aspects of multiple regression and factor analysis to estimate a series of interrelated dependence relationships simultaneously". Confirmatory factor analysis was conducted to determine the validity of the three domains of the model, namely organisational strategy, processes and policies as well as outcomes. In this analysis, the three domains of the model are the latent variables.

Figure 4.6: Steps in the SEM strategy (adapted from Hair *et al.*, 1998, p. 592 - 614)

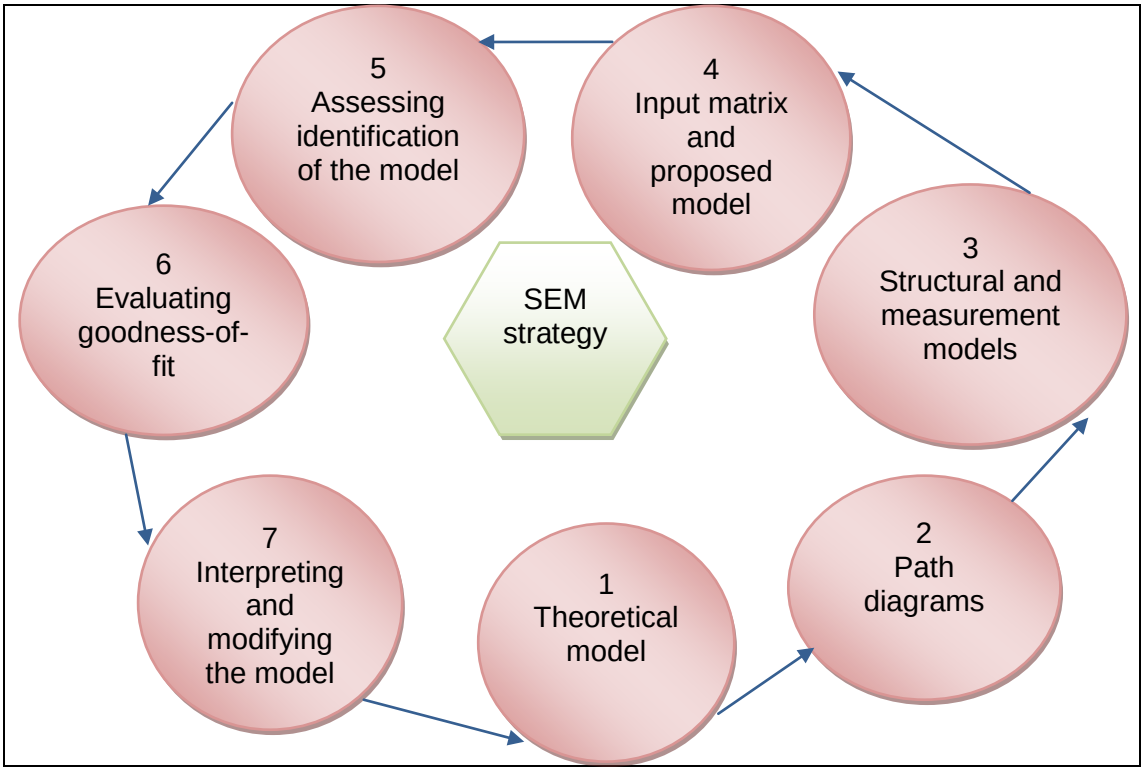


Figure 4.6 depicts the stages of the SEM strategy which were conducted in this study (Hair *et al.* 1998, pp. 592–614). The following is a discussion of the procedure followed in conducting an empirical test of the proposed diagnostic model of employee satisfaction:

- *Stage 1: development of the theoretically based model.* This initial stage of the SEM involves using all available relevant theory, research and information to construct the theoretical model (Hair *et al*., 1998).

  In chapter 3 of this study, the theoretical diagnostic model of employee satisfaction during organisational transformation was discussed on the basis of the results of the literature study.

- *Stage 2: constructing a path diagram of causal relationships.* In SEM, it is essential to specify the relationships between the relevant variables describing the phenomenon of study. It is at this stage that the researcher will use SEM graphs with one-headed arrows indicating causal relationships or two-headed arched arrows indicating mutual dependencies (correlation) (Kline, 1998). Chapter 5 of this study explores the path diagram developed in chapter 3.

  The inclusion of unimportant factors or the exclusion of important factors will produce implied models that are misspecified. Because a misspecified model cannot adequately reproduce the observed covariances, it will not fit the data (Hair *et al*., 1998).

- *Stage 3: converting the path diagram into a set of structural and measurement models.* According to Hair *et al.* (1998, p.619), confirmatory factor analysis is described as "...the use of multivariate techniques to test or confirm a pre-specified relationship". The fundamental hypothesis of the SEM is that the covariance matrix of the observed or manifest variables is a function of a set of parameters which, in this study, means the relationship between latent variables and between the latent and the observed variables (Bollen,1989).

Table 4.11 indicates the latent and manifest variables of the employee satisfaction diagnostic model.

Table 4.11: Latent and manifest variables of the employee satisfaction diagnostic model

Latent variables	Observed or manifest variables	Number of items
Organisational strategy	Vision and mission	4
	Values	5
	Leadership	7
Processes and policies	Change management	7
	Health and safety	3
	Employment equity and diversity	6
	Human resources management	4
	Training	4
	HIV/AIDS	3
	Communication	11
Outcomes	Teamwork	3
	Relationships	8
	Job satisfaction	9

In order to examine the validity of the three latent variables of the model, namely organisational strategy, policies and procedures and outcomes, a confirmatory factor analysis was conducted. The confirmatory factor analysis was conducted using the AMOS software package (version 18.0).

- *Stage 4: choosing the input matrix type and estimating the proposed model, and stage 5: assessing the identification of the structural model.* A correlation matrix was used because the purpose of this study was to explore the pattern of interrelationships between the latent and manifest variables (Hair et al., 1998). The use of correlation matrix

addressed stages 4 and 5 of the SEM process which involve choosing the input matrix type and estimating the proposed model, as well as identifying the structural model.

Once the structural and measurement model have been specified and the input data selected, the AMOS technique of the SPSS computer program can be used to actually estimate the model. The goodness-of-fit of this model will first be assessed for the overall model and then for the measurement and structural model separately. Finally, the proposed model will be verified and required significant modifications of the model explored.

- *Stage 6: evaluation of goodness-of-fit (GFI).* This is stage 6 of the SEM process. The GFI statistics were used to determine the data fit the model (Bollen, 1989; Hair *et al*., 1998). The first assessment of model fit was done for the overall model in order to determine the degree to which the specified indicators represent the hypothesised constructs. This was followed by the evaluation of each construct to examine the indicator loadings for statistical significance and to assess the construct's reliability and variance extracted (Hu & Bentler, 1998).

  The following indices were used to evaluate the model (Bollen, 1989; Hu & Bentler, 1998; Hair, Anderson, Tathum, & Black, 2005; Bentler & Bonnet, 1980):

  – *Goodness-of-fit index (GFI)*. A value of 0 reflects no fit, while a value of 1 is a perfect fit. Values close to 0.90 reflect an acceptable fit.
  – *Normed fit index (NFI)*. A value of 0 reflects no fit, while a value of 1 is a perfect fit. Values close to 0.90 reflect an acceptable fit.
  – *Incremental fit index (IFI)*. A value of 0 reflects no fit, while a value of 1 is a perfect fit. Values close to 0.90 reflect an acceptable fit.
  – *Comparative fit index (CFI)*. A value of 0 reflects no fit, while a value of 1 is a perfect fit. Values close to 0.90 reflect an acceptable fit.

– *Roots mean squared error of approximation (RMSEA)*. A value of 0.05 represents a close approximate fit; values between 0.05 and 0.08 suggest a reasonably approximate fit and values greater than 0.10 suggest a poor fit.

In chapter 5, section 5.5.2, the evaluation of goodness-of-fit is described in detail as well as its application in testing the developed diagnostic model of employee satisfaction during transformation.

Furthermore, a multiple regression analysis was conducted to determine the causal and intercorrelations between the variables (Bentler & Bonnet, 1980; Hair *et al*., 2005). In this study, the purpose of using the multiple regression analysis was to identify the relationships between the latent variables as independent and the manifest variables as dependent variables of the employee satisfaction model.

- *Stage 7: Interpreting and modifying the mode:* This is the final stage of SEM and it entails interpreting and modifying the model. According to Hair *et al*. (1998, p. 654) “possible modifications to the proposed model may be indicated through examination of the normalised residuals and the modification indices”. In this study, theoretical motivation was used before the proposed modification was conducted by testing the respecified model. During this process, the modification index from AMOS was used to find improvements in the model. The modification index exists for each fixed parameter in the model and it is an estimate or prediction of the improvement in the model fit by setting the parameters free (Hu & Bentler, 1998; Hair *et al*., 2005). The proposed model for employee satisfaction was also interpreted on basis of the literature or existing theory.

4.10 FORMULATION OF THE RESEARCH HYPOTHESES

A hypothesis can be described as a tentative statement predicting the relationship between the variables under investigation (Neuman, 1997). It is formulated once the literature review has been completed and the research question has been stated in question form (Christensen, 1994). According to Welman *et al*. (2009, p. 26) "...a hypothesis is a statement or proposition that can be tested by reference to the empirical study". Hypotheses are tested scientifically before they can be accepted or rejected.

Tredoux and Durrheim (2002, p. 129) describe the process of hypothesis testing as a "...logical and empirical procedure whereby hypotheses are formally set up and then subjected to empirical test". Hypotheses are accepted when they have been statistically proven through scientific observation.

In the literature review chapters, the central research hypothesis was formulated to determine the impact of organisational transformation on employee satisfaction and to develop a theoretical model of employee satisfaction during organisational transformation. The following research hypotheses were formulated in order to achieve the empirical objectives of the study:

H1: There are significant differences between gender, job level, race and department groups in the three-year longitudinal study of employee satisfaction during organisational transformation.

H2: There are significant differences in the three-year study of employee satisfaction during organisational transformation.

H3: There is goodness-of-fit of the proposed theoretical employee satisfaction diagnostic model and the empirical data.

The above empirical research hypotheses are tested by means of descriptive and inferential statistics as well as the SEM procedure.

4.11 CHAPTER SUMMARY

This chapter explained the steps in the research design and methodology study. An overview of the population and sample size was presented, followed by a discussion of the survey methods used, the process of data collection and data processing and analysis. The chapter concluded with the formulation of the relevant research hypotheses for the study.

Chapter 5 focuses on the data analysis, interpretation and integration of the empirical findings.

CHAPTER 5 RESEARCH RESULTS

5.1 INTRODUCTION

This chapter describes the organisational context of transformation, discusses the statistical results of the study and integrates the empirical research findings with the literature review. The statistical results of this study are reported in terms of descriptive statistics, inferential statistics and the structural equation model.

5.2 ORGANISATIONAL TRANSFORMATION AS THE CONTEXT OR MODERATING FACTOR OF THIS STUDY

The actual process of transformation rather than the independent variable was the organisational context of this study because the researcher did not measure organisational transformation. In order to gather information on the nature of the transformation as a moderating factor, four of the human resource management staff members were interviewed about the various changes that had occurred in the organisation, its departments, policies and processes. On the strength of the information collected from these managers, a balanced picture was developed of the actual changes in the period between 2003 and 2008.

The following organisational transformations or changes were implemented during the 2003 to 2008 periods of this study:

- *Strategy*. The organisation's strategy was changed and a new human resource strategy was formulated.
- *Policy development*. The policies that were developed were employment equity; talent management; recruitment and selection; career management; disciplinary codes and performance management.
- *System*. An IT system was introduced for salaries administration.

- *Restructuring*. Corporate services and operations departments were restructured in order to fit into the new organisational strategy. A new operations unit was also developed.
- *Training programmes*. Leadership and supervisory development programmes were introduced in the organisation to train team leaders, supervisors and managers.

5.3 DESCRIPTIVE STATISTICS

Descriptive statistics are used to describe and summarise sets of data (Welman *et al*. 2009). Descriptive statistics are necessary to understand inferential statistics. Item reliability and the Cronbach alpha coefficient for the Employee Satisfaction Survey (ESS) were applied in order to establish construct validity. In this chapter, the item reliability and Cronbach alpha coefficient of the measuring instrument for the three samples are reported and subsequently interpreted. In order to give context to the research results and findings, the reporting and interpretation of means and standard deviations were conducted for the three samples.

5.3.1 Reporting of item reliability: the Cronbach alpha coefficient

The internal consistency reliability implies the degree of generalisation across the items in the measurement instrument (Welman *et al*., 2009). It provides assurance about the interpretation of the research results. According to Welman *et al.* (2009, p. 147), "...the Cronbach alpha coefficient is a measure of the internal consistency of a measurement". In this study, the item analyses were conducted for the dimensions of the ESS that did not correlate highly in order to determine whether the removal of some items improved the Cronbach alpha.

The following is the description of the item reliability of the Employee Satisfaction Survey (ESS) for the three samples.

5.3.1.1 Reliability analysis of the ESS for the 2003 sample

Table 5.1 indicates the Cronbach alpha coefficient of the 13 ESS dimensions for the 2003 sample. These alpha coefficients ranged from 0.91 to 0.33 for the total sample (N = 1140). The total ESS obtained a Cronbach alpha coefficient of 0.97 for 2003, which can be regarded as high and acceptable for this study.

In terms of table 5.1, the reliabilities of most of the dimensions of the ESS are fairly high. The health and safety dimension obtained an alpha coefficient of 0.64, while the teamwork dimension obtained an alpha coefficient of 0.71. A low alpha coefficient of 0.33 was obtained for the HIV/AIDS dimension. Coefficients as low as 0.30 are deemed to be acceptable reliability levels for group measures (Tredoux & Durrheim, 2002; Foxcroft & Roodt, 2005).

Table 5.1: Reliability analysis of the ESS for the 2003 sample

ESS dimensions	Cronbach alpha coefficient	Number of items
Vision and mission	0.93	4
Values	0.82	5
Leadership	0.87	7
Change management	0.91	7
Health and safety	0.68	3
Employment equity and diversity	0.75	6
Human resource management	0.80	4
Training	0.75	4
HIV/AIDS	0.33	3
Communication	0.90	11
Teamwork	0.71	3
Relationships	0.85	8
Job satisfaction	0.83	9
Total ESS	**0.97**	**74**

In order to determine whether the reliability of the dimensions with low Cronbach alpha coefficients could be improved, item analyses were conducted on the health and safety, teamwork and HIV/AIDS dimensions. Table 5.2 depicts the item analysis for the health and safety dimension of the 2003 sample. The item analysis results indicates that by removing item 41 (*My co-workers use the safety steps,)* the alpha coefficient would change the coefficient value to 0.67 which is not an improvement. For the purpose of this study, the researcher therefore decided to include all the items in the dimension.

Table 5.2: Item analysis for the health and safety dimension of the ESS for the 2003 sample

Question item	Scale mean if item deleted	Scale variance if item deleted	Corrected item – total correlation	Cronbach alpha if item deleted
Q39	6.82	5.20	0.44	0.56
Q40	6.52	4.68	0.57	0.35
Q41	6.15	6.46	0.34	0.67

Table 5.3 indicates the item analysis for the teamwork dimension of the 2003 sample. No items could be excluded to substantially improve the overall reliability of the teamwork dimension.

Table 5.3: Item analysis for the teamwork dimension of the ESS for the 2003 sample

Question item	Scale mean if item deleted	Scale variance if item deleted	Corrected item – total correlation	Cronbach alpha if item deleted
Q21	6.29	5.89	0.49	0.56
Q22	6.79	5.75	0.50	0.54
Q23	6.75	5.81	0.45	0.62

Table 5.4 indicates the item analysis for the dimension HIV/AIDS for the 2003 sample. This table shows that item 63 (*I have a need for more information about HIV/AIDS*) does not correlate well with the dimension. Item analysis of this dimension indicates that by excluding item 63, the reliability of the dimension would improve substantially to 0.75. The researcher therefore decided to remove the item in order to improve the reliability of this dimension.

Table 5.4: Item analysis for the HIV/AIDS dimension of the ESS for the 2003 sample

Question item	Scale mean if item deleted	Scale variance if item deleted	Corrected item – total correlation	Cronbach alpha if item deleted
Q61	5.60	3.51	0.39	-0.26
Q62	5.72	3.65	0.38	-0.23
Q63	6.42	6.87	-0.12	0.75

In summary, only item 63 of the HIV/AIDS dimension was excluded in order to improve the reliability of the dimension in the 2003 sample. For the purpose of this study, the psychometric properties of the ESS were regarded as highly acceptable for the 2003 sample because of the overall reliability of the ESS at 0.97.

5.3.1.2 Reliability analysis of the ESS for the 2007 sample

Table 5.5 indicates the Cronbach alpha coefficient of all 13 ESS dimensions for the 2007 sample. These alpha coefficients varied from 0.89 to 0.65 for the total sample (N = 920). The total ESS obtained a Cronbach alpha coefficient of 0.97 for the 2007 sample, which is similar to the 2003 sample. It can also be regarded as high and therefore acceptable for this study.

The dimensions of values, leadership, change management, health and safety, human resources management, training, communication, teamwork,

relationships and job satisfaction acquired high reliability coefficients. The dimensions with low alpha coefficients were vision and mission (0.66), employment equity and diversity (0.65) and HIV/AIDS (0.65). Item analyses were conducted to explore whether the dimensions with alpha coefficients could be substantially improved.

Table 5.5: Reliability analysis of the ESS for the 2007 sample

ESS dimensions	Cronbach alpha coefficient	Number of items
Vision and mission	0.66	4
Values	0.76	5
Leadership	0.88	7
Change management	0.86	7
Health and safety	0.72	3
Employment equity and diversity	0.65	6
Human resource management	0.83	4
Training	0.72	4
HIV/AIDS	0.65	3
Communication	0.76	11
Teamwork	0.71	3
Relationships	0.84	8
Job satisfaction	0.89	9
Total ESS	**0.97**	**74**

According to table 5.6, the item analysis results for the vision and mission dimension for the 2007 sample indicates that by excluding item 3 (*Management shows in what they do that they are committed to the vision and mission of the organisation),* the alpha coefficient would only improve the coefficient value to 0.70. Since this improvement was not regarded as substantial, for the purpose of this study, it was decided to include all the items in the dimension.

Table 5.6: Item analysis for the vision and mission dimension of the ESS for the 2007 sample

Question item	Scale mean if item deleted	Scale variance if item deleted	Corrected item – total correlation	Cronbach alpha if item deleted
Q1	10.45	8.19	0.45	0.57
Q2	10.36	8.81	0.48	0.55
Q3	11.18	9.77	0.26	0.70
Q4	10.45	8.14	0.58	0.49

Table 5.7 indicates the item analysis for the employment equity and diversity dimension for the 2007 sample. Since no items could be excluded in order to substantially improve the overall reliability of the dimension, all five items of the employment equity and diversity dimension were included.

Table 5.7: Item analysis for the employment equity and diversity dimension of the ESS for the 2007 sample

Question item	Scale mean if item deleted	Scale variance if item deleted	Corrected item – total correlation	Cronbach alpha if item deleted
Q42	9.85	13.13	0.49	0.55
Q43	9.30	12.51	0.45	0.56
Q44	9.82	13.48	0.46	0.57
Q45	8.84	15.30	0.19	0.69
Q46	9.59	12.82	0.42	0.58

In table 5.8, the item analysis for the dimension HIV/AIDS for the 2007 sample indicates that item 63 (*I have a need for more information about HIV/AIDS*) does not relate well to the dimension. Item analysis of this dimension indicates that by eliminating item 63, the reliability of the dimension would improve

substantially to 0.89. Once again, the researcher decided to remove the item in order to improve the reliability of this dimension.

Table 5.8: Item analysis for the HIV/AIDS dimension of the ESS for the 2007 sample

Question item	Scale mean if item deleted	Scale variance if item deleted	Corrected item – total correlation	Cronbach alpha if item deleted
Q61	7.75	4.16	0.60	0.37
Q62	7.78	4.12	0.61	0.36
Q63	8.35	4.35	0.24	0.89

In summary, all the dimensions of the ESS were considered to be reliable for the purpose of this study. Hence only one item of the dimension, namely HIV/AIDS, was eliminated in order to improve the reliability of the dimensions in the 2007 sample. The psychometric properties of the ESS were regarded as highly acceptable for the 2007 sample based on the overall reliability of the ESS at 0.97, which is similar to the reliability of the 2003 sample.

5.3.1.3 Reliability analysis of the ESS for the 2008 sample

The Cronbach alpha coefficients of all 13 ESS dimensions for the 2008 sample are indicated in table 5.9. These alpha coefficients differed from 0.89 to 0.66 for the total sample (N = 759). The total ESS scored a Cronbach alpha coefficient of 0.96 for 2008, which is closely related to the Cronbach alpha coefficients for the 2003 and 2007 samples. The Cronbach alpha coefficient of the ESS for the 2008 samples was therefore also regarded as high and acceptable for this study.

The Cronbach alpha coefficient values were high for the dimensions of vision and mission, values, leadership, change management, health and safety, employment equity and diversity, human resource management, training,

communication, teamwork, relationships and job satisfaction. As indicated in sections 5.2.1.1 and 5.2.1.2, the Cronbach alpha coefficient of the dimension, HIV/AIDS, was low at 0.66. Item analysis of this dimension was conducted to determine the possibility of improving the reliability coefficient of this dimension.

Table 5.9: Reliability analysis of the ESS for the 2008 sample

ESS dimensions	Cronbach alpha coefficient	Number of items
Vision and mission	0.84	4
Values	0.84	5
Leadership	0.88	7
Change management	0.89	7
Health and safety	0.81	3
Employment equity and diversity	0.74	5
Human resource management	0.72	4
Training	0.78	4
HIV/AIDS	0.66	3
Communication	0.84	11
Teamwork	0.70	3
Relationships	0.83	8
Job satisfaction	0.89	9
Total ESS	**0.96**	**74**

Table 5.10 indicates the item analysis for the dimension, HIV/AIDS, for the 2008 sample. The table also shows that item 63 (*I have a need for more information about HIV/AIDS*) does not relate to the dimension. Item analysis of this dimension indicated that by excluding item 63, the reliability of the dimension would improve substantially to 0.83. The researcher therefore decided to remove this item for the purpose of consistency and to improve the reliability of this dimension.

Table 5.10: Item analysis for the HIV/AIDS dimension of the ESS for the 2008 sample

Question item	Scale mean if item deleted	Scale variance if item deleted	Corrected item – total correlation	Cronbach alpha if item deleted
Q61	7.77	3.85	0.55	0.45
Q62	7.85	3.55	0.62	0.35
Q63	8.06	4.29	0.27	0.83

In summary, only item 63 of the ESS dimension, HIV/AIDS, was removed in order to improve the reliability of the dimensions in the 2008 sample. Hence for the purpose of this study all the dimensions of the ESS were considered to be reliable. The psychometric properties of the ESS were regarded as highly acceptable for the 2008 sample based on the overall reliability of the ESS at 0.96, which is similar to the reliability coefficients for the 2003 and 2007 samples.

5.3.1.4 Summary of the ESS for the three samples

Table 5.11 provides an overview of the ESS Cronbach alpha values for each of the three samples of this study. The total ESS scale Cronbach alpha for each of the three samples was consistent at 0.97, which was regarded as high and thus suitable for the purpose of this study.

Table 5.11: Reliability analyses of the ESS for the three samples

Year of study	Cronbach alpha coefficient	Number of items	Sample size
2003	0.97	74	N = 1140
2007	0.97	74	N = 920
2009	0.96	74	N = 759

5.3.2 Reporting and interpretation of the means and standard deviations

This section reports on the means and standard deviations of the ESS measuring instrument for each of the three samples in the study. The descriptive results are discussed in terms of the values generated by each of the dimensions of the ESS as a measuring instrument. The ESS is scored by obtaining a mean score across all the items in each dimension. Each item score ranges from 1 (strongly disagree) to 5 (strongly agree), with a score of 1 as the minimum and 5 as the maximum.

According to Castro and Martins (2010, p. 7), "...research by the HSRC indicates that an average of 3.2 is a good guideline to distinguish between positive and potential negative perceptions". The researcher in the current study therefore decided to use the recommended cut-off score of 3.2 as a guideline to differentiate between potentially positive and negative perceptions. This implies that a mean score above 3.2 indicated a positive perception, while a mean score below 3.2 indicated a negative perception of the ESS dimensions. Hence a positive perception indicates satisfaction, while a negative perception means dissatisfaction.

5.3.2.1 Means and standard deviations of the ESS for the 2003 sample

Table 5.12 provides the descriptive information on the ESS dimensions for the 2003 sample. The perceptions of this sample in this organisation can be described as negative overall, with an overall mean score of 2.56, which is below the 3.2 cut-off point. The results indicate that employees were generally dissatisfied with the various aspects of the organisation as measured by the 15 dimensions of the ESS.

Table 5.12: Means and standard deviations of the ESS for the 2003 sample (N = 1140)

ESS dimensions	Minimum	Maximum	Mean	Standard deviation
Vision and mission	1.00	5.00	2.59	1.31
Values	1.00	5.00	3.00	1.19
Leadership	1.00	5.00	2.99	1.14
Change management	1.00	5.00	2.30	1.04
Health and safety	1.00	5.00	3.09	1.14
Employment equity and diversity	1.00	5.00	2.29	0.94
Human resource management	1.00	5.00	2.11	1.04
Training	1.00	5.00	2.91	1.14
HIV/AIDS	1.00	5.00	2.58	0.95
Communication	1.00	5.00	2.39	1.01
Teamwork	1.00	5.00	3.10	1.20
Relationships	1.00	5.00	2.99	1.01
Job satisfaction	1.00	5.00	2.97	1.22
Total ESS	**-**	**-**	**2.56**	**1.13**

Although the 2003 sample demonstrated dissatisfaction with all the dimensions of the ESS, the researcher decided to focus on the dimensions that the respondents perceived as extremely negative. The discussion below focuses mainly on the extreme negative perceptions of the ESS dimensions, namely human resource management, employment equity and diversity, communication and change management.

The results highlight the fact that the employees perceived human resource management (mean of 2.11 and standard deviation of 1.04) in the organisation as extremely negative compared with the other dimensions. The results show that the human resource management department in this organisation is considered to be unfair in terms of the application of

recruitment, promotion, salaries, disciplinary and grievance processes and procedures.

A study conducted by Voisard (2008) highlighted the fact that employees earning higher salaries experienced higher employee satisfaction because they felt more appreciated and recognised for their work. Organisational rewards such as salary, employee benefits and performance measures are considered to be the primary source of employee satisfaction (Mottaz, 1987; Mudor & Tooksson, 2011). Employee satisfaction is the extent to which employees perceive that they are being fairly treated (Aamodt, 2010). This implies that perceptions of organisational justice regarding human resource management processes, policies and procedures are key determinants of employee satisfaction in an organisation.

The results also indicate that the participants had an extremely negative perception of employment equity and diversity management (mean of 2.29 and standard deviation of 0.94) in the organisation. This dissatisfaction means that immediate managers do not treat all employees equally and employees do not see their organisation as being committed to implementing diversity management and employment equity initiatives. Diversity and employment equity initiatives serve as a competitive advantage, because an organisation that is perceived to be committed to these programmes reports high levels of employee satisfaction, loyalty and retention (Werner, 2007).

Employees also perceived change management in an extremely negative light (mean of 2.30 and standard deviation of 1.04). The researcher therefore inferred that employees were dissatisfied because of their exclusion from decision making, communication and the implementation of organisational changes. Harigopal (2006) highlighted the fact that employees tend to accept and welcome organisational change or transformation when it benefits them and affords them opportunities to contribute to and determine the change process.

Lastly, communication in the organisation was perceived in an extremely negative way by the participants, with a mean score of 2.39 and standard deviation of 1.01. According to Cunningham (2007, p, 164), “organisational communication serves three major purposes: it allows members to coordinate actions, share information and satisfy social needs”. The literature provides ample evidence of the positive relationship between organisational communication and employee satisfaction (Iverson, 2000; Cunningham, 2007; De Nobile & McCormick 2008). In other words, lack of organisational communication leads to employee dissatisfaction. The results of this study indicate that employees are not provided with sufficient information on organisational changes and future plans to enable them to perform efficiently.

While all the dimensions of ESS measured in 2003 were areas of concern for the organisation, the extremely negative perception of dimensions discussed above could be regarded as the major developmental areas for the organisation.

5.3.2.2 Means and standard deviations of the ESS for the 2007 sample

The descriptive information on the ESS dimensions for the 2007 sample is depicted in table 5.13. The overall mean score of 2.80 for this sample suggests that the employees’ perceptions are negative because they are generally dissatisfied with organisational processes and systems measured by the ESS.

Table 5.13: Means and standard deviations of the ESS for the 2007 sample (N = 920)

ESS dimensions	Minimum	Maximum	Mean	Standard deviation
Vision and mission	1.00	5.00	3.22	1.19
Values	1.00	5.00	2.97	1.11
Leadership	1.00	5.00	2.88	1.17
Change management	1.00	5.00	2.47	1.05
Health and safety	1.00	5.00	3.12	1.19
Employment equity and diversity	1.00	5.00	2.32	0.97
Human resource management	1.00	5.00	2.24	1.03
Training	1.00	5.00	2.80	1.17
HIV/AIDS	1.00	5.00	3.77	1.05
Communication	1.00	5.00	2.60	0.95
Teamwork	1.00	5.00	3.14	1.17
Relationships	1.00	5.00	3.01	0.99
Job satisfaction	1.00	5.00	3.21	1.13
Total ESS	**-**	**-**	**2.80**	**1.05**

While the 2007 sample demonstrated dissatisfaction in most of the dimensions of the ESS, the employees did pinpoint a few areas of satisfaction. The positive results of the three dimensions indicate that some change interventions had been made.

The researcher therefore decided to focus on the dimensions that the participants had perceived in a positive light. The discussion below focuses mainly on the positive perception of the ESS dimensions, namely job satisfaction, HIV/AIDS and vision and mission.

The participants had an extremely positive perception of HIV/AIDS programmes (a mean of 3.77 and a standard deviation of 1.54) in the organisation. This indicates that the organisation supports employees through its HIV/AIDS programmes and focuses on education, awareness, treatment and prevention. HIV/AIDS organisational support programmes that enable employees to manage and prevent HIV/AIDS improve their perception that they are in fact valued in the organisation (Matlala, 1999; Meyer & Botha, 2000; Bodilenyane, 2012).

The results also indicate that the respondents were satisfied with their jobs (a mean of 3.21 and a standard deviation of 1.13). Job satisfaction suggests that the employees found their work challenging and interesting. They also regard their future with the organisation as positive. The findings of a study conducted by Balgobind (2002) with a sample of South African employees confirm the results in that employees who enjoyed their work reported high levels of satisfaction in their organisation.

The dimension, organisational vision and mission, was positively perceived by the participants with a mean score of 3.22 and standard deviation of 1.19. This implies that employees understand and are passionate about implementing the organisation's vision and mission. According to McShane and Von Glinow (2005, p. 514), a clear and well-articulated vision provides employees with a better understanding of the expected behaviours in the organisation.

Based on the results of the 2007 sample, the ESS dimensions considered to be developmental areas for the organisation were values, leadership, human resource management, employment equity and diversity, communication, change management, health and safety, training, teamwork and relationships. All these dimensions had mean scores below the cut-off point of 3.2.

5.3.2.3 Means and standard deviations of the ESS for the 2008 sample

The means and standard deviations of the 2008 sample are indicated in table 5.14. In terms of the results of the 2008 sample, employee satisfaction in the organisation can be described as positive with a mean score of 3.22, indicating that the employees are satisfied.

Table 5.14: Means and standard deviations of the ESS for the 2008 sample (N = 759)

ESS dimensions	Minimum	Maximum	Mean	Standard deviation
Vision and mission	1.00	5.00	3.38	1.16
Values	1.00	5.00	3.13	1.10
Leadership	1.00	5.00	3.13	1.11
Change management	1.00	5.00	2.69	1.10
Health and safety	1.00	5.00	3.22	1.17
Employment equity and diversity	1.00	5.00	2.53	0.96
Human resource management	1.00	5.00	2.69	1.05
Training	1.00	5.00	3.00	1.12
HIV/AIDS	1.00	5.00	3.90	0.96
Communication	1.00	5.00	2.86	0.89
Teamwork	1.00	5.00	3.29	1.15
Relationships	1.00	5.00	3.21	0.91
Job satisfaction	1.00	5.00	3.37	1.05
Total ESS	**-**	**-**	**3.22**	**1.02**

The results of the 2008 sample indicated an improvement in the number of the dimensions that the participants perceived positively, namely vision and mission, health and safety, HIV/AIDS, teamwork, relationships and job satisfaction.

Since the dimensions of vision and mission, HIV/AIDS and job satisfaction were discussed as areas of satisfaction for the 2007 sample in section 5.3.2.3, the discussion below will focus only on teamwork, relationships and health and safety:

Teamwork in the organisation can be defined as positive, with a mean score of 3.29 and a standard deviation of 1.15, which is above the cut-off point. The result indicates that the employees felt valued as members of their team, and as a team collaborated with other departments in the organisation. According to Aamodt (2010), employees who enjoy working with their supervisors and colleagues as a team tend to be more satisfied with their jobs.

The participants had a positive perception of relationships (a mean of 3.21 and a standard deviation of 1.91). According to Milner (2009, p. 83), “most people work fulfils the need for social interaction, having friendly and supportive co-workers leads to increased satisfaction”. This result therefore indicates that the employees in the organisation in this study treated one another with dignity and respect.

The participants also perceived the dimension of health and safety positively, with a mean score of 3.22 and a standard deviation of 1.17. The positive score indicates that the employees abided by and were informed about health and safety measures in the organisation.

In relation to the results of the 2003 and 2007 samples, it is evident from the results of the 2008 sample that the ESS dimensions that consistently remained developmental areas for the organisation were values, leadership, human resource management, employment equity and diversity, communication, change management and training. These dimensions obtained mean scores below the cut-off point of 3.2.

Once again, because the dimensions of human resource management, employment equity and diversity, communication and change management were discussed as areas of dissatisfaction for the 2003 sample in section 5.3.2.1, the researcher decided to briefly discuss the following dimensions which emerged as developmental areas in all three samples in this study, but which have not yet been discussed:

The participants perceived organisational values negatively (a mean of 3.13 and a standard deviation of 1.10), indicating that the employees did not operate in line with organisational values in their work. Organisational values are vital as a more effective way to guide employee behaviour and engage in ethical practices (McShane & Von Glinow, 2005). These results suggest that the employees in this organisation found the existing values to be of little value in guiding ethical behaviour in the organisation.

The participants perceived leadership in the organisation negatively, with a mean score of 3.13 and a standard deviation of 1.11. This indicates that the leaders were perceived as incompetent and unable to manage people, and they also tended to exclude employees from decision making. A study by Stander and Rothmann (2008, p. 11) indicates that leaders' empowering behaviours have a positive impact on employee satisfaction. Such behaviours include delegation of authority, providing future vision, accountability of outcomes, leading by example, encouragement, participative decision making, information sharing and people development (Stander & Rothmann, 2008).

The participants also reported a mean score below the cut-off point of 3.2 for training (a mean of 3.00 and a standard deviation of 1.12). These results indicate that employees perceived training and development opportunities in the organisation negatively. In a research study, Schmidt (2007, p. 482) reported a positive correlation between employee satisfaction and opportunities for training and development in an organisation. In other words, a lack of training and development opportunities in an organisation leads to dissatisfaction.

5.3.2.4 Summary of the ESS means and standard deviations for the three samples

Table 5.15 indicates the overall means and standard deviation scores of the ESS for the three samples in this study. The mean scores of the three samples varied from 2.56 to 3.22, with variations in the standard deviations ranging from 1.02 to 1.13.

Table 5.15: Summary of means and standard deviations of the ESS for the three samples

ESS samples	Minimum	Maximum	Mean	Standard deviation
2003 (N = 759)	1.00	5.00	2.56	1.13
2007 (N = 920)	1.00	5.00	2.80	1.05
2008 (N = 1140)	1.00	5.00	3.22	1.02

The overall mean score of the 2003 sample (mean score = 2.56; standard deviation = 1.13) and the 2007 sample (mean score = 2.80; standard deviation = 1.05) indicate employees' negative perceptions of and dissatisfaction with organisational processes, policies and procedures.

The participants in the 2008 sample obtained the highest mean scores of above 3.2 overall, in comparison with the results of the 2003 and 2007 samples. The researcher thus inferred that in the three years of the study, only the participants in the 2008 sample were satisfied with organisational processes and procedures as measured by the ESS.

5.4 INFERENTIAL STATISTICS

In chapter 4, hypotheses were formulated for this study. The purpose of inferential statistics is to use samples to test research hypotheses. Nonparametric tests were used for the three samples in order to test the hypotheses.

5.4.1 Nonparametric tests of the biographical groups and employee satisfaction

The nonparametric tests of Mann-Whitney and Kruskal Wallis were used in this study to test the following hypothesis:

H1: There are significant differences between gender, job levels, race and department groups in the three years of study of employee satisfaction during organisational transformation.

This section discusses the results by determining whether the biographical groups (gender, race, job level and department) of the three samples differ significantly on their mean scores with regard to the variable of employee satisfaction.

5.4.1.1 Reported differences in the ESS mean scores for gender groups (2003, 2007 & 2008)

The research results of the Mann-Whitney tests and mean scores investigating the relationship between ESS and the demographic variable, gender, for all three samples are provided in tables 5.16 and 5.17.

Table 5.16: Mann-Whitney test results for the gender groups on the ESS (2003, 2007 & 2008)

ESS dimensions	2003 Z (Asymp. sig.)	2007 Z (Asymp. sig.)	2008 Z (Asymp. sig.)
Vision and mission	-10.41 (0.000***)	-6.46 (0.000***)	-5.62 (0.000***)
Values	-2.79 (0.05*)	-1.27 (2.04)	-0.91 (0.36)
Leadership	-5.02 (0.000***)	-1.71 (0.87)	-.146 (0.88)
Change management	-5.81 (0.000***)	-1.16 (2.47)	-0.53 (0.59)
Health and safety	-0.70 (0.48)	-5.46 (0.000***)	-6.28 (0.000***)
Employment equity and diversity	-5.84 (0.000***)	-0.94 (0.41)	-0.79 (0.63)
Human resource management	-6.21 (0.000***)	-1.60 (0.10)	-2.03 (0.04*)
Training	-4.10 (0.000***)	-3.05 (0.002*)	-2.30 (0.03*)
HIV/AIDS	-5.33 (0.000***)	-0.81 (0.41)	-1.70 (0.08)
Communication	-8.34 (0.000***)	-2.84 (0.004*)	-3.22 (0.001**)
Teamwork	-0.78 (0.43)	-0.62 (0.53)	-1.11 (0.26)
Relationships	-3.40 (0.00**)	-0.52 (0.60)	-1.56 (0.11)
Job satisfaction	-4.49 (0.000***)	-5.80 (0.000***)	-3.64 (0.000***)

Note: ***p $\leq$ 0.000; **p $\leq$ 0.01; *p $\leq$ 0.05

In table 5.16, the results indicate the following significant differences in the three samples:

- The 2003 samples results show a statistically significant difference between gender and the ESS dimensions (ranging from $p \leq 0.000$ to $p \leq 0.05$) on vision and mission, leadership, values, change management, employment equity and diversity, human resources, training, HIV/AIDS, communication, relationships and job satisfaction.

- There is a statistically significant difference (ranging from $p \leq 0.000$ to $p \leq 0.05$) in the 2007 sample between gender and the ESS dimensions of vision and mission, health and safety, training, communication and job satisfaction only.

- The 2008 sample indicates a statistically significant difference between gender and the ESS dimensions (ranging from $p \leq 0.000$ to $p \leq 0.05$) only on vision and mission, health and safety, human resources, training, communication and job satisfaction.

While it is evident in these results that the statistically significant differences between gender and the ESS dimension varied in three studies, only the dimension of teamwork that did not show any significant differences in the three years of the study.

Table 5.17: Mean scores for significant differences for the gender groups on the ESS (2003, 2007 & 2008)

ESS dimensions	Gender	2003 mean	2007 mean	2008 mean
Vision and mission	*Male*	2.52	3.07	3.23
	Female	3.72	3.66	3.82
Values	*Male*	3.01	3.00	3.15
	Female	3.31	2.91	3.05
Leadership	*Male*	2.99	2.87	3.13
	Female	3.48	3.04	3.13
Health and safety	*Male*	3.14	3.24	3.37
	Female	3.11	2.76	2.78
Employment equity and diversity	*Male*	2.66	2.32	2.51
	Female	2.76	2.32	2.61
Human resource management	*Male*	2.07	2.21	2.65
	Female	2.59	2.31	2.85
Training	*Male*	2.91	2.84	3.06
	Female	3.29	2.56	2.83
HIV/AIDS	*Male*	2.57	3.82	3.98
	Female	3.00	3.67	3.64
Communication	*Male*	2.35	2.58	2.81
	Female	3.05	2.79	3.03
Relationships	*Male*	3.02	3.04	3.22
	Female	3.30	3.01	3.11
Job satisfaction	*Male*	2.96	3.29	3.44
	Female	3.42	2.81	3.16
Change management	*Male*	2.27	2.49	2.68
	Female	2.76	2.38	2.71

The discussion below focuses on the significant differences between the mean scores of the female and male participants in the study (see table 5.17).

In the 2003 sample, the female participants obtained significantly higher mean scores than the male participants, with significant differences emerging for all the ESS dimensions. The female participants reported positive perceptions on the dimensions of vision and mission (m = 3.72), values (m = 3.31), leadership (m = 3.48), training (m = 3.29), relationships (m = 3.30) and job satisfaction (m = 3.42). It is also evident that in the dimensions that were negatively perceived by both male and female participants, the female participants had a higher mean score, namely employment equity and diversity (m = 2.76), human resource management (m = 2.59), HIV/AIDS (m = 3.00), communication (m = 3.05) and change management (m = 2.76). These results suggest that the female participants obtained higher mean scores compared with their male counterparts in the positively and negatively perceived dimensions.

The results of the 2007 sample were inconsistent in that the female participants only obtained significantly high mean scores than the male participants on the ESS dimensions of vision and mission (m = 3.66), thus indicating their positive perception, and communication (m = 2.79), indicating their negative perception of this dimension. The male participants in this sample obtained significantly higher mean scores than their female counterparts on the ESS dimensions of health and safety (m = 3.24) and job satisfaction (m = 3.29), thus indicating their satisfaction and positive perception. It was only in the dimension of training (m = 2.84) that the male participants in this sample obtained significantly higher mean scores than the female participants, although this still indicated a negative perception.

Similarly, the results of the 2008 sample were also inconsistent, with the female participants only obtaining significantly high mean scores than the male participants on the ESS dimensions of vision and mission (m = 3.82), indicating their positive perception. They also obtained high mean scores on human resource management (m = 2.85) and communication (m = 2.79,)

indicating a negative perception in these dimensions. The male participants in this sample also obtained significantly higher mean scores than the female participants on the ESS dimensions of health and safety (m = 3.37) and job satisfaction (m = 3.34), indicating their satisfaction and positive perception. Again, it is only in the dimension of training (m = 3.06) that the male participants in this sample obtained significantly higher mean scores than the female participants, although still indicating a negative perception.

Interpretation of the results shown in tables 5.16 and 5.17 suggests that generally, the female participants seemed to be more satisfied than their male counterparts. In the dimension of vision and mission, the female participants consistently demonstrated significantly more positive perceptions than the male participants. According to Oshagbemi (2003, p. 1214), "...a common explanation for the different level of work satisfaction sometimes reported for men and women is that women have different expectations with regard to work".

Although the literature indicates that the results of studies pertaining to the relationship between employee satisfaction and gender were contradictory, this study confirms the finding by some studies that have found women to be more satisfied than men (Sloane & Williams, 1996; Ward & Sloane, 1998; Oshagbemi, 2003). However, the results of the 2007 and 2008 samples in this study indicate that the male participants seemed to be more satisfied than the female participants in terms of health and safety, training and job satisfaction.

5.4.1.2 Reported differences in the ESS mean scores for the race groups (2003, 2007 & 2008)

The research results of the Kruskal Wallis test and mean scores investigating the relationships between ESS and the demographic variable of race for all three samples are provided in tables 5.18 and 5.19. The race groups in the three samples comprised African, coloured, Indian and white participants.

Table 5.18: Kruskal Wallis test results for the race groups on the ESS (2003, 2007 & 2008)

ESS dimensions	2003 Chi-square (asymp. sig.)	2007 Chi-square (asymp. sig.)	2008 Chi-square (asymp. sig.)
Vision and mission	265.00 (0.000***)	49.88 (0.000***)	8.04 (0.04*)
Values	15.16 (0.002**)	7.41 (.065)	25.97 (.000***)
Leadership	96.63 (0.000***)	28.10 (0.000***)	.990 (0.80)
Change management	85.36 (0.000***)	0.44 (0.93)	3.21 (0.36)
Health and safety	14.36 (0.002**)	3.65 (0.30)	8.75 (0.03*)
Employment equity and diversity	72.28 (0.000***)	4.55 (0.20)	14.42 (0.00**)
Human resource management	132.46 (0.000***)	36.42 (0.000***)	1.46 (0.69)
Training	79.41 (0.000***)	22.18 (0.000***)	3.40 (0.33)
HIV/AIDS	102.77 (0.000***)	58.60 (0.000***)	39.31 (0.000***)
Communication	178.87 (0.000***)	3.18 (0.36)	1.40 (0.70)
Teamwork	10.92 (0.01*)	2.15 (0.54)	4.68 (0.19)
Relationships	47.54 (0.000***)	13.44 (0.004**)	2.64 (0.45)
Job satisfaction	37.80 (0.000***)	16.80 (0.001**)	13.73 (0.00**)

Note: ***p $\leq$0.000; **p $\leq$0.01; *p $\leq$0.05

Based on the results in table 5.18, the following significant differences in race groups were evident in the three samples:

- In the 2003 sample, there was a statistically significant difference between race and all the ESS dimensions (ranging from $p \leq 0.05$ to $p \leq 0.000$).

- In the 2007 sample, a statistically significant difference was found between race and the ESS dimensions of vision and mission, leadership, human resource management, training, HIV/AIDS, relationships and job satisfaction (ranging from $p \leq 0.05$ to $p \leq 0.000$).

- In the 2008 sample, there were statistically significant differences between race and the ESS dimensions of vision and mission, values, health and safety, employment equity and diversity, HIV/AIDS and job satisfaction (ranging from $p \leq 0.05$ to $p \leq 0.000$).

Table 5.19: Mean scores for significant differences for the race groups on the ESS (2003, 2007 & 2008)

ESS dimensions	Year of study	African	Coloured	Indian	White
Vision and mission	*2003 mean*	2.36	3.88	3.99	3.88
	2007 mean	3.07	3.77	3.88	3.67
	2008 mean	3.31	3.81	3.71	3.62
Values	*2003 mean*	2.99	3.37	3.55	3.29
	2008 mean	3.22	2.76	2.82	2.62
Leadership	*2003 mean*	2.91	3.52	3.70	3.70
	2007 mean	2.82	3.18	3.05	3.38
Health and safety	*2003 mean*	3.08	3.43	2.97	3.37
	2008 mean	3.30	2.84	2.53	3.22
Employment equity and diversity	*2003 mean*	2.21	2.69	2.70	3.37
	2008 mean	2.59	2.35	1.98	2.26
Human resource management	*2003 mean*	1.98	2.77	2.68	2.82
	2007 mean	2.15	2.68	2.50	2.68
Training	*2003 mean*	2.82	3.50	3.54	3.52
	2007 mean	2.74	2.90	2.87	3.24
HIV/AIDS	*2003 mean*	2.49	3.25	3.14	3.13
	2007 mean	3.86	3.72	3.55	3. 49
	2008 mean	3.96	3.80	3.38	3.50
Communication	*2003 mean*	2.26	3.04	3.20	3.29
Relationships	*2003 mean*	2.97	3.22	3.41	3.46
	2007 mean	3.00	3.05	3.26	3.30
Job satisfaction	*2003 mean*	2.92	3.54	3.72	3.32
	2007 mean	3.28	2.87	2.86	3.08
	2008 mean	3.40	3.43	2.86	3.03
Change management	*2003 mean*	2.21	2.83	2.84	2.83
Teamwork	*2003 mean*	3.11	3.21	3.46	3.42

The discussion below focuses on the significant differences in the mean scores of the race groups in the study (see table 5.19).

The African participants in the 2003 sample obtained significantly lower scores compared with the coloured, Indian and white participants. The African participants demonstrated extremely negative perceptions compared with the other race groups in the ESS dimensions of vision and mission (m = 2.36); values (m = 2.99); leadership (m = 2.91); employment equity and diversity (m = 2.21); human resource management (m = 1.98); training (m = 2.82); HIV/AIDS (m = 2.49); communication (m = 2.26); relationships (m = 2.98); change management (m = 2.21); teamwork (m = 3.11); and job satisfaction (m = 2.92). It is only in the ESS dimension of health and safety that the Indians participants in the 2003 sample obtained the lowest mean score of 2.97 compared with the African, white and coloured participants.

In the 2007 sample, the African participants also obtained significantly lower scores compared with the coloured, Indian and white participants on the ESS dimensions of vision and mission (m = 3.07), leadership (m = 2.82), human resource management (m = 2.15), training (m = 2.74) and relationships (m = 3.00). These results indicate the Africans' extremely negative perceptions and dissatisfaction in these dimensions. It is only in the dimensions of HIV/AIDS (m = 3.86) and job satisfaction (m = 3.28) that the African participants managed to obtain the highest mean score compared with the coloured, Indian and white participants, indicating their positive perception and satisfaction in these dimensions.

The results of the 2008 sample were inconsistent, indicating that the African participants obtained significantly higher scores than the other race groups on the dimensions of values (m = 3.22), health and safety (m = 3.30) and HIV/AIDS (m = 3.96), indicating their positive perception and satisfaction. However, the coloured participants also obtained significantly higher scores than the other race groups on the dimension of vision and mission (m = 3.81) and job satisfaction (m = 3.43).

Interpretation of the results for all three samples in tables 5.18 and 5.19 suggest that in 2003, 2007 and 2008, the African participants obtained mean scores that were significantly different from the scores of the other race groups, generally indicating their dissatisfaction and negative perceptions. Only the coloured participants in the 2008 also obtained mean scores that were significantly different from the scores of the other race groups in some of the ESS dimensions.

The results of studies on the relationship between race and employee satisfaction as reported in the literature have also been fairly mixed. Friday and Friday (2003, p. 430) indicated that "...some studies have found that black employees reported higher levels of satisfaction than white employees; and there are studies in which white employees reported higher levels of satisfaction than black employees". It is also evident in this study that the participants of the various race groups differed in terms of their areas of satisfaction and dissatisfaction in the different samples for the three-year study in this organisation.

5.4.1.3 Reported differences in the ESS mean scores for the job level groups (2003, 2007 & 2008)

Tables 5.20 and 5.21 provide the research results of the Kruskal Wallis test and mean scores investigating the relationships between the ESS and the demographic variable of job level in all three samples. The job level groups in the three samples comprised participants from senior management, middle management and supervisory and operational staff.

Table 5.20: Kruskal Wallis test results for the job level groups on the ESS (2003, 2007 & 2008)

ESS dimensions	2003 Chi-square (asymp. sig.)	2007 Chi-square (asymp. sig.)	2008 Chi-square (asymp. sig.)
Vision and mission	201.53 (0.000***)	67.65 (0.000***)	5.76 (0.216)
Values	26.00 (0.000**)	8.29 (0.08*)	6.87 (0.153)
Leadership	71.92 (0.000***)	40.86 (0.000***)	10.78 (0.02**)
Change management	84.37 (0.000***)	5.98 (0.200)	4.39 (0.355)
Health and safety	32.21 (0.000***)	10.78 (0.02**)	6.71 (0.152)
Employment equity and diversity	75.20 (0.000***)	15.59 (0.04*)	5.77 (0.216)
Human resource management	96.07 (0.000***)	40.37 (0.000***)	7.23 (0.124)
Training	85.49 (0.000***)	30.71 (0.000***)	19.38 (0.001**)
HIV/AIDS	111.99 (0.000***)	25.87 (0.000***)	2.78 (0.594)
Communication	165.15 (0.000***)	18.30 (0.001**)	3.41 (0.491)
Teamwork	18.76 (0.001**)	6.68 (0.154)	6.59 (0.159)
Relationships	39.88 (0.000***)	27.87 (0.000***)	6.51 (0.164)
Job satisfaction	32.24 (0.000***)	19.42 (0.001**)	1.31 (0.859)

Note: ***p $\leq$ 0.000; **p $\leq$ 0.01; *p $\leq$ 0.05

Table 5.20 indicates that the following significant differences between job level and the ESS dimensions were evident in the three samples:

- The results of the 2003 sample indicate that there was a statistically significant difference between job levels and all the ESS dimensions (ranging from $p \leq 0.05$ to $p \leq 0.000$).

- In the 2007 sample, statistically significant differences were also evident between job levels and most of the ESS dimensions (ranging from $p \leq 0.05$ to $p \leq 0.000$), with the exception of teamwork and change management.

- The 2008 sample only indicated statistically significant differences between job levels and the ESS dimensions of training ($p \leq 0.000$) and leadership ($p \leq 0.01$).

Table 5.21: Mean scores for significant differences between the job level groups on the ESS (2003, 2007 & 2008)

ESS dimensions	Year of study	SM	MM	SS	OS
Vision and mission	*2003 mean*	2.48	4.13	3.32	2.36
	2007 mean	3.85	3.53	3.00	3.58
Values	*2003 mean*	2.42	3.19	3.36	2.99
	2007 mean	3.23	3.02	2.96	2.71
Leadership	*2003 mean*	2.58	3.66	3.43	2.93
	2007 mean	3.56	3.17	2.78	2.97
	2008 mean	3.61	3.44	3.85	3.98
Health and safety	*2003 mean*	2.89	3.48	3.43	3.06
	2007 mean	3.30	3.13	3.17	2.67
Employment equity and diversity	*2003 mean*	2.35	2.97	2.57	2.19
	2007 mean	2.63	2.39	2.26	2.24
Human resource management	*2003 mean*	2.15	2.81	2.47	1.97
	2007 mean	2.79	2.48	2.15	2.13
Training	*2003 mean*	2.43	3.56	3.43	2.82
	2007 mean	3.33	3.02	2.70	2.67
	2008 mean	3.43	3.36	3.26	2.90
HIV/AIDS	*2003 mean*	2.50	3.43	2.94	2.46
	2007 mean	3.54	3.62	3.82	3.72
Communication	*2003 mean*	2.37	3.30	2.91	2.22
	2007 mean	2.76	2.80	2.53	2.72
Relationships	*2003 mean*	2.65	3.41	3.34	2.98
	2007 mean	3.38	3.24	2.96	2.99
Job satisfaction	*2003 mean*	2.63	3.52	3.28	2.93
	2007 mean	3.20	3.13	3.29	2.72
Change management	*2003 mean*	2.21	2.99	2.69	2.18
Teamwork	*2003 mean*	2.42	3.38	3.32	3.12

Note: Senior Management (SM), Middle Management (MM), Supervisory Staff (SS) and Operational Staff (OS)

The discussion below focuses on the significant differences between the mean scores for the participants' job levels (see table 5.21):

The middle management participants in the 2003 sample obtained significantly higher mean scores than the senior management, supervisory and operational staff participants in most of the ESS dimensions, indicating satisfaction and positive perceptions. It is only in the dimension of values (m = 3.36) that the supervisory staff indicated significantly positive perceptions. The operational staff reported extremely negative perceptions compared with the other job levels on the dimensions of employment equity and diversity (m = 2.19), human resource management (m = 1.97) and change management (m = 2.18).

Based on the results of the 2007 sample, the senior management participants obtained significantly higher mean scores than the other job levels in the dimensions of vision and mission, leadership, health and safety, training and relationships. The supervisory staff scored significantly higher in the dimensions of HIV/AIDS (m = 3.82) and job satisfaction (m = 3.29), while the operational staff obtained significantly lower scores for employment equity and diversity (m = 2.24) and human resource management (m = 2.13). These results indicate that the senior managers had positive perceptions and were satisfied with most of the ESS dimensions compared with the other job levels.

Two dimensions in the 2008 sample that reported significant differences between the different job levels, suggest that the operational staff had an extremely positive perception of leadership (m = 3.98), while senior management had extremely positive perceptions of training (m = 3.43).

The research results of the three samples depicted in tables 5.20 and 5.21 suggest that the senior and middle management staff seemed to be satisfied with most of the ESS dimensions compared with the results of the supervisory and operational staff. According to findings in the literature, job level is a reliable predictor of employee satisfaction, with employees at different management levels being generally more satisfied compared with employees

at lower job levels (Holden & Black, 1996; Oshagbemi, 2003). A study by Ross (2005) in a South African context also confirmed that position has a clear and consistent impact on employee satisfaction, in that employees at management level seem to experience higher levels of satisfaction than junior staff.

5.4.1.4 Reported differences between the ESS mean scores for the department groups (2003, 2007 & 2008)

The research results of the Kruskal Wallis test and mean scores investigating the relationships between ESS and the demographic variable, department, for all three samples are depicted in tables 5.22 and 5.23. The departmental groups in the three samples included participants in corporate affairs, finance, operations and customer services.

Table 5.22 indicates the following significant differences between departments and the ESS dimensions between the three samples:

- The 2003 sample highlights the fact that there was a statistically significant difference between departments and all the ESS dimensions (ranging from $p \leq 0.05$ to $p \leq 0.000$), with the exception of the teamwork dimension.
- The results of the 2007 sample indicate statistically significant differences between departments and most of the ESS dimensions (ranging from $p \leq 0.05$ to $p \leq 0.000$), with the exception of values, leadership, change management, employment equity and diversity and HIV/AIDS.
- The 2008 sample only demonstrated statistically significant differences between departments and the ESS dimensions of vision and mission ($p \leq 0.01$), health and safety ($p \leq 0.000$), training ($p \leq 0.001$), communication ($p \leq 0.05$), leadership ($p \leq 0.01$) and job satisfaction ($p \leq 0.01$).

Table 5.22: Kruskal Wallis test results for the department groups on the ESS (2003, 2007 & 2008)

ESS dimensions	2003 Chi-square (asymp. sig.)	2007 Chi-square (asymp. sig.)	2008 Chi-square (asymp. sig.)
Vision and mission	122.64 (0.000***)	54.04 (0.000***)	18.60 (0.001**)
Values	27.50 (0.000***)	7.18 (0.127)	4.39 (0.355)
Leadership	25.27 (0.000***)	8.50 (0.07)	10.07 (0.899)
Change management	49.46 (0.000***)	7.61 (0.107)	2.56 (0.663)
Health and safety	5.98 (0.000***)	70.68 (0.000***)	55.58 (0.000***)
Employment equity and diversity	41.06 (0.000***)	6.52 (0.164)	3.20 (0.525)
Human resource management	71.28 (0.000***)	16.41 (0.003**)	10.00 (0.04*)
Training	46.03 (0.000***)	23.08 (0.000***)	19.50 (0.001***)
HIV/AIDS	35.40 (0.000***)	3.66 (0.453)	4.89 (0.298)
Communication	80.17 (0.000***)	28.49 (0.000***)	9.71 (0.04*)
Teamwork	7.33 (0.111)	19.79 (0.001**)	2.55 (0.635)
Relationships	27.90 (0.000***)	10.11 (0.03**)	4.66 (0.325)
Job satisfaction	48.47 (0.000***)	72.04 (0.000***)	13.83 (0.01**)

Note: ***p $\leq$0.000; **p $\leq$ 0.01; *p $\leq$ 0.05

Table 5.23: Mean scores for the significant differences between the department groups on the ESS (2003, 2007 & 2008)

ESS dimensions	Year of study	CA	F	O	CS
Vision and mission	*2003 mean*	3.29	3.44	2.45	3.53
	2007 mean	3.53	3.26	3.01	3.65
	2008 mean	3.70	3.88	3.19	3.66
Values	*2003 mean*	2.94	2.97	3.02	3.57
Leadership	*2003 mean*	3.17	3.30	2.98	3.37
Health and safety	*2003 mean*	2.95	2.76	3.17	3.21
	2007 mean	3.14	2.67	3.32	2.54
	2008 mean	3.34	3.30	3.43	2.65
Employment equity and diversity	*2003 mean*	2.48	2.30	2.23	2.71
Human resource management	*2003 mean*	2.46	2.44	2.01	2.68
	2007 mean	2.41	2.09	2.20	2.27
	2008 mean	2.87	2.46	2.61	2.79
Training	*2003 mean*	3.00	2.96	2.86	3.52
	2007 mean	3.15	2.43	2.85	2.53
	2008 mean	3.20	2.70	3.08	2.72
HIV/AIDS	*2003 mean*	2.65	2.88	2.53	3.00
Communication	*2003 mean*	2.77	2.80	2.30	3.03
	2007 mean	3.00	2.41	2.54	2.72
	2008 mean	3.10	3.05	2.80	2.89
Relationships	*2003 mean*	3.04	3.00	3.43	3.06
	2007 mean	3.24	2.69	3.05	3.00
Job satisfaction	*2003 mean*	3.15	3.34	2.90	3.58
	2007 mean	3.02	2.95	2.69	3.23
	2008 mean	3.57	3.32	3.44	3.15
Change management	*2003 mean*	2.48	2.74	2.22	2.79
Teamwork	*2007 mean*	3.39	2.67	3.21	2.92

Note: Corporate Affairs (CA), Fincance (F), Operations (O) and Customer Services (CS)

Regarding the departments, the following discussion focuses on the significant differences in the mean scores found in this study (see table 5.23):

The customer service participants in the 2003 sample obtained significantly higher mean scores than the participants employed in the finance, operations and corporate affairs departments. The results indicate their satisfaction with and positive perceptions of vision and mission (m = 3.53), values (m =3.57), leadership (m=3.37), health and safety (m=3.21), training (m= 3.52) and job satisfaction (m = 3.58). The operations department demonstrated extremely negative perceptions compared with other departments on the dimensions of employment equity and diversity (m = 2.23), human resource management (m = 2.01), HIV/AIDS (m = 2.53), communication (m = 2.30) and change management (m = 2.22). It is only in the dimension of relationships (m = 3.43), that the operations department scored significantly higher, reflecting satisfaction in this dimension. The researcher could thus infer that while the customer services department was satisfied, the operations department was dissatisfied.

The results of the 2007 sample also indicated that the participants in the customer services department obtained significantly higher mean scores than the participants employed in the finance, operations and corporate affairs departments. The results indicate their satisfaction with and positive perceptions of vision and mission (m = 3.65) and job satisfaction (m = 3.23). The finance department appeared to have extremely negative perceptions compared with the other departments on the dimensions of human resource management (m = 2.09), training (m = 2.43), communication (m = 2.41), relationships (m =2.69) and teamwork (m = 2.67). It is only in the dimension of health and safety (m = 3.32) that the operations department scored significantly higher, reflecting satisfaction with this dimension. Once again the researcher could thus infer that while the customer services department was satisfied with some of the ESS dimensions, the finance department was dissatisfied.

Based on the 2008 sample results, it is evident that the participants in the finance department obtained significantly lower mean scores than the participants employed in the customer services, operations and corporate affairs departments. These participants indicated that they were dissatisfied with human resource management (m = 2.46) and training (m = 2.70). The finance department indicated positive perceptions only in the dimension of vision and mission (m = 3.88), whereas the operations department indicated higher satisfaction than the other departments in the dimension of health and safety (m = 3.43). The operations department also had a significantly lower score on communication (m = 2.80). Once again, the finance department reflected dissatisfaction with most of the dimensions, compared with the other departments in the organisation.

The research results for the three samples indicated in tables 5.22 and 5.23 reveal that the participants from the finance and operations departments seemed to be more dissatisfied, while the customer services department was generally satisfied with their organisation's processes and systems. Although there seems to be lack of literature indicating the relationship between the demographic variable, departments and employee satisfaction, a number of studies indicate that employee satisfaction has a positive impact on customer services (Vilares & Coehlo, 2000; Bulgarella, 2005; Chen *et al.,* 2006). This implies that employees who are satisfied with their organisation are inclined to provide better customer service to clients.

5.4.2 Reported differences in the ESS mean scores for the three years of study (2003, 2007 & 2008)

The nonparametric tests of Mann-Whitney and Kruskal Wallis were also used in this study to test the following hypothesis:

H2: There are significant differences in the three years of study of employee satisfaction during organisational transformation.

The research results of the Kruskal Wallis test and mean scores investigating the relationship between ESS and the years of the study are provided in tables 5.24 and 5.25.

Table 5.24: Kruskal Wallis test results for the three years of study on the ESS (2003, 2007 & 2008)

ESS dimensions	Chi-square	Df.	Asymp. sig.
Vision and mission	132.35	2	.000***
Values	11.41	2	.003**
Communication	86.81	2	.000***
Teamwork	8.74	2	.013*
Relationship	7.82	2	.020*
Leadership	17.01	2	.000***
Health and safety	1.76	2	.414
Employment equity and diversity	29.13	2	.000***
Training	18.04	2	.000***
Human resource management	121.95	2	.000***
Job satisfaction	1489.74	2	.000***
HIV/AIDS	558.94	2	.000***
Change management	19.00	2	.000***

Note: ***p $\leq$0.000; **p $\leq$0.01; ***p $\leq$0.05

The results in table 5.24 indicate that there was a statistically significant difference between the year of study and the ESS dimensions of vision and mission, values, communication, employment equity and diversity, teamwork, human resource management, training, HIV/AIDS, leadership, relationships, change management and job satisfaction (ranging from p $\leq$0.05 to p $\leq$0.000). It was only in the EES dimension of health and safety that no significant differences were evident between the 2003, 2007 and 2008 samples of participants (p-value $\geq$0.05).

Table 5.25: Mean scores for the differences in the years of study on the ESS (2003, 2007 & 2008)

ESS dimensions	2003 Mean	2007 Mean	2008 Mean
Vision and mission	2.59	3.22	3.38
Values	3.00	2.97	3.13
Leadership	2.99	2.88	3.13
Change management	2.30	2.47	2.69
Health and safety	3.09	3.12	3.22
Employment equity and diversity	2.29	2.32	2.53
Human resource management	2.11	2.24	2.69
Training	2.91	2.80	3.00
HIV/AIDS	2.58	3.77	3.90
Communication	2.39	2.60	2.86
Teamwork	3.10	3.14	3.29
Relationships	2.99	3.01	3.21
Job satisfaction	2.97	3.21	3.37
Total ESS	**2.56**	**2.80**	**3.22**

Table 5.24 shows that the 2003 sample demonstrated more areas of dissatisfaction than the 2007 and 2008 samples in the dimensions of change management (m = 2.30), employment equity and diversity (m = 2.29), human resource management (m = 2.11) and communication (m = 2.39). Similarly, the 2007 sample indicated three areas of dissatisfaction in the dimensions of values (m = 2.97), leadership (m = 2.88) and training (m = 2.80).

The participants in the 2008 sample obtained significantly higher mean scores, indicating higher satisfaction, than the participants in the 2003 and 2007 samples in most of the ESS dimensions of vision and mission (m = 3.38), health and safety (m = 3.22), HIV/AIDS (m = 3.90), teamwork (m

=3.29), relationships (m = 3.21) and job satisfaction (m = 3.37). Based on these results, the researcher could infer that the participants in the 2008 sample seemed to be more satisfied with organisational processes and procedures than the participants in the 2003 and 2007 samples.

The findings of this study are enlightening in that the participants in the 2008 sample seemed to be more satisfied than the participants in the 2003 and 2007 samples. A possible reason for this is the fact that the organisation made a number of interventions.

During 2004 to 2006, the organisation started the first intervention as part of organisational transformation, focusing on the following feedback from the 2003 sample employee satisfaction survey:

- *Strategy*. The organisation's strategy was changed and a new HR strategy developed.
- *Restructuring*. The corporate services and operations departments were restructured to fit the new organisational strategy. A new operations unit was also developed.
- *Policy development*. New policies were implemented for the following: employment equity; talent management; recruitment and selection; career management; disciplinary codes; and performance management.
- *System*. An IT system was introduced for salaries administration.

Again in late 2007 and early 2008, the organisation introduced the second intervention as part of organisational transformation, focusing on the following after receiving feedback on the 2007 sample employee satisfaction survey:

- *Policy development*. Policies were formulated on talent management, career management and performance management strategy.
- *Training programmes.* Leadership and supervisory development programmes were also introduced in the organisation in order to train team leaders, supervisors and managers.

The researcher assumed that organisational transformation through the implementation of the above change interventions had an impact on the positive employee satisfaction results of the 2008 sample.

While the findings of this study provide interesting insight into the significant differences prevalent in the three years of study of employee satisfaction, the researcher had difficulty substantiating the findings of this study because of a dearth of literature pertaining to longitudinal studies on employee satisfaction. Varkey *et al*. (2008) conducted a two-year study of employee satisfaction and found that there where no significant increases in employee satisfaction between the 2004 and 2006 studies. However, in the current study, the organisation did experience a significant increase in employee satisfaction owing to the transformational changes implemented in the organisation. The organisational changes listed above are also described in detail in section 5.2.

5.5 STRUCTURAL EQUATION MODEL (SEM)

In order to contextualise the findings of this study, the researcher acknowledged that use of all three samples' manifest or observed variables in SEM was extremely repetitive – hence her decision to reduce the data. Only the empirical data of the 2008 sample were used in this study to develop the employee satisfaction diagnostic model on the basis of the following hypothesis:

H3: There is goodness of fit between the proposed theoretical employee satisfaction diagnostic model and the empirical data.

5.5.1 Confirmatory factor analysis

An SEM was built investigating the relationships between the manifest and latent variables in the proposed employee satisfaction diagnostic model, as illustrated in figure 5.1. The latent variables of the model are organisational strategy, policies and procedures and outcomes.

Table 5.26 indicates the results of the correlation matrix of the manifest and latent variables. An analysis was conducted to determine the validity of the three latent variables of the model, namely organisational strategy, policies and procedures and outcomes. The analysis was conducted using AMOS (version 18.0). The manifest variables had moderate to high loadings in the expected latent variables and were all statistically significant.

According to Chin (1998), the recommended standardised path is at least 0.20, or above 0.30, for variables in order to be considered for interpretation Although there were low loadings of 0.35 (health and safety with processes and policies), 0.21 (vision and mission with organisational strategy) and 0.14 (HIV/AIDS with policies and procedures), overall, the coefficient paths from the latent variables to the manifest variables were positive in the current study, indicating a satisfactory fit of above 0.40 for most of the manifest variables.

Table 5.26: Results of the correlation matrix of the manifest and latent variables

Observed or manifest variables	***Organisational strategy***	***Processes and policies***	***Outcomes***
Vision and mission	0.21	0.00	0.00
Values	0.42	0.00	0.00
Leadership	0.63	0.00	0.00
Change management	0.00	0.59	0.00
Health and safety	0.00	0.35	0.00
Employment equity and diversity	0.00	0.51	0.00
Human resource management	0.00	0.52	0.00
Training	0.00	0.44	0.00
HIV/AIDS	0.00	0.14	0.00
Communication	0.00	0.65	0.00
Teamwork	0.00	0.00	0.49
Relationships	0.00	0.00	0.55
Job satisfaction	0.00	0.00	0.67

Table 5.27 provides the results of the confirmatory factor analysis of the latent variables. The path coefficients of the latent variables of organisational strategy, policies and processes and outcomes, indicated a satisfactory fit for all these variables. All the path coefficients leading from one latent variable to another were positive and all moderate to high, ranging from 0.919 to 1.059.

Table 5.27: Results of the correlation matrix of the latent variables

Latent variables	*Organisational strategy*	*Processes and policies*	*Outcomes*
Organisational strategy	.00		
Processes and policies	.996	.00	
Outcomes	1.059	.919	.00

5.5.2 Evaluation of Goodness of fit

The evaluation of goodness of fit of the model indices is indicated in table 5.28. The indices used to evaluate the model are described below, namely the comparative fit index (CFI), the incremental fit index (IFI), the normed fit index (NFI), the chi-square (CMIN), the roots mean squared error of approximation (RMSEA) and the goodness-of-fit index (GFI),

- *Comparative fit index (CFI).* The comparative fit index is also referred to as the Bentler comparative fit index (Bentler, 1990). Like the IFI and NFI, it is used to compare the model of interest with an alternative such as the null or independence model. The CFI compares the fit of a target model to the fit of an independent model – a model in which the variables are assumed to be uncorrelated. In this context, fit refers to the difference between the observed and predicted covariance matrices as represented by the chi-square index. The CFI represents the ratio between the discrepancies of this target model to the discrepancy of the independence model. It thus represents the extent to which the model of interest is better than the independence model. According to Hoe (2008), CFI values above 0.90 and 1.00 indicate acceptable fit and are not too sensitive to sample size. However, the CFI is ineffective if most of the correlations between the variables approach 0-, because there is less covariance to explain the variables and it is also considered to be a biased measure, based on noncentrality (Hair *et al*., 2005).

- *Incremental fit index (IFI).* The IFI, also known as Bollen's IFI, is also relatively insensitive to sample size. IFI values that exceed 0.90 are regarded as acceptable, although this index may exceed 1.00 (Bollen, 1989). The IFI is computed using the difference between the chi-square of the independence model in which variables are uncorrelated and calculate the chi-square of the target model (Hair *et al*., 2005). The difference between the chi-square of the target model and the degree of freedom for the target model is calculated, and the ratio of these values thus represents the IFI (Bollen, 1989; Hu & Bentler, 1998).

- *Normed fit index (NFI).* The NFI is also known as the Bentler-Bonnet NFI (Bentler & Bonnet, 1980). The fit index varies from 0 to 1 and the value of 1 indicates model fit. The NFI equals the difference between the chi-square of the null model and the chi-square of the target model, divided by the chi-square of the null model (Hoe, 2008).

- *Chi-square (CMIN).* The chi-square ($\chi 2$) for the model is the discrepancy function or chi-square goodness of fit. According to Hoe (2008, p. 78), "...a low $\chi 2$ value, indicating non significance, would point to a good fit and this is because the chi-square test is used to assess actual and predicted matrices". This implies that the model is deemed to be acceptable when the chi-square value is not significant. This implies that if the observed covariance matrix is similar to the predicted covariance matrix, the matrix is predicted by the model. However, there are times when the chi-square is significant and the model is considered to be acceptable. According to Hair *et al*. (2005), most researchers disregard the chi-square index if the sample size exceeds 200 and the other indices indicate that the model is acceptable. The challenges posed by the chi-square index are that complex models with various parameters tend to generate an acceptable fit and the large sample size usually results in the model being incorrectly rejected (Hu & Bentler, 1998; Hair *et al*., 2005; Bentler & Bonnet, 1998).

- *Root mean squared approximation of error (RMSEA).* The RMSEA index measures the discrepancy between the observed and estimated covariance matrices per degree of freedom in the population (Hoe, 2008). O'Boyle and Williams (2011, p. 4) recommend that "...values less than 0.05 represent close approximate fit, values between 0.05 and 0.08 suggest reasonably approximate fit, and values greater than 0.10 suggest poor fit". This implies that the value of this fit index is expected to better approximate or estimate the population (Hoe, 2008). RMSEA indicates the discrepancy per degree of freedom for the model, and a value of 0.1 or less will indicate a reasonable error of approximation (Hair *et al.*, 1995).

- *Goodness-of-fit index (GFI).* The GFI is a nonstatistical measure ranging in value from 0, as a poor fit, to 1.0 as a perfect fit (Hair *et al*., 2005). The NFI, CFI and IFI values range from 0.0 to 1.0, of which the latter suggests a perfect fit (Bentler & Bonnet, 1980; Bollen, 1989). Although 1.0 suggests a perfect fit, the indice values greater than 0.90 are recommended for good fit assumptions (Hu & Bentler, 1998; Hair *et al*., 2005).

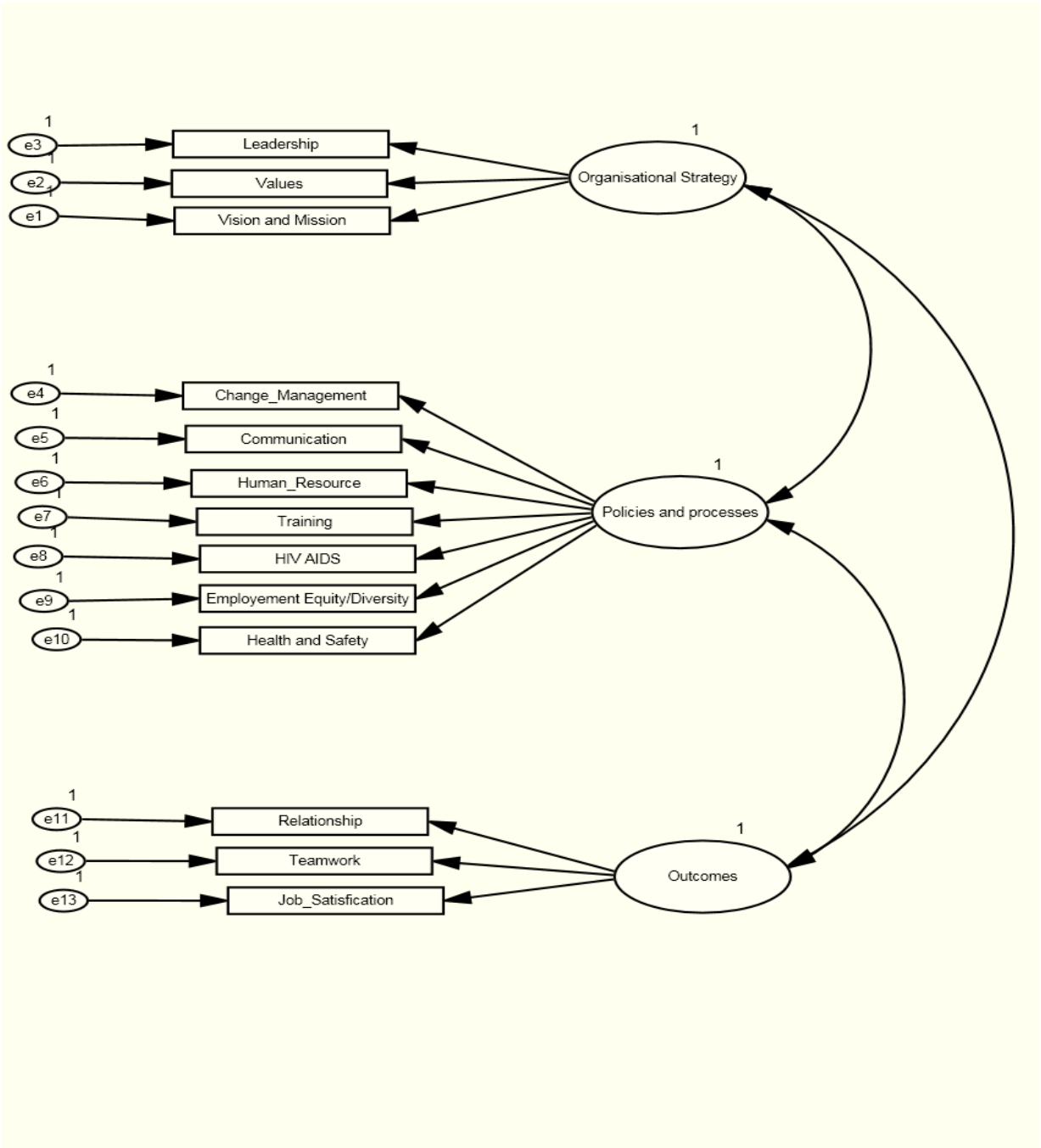


Figure 5.1: Employee satisfaction diagnostic model A

Note: Direct causal relationship = ⟶, Correlations between variables = ⟷ and Error between actual and predicted value = ⬭

5.5.3 Structural equation model A

The results of initial test of model A depicted as figure 5.1 are discussed below on the basis of the above goodness-of-fit measures (see table 5.28).

Table 5.28: Goodness-of-fit measures for employee satisfaction diagnostic model A

Indices	Values
Goodness-of-fit index (GFI)	0.87
Chi-square (CMI)	625.02
P-value of close fit	0.000
Root mean square residual (RMR)	2.07
Root mean square error of approximation (RMSEA)	0.10
Normed fit index (NFI)	0.88
Incremental fit index (IFI)	0.89
Comparative fit index (CFI)	0.89

Note: GFI NFI, IFI and CFI above 0.90 signify a good fit (Bentler & Bonnet, 1980; Bollen, 1989; Hair *et al*., 2005; Hu & Bentler, 1998)

The various measures of model fit were used in this study to assess the model, which included absolute and incremental fit measures. Absolute measures are the chi-square, P-value and GFI, while the incremental measures include NFI, CFI and IFI. A SEM test of employee satisfaction diagnostic model A indicated a weak fit, based on the following measures (see figure 5.1):

- A GFI of 0.87 is below the minimum requirement for goodness of fit, which is 0.90.
- An NFI of 0.88 does not meet the model fit requirement of 1.00.
- An IFI of 0.89 is below the required minimum value of 0.90 for an acceptable fit.
- The CFI of 0.89 does not meet the minimum requirement of an acceptable fit of 1.00.

- The RMR value of 2.07 and the RMSEA value of 0.109 are also above the acceptable levels of a goodness of fit.
- The chi-square of 625.02 is high and significant with the P-value of 0.000 suggesting that the model should be rejected.

Based on the above results of the fit measures, model A was rejected. On the basis of the data in this research, this model did not meet the required goodness of fit for both the incremental and absolute measures used. The next section discusses the modification procedures conducted in this study.

5.5.4 Modification of the model

The modification index from AMOS was used to look for improvements in structural equation model A for this study. The modification indices should be used with caution because, according to (Bollen, 1989), a parameter link should only be relaxed if it can be interpreted substantially regarding the direction of impact as well as the sign of the parameter.

In this study, the modification indices suggested that the constraints on the error terms for the manifest variables should be relaxed in order to obtain a better fit of the SEM, as depicted in figure 5.2.

The following indices made sense and would improve the overall fit of the model:

- The first pair of manifest variables which error terms should be allowed to correlate is communication with values, vision and mission. Communication includes such things as disseminating and sharing information in the organisation regarding the organisation's values, mission and vision statement. Communication policies and processes are developed in the context of the organisation's internal environment and strategy which include values, mission and vision (Steyn, 2003). According to Fairhurst, Jordan, and Neuwirth (1997, p. 243), "…mission statements are seen often in company newsletters, speeches, annual reports, brochures, and posters". Because organisational values,

mission and vision are mainly aspects or contents of the communication process, it is clear that these manifest variables are related and their error terms allowed to correlate.

- The second pair of manifest variables that the modification indices suggested should be allowed to correlate was job satisfaction and HIV/AIDS. According to Voisard (2008), job satisfaction entails employees' positive appraisal of their jobs based on the conditions of their working environment or organisation. Employees are either infected with or affected by HIV/AIDS. According to Matlala (1999, p. 25) "HIV/AIDS directly impacts individuals, families, organisations, businesses and the economy". Organisations are expected to embark on the development and implementation of employee wellbeing policies and interventions aimed at treatment, training and supply employees with information on HIV/AIDS (Matlala, 1999). Job satisfaction is one of the benefits of employee wellbeing (Meyer & Botha, 2000). The results of the study conducted by Ho (1997, p. 187) indicate that wellness programmes have a positive impact on employees' outcomes such as job satisfaction and high morale. Since these variables are positively related, the constraints have been relaxed.

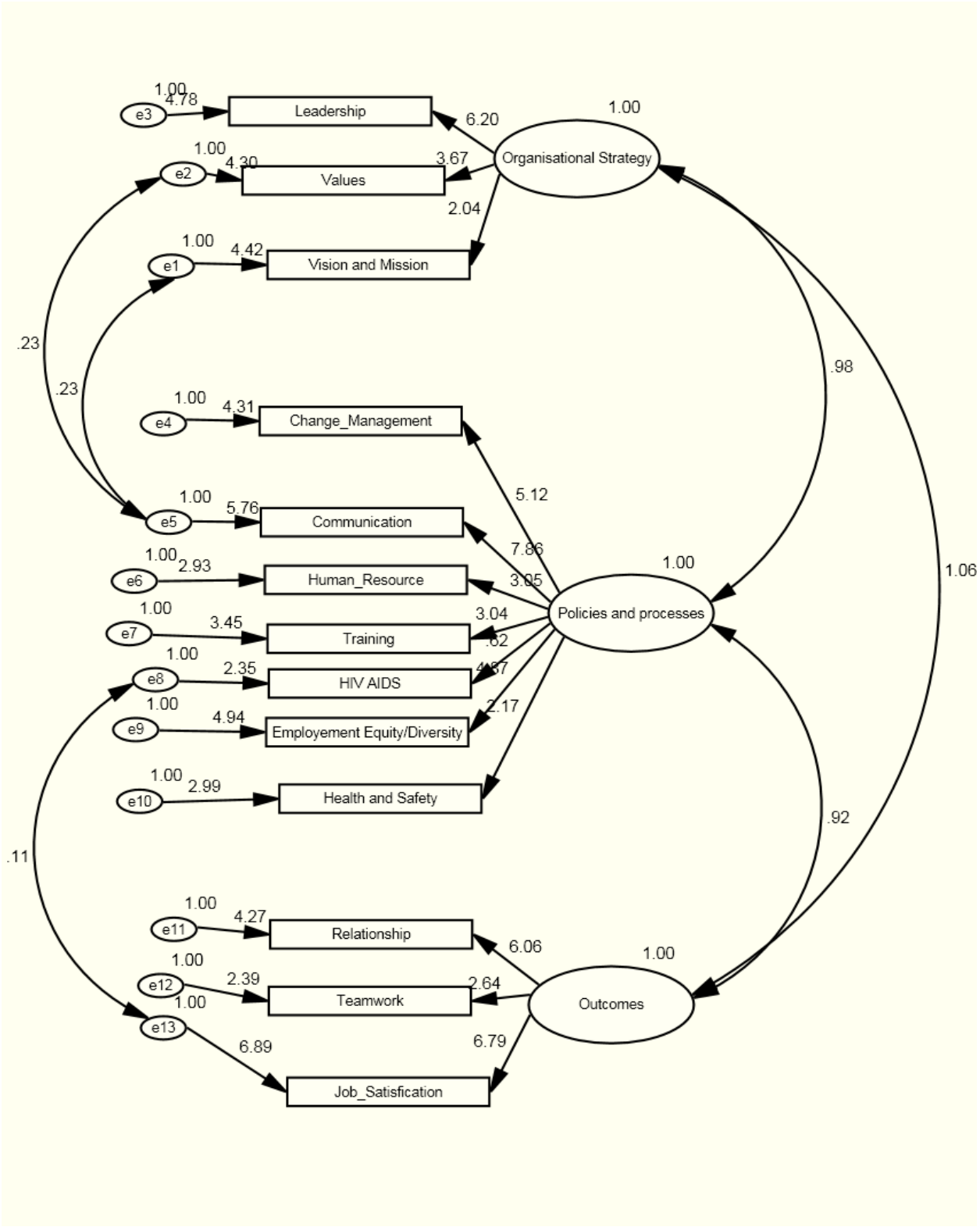


Figure 5.2: Employee satisfaction diagnostic model B

Note: Direct causal relationship = ⟶, Correlations between variables = and Error ⟷ between actual and predicted value = ⬭

5.5.5 Structural equation model B

The results of the goodness-of-fit measures for employee satisfaction diagnostic model B depicted as figure 5.2 are presented below, based on the modifications (see table 5.29).

Table 5.29: Goodness-of-fit measures for employee satisfaction diagnostic model B

Indices	Values
Goodness-of-fit index (GFI)	0.90
Chi-square (CMI)	471.86
P-value of close fit	0.00
Root mean square residual (RMR)	1.76
Root mean square error of approximation (RMSEA)	0.09
Normed fit index (NFI)	0.91
Incremental fit index (IFI)	0.92
Comparative fit index (CFI)	0.92

Note: The GFI, NFI, IFI and CFI above of 0.90 signify a good fit (Bentler & Bonnet, 1980; Bollen, 1989; Hu & Bentler, 1998; Hair *et al*., 2005)

A SEM test of employee satisfaction diagnostic model B indicated both an incremental and absolute goodness of fit, based on the following measures (see figure 5.2):

- In terms of the GFI, the value of 0.905 met the required value of 0.90, which suggests good model fit.
- The NFI demonstrated a good model fit with a value of 0.910, which met the minimum requirement value of 0.90 for model fit. This signifies a 91% improvement in model fit.
- The IFI value of 0.920 is above the required minimum value of 0.90 which indicates an acceptable model fit.
- The CFI value of 0.920 is also above the cut-off point of 0.90, which indicates an acceptable model fit.

- The RMSEA value of 0.09 is within the acceptable levels of goodness of fit, which is a value of less than 0.10.

Although model B was improved by means of model modification indices, the CMI remained significant, with the CMI value of 471.86 and P-value of 0.000, when the nonsignificant value was required for model fit. The large sample size of 759 could have been the effect of a significant chi-square value in this study. The chi-square results in this study were disregarded because a large sample size usually results with significant values and the model being incorrectly rejected (Hu & Bentler, 1998; Hair *et al.*, 2005; Bentler & Bonnet, 1980).

The variable fit measures did not show any obvious misspecifications. Since all the overall fit measures were favourable, model B appears to be a good match with the empirical data. The hypothesis is accepted because all the indices suggest a reasonable fit of the empirical data and the theoretical diagnostic model of employee satisfaction during transformation. The regression analysis of the SEM model indicated that there is a positive intercorrelation between the variables. The results of the SEM regression analysis indicating the intercorrelations are provided in table 5.30.

Table 5.30: SEM regression analysis: intercorrelations between the latent variables

Latent variables	Estimate	S.E.	C.R.	P
Policies and processes ⟷ Outcomes	.925	.015	59.691	0,001
Organisational Strategy ⟷ Policies and Processs	.977	.016	61.181	0,001
Organisational Strategy ⟷ Outcomes	1.056	.017	62.405	0,001

Note: Estimate = estimated path coefficient (prediction) for arrows in the model; SE = standard error; CR = critical ratio; P = probability value

The results of the SEM regression analysis indicated a positive intercorrelation between all the variables, namely organisational strategy, outcomes and policies and processes. The results all show the intercorrelations as indicated by P-values below .05 or *** on the .001 level (two tailed).

Table 5.31: SEM regression analysis: causal relationship variables

Latent variables			Estimate	S.E.	C.R.	P
Vision and Mission	⟷	Organisational Strategy	2.038	.180	11.308	0,001
Values	⟷	Organisational Strategy	3.667	.190	19.300	0,001
Leadership	⟷	Organisational Strategy	6.203	.248	25.013	0,001
Change Management	⟷	Policies and Processs	5.117	.213	24.072	0,001
Communication	⟷	Policies and Processs	7.858	.304	25.877	0,001
Human Resources	⟷	Policies and Processs	3.048	.138	22.115	0,001
Training	⟷	Policies and Processs	3.044	.155	19.667	0,001
HIV/AIDS	⟷	Policies and Processs	.624	.092	6.813	0,001
Employment Equity	⟷	Policies and Processs	4.869	.229	21.285	0,001
Health and Safety	⟷	Policies and Processs	2.171	.128	16.990	0,001
Relationships	⟷	Outcomes	6.064	.231	26.244	0,001
Teamwork	⟷	Outcomes	2.635	.116	22.743	0,001
Job Satisfaction	⟷	Outcomes	6.788	.317	21.407	0,001

Note: Estimate = estimated path coefficient (prediction) for arrows in the model; SE = standard error; CR = critical ratio; P = probability value

The regression analysis of the SEM model indicated that there is a causal relationship between the manifest and latent variables. The results of the SEM regression analysis indicating the causal relationships are provided in table 5.31.

In addition, the results of the causal relationships indicate that the variables, vision and mission, values and leadership have a direct causal relationship with organisational strategy as the independent variable. Change management, communication, human resources, training, HIV/AIDS Employment equity/diversity and health and safety have a significant causal relationship with policies and processes as the independent variable. Lastly, relationships, teamwork and job satisfaction have a direct causal relationship with outcomes as the independent variable. The results of all the causal relationships are indicated by P-values below .05 or *** on the .001 level (two tailed). This implies a positive correlation between the latent variables as independent and the manifest variables as dependent.

5.6 SUMMARY OF THE RESEARCH HYPOTHESES

The biographical variables of the 2003, 2007 and 2008 samples indicated that the participants in the three samples were predominantly represented by males (above 74%), with the greatest portion of respondents being Africans (above 79%), employed at an operational staff level (above 69%) and working in the operations department (above 57%).

The above empirical results addressed the following empirical objectives of this study:

- To conduct three years of study of the differences in employee satisfaction during organisational transformation using three samples of respondents in a South African organisation
- To determine whether gender, job level, race and department groups differ significantly in the three years of study of employee satisfaction

during organisational transformation in a sample of respondents in a South African organisation

- To develop and test an employee satisfaction diagnostic model with the empirical data

Table 5.32 provides an overview of decisions relating to the research hypotheses to determine whether the above objectives of this study were achieved. The research hypotheses were supported by testing the research findings using descriptive, inferential and SEM statistics.

Table 5.32: Overview of decisions relating to the hypotheses of the empirical study

HYPOTHESES		DECISION
H1:	There are significant differences in the three years of study of employee satisfaction during organisational transformation.	Supported
H2:	There are significant differences between the gender, job level, race and department groups in the three years of study of employee satisfaction during the context of organisational transformation.	Supported
H3:	There is goodness of fit of the proposed theoretical employee satisfaction diagnostic model and the empirical data.	Supported

During the process of hypothesis testing, the significance level of $p \leq 0.05$ was used as the criterion for supporting or not supporting the hypotheses. The hypotheses are not supported or the hypotheses are supported if the probability is less than or equal to the chosen level of significance.

In terms of differences in the three years of study of employee satisfaction, the hypotheses of this study were fully supported on the basis of the findings of the inferential analysis.

The hypothesis regarding the differences between the demographic groups (gender, race, job level and department) and the ESS was also supported on the basis of the inferential statistics.
Lastly, based on SEM, the hypothesis was fully supported in respect of the goodness of fit of the proposed theoretical employee satisfaction diagnostic model and the empirical data.

5.7 CHAPTER SUMMARY

This chapter dealt with the organisational context of transformation. The descriptive and inferential statistics and the SEM of relevance to this research were also explained. The researcher then interpreted the research results in order to integrate the findings of the literature review with those of the empirical research. The hypotheses formulated in chapter 4 were supported on the basis of the results of the empirical study.

The final step in this thesis, namely a discussion of the conclusions, limitations and recommendations of the research study will be addressed in chapter 6.

CHAPTER 6 CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

"Unless you resolve to be courageous, you cannot command". (Ngwale, 2011)

6.1 INTRODUCTION

The previous chapter covered steps 5 and 6 of the empirical study outlined in chapter 1. This chapter focuses on the final step in the empirical study which deals with the conclusions, limitations and recommendations. The conclusions of the literature review are presented on the basis of the framework used in the study. Conclusions are then drawn for the empirical research. The limitations of the literature review and empirical research are also discussed, and the chapter concludes with a discussion of the recommendations and a chapter summary.

6.2. CONCLUSIONS

The following conclusions were drawn on the basis of the literature review and the empirical research.

6.2.1 Conclusions regarding the literature review

The general aim of this study was to conduct a longitudinal study of differences in employee satisfaction during organisational transformation; to determine whether individuals from different gender, race, department and job level groups differed significantly in their employee satisfaction in the three years of study; and to develop and test a diagnostic model for employee satisfaction during organisational transformation. This general aim was achieved by addressing and achieving the specific aims of the research study.

Conclusions were drawn on the specific objectives of the literature review in relation to the constructs of organisational transformation and employee satisfaction.

6.2.1.1 The first, second and third objectives: to conceptualise the construct of organisational transformation from a theoretical perspective, to conceptualise the construct of employee satisfaction from a theoretical perspective and to determine the theoretical impact of organisational transformation on employee satisfaction

The first, second and third objectives of the literature review, as formulated above, were achieved in chapter 2 (organisational transformation) and chapter 3 (employee satisfaction).

In terms of the impact of organisational transformation on employee satisfaction, the following conclusions were drawn:

Organisational transformation is conceptualised as second-order organisational change aimed at adapting the frameworks and assumptions of the organisation. It seeks to create massive changes in the organisation's structure, processes, culture and orientation to its environment. Employee satisfaction is conceptualised as the employees' contentment and fulfilment of their desires and needs in the organisation. It stems from the employee's appraisal of aspects of the work environment.

According to Werner (2007), South African organisations are faced with the forces of change in the form of changes in technology, business markets, politics, society, economics, the labour market, human resource processes and organisational systems. Based on these forces, most organisations have the daunting but vital task of implementing transformation processes. It is in the process of organisational transformation that employees are affected either positively or negatively. By gaining knowledge of and insight into how employees can respond to organisational transformation by being satisfied or dissatisfied in the organisation, interventions can be planned to manage the impact of organisational transformation on employee satisfaction. This may also help employees as the internal customers of the organisation to ensure that their organisation is able to accomplish its business goals (Burke *et al.,* 2005; Chen *et al.*, 2006).

The benefits of employee satisfaction in an organisation can be realised on the strength of the organisation's ability to diagnose the impact of organisational transformation on employee satisfaction. Research indicates that employee satisfaction benefits include employee retention, customer satisfaction, improved quality, improved performance, life satisfaction, employee health and wellbeing (Bulgarella, 2005; Maltzer *et al*., 2004; O'Neil, 2005; Spector, 2006; Voisard, 2008). It was found that different kinds of organisational transformation have different effects on employee satisfaction, with the result that employees tend to demonstrate their dissatisfaction with transformation by resisting it (Harigopal, 2006).

Based on the literature study, it was found that there were inconsistencies in determining the theoretical relationship between the biographical variables of gender, race and job level and employee satisfaction. However, the researcher found that there is a lack of literature research on determining the relationship between employee satisfaction and departments as a demographic variable.

6.2.1.2 The fourth objective: to develop a conceptual diagnostic model of employee satisfaction during organisational transformation

The fourth objective was achieved in chapter 3.

In terms of the theoretical development of the employee satisfaction model, the following conclusions were drawn:

Organisations need a framework in the form of a diagnostic model of employee satisfaction during organisational transformation. This framework or model will enable the organisation to diagnose or assess its employees' satisfaction during organisational transformation. This will afford employees an opportunity to make an appraisal of the organisational strategy, policies and processes and outcomes in order to determine their contentment and fulfilment in the organisation.

Organisational strategy includes the vision, mission, values and leadership of the organisation. The literature indicated that organisational strategy is the criterion against which management set the agenda for the future behaviour of the organisation, and it is a vital component of improving employees' satisfaction (Aydin & Ceylan, 2009; Eskildsen & Dahlgaard, 2000; Martins & Coetzee, 2007; Varkey *et al.*, 2008).

Policies and processes are used in the diagnostic process to determine the level of satisfaction employees derive from the various aspects of their work environment (Küskü, 2001). Employees can derive satisfaction or dissatisfaction from policies and processes implemented by their organisation. These policies and processes include change management, health and safety, communication, employment equity and diversity, human resource management, training and development and HIV/AIDS initiatives (Martins & Coetzee, 2007). Employee satisfaction is determined by employees' perceptions of organisational policies and processes as being equitable and congruent with their needs and expectations (Milner, 2009; Mottaz, 1987; Vlosky & Aguillar, 2009)

Relationships, teamwork and job satisfaction are organisational outcomes or results that affect employee satisfaction. The literature indicated that teamwork and positive relationships with colleagues and supervisors increase employee satisfaction (Milner, 2009; Aamodt, 2010). Job characteristics stimulate psychological states that lead to employee satisfaction (Hackman & Oldham, 1976; Spector, 2006; Voisard, 2008).

6.2.2 Conclusions regarding the empirical research

The empirical objectives of this study were as follows:

- To conduct a three-year longitudinal study of differences in employee satisfaction during organisational transformation using a sample of respondents in a South African organisation
- To determine whether gender, race, job level and department groups differed significantly in the three-year study of employee satisfaction

during organisational transformation in a sample of respondents in a South African organisation

- To develop and test an employee satisfaction diagnostic model for the practice of industrial and organisational psychology
- To make recommendations for further research based on the findings of the research study

In terms of the research results, hypothesis H1 was supported on the basis of the descriptive and inferential analysis of the differences between the years of study and employee satisfaction. H2 was supported on the strength of the descriptive and inferential analysis of the differences between demographic variables and employee satisfaction. H3 was also supported on the basis of the results of SEM. The findings of the empirical study based on the research objectives and the relevant research hypothesis are presented as the conclusions of the empirical study.

6.2.2.1 The first objective: to conduct a three-year longitudinal study of the differences in employee satisfaction during organisational transformation using a sample of respondents in a South African organisation

This first objective as stated above, was achieved in chapter 5. The ESS was used in 2003, 2007 and 2008 to measure employee satisfaction. The reliability and validity of the ESS were discussed in chapter 5 (see tables 5.1, 5.5 & 5.9). The researcher concluded that most of the dimensions had acceptable internal consistency reliability on the basis of the results of the Cronbach alpha test. In the dimension, HIV/AIDS, only one item not relating to this dimension was removed in order to improve the reliability of the dimension. For the sake of consistency, the item was removed in all three samples.

The results of the differences in the three-year of study were presented in chapter 5 (see table 5.25). The total employee satisfaction mean scores of the 2003 and 2007 samples were below the recommended 3.2 cut-off point, while the 2008 sample results indicated a mean score above the 3.2 cut-off point. These results suggested that staff members in the 2008 sample appeared to be satisfied in most of the ESS dimensions compared with the participants in the 2003 and 2007 samples. Although the 2008 sample appeared generally positive, seven dimensions were identified as requiring attention in the organisation. The dimensions that reflected negative perceptions of organisational members included values, leadership, change management, employment equity and diversity, human resource management, training and communication. Although change interventions had been implemented in this dimensions, employees in the organisation still regarded these dimensions as areas of development and concern.

6.2.2.2 The second objective: to determine whether gender, race, job level and department groups differ significantly in the three-year study of employee satisfaction during organisational transformation in a sample of respondents in a South African organisation

The second objective, as stated above, was achieved in chapter 5.

- *Gender and employee satisfaction.* In terms of the biographical variable of gender, the empirical analysis indicated that gender differences contributed to differences in the scores of the employee satisfaction dimensions. The results of the 2003 sample indicated that in most of the ESS dimensions, the female respondents were more satisfied than their male counterparts. The results of the 2007 and 2008 samples were similar, indicating that the male participants were more satisfied than their female counterparts in the dimensions of health and safety and job satisfaction, while the female participants were more satisfied than their male counterparts in the dimension of vision and mission. These results also indicated that the females were more dissatisfied in the dimensions of human resource management and communication,

while the male participants were more dissatisfied about training. The results show that the relationship between employee satisfaction and gender was found to vary in the three years of this study. This confirms the findings in the literature, namely that the relationship between these two variables is inconsistent, in that some studies found women to be more satisfied than men, while others reported that men seem to be more satisfied than women (Oshagbemi, 2003; Spector, 2006).

- *Race and employee satisfaction.* The empirical results indicated that race differences contributed to variances in the scores of the employee satisfaction dimensions. According to the 2003 sample, the African participants were more dissatisfied on most of the ESS dimensions than the coloured, Indian and white participants. It was only in the ESS dimension health and safety that the Indian participants were more dissatisfied than the other race groups. The results of the 2007 also indicated that the African participants were more dissatisfied than other race groups on the ESS dimensions of vision and mission, leadership, human resource management, training and relationships. By contrast, in the dimensions of HIV/AIDS and job satisfaction, the African participants in this sample were more satisfied than the other race groups. The results of the 2008 sample also indicated that in the dimensions of health and safety, HIV/AIDS and values, the African participants were more satisfied than the other race groups, while the coloured participants were more satisfied than the other race groups on the ESS dimensions of vision and mission and job satisfaction. Overall, these inconsistent results on race validate the findings in the literature review that the relationship between race and employee satisfaction is fairly blurred. These mixed results suggest that in some studies, whites are more satisfied, while blacks are dissatisfied. In other studies, the black employees reported higher levels of satisfaction than white employees (Friday & Friday, 2003; Oshagbemi, 2003; Spector, 2006).

- *Job levels and employee satisfaction.* Regarding the biographical variable of job level, the empirical results indicated that job level differences contributed to differences in the scores of the employee satisfaction dimensions. The 2003 sample indicated that the participants at middle management level were more satisfied in most of the ESS dimensions compared with the operational, supervisory and senior management participants. Employees at supervisory level were more satisfied with organisational values. Participants at operational level were more dissatisfied, compared with the participants in the other job levels, in the ESS dimensions of employment equity and diversity, human resource management and change management. According to the 2007 sample, the senior management participants were more satisfied than the participants in the other job levels in the dimensions of vision and mission, leadership, health and safety, training and relationships, while the supervisory staff also demonstrated more satisfaction in the dimensions of HIV/AIDS and job satisfaction. These results confirm the findings in the existing literature which suggest that job level is a reliable predictor of employee satisfaction, with employees in higher ranks being generally more satisfied than workers in lower ranks (Oshagbemi, 2003; Spector, 2006; Bowen *et al.*, 2008). The operational participants in the sample indicated greater dissatisfaction with employment equity and diversity and human resource management. Two dimensions in the 2008 sample that reported significant differences between the different job levels indicated that participants at operational level were more satisfied with the dimension of leadership, whereas senior management were more satisfied with the dimension of training.

- *Department and employee satisfaction.* The empirical results indicated that departmental differences contributed to differences in the scores on the employee satisfaction dimensions. Based on the results of the 2003 sample, it was evident that the participants in the customer services department were more satisfied in most of the ESS

dimensions than the participants in the finance, operations and corporate affairs departments. Participants in the operations department were more dissatisfied in terms of the dimensions of employment equity and diversity, human resource management, HIV/AIDS, communication and change management. Once again, in the 2007 sample, the researcher inferred that while the customer services department indicated satisfaction in most of the ESS dimensions, the finance department indicated dissatisfaction in the dimensions of human resource management, training, communication, relationships and teamwork. The results of the 2008 sample also indicated that the participants in the finance department reported more dissatisfaction with human resource management and training, while staff in the operations department was more dissatisfied with communication. In terms of the literature, there seems to be a dearth of studies dealing with the relationship between department and employee satisfaction. Hence the results of this study should address the existing theoretical gap.

6.2.2.3 The third objective: to develop and test an employee satisfaction diagnostic model for the practice of industrial and organisational psychology

The third objective, as stated above, was achieved in chapter 5, using the SEM.

The SEM investigated the impact of the organisational strategy, policies and procedures and outcomes as the three domains of employee satisfaction during organisational transformation. Confirmatory factor analysis of the latent variables was conducted and the path coefficients of the latent variables, organisational strategy, policies and processes and outcomes, indicated a satisfactory fit for all these variables (see table 5.27).

The goodness-of-fit measure was used to evaluate model A of the SEM. The initial evaluation of model A indicated a weak fit, suggesting two modifications to the model. The first modification focused on allowing the correlation between the manifest variables of values, vision and mission with communication, while the second modification focused on allowing the correlation between the manifest variables of job satisfaction and HIV/AIDS.

The second goodness-of-fit measure of the modified model B indicated both absolute and incremental goodness of fit (see table 5.29). The SEM confirmed the causal relationships between the latent and manifest variables, indicating that the latent variables of organisational strategy, policies and procedures and outcomes were the main indicators of employee satisfaction. The model also indicated the intercorrelations between these latent variables.

A comparison of model B of the SEM and the theoretical model revealed the following similarities:

- The domain of organisational strategy has a direct causal relationship with the dimensions of vision and mission, values and leadership. These dimensions of the domain, organisational strategy, confirm the findings in the literature review that organisational strategy is the criterion in which management set the agenda for the future behaviour of the organisation, and this is one of the determinants of employee satisfaction (Chen *et al*., 2006; Eskildsen & Dahlgaard, 2000).
- The domain of policies and processes has a direct causal relationship with the dimensions of change management, health and safety, employment equity and diversity, communication, human resource management, training and HIV/AIDS. The literature suggests that policies and processes are used in the diagnostic process to determine the level of satisfaction employees derive from the various aspects of the work environment (Fosam *et al*., 1998; Küskü, 2001; Matlala, 1999).

- The domain of outcomes has a direct causal relationship with the dimensions of relationships, teamwork and job satisfaction. The literature indicates that teamwork and positive relationships with colleagues and supervisors as organisational outcomes enhance employee satisfaction (Milner, 2009; Aamodt, 2010).

The B SEM indicated two new correlations between the latent variables. The first relationship was the correlation between communication with organisational values, vision and mission statement, and the second correlation between the dimensions of job satisfaction and HIV/AIDS.

In conclusion, the researcher could infer that the results of the B SEM enhanced the theoretical model created in chapter 3. This model suggests that if this organisation were to decide to diagnose its employee satisfaction, it should assess the organisational strategy, policies and procedures and outcomes in order to determine employees' satisfaction or dissatisfaction. These domains would enable the organisation to identify developmental areas based on employees' dissatisfaction or areas of strength based on the employees' satisfaction. This diagnosis would enable the organisation to initiative interventions aimed at addressing areas of dissatisfaction as developmental areas and to leverage on its strengths as areas of satisfaction in the organisation.

6.2.3 Conclusions relating to the central hypothesis

The empirical study provided statistically significant evidence to support the acceptance of the central hypothesis of this study, as discussed in chapter 5. The central hypothesis of this study stated that there were differences in the three year longitudinal study of employee satisfaction during organisational transformation. Furthermore, people from different race, gender, job level and department groups differed significantly in terms of their employee satisfaction. In addition, it was concluded that there was goodness of fit between the proposed theoretical employee satisfaction diagnostic model and the empirical data, which could be used during organisational transformation.

6.2.4 Conclusions relating to contributions to the field of industrial and organisational psychology

The findings of the literature review and the empirical research results contributed to the field of industrial and organisational psychology, in particular to organisational behaviour. The literature review revealed insights into the impact of organisational transformation on employee satisfaction. In particular, the literature review provided insight into concepts and theoretical models that have led to the development of an employee satisfaction diagnostic model for organisational transformation.

The empirical findings contributed new knowledge to the longitudinal study of employee satisfaction during organisation transformation, based on the significant differences obtained in the three years of this study. The findings on the relationship between employee satisfaction and demographic variables such as gender, race, job level and department are new and could help organisations to understand their diverse employees' need in order to enhance their satisfaction level. Organisations will be able to design interventions to improve employee satisfaction during organisational transformation on the basis of a deeper knowledge of the role of demographic variables in employee satisfaction.

Industrial psychologists play a crucial role in assisting organisations to facilitate their diagnostic and intervention processes. Based on the findings of this study, industrial psychologists could use the employee satisfaction diagnostic model developed in this study. This model could serve as a framework for industrial psychologists to help organisations dealing with organisational transformation to diagnose or assess their employee satisfaction and dissatisfaction, in the areas of organisational strategy, policies and processes and outcomes. Industrial psychologists could use the results of the employee satisfaction diagnosis model to design, propose and introduce organisational interventions aimed at improving employee satisfaction.

This research adds to the field of organisational behaviour by proposing a model of employee satisfaction during organisational transformation. The domains of this model should enable organisations to identify developmental areas based on employees' dissatisfaction or areas of strengths based on employees' satisfaction. The diagnostic model will also enable organisations and practitioners to initiative interventions aimed at addressing areas of dissatisfaction as developmental areas and to leverage on its strengths as areas of satisfaction in the organisation.

In conclusion, organisations should realise the benefits of enhancing employee satisfaction through organisational initiatives. The benefits of employee satisfaction are employee retention, customer satisfaction, improved quality, enhanced performance, life satisfaction, employee health and wellbeing.

6.3 LIMITATIONS

The discussion below focuses on the limitations of the literature review and the empirical study.

6.3.1 Limitations of the literature review

The following limitations were evident in the literature review:

The research on the development of an employee satisfaction diagnostic model during organisational transformation in the South African context was limited on account of the following:

- The variable of employee satisfaction was only measured in one organisation. Although the context of organisational transformation was highlighted, this study could not provide a holistic perspective of the variables or factors that could potentially impact on employee satisfaction.

- The paradigms of this study were limited to the subfields of organisational psychology and the discipline of industrial and organisational psychology, which are systems, humanistic and functionalistic paradigms.

6.3.2 Limitations of the empirical study

The following are the limitations of the study in terms of its ability to generalise and make practical recommendations on the basis of the findings:

- The data on the context organisational transformation were gathered by mean of qualitative methods instead of psychometric tools. A direct relationship between employee satisfaction and organisational transformation could not be established in the study.
- The ESS (Martins & Coetzee, 2007) was dependent on the respondents' self-awareness and personal perceptions which could have potentially affected the validity of the results.
- In terms of the sample, a convenient sample was used for this study instead of a randomised group method, which implies that the findings could not be generalised because they pertain only to the population involved in this study.
- The vast majority of the participants in this study where Africans. Although there were white, Indian and coloured participants, the high number of Africans influenced the generalisation of the results to the broader multicultural South African population.
- The primary limitation of this study included the fact that the data for all three samples were collected from a single organisation.

6.4 RECOMMENDATIONS

To achieve the empirical aim stated in section 6.2.2, this section makes recommendations for further research based on the findings of this research study. The recommendations below focus on the participating organisation, the field of industrial and organisational psychology and future research. The recommendations were made on the basis of the findings, conclusions and limitations of this study.

6.4.1 Recommendations for further research

These recommendations are intended for populations working with individuals in organisational settings, such as industrial psychologists and organisational development practitioners. The following recommendations for future research in the field of industrial and organisational psychology are based on the conclusions and limitations of the study:

The limitations of the results of this study are that it was based solely data collected in one organisation. The focus of future research should therefore be to collect data from other organisations in order to validate the results of this study. The results of this study will not have a general applicability without such replication.

There is a need for more research on the impact of organisational transformation on employee satisfaction. Further research, specifically in the South African context, would be for organisational development purposes, in that it would help organisational psychologists and managers to manage the impact or effect of organisational transformation on employees' satisfaction.

This study was limited in terms of providing insight into the relationship between employee satisfaction and organisational transformation. Further studies into this relationship should be conducted by industrial and organisational psychologists, researchers, academics and business leaders in

order to assist with the development of employee satisfaction strategies in organisations.

In this study, several relationships were identified in the model, suggesting vital future research. Firstly, the results suggest that the dimensions of communication, vision and mission and values are closely related. Secondly, the results suggest that there is a relationship between the dimensions of job satisfaction and HIV/AIDS. These relationships between the dimensions of the ESS warrant further research.

Finally, the development of the diagnostic model of employee satisfaction during organisational transformation in this study was an attempt to design a comprehensive model that could be used to inform both future research and practice.

6.4.2 Recommendations relating to the participating organisation

Based on the results on the empirical results of limitations and conclusions of this study, the following recommendations are made specifically for the participating organisation:

In future, this organisation could use the new model to diagnose its employee's satisfaction, identifying areas of satisfaction and of dissatisfaction at individual, group and organisational level. This model should enable the organisation to focus on organisational strategy, policies and procedures and outcomes as core domains of employee satisfaction.

The results of the employee satisfaction diagnoses could be used in this organisation to propose interventions aimed at leveraging on its strengths and addressing developmental areas.

When focusing on the results of the 2008 sample as the final survey, employees in this organisation demonstrated satisfaction with the vision and mission, health and safety, HIV/AIDS, teamwork, relationships and job

satisfaction. It is recommended that in order to retain these levels of satisfaction, the organisation should continue with the introduction of intervention programmes in these areas.

The 2008 sample also highlighted the fact that areas of concern in this organisation are values, leadership, change management, employment equity and diversity, human resource management, training and communication. It is recommended that the organisation embark on the following interventions:

- *Organisational values.* In any organisation, values guide the behaviour of employees about what is acceptable. According to Werner (2007), organisations have espoused and enacted values. Espoused values are the preferred values in an organisation as reflected in its strategy, while enacted values are reflected in the behaviour of employees and managers. Congruence between the espoused and enacted values can eliminate dissatisfaction in the organisation. It is recommended in the organisation involved in this study that human resource practitioners encourage and motivate both employees and managers to enact organisational values as articulated in the strategy.
- *Communication.* Organisational communication is the process whereby employees in an organisation receive and supply information. It is essential that the organisation should create an environment that promotes supportive, democratic and open communication in order to improve employee satisfaction in this regard (De Nobile & McCormick, 2008). Employees tend to feel valued when organisational communication processes allow them to give their inputs.
- *Leadership.* It is essential that leadership in the organisation should develop trusting and collaborative relationships with their employees. Strategies relevant to the organisation include customising leadership competencies to meet employees' expectations and developing leaders who view leadership as a tool to support employees instead of as a means to manage work only (Watson, 2009). Leadership plays a key role in motivating, influencing and persuading employees to fulfil the organisational strategy and in retaining employees.

- *Change management.* According to Stander and Rothman (2008, p. 7), organisational changes “stimulate a need for employees to adapt their roles through embracing risk, stimulating innovation and coping with uncertainty”. When employees find that their organisation is unable to meet this need, they are likely to be dissatisfied. It is recommended that for employees in the organisation to perceive change positively, a process of change management focusing on employee empowerment should be implemented. Employee empowerment involves participation in decision making on organisational changes (Stander & Rothman, 2008). The process of change management should include communicating the need for and benefits of change, stakeholder engagement, securing buy-in, assessing change readiness, dealing with resistance to change and implementing and evaluating the impact of change initiatives.
- *Training.* Human resource development practitioners in the organisation need to enhance the employees’ capacity to learn, help them overcome obstacles or barriers to learning and create an organisational culture that promotes continuous learning (Schmidt, 2007). Satisfaction with existing opportunities for training and development in an organisation is a significant aspect of career decision making and staff retention.
- *Human resource management.* It is essential that employees perceive human resource management practices such as recruitment, selection, salaries, labour relations and performance management to be fair for all employees. Organisational fairness in the implementation of human resource management processes and procedures enhances employee performance and commitment to the organisation (Mudor, & Tooksson, 2011).
- *Employment equity and diversity.* The biographical analysis of the organisation indicated that it is a diverse organisation with employees from different backgrounds. It is therefore recommended that human resource development practitioners in the organisation develop a diversity management strategy aimed at valuing and embracing

differences in order to create equal opportunities for all employees in the organisation.

In conclusion, its is recommended that in future employee satisfaction surveys, the organisation should continue to communicate the planned interventions based on the employee satisfaction diagnosis to employees, in order to create an expectation and show commitment. Senior or top management should be committed to making improvements in terms of the dissatisfaction areas identified by employees. Employees should receive feedback on the results of the employee satisfaction diagnostic process in order to encourage future participation.

6.4.3 Recommendations for industrial psychologists working in the field of organisational psychology

The literature review provided a useful foundation for the development of a diagnostic model of employee satisfaction during organisational transformation. The empirical study confirmed the goodness of fit for the developed diagnostic model of employee satisfaction during organisational transformation, which could be used as a framework for industrial and organisational psychologists.

The role of both managers and industrial psychologists is that of organisational development practitioner. In order to successfully fulfil this role, they are expected to conduct organisational audits or diagnoses and they also require an in-depth understanding of organisational behaviour, in terms of determining factors that inhibit and enhance performance in the organisation that may lead to employee satisfaction/dissatisfaction. The model developed and tested in this study could assist practitioners and managers to identify the factors that inhibit and enhance employee satisfaction.

Industrial psychologists as organisational practitioners should be able to use the findings of the diagnostic process to develop interventions at an individual, group or organisational level aimed at improving or enhancing employee satisfaction.

The findings of this study also suggest that managers and human resource practitioners need to be aware that different biographical groups (gender, race, job level and department) have different needs affecting their employee satisfaction and impacting on their behaviour at work. It is essential to create an environment that addresses the needs of the different biographical groups in order to enhance their performance and satisfaction in organisations.

6.5 INTEGRATION OF THE RESEARCH RESULTS

This thesis focused on an exploration of differences in employee satisfaction in terms of three years of the study and demographic variables. Central to this thesis was the development of a diagnostic model of employee satisfaction during organisational transformation. Employee satisfaction and organisational transformation play a key role in the process of organisational development and performance in today's organisations.

The literature review indicated that there is a theoretical relationship between organisational transformation and employee satisfaction. The modern organisation has to contend with the forces of change and is continually embarking on organisational transformation initiatives in an effort to adapt to the forces of change and remain competitive in the global market. Insight into the impact of organisational transformation on employee satisfaction would lead to the formulation of effective strategies for organisational behaviour and development.

Knowledge of the factors that lead to high levels of employee satisfaction, gives organisations insight into what motivates their employees in the workplace. Organisations need to understand that individuals have unique needs and desires that drive them towards fulfilment and contentment in their

organisations. This kind of insight is essential for organisations because it adds value to organisational processes aimed at employee retention, employee performance, customer satisfaction, life satisfaction and employee wellbeing.

The empirical study investigated the differences in the three years of study of employee satisfaction during organisational transformation. The empirical study provided statistically significant evidence that supports the central hypothesis of this study, namely that there were differences in the three years study of employee satisfaction during organisational transformation, and that employees from different race, gender, job level and department groups differed significantly in terms of their employee satisfaction. In addition, it provided evidence that there was goodness of fit between the proposed theoretical employee satisfaction diagnostic model during organisational transformation and the empirical data.

In conclusion, it is the researcher's belief that the findings of this study provided insight and scientific knowledge in terms of employee satisfaction during organisational transformation, and that industrial psychologists and organisational development managers should be able to apply these insights, especially the employee satisfaction diagnostic model in enhancing organisational behaviour and development strategies in their organisations. Recommendations were made for future research, and this study should make a positive contribution, firstly, to the subfield of organisational behaviour, and secondly, to the field of industrial and organisational psychology in the South African context.

6.6 CHAPTER SUMMARY

In this chapter, conclusions were drawn and discussed on the basis of the objectives of both the literature review and empirical study. Possible limitations were explored in the literature review and the empirical research. Recommendations for future research were discussed focusing on the need for more research investigating the relationship between employee satisfaction and organisational transformation, especially in the South African context. In conclusion, an integration of the research was presented, highlighting the fact that the results of the empirical study provided evidence of the differences in employee satisfaction during the three years of the study, differences between demographic variables and employee satisfaction and the goodness of fit of the employee satisfaction diagnostic model during organisational transformation.

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