

***THE DEVELOPMENT AND VALIDATION OF AN
ASSESSMENT FRAMEWORK FOR MEASURING THE
ORGANISATIONAL EFFECTIVENESS
OF A METROPOLITAN MUNICIPALITY
IN SOUTH AFRICA***

by

BENJAMIN HUGH OLIVIER

STUDENT NUMBER 0396-6054

Submitted in accordance with the requirements for the degree of

DOCTOR OF ADMINISTRATION

In the subject

INDUSTRIAL AND ORGANISATIONAL PSYCHOLOGY

at the

UNIVERSITY OF SOUTH AFRICA

SUPERVISOR: PROF NICO MARTINS

December 2014

ACKNOWLEDGEMENTS

I would like express my appreciation and thanks to the following:

- My wife, Sandra, for her support and understanding when I had to spend large amounts of time away from her.
- My promoter, Professor Nico Martins, for his friendship, guidance, support and continual encouragement.
- Mrs Dina Venter for the statistical analysis of the data and for her patience in explaining the results to me in understandable language.
- Unisa, for providing me with the time and necessary financial support to conduct this study.
- Organisational Diagnostics for providing the data for the research.
- The applicable metropolitan municipality for providing the necessary approval to use the data for this study.

DECLARATION

I, Benjamin Hugh Olivier, student number 0396-6054, hereby declare that this thesis titled **“The development and validation of an assessment framework for measuring the organisational effectiveness of a metropolitan municipality in South Africa”**, is my own work, and that all sources that I have used or quoted have been indicated and acknowledged by means of complete references.

BENJAMIN HUGH OLIVIER
Student No: 0396-6054

DATE

SUMMARY

THE DEVELOPMENT AND VALIDATION OF AN ASSESSMENT FRAMEWORK FOR MEASURING THE ORGANISATIONAL EFFECTIVENESS OF A METROPOLITAN MUNICIPALITY IN SOUTH AFRICA

DEGREE : D ADMIN (INDUSTRIAL PSYCHOLOGY)

**DEPARTMENT : INDUSTRIAL AND ORGANISATIONAL
PSYCHOLOGY**

SUPERVISOR : PROF NICO MARTINS

The aim of this quantitative study was to develop and validate a model to measure the organisational effectiveness of a metropolitan municipality in South Africa. The literature review phase explored the concept of organisational effectiveness and the assessment thereof in both the Public and Private Sectors.

The literature review indicated that there is a clear distinction between business performance (operational and financial performance) and the larger concept of organisational effectiveness, and also that the measurement of organisational effectiveness in the Public Sector differed from the measurement thereof in the Private Sector. The literature review also indicated that measures of Public Sector effectiveness could not be directly applied to measure the effectiveness of Private Sector organisations.

From the literature review a proposed theoretical model for measuring the organisational effectiveness of a metropolitan municipality in South Africa

was proposed. This proposed model included organisational and behavioural variables contained in traditional approaches to organisational effectiveness, variables that were identified in previous organisational effectiveness studies, as well as variables contained in existing assessment models of organisational effectiveness. This model was then validated during the empirical phase by conducting a survey of an existing metropolitan municipality in South Africa (n = 6514) and exposing the results of the survey to Structural Equation Modelling (SEM).

The confirmatory factor analysis conducted as part of SEM subsequently identified three main and 10 secondary statistically significant organisational and behavioural variables that could be used to measure the effectiveness of a metropolitan municipality in South Africa. The three main variables identified were (1) Healthy Systems, (2) Goal Achievement and (3) Service Delivery, while the 10 secondary variables identified were (1) Diversity, (2) Training & Development, (3) Rewards & Recognition, (4) Management Practices, (5) Internal Functioning, (6) Work Environment, (7) Interpersonal Relations, (8) Workforce Equity, (9) Customer Satisfaction and (10) Vision & Mission. It was thus recommended that metropolitan municipalities in South Africa could use this validated model as an assessment framework to measure their current organisational effectiveness, to identify aspects which need to be rectified to improve effectiveness, and to compare and benchmark their municipality in order to learn from other metropolitan municipalities to improve their effectiveness.

KEY TERMS

Organisational effectiveness, organisational performance, diagnosis, organisational development, assessment framework, assessment model, Public Sector, Private Sector, local government, metropolitan municipality.

TABLE OF CONTENTS

	PAGE
ACKNOWLEDGEMENTS	ii
DECLARATION	iii
SUMMARY	iv
CHAPTER 1: SCIENTIFIC ORIENTATION TO THE RESEARCH	1
1. INTRODUCTION	1
1.1 ORIENTATION	1
1.2 BACKGROUND TO THE STUDY	1
1.2.1 The importance of local government	1
1.2.2 The effectiveness of local governments in South Africa	3
1.2.3 The importance of metropolitan municipalities in South Africa	6
1.2.4 The importance of organisational effectiveness	7
1.2.5 The assessment of organisational effectiveness	9
1.2.6 Assessing Public Sector effectiveness	10
1.3 MOTIVATION FOR THIS STUDY	12
1.4 PROBLEM STATEMENT	13
1.5 AIMS	14
1.5.1 General aim	14
1.5.2 Specific aims	15

1.6	THE PARADIGM PERSPECTIVE	16
1.6.1	The meta-theoretical paradigm	16
1.6.2	The methodological paradigm	17
1.6.3	The theoretical paradigm	17
1.7	RESEARCH VARIABLES	18
1.8	UNIT OF ANALYSIS	18
1.9	RESEARCH DESIGN	19
1.10	Research approach	21
1.11	Research method	21
1.11.1	Research participants	22
1.11.2	Measuring instrument	22
1.11.3	Research procedure	23
1.11.4	Statistical analysis	24
1.11.5	Refinement of the new proposed theoretical assessment framework	27
1.12	CONCLUSION, LIMITATIONS AND RECOMMENDATIONS	27
1.13	CHAPTER LAYOUT	27
1.14	CHAPTER SUMMARY	28
	CHAPTER 2: ORGANISATIONAL EFFECTIVENESS	29
2.1	INTRODUCTION	29
2.2	ORGANISATIONAL EFFECTIVENESS VERSUS ORGANISATIONAL PERFORMANCE	29

2.3	THE LACK OF CONSENSUS ON THE MEANING OF ORGANISATIONAL EFFECTIVENESS	32
2.4	THE IMPORTANCE OF ORGANISATIONAL EFFECTIVENESS	33
2.5	THE DIFFICULTY OF DEFINING ORGANISATIONAL EFFECTIVENESS	38
2.5.1	Introduction	38
2.5.2	Properties of organisational effectiveness making a common definition difficult	40
2.5.3	Obstacles constraining the development of a common definition of organisational effectiveness	42
2.5.4	Barriers to developing a general operational model of organisational effectiveness	46
2.6	APPROACHES TO ORGANISATIONAL EFFECTIVENESS	51
2.6.1	Introduction	51
2.6.2	The criteria approach to organisational effectiveness	51
2.6.3	The goal approach to organisational effectiveness	59
2.6.4	The systems resource approach to organisational effectiveness	63
2.6.5	The internal processes approach to organisational effectiveness	65
2.6.6	The strategic constituencies approach to organisational effectiveness	67
2.6.7	The conflicting values approach to organisational effectiveness	70
2.7	WHICH IS THE BEST APPROACH TO ORGANISATIONAL EFFECTIVENESS?	73

2.8	A SUMMARY OF THE EVOLUTION OF APPROACHES TO ORGANISATIONAL EFFECTIVENESS	75
2.8.1	Ideal types	75
2.8.2	Contingency approaches	76
2.8.3	Multiple constituencies	76
2.8.4	Paradox approach	77
2.9	CHAPTER SUMMARY	77
CHAPTER 3:	ORGANISATIONAL EFFECTIVENESS IN PUBLIC SECTOR ORGANISATIONS, INCLUDING LOCAL GOVERNMENT	78
3.1	INTRODUCTION	78
3.2	CLARIFYING PUBLIC AND PRIVATE SECTOR ORGANISATIONAL EFFECTIVENESS TERMINOLOGY	78
3.3	THE IMPORTANCE OF ORGANISATIONAL EFFECTIVENESS FOR PUBLIC SECTOR ORGANISATIONS	79
3.4	THE DIFFERENCE BETWEEN PUBLIC SECTOR ORGANISATIONAL PERFORMANCE AND PRIVATE SECTOR ORGANISATIONAL EFFECTIVENESS	80
3.5	THE IMPORTANCE OF LOCAL GOVERNMENT AS PART OF THE PUBLIC SECTOR	89
3.5.1	Introduction	89
3.5.2	The objectives of local government in South Africa	90
3.5.3	The importance of metropolitan municipalities in Africa as a special form of local government	91
3.5.4	The importance of metropolitan municipalities in South Africa as a special form of local government	93

3.6	THE ORGANISATIONAL EFFECTIVENESS OF LOCAL GOVERNMENT IN SOUTH AFRICA, INCLUDING METROPOLITAN MUNICIPALITIES	95
3.7	CONCLUSIONS REGARDING THE MEASUREMENT OF ORGANISATIONAL EFFECTIVENESS IN THE PUBLIC AND PRIVATE SECTORS	97
3.8	CHAPTER SUMMARY	98

CHAPTER 4: THE ASSESSMENT OF ORGANISATIONAL EFFECTIVENESS **99**

4.1	INTRODUCTION	99
4.2	THE IMPORTANCE OF ASSESSING ORGANISATIONAL EFFECTIVENESS	99
4.3	THE DIFFICULTY OF ASSESSING ORGANISATIONAL EFFECTIVENESS	102
4.4	CHARACTERISTICS OF ASSESSMENT FRAMEWORKS/MODELS	105
4.4.1	Introduction	105
4.4.2	The basic components of an assessment framework/model	106
4.4.3	How assessment frameworks/models differ	107
4.4.4	Criteria for effective assessment frameworks/models	108
4.4.5	Benefits of using an assessment framework/model to measure organisational effectiveness	109
4.5	AN EVALUATION OF EXISTING ASSESSMENT FRAMEWORKS OR MODELS WHICH MEASURE THE ORGANISATIONAL EFFECTIVENESS OF A TOTAL ORGANISATION TO DETERMINE THEIR APPLICABILITY TO METROPOLITAN MUNICIPALITIES IN SOUTH AFRICA	111

4.5.1	Introduction	111
4.5.2	Porter, Lawler and Hackman's Model of Individual Performance in Organisations	112
4.5.3	Weisbord's Six-Box Model	118
4.5.4	The Nadler-Tushman Congruence Model of Organisational Behaviour	125
4.5.5	The 7-S/8-S Framework	130
4.5.6	Tichy's Technical Political Cultural (TPC) Framework	134
4.5.7	The Causal Model of Organisational Performance	138
4.5.8	The Balanced Scorecard	145
4.5.9	The South African Excellence Model for Local Government	150
4.5.10	The High Performance Model	155
4.6	THE APPLICABILITY OF EXISTING ASSESSMENT FRAMEWORKS WHICH MEASURE THE ORGANISATIONAL EFFECTIVENESS OF A TOTAL ORGANISATION TO THE MEASUREMENT OF ORGANISATIONAL EFFECTIVENESS IN METROPOLITAN MUNICIPALITIES IN SOUTH AFRICA	158
4.6.1	Summary	158
4.6.2	Conclusions	160
4.7	RECOMMENDED NEW CUSTOMISED THEORETICAL ASSESSMENT FRAMEWORK FOR MEASURING THE ORGANISATIONAL EFFECTIVENESS OF A METROPOLITAN MUNICIPALITY IN SOUTH AFRICA	162
4.7.1	Introduction	162
4.7.2	Answering seven critical questions when measuring organisational effectiveness	163

4.7.3	The recommended theoretical framework to measure the organisational effectiveness of a metropolitan municipality in South Africa	172
4.7.4	Conclusions	182
4.8	CHAPTER SUMMARY	183
CHAPTER 5: EMPIRICAL STUDY		185
5.1	INTRODUCTION	185
5.2	THE RESEARCH DESIGN	185
5.2.1	Phase 1: Literature review	185
5.2.1.1	<i>Step 1: Literature review</i>	187
5.2.1.2	<i>Step 2: Develop a proposed theoretical assessment framework</i>	187
5.2.2	Phase 2: Empirical study	188
5.2.2.1	<i>Step 3: Administering the survey instrument</i>	188
5.2.2.2	<i>Step 4: Analysis of the data</i>	198
5.2.2.3	<i>Step 5: Validating the proposed theoretical assessment framework by means of SEM</i>	202
5.2.2.4	<i>Step 6: Refinement of the new proposed theoretical assessment framework</i>	217
5.3	CHAPTER SUMMARY	217
CHAPTER 6: RESEARCH RESULTS		218
6.1	INTRODUCTION	218
6.2	DESCRIPTIVE STATISTICS	218

6.2.1	Frequency distributions	218
6.2.2	Means and standard deviations	223
6.3	RELIABILITY OF DIMENSIONS	224
6.4	EXPLORATORY FACTOR ANALYSIS	226
6.5	STRUCTURAL EQUATION MODELLING (SEM)	235
6.5.1	Introduction	235
6.5.2	Confirmatory factor analysis	236
6.5.2.1	<i>Developing and specifying the 1st order measurement model</i>	236
6.5.2.2	<i>Assessing 1st order measurement model validity</i>	241
6.5.2.3	<i>Developing and specifying the 2nd order measurement model</i>	244
6.5.2.4	<i>Assessing 2nd order measurement model validity</i>	247
6.5.2.5	<i>Specifying the structural model</i>	249
6.5.2.6	<i>Assessing the structural model validity</i>	252
6.5.3	Adaptation of the original proposed theoretical assessment framework to conform to the structural model of organisational effectiveness obtained from the SEM process	254
6.5.4	The implications of the new adapted theoretical model	256
6.6	CHAPTER SUMMARY	256
CHAPTER 7: CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS		258
7.1	INTRODUCTION	258
7.2	CONCLUSIONS REGARDING THE AIMS OF THE STUDY	258

7.2.1	Conclusions regarding the specific theoretical aims of the study	258
7.2.2	Conclusions regarding the specific empirical aims of the study	269
7.2.3	Conclusions regarding the general aim of the study	279
7.2.4	Conclusions regarding the research hypothesis	279
7.3	LIMITATIONS OF THE STUDY	281
7.3.1	Limitation related to the literature review	281
7.3.2	Limitations related to the empirical study	282
7.4	SUGGESTIONS FOR FURTHER RESEARCH	283
7.5	RECOMMENDATIONS FOR THE PARTICIPATING METROPOLITAN MUNICIPALITY	284
7.6	RECOMMENDATIONS FOR THE FIELD OF INDUSTRIAL AND ORGANISATIONAL PSYCHOLOGY REGARDING ORGANISATIONAL EFFECTIVENESS	285
7.7	CHAPTER SUMMARY	287
	REFERENCE LIST	288

LIST OF TABLES

Table 1.1:	Inhabitants of South Africa's Eight Metros in 2013	7
Table 2.1:	Factors accounting for 70% of total variance	52
Table 2.2:	A Partial Listing of Univariate Measures of Organisational Effectiveness	54
Table 2.3:	Summary of Assessment Approach, Domains and Criteria	54

Table 2.4:	Frequency of occurrence of evaluation criteria in 17 models of organisational effectiveness	56
Table 2.5:	Evolution of Approaches to Organisational Effectiveness	75
Table 4.1:	Assessment Frameworks/Models which Assess the Organisational Effectiveness of a Total Organisation	113
Table 4.2:	The South African Excellence Model for Local Government Criteria	152
Table 4.3:	Comparison between Assessment Frameworks/Models and Traditional Approaches to Organisational Effectiveness	159
Table 4.4:	Seven Critical Questions in Assessing Organisational Effectiveness	172
Table 5.1:	ES Dimensions and Number of Statements per Dimension	190
Table 5.2:	The Dimensions of the ES Coupled to the Hypothesised Variables in the Proposed Theoretical Measurement Model	192
Table 6.1:	Means and standard deviations for the 13 dimensions of the ES	223
Table 6.2:	The Internal Consistency of the 13 Pre-defined Dimensions of the ES	225
Table 6.3:	Total Variance explained by 11 components obtained from the Exploratory Factor Analysis with the remaining 76 Items	228
Table 6.4:	Rotated Component Matrix: Principal Component Analysis with Varimax Rotation	230
Table 6.5:	Reliability Statistics for the 11 Extracted Factors	235
Table 6.6:	Standardised Maximum Likelihood Estimates of Regression Weights	237

Table 6.7:	Measurement Model: Estimated Covariances between the 10 Remaining Latent Variables	239
Table 6.8:	Goodness-of-Fit Indices for the 1 st Order Measurement Model	241
Table 6.9:	Standardised Maximum Likelihood Estimates of Regression Weights	246
Table 6.10:	2 nd Order Measurement Model: Covariances among Pairs of the three Latent Variables	246
Table 6.11:	Goodness-of-Fit Indices for the 2 nd Order Measurement Model	248
Table 6.12:	Structural Model Maximum Likelihood Estimates of Regression Weights	251
Table 6.13:	Goodness-of-Fit Indices for the Structural Model	252
Table 7.1:	Aspects to be included in any assessment framework to measure the organisational effectiveness of a metropolitan municipality in South Africa	278

LIST OF FIGURES

Figure 1.1:	Service Delivery Protests by Province, 2004 – 2014	5
Figure 1.2:	Major Service Delivery Protests, by year, 2004 – 2014	6
Figure 1.3:	The Research Design	20
Figure 2.1:	The domain of organisational effectiveness	30
Figure 2.2:	A summary of the competing value sets and effectiveness models	89
Figure 4.1:	Porter, Lawler & Hackman's Model of Individual Performance	114
Figure 4.2:	Weisbord's Six-Box Model	119
Figure 4.3:	Nadler and Tushman's Congruence Model of Organisational Behaviour (1977)	126

Figure 4.4:	The 7-S Framework	130
Figure 4.5:	Tichy's Technical Political Cultural Framework	135
Figure 4.6:	The Causal Model of Organisational Performance	140
Figure 4.7:	The Balanced Scorecard	146
Figure 4.8:	The South African Excellence Model for Local Government	151
Figure 4.9:	The High Performance Model	156
Figure 4.10:	Recommended Theoretical Framework to Measure the Organisational Effectiveness of a Metropolitan Municipality in South Africa	171
Figure 5.1:	The Research Design	186
Figure 5.2:	Integrating SEM with the Research Design	208
Figure 6.1:	Frequency Distribution of Age of Respondents	219
Figure 6.2:	Frequency Distribution of Gender of Respondents	219
Figure 6.3:	Frequency Distribution of Qualifications of Respondents	220
Figure 6.4:	Frequency Distribution of Occupational Level of Respondents	220
Figure 6.5:	Frequency Distribution of Home Language of Respondents	221
Figure 6.6:	Frequency Distribution of Employment Equity Group (Race) of Respondents	222
Figure 6.7:	Frequency Distribution of Department of Respondents	222
Figure 6.8:	Scree Plot of Eigenvalues	229
Figure 6.9:	The 1 st order measurement model	237
Figure 6.10:	The 2 nd order measurement model	245
Figure 6.11:	2 nd order measurement model correlations	247
Figure 6.12:	The Specified, Hypothesised Structural Model	250
Figure 6.13:	Structural Model Regression Weights	251

Figure 6.14: Adapted Theoretical Framework to Measure the Organisational Effectiveness of a Metropolitan Municipality in South Africa

255

LIST OF APPENDICES

- APPENDIX A: Detail regarding the Missing Data for the 13 Dimensions of the ES
- APPENDIX B: Pearson Product-Moment Correlation Coefficients of the original 78 Items of the ES
- APPENDIX C: Total Variance Explained by Exploratory Factor Analysis with 76 Items

CHAPTER 1: SCIENTIFIC ORIENTATION TO THE RESEARCH

1.1 INTRODUCTION

In this Chapter the background to the study, motivation for this study, problem statement, aims, the paradigm perspective, the research variables and unit of analysis, the research design and the thesis Chapter layout will be discussed.

1.2 BACKGROUND TO THE STUDY

1.2.1 The importance of local government

According to Mitlin (2000), local government is a very important sphere of government all over the world because it is the sphere of government closest to the people. Many basic services are delivered by local municipalities, and local ward councillors are the politicians closest to communities. Furthermore, local governments are increasingly required to play larger roles in providing services, alleviating poverty, and facilitating development (Andrews & Shah, 2003; Mitlin, 2000). This was further emphasised by Clos (2003), who said that:

“Local governments are key to the development of sustainable cities and alleviation of poverty. Strong local authorities, both in urban and rural areas, are crucial in implementing effective strategies for the future development of our communities.”

This view is supported by various authors who emphasise that local government is the closest form of government to the general populace and

thus plays an important role in delivering services to communities (Cameron, 2005; Craythorne, 2006; Mortimer, 2004; Rakodi, 1997).

In South Africa, after the first democratic municipal elections in 1994, there were high expectations of local governments regarding service delivery. This is confirmed by the fact that the objectives for local government are set out in the South African Constitution (Constitution of the Republic of South Africa, 1996), which according to Section 152 are:

- To provide democratic and accountable government of local communities;
- To ensure the provision of services to communities in a sustainable manner;
- To promote social and economic development;
- To promote a safe and healthy environment; and
- To encourage the involvement of communities and community organisations in the matters of local government.

In accordance with the Local Government: Municipal Structures Act, 1998 (Act No 117 of 1998), and in order to fulfil its Constitutional obligations, South Africa is divided into 283 municipalities, based on three legal categories, namely:

- Metropolitan municipalities - eight (8);
- District Municipalities - forty four (44); and
- Local Municipalities - two hundred and thirty one (231).

However, a central challenge for the many new institutions of local government in South Africa has been their viability and ability to build strong organisations capable of delivering on the principles of Section 53 of the

Constitution (Constitution of the Republic of South Africa, 1996, p. 155), which states that:

“A municipality must structure and manage its administration and budgeting and planning processes to give priority to the basic needs of the community, and to promote the social and economic development of the community, and participate in national and provincial development programmes.”

According to the State of Local Government in South Africa Report [Department of Cooperative Governance and Traditional Affairs (DCOGTA), 2009], if a municipality can achieve the above objectives consistently, within its financial and administrative capacity, it could be described as a functional, well-performing municipality.

1.2.2 The effectiveness of local government in South Africa

As can be seen from the above, the primary responsibility of local governments in South Africa today is to provide access to crucial public services (Constitution of the Republic of South Africa, 1996). The importance of this was emphasised by the South African President, Jacob Zuma, in his State of the Nation Address on 10 February 2011, when he said that *“We have to make people’s experience of local government a pleasant one, because it touches their homes and their lives directly every day”* (www.thepresidency.gov.za).

Given their constitutional responsibilities, how are local governments in South Africa currently performing? According to the DCOGTA (2009), which conducted its own investigation into the functioning of all municipalities in South Africa, diverse challenges have been met that undermine the progress

and successes achieved so far. Of paramount importance would be acknowledging that the 283 municipalities in the country have different capacities and are faced with different social and economic challenges. Depending on the different challenges, it will be necessary for each municipality to focus and improve on the responsibilities that it is able to deliver.

The State of Local Government in South Africa Report (DCOGTA, 2009) further states that the democratisation of the local sphere is now fraught with community frustration over poor institutionalisation of systems, poor service delivery and poor political governance. According to the Report (DCOGTA, 2009) a culture of patronage and nepotism is now so widespread in many municipalities that the formal municipal accountability system is ineffective and inaccessible to many citizens. There is now a lack of citizen confidence and trust in the system. This has been publicly evidenced in the spate of community protests since 2004, which may be seen as a symptom of the alienation of citizens from local government. Figure 1.1 below illustrates the provincial spread of community protests over the last 10 years.

Municipal IQ Hotspots Monitor (2014) shows that in the period 1 January to 3 April 2014 alone, there have been 48 major service delivery protests staged against local government, occurring roughly at a rate of a protest every second day. Gauteng and the Eastern Cape remain the most protest-ridden provinces in 2014, with the Eastern Cape just slightly ahead as of the end of March 2014.

Figure 1.1: Service Delivery Protests by Province, 2004 – 2014 (Municipal IQ Hotspots Monitor, 2014)

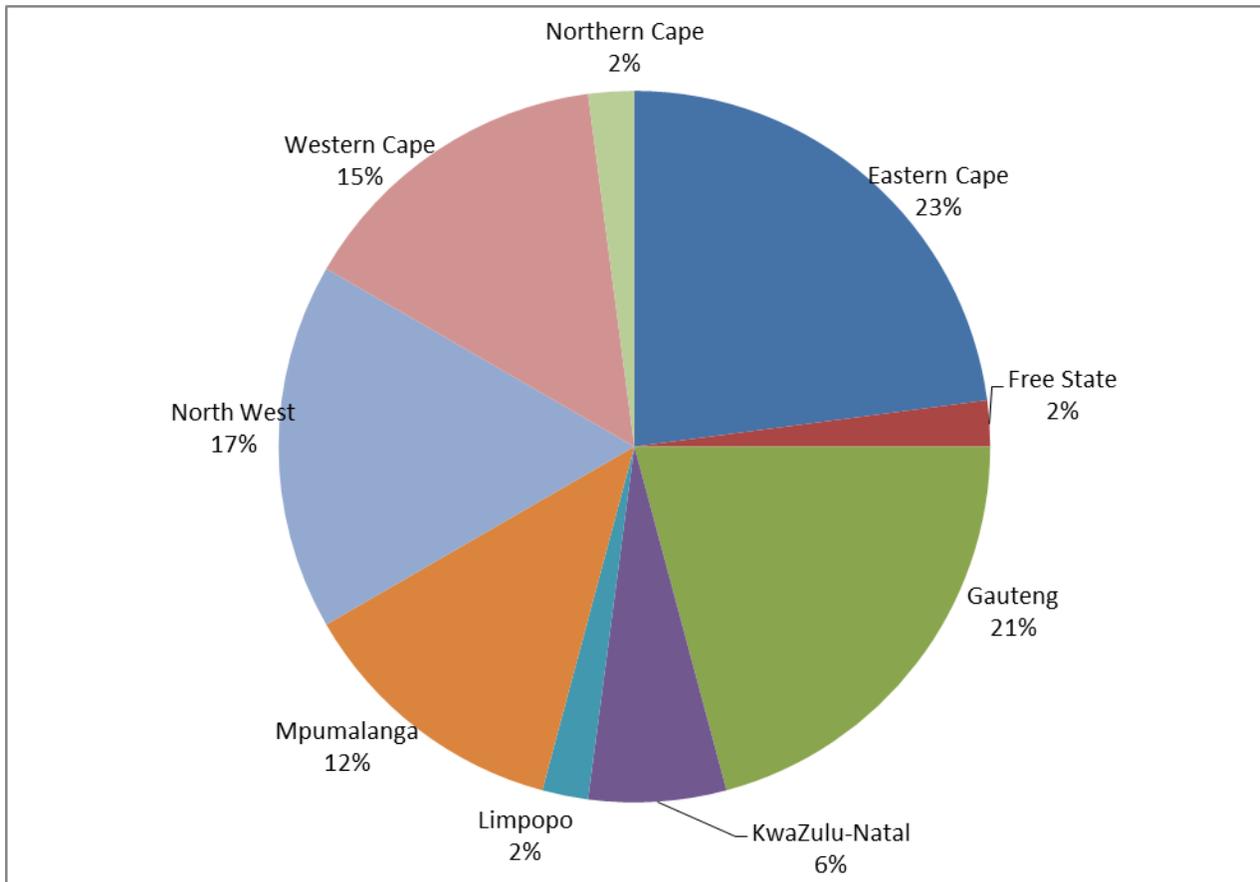
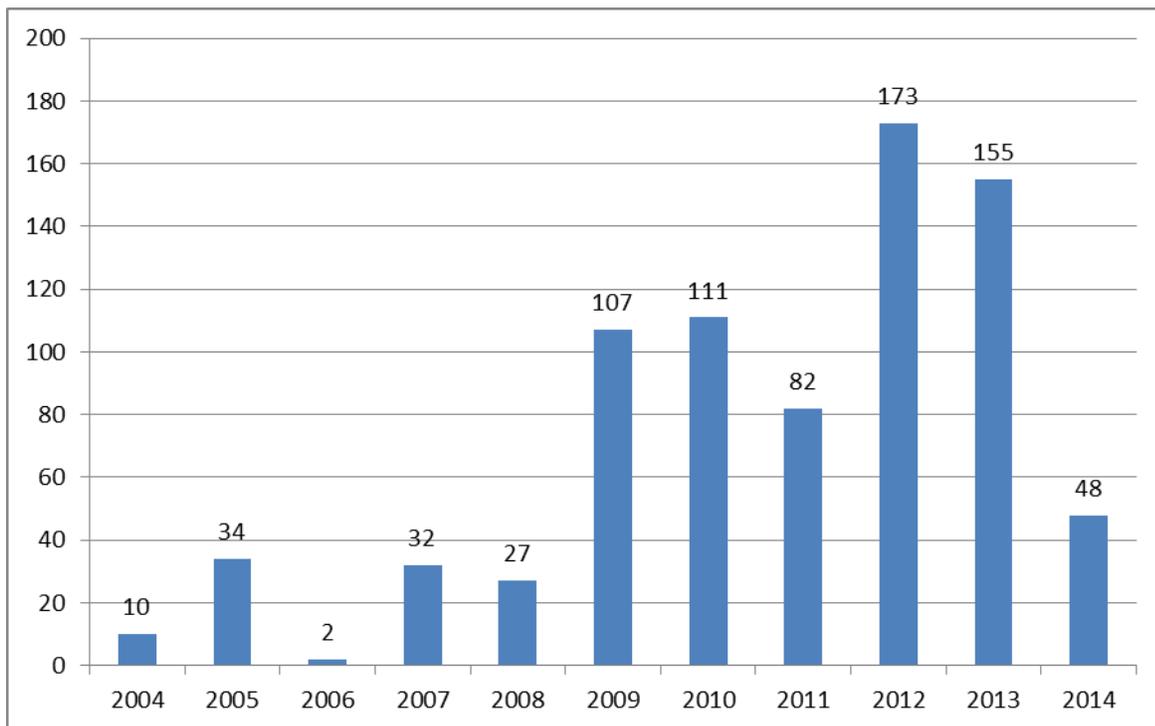


Figure 1.2 below also illustrates the upward trend in service delivery protests over the last 10 years, clearly signifying an escalating loss of confidence in local government to deliver services. After just four months in 2014 the total already stood at 48.

According to Atkinson (2007), there are three main causes for the mass protests over the last few years: (1) municipal *ineffectiveness* in service delivery, (2) the poor responsiveness of municipalities to citizens' grievances, and (3) the conspicuous consumption entailed by a culture of self-enrichment on the part of municipal councillors and staff. Adding to this, Leibbrandt and Botha (2014) state that the inability to execute strategies is one of the main

problems in local government in South Africa today. It is thus obvious that the majority of local governments in South Africa are currently *underperforming*, are deemed to be *ineffective*, and are *in crisis*.

Figure 1.2: Major Service Delivery Protests, over the period Jan 2004 – April 2014 (Municipal IQ Hotspots Monitor, 2014)



1.2.3 The importance of metropolitan municipalities in South Africa

Of the 283 municipalities in South Africa, the eight metros constitute a significant segment of the total local government sphere. This becomes clear from Table 1.1 below which indicates that the eight metropolitan municipalities in South Africa have more than 20 million inhabitants, which is

38% of the total estimated mid-year population of South Africa of 52.98 million (Statistics South Africa, 2013).

Table 1.1:

Inhabitants of South Africa's Eight Metros in 2013 (Statistics South Africa, 2013)

Name of metro	Number of inhabitants
City of Johannesburg	4 434 827
City of Cape Town	3 740 026
eThekweni (Durban)	3 442 361
Ekurhuleni	3 178 470
City of Tshwane (Pretoria)	2 921 488
Nelson Mandela Bay (Port Elizabeth)	1 152 115
Buffalo City	755 200
Mangaung (Bloemfontein)	747 431
Total	20 371 918

The eight metros referred to above also represent the eight largest urbanised and industrialised centres in South Africa (www.salga.org.za). They are also important economic centres in their own right, managing huge capital investment programmes and some of them having budgets larger than that of Swaziland and Lesotho. Collectively, they account for over half of South Africa's GDP, over 38% of the country's population and provide jobs for 45% of the workforce (www.southafrica.co.za). From the above it is thus clear that metropolitan municipalities in South Africa are extremely important local government entities which play a huge role in the economic, social and political activities of the country.

1.2.4 The importance of organisational effectiveness

Most organisations today are facing an external environment characterised by rapid technological changes, a global economy, changing market requirements, and intense domestic and international competition (Achua & Lussier, 2010). In fact Hamel (2000, pp. 9 – 11) says that *“with all these*

rapid changes taking place, industry revolutionaries will firstly take an organisation's markets and its customers, next they'll take its best employees, and finally they'll take its assets".

In the 21st Century business environment, companies have found it necessary to transform from a business that simply earns a profit to a business that looks for ways to maintain a competitive advantage. Leaders are now not only tasked with strategising to come up with profit-earning activities, but are also tasked with strategising to motivate and engage employees to give more back to the organisation in order to achieve desired results, that is, increased productivity and increased earnings. (Savage-Austin & Honeycutt, 2011). This implies that in order to survive in the future, overcome competition, increase productivity and improve customer service, all organisations will have to *improve their effectiveness*.

For the Public Sector, improving organisational effectiveness has become just as important as for the Private Sector. Citizens all over the world are increasingly demanding that Public Sector organisations improve their service delivery and prove that they have an impact on complex social problems, while tax payers are demanding an acceptable return on the taxes that they pay to governments at all levels (Sowa, Seldon & Sandfort, 2004). Since the 1980s, Public Sectors around the world have emphasised administrative reform, owing to economic decline and increased international competition. The objective was to cut budgets and to improve the effectiveness and efficiency of government bureaucracy (Van Thiel & Leeuw, 2002). At local government level municipalities are creatures of stature – they exist to do things which Parliament or a country's constitution has said that they should do (Jackson, 1984). As such they are under pressure to perform, as a failure to do so will see them either being punished or rewarded by vote choice (Boyne, James, John & Petrovsky, 2009).

In South Africa the service delivery protests at local government level over the last few years are a clear indication that ordinary citizens are demanding that municipalities become more effective and start delivering on their constitutional mandate. Demands for interventions from National and Provincial levels to improve the functioning of municipalities are also increasing, and the Government has had to launch an ambitious Local Government Turn-Around Strategy (LGTAS) in an attempt to improve local government effectiveness (www.info.gov.za).

1.2.5 The assessment of organisational effectiveness

According to Hall (1999), organisations are studied in order to understand how and why they are effective or not. The first step towards improving organisational effectiveness is to determine how it is currently functioning and to do this an organisational diagnosis or assessment is necessary. In organisational diagnosis, consultants, researchers, or managers use conceptual models and applied research methods to assess an organisation's current state and discover ways to solve problems, meet challenges, or enhance performance. Without careful diagnosis, decision makers may waste effort by failing to attack the root causes of problems (Harrison, 2005). Diagnosing organisations also forms part of the action-research approach to organisational development, which is according to Warrick (as cited in Schifo, 2004, p.74) *"... a process for understanding, developing, and changing organizations and improving their health, effectiveness, and self-renewal capabilities"*. From the above it is thus clear that the assessment of organisational effectiveness is essential in order to improve it.

Although there is no consensus on a definition of organisational effectiveness or on what elements or constructs should be measured (Cameron, 1986;

Mullins, 2010; Yuchtman & Seashore, 1967), many authors have attempted their own definitions thereof (Barnett, Greve & Park, 1994; Glaser, 1991; Lee & Brower, 2006) and various frameworks have been used over the years to assess organisational effectiveness (Burke & Litwin, 1992; Kaplan & Norton, 1992; Nadler & Tushman, 1977; Nel & Haycock, 2005; Porter, Lawler & Hackman, 1976; Tichy, 1983; Waterman, Peters & Philips, 1980; Weisbord, 1976; Wiley, 2010). In fact most if not all organisational improvement efforts are preceded by a comprehensive organisational diagnosis which is used as a stimulus to change the functioning and thus the effectiveness of the organisation (Harrison, 2005).

1.2.6 Assessing Public Sector effectiveness

Andrews and Shah (2003) argue that given the important role of delivering services to local communities which municipalities are asked to perform in countries around the world, it is only logical that various stakeholder organisations and citizens of all political parties want to know how well they are doing, and how they can be improved. However, Andrews and Shah (2003) state that the problem with asking such questions is that criteria for evaluating local governments remain poorly formed: What does organisational effectiveness in a “good” local government look like? What factors should one consider when evaluating local governments?

The numerous organisational effective assessment frameworks mentioned above (Burke & Litwin, 1992; Kaplan & Norton, 1992; Nadler & Tushman, 1977; Nel & Haycock, 2005; Porter et al., 1976; Tichy, 1983; Waterman et al., 1980; Weisbord, 1976; Wiley, 2010) are not able to adequately answer these questions, as these frameworks have been developed for the Private Sector, or in the case of the South African Excellence Model for Local Governments (Nel & Haycock, 2005), adapted from the Private Sector for

use in the Public Sector. Sawhill and Williamson (2001) argue that for a private enterprise, measuring success is often as simple as reading a profit and loss statement. For a mission-driven non-profit, however, measuring “success” is far more difficult. Brewer and Selden (2000) state that some of the reasons for this are that organisational performance in the Public Sector is difficult to define and measure. Stakeholders often disagree about which elements of performance are important, and some elements are difficult to measure because they are preventative in nature. Also, in the Public Sector the political element plays an important role in organisational effectiveness. According to Sowa et al. (2004), little consensus has emerged, either theoretically or empirically, as to what constitutes non-profit organisational effectiveness and how best to measure it. Furthermore, many of the models used to assess the effectiveness of the Public Sector have not been empirically validated either (Brewer & Selden, 2000). Even the South African Excellence Model for Local Governments (Nel & Haycock, 2005) was originally developed for business, but the word “business” has been removed from the model due to the fact that it has been made applicable to non-profit organisations in South Africa (Smit, 1999).

In the case of South Africa, there is no one comprehensive, validated assessment framework for measuring the effectiveness of metropolitan municipalities. Since the advent of democracy in South Africa in 1994, various frameworks have been used to measure a local government’s current *business excellence* levels (Nel & Haycock, 2005; Smit, 1999), or *capacity* as measured by the Municipal Demarcation Board (www.demarcation.org.za), or how *productive the average resident* of a South African municipality can be as represented by a Municipal Productivity Index (www.municipaliQ.co.za), or to what degree a municipality is *fulfilling its constitutional mandate* (DCOGTA, 2009). Each one of these frameworks follows a different approach to organisational effectiveness at local government level. This lack of a

comprehensive, *validated* diagnostic model which includes all the relevant behavioural and organisational elements of organisational effectiveness at local government level makes it difficult to measure, compare and improve the performance of metropolitan municipalities in South Africa.

1.3 MOTIVATION FOR THIS STUDY

In order to improve the effectiveness of metropolitan municipalities in South Africa, and thus the lives of all its citizens, it will firstly be necessary to measure the current effectiveness of the metropolitan municipalities. This will ensure that the correct aspects are addressed to improve effectiveness. In fact, this diagnostic approach to improving organisational effectiveness is applicable to any kind of organisation (Harrison, 2005).

Furthermore, if the effectiveness of only the eight metropolitan municipalities in South Africa can be improved, it will have a significant impact on service delivery, as more than 40% of the total population reside in the eight metros (www.southafrica.co.za).

Industrial and Organisational Psychology (IOP), with its application of psychological principles to organisations, is ideally suited to measure and improve organisational effectiveness, as factors that affect the *people* in an organisation are examined as opposed to the business fields that only examine broader aspects of running an organisation such as marketing channels, transportation networks, and cost accounting (Kimbrough, Durley, & Munoz, 2005).

IOP thus has the expertise to develop a comprehensive assessment framework which would address all relevant behavioural and organisational variables needed to measure the effectiveness of metropolitan municipalities

in South Africa. And, very importantly, IOP is capable of applying the necessary research skills to validate such an assessment framework by means of empirical data and statistics (Aamodt, 2007).

1.4 PROBLEM STATEMENT

Although many assessment frameworks for measuring the effectiveness of Private Sector organisations exist (Burke & Litwin, 1992; Falletta, 2005; Lawrence & Lorsch, 1969; Nadler & Tushman, 1977; Porter et al., 1976; Waterman et al., 1980; Weisbord, 1976), an assumption has been established that these assessment frameworks do not include all the behavioural and organisational variables required to adequately measure metropolitan municipality effectiveness in South Africa.

By conducting a review of research literature regarding organisational effectiveness of Private and Public Sector organisations in the world in general and in South Africa in particular, it will be possible to identify behavioural and organisational variables which contribute to effectiveness at metropolitan municipality level. These variables can then be used to develop a theoretical assessment framework to measure the effectiveness of metropolitan municipalities in South Africa. This theoretical assessment framework can then be validated by means of an empirical study (quantitative research). Such a validated assessment framework can be used to:

- Measure the current effectiveness of metropolitan municipalities in South Africa;
- Identify aspects which need to be rectified to improve effectiveness; and

- Compare and benchmark metropolitan municipalities in order to learn from each other to improve their effectiveness.

The research question is thus:

“What behavioural and organisational variables should be included in an assessment framework in order to measure the effectiveness of a metropolitan municipality in South Africa?”

The research hypothesis (H₁) is thus:

Existing assessment frameworks used to measure the effectiveness of organisations do not include all relevant behavioural and organisational variables needed to measure the effectiveness of a metropolitan municipality in South Africa

1.5 AIMS

The research consists of a general aim and specific aims.

1.5.1 General aim

The general explanatory aim of this study is to develop and validate an assessment framework for measuring the organisational effectiveness of a metropolitan municipality in South Africa.

1.5.2 Specific aims

The specific theoretical aims are to:

- Investigate the construct of organisational effectiveness in Private and Public Sector organisations, including local government.
- Investigate the measurement of organisational effectiveness.
- Evaluate existing organisational assessment frameworks/models which measure the organisational effectiveness of a total organisation to determine their applicability to metropolitan municipalities in South Africa.
- Develop a new proposed theoretical assessment framework that can be utilised to measure the organisational effectiveness of a metropolitan municipality in South Africa.

The specific empirical aims are to:

- Gather data from a metropolitan municipality in South Africa by means of a survey instrument which can be used to determine statistically the behavioural and organisational variables that influence organisational effectiveness at a metropolitan municipality in South Africa.
- Validate a proposed theoretical assessment framework for measuring the organisational effectiveness of metropolitan

municipalities in South Africa by means of Structured Equation Modelling (SEM).

- Formulate recommendations regarding which behavioural and organisational variables should be included in an assessment framework in order to measure the organisational effectiveness of metropolitan municipalities in South Africa.
- Formulate recommendations for the participating metropolitan municipality.
- Make recommendations for the field of Industrial and Organisational Psychology regarding organisational effectiveness.

1.6 THE PARADIGM PERSPECTIVE

1.6.1 The meta-theoretical paradigm

Meta-theoretically this study is anchored in the *positivist research paradigm*. Positivism is concerned with external reality according to certain laws and is used by detached and objective observers who have tested their hypotheses against experimental and other quantitative methods (Terre Blanche & Durrheim, 1999). The study thus involves objective measurement to assess the impact of behavioural and organisational factors on organisational effectiveness in general, and organisational effectiveness of a metropolitan municipality in South Africa in particular.

1.6.2 The methodological paradigm

Methodologically, this study follows a *quantitative approach* in order to generate new theory (Punch, 2005). A theoretical assessment framework for organisational effectiveness at metropolitan municipality level will be developed after which its empirical validity will be tested at one metropolitan municipality in South Africa. To be empirically valid, a theoretical model must possess three key properties (Martinez-Pons, 1997):

- It must have explanatory/predictive power. That is, the model must explain and predict variability in the variables of interest.
- It must be parsimonious. That is, it must explain as much of the variance in the variables of interest with as simple a theoretical structure as possible.
- It must fit the data. That is, enough relationships among the model's components must be stipulated to account for maximum variance.

1.6.3 The theoretical paradigm

The theoretical paradigm is *Industrial and Organisational Psychology* (IOP). This paradigm applies psychological theories to explain and enhance the effectiveness of human behaviour in the workplace (Aamodt, 2007), in order to contribute to an organisation's success by improving the performance and well-being of its people (Wilson, 2010). Within this paradigm a *systems perspective to organisations* was followed in which the organisation is studied as an open system. That is, an organisation is viewed as a total system with

inputs, throughputs, and outputs, connected by feedback loops. The feedback loops illustrate that systems are affected by outputs, as well as inputs (Katz & Kahn, 1978).

1.7 RESEARCH VARIABLES

According to Shuttleworth (2008), the research variables of any scientific experiment or research process, are factors that can be manipulated and measured. Any factor that can take on different values is a scientific variable and influences the outcome of experimental research. Babbie (2010) explains that the independent variable is what you manipulate, while your effects or outcome, what is affected by the independent variable, is a dependent variable.

In this study, the items measured by the Effectiveness Survey (ES) were the independent variables (the manifested constructs), while the latent constructs that were obtained from the Structural Equation Modelling (SEM) were the dependent variables.

1.8 UNIT OF ANALYSIS

According to Trochim (2006), an important idea in a research project is the unit of analysis, which is the major entity that you are analysing in your study. Trochim (2006) mentions individuals, groups, artefacts and social interactions as examples of units of analysis.

In this study the unit of analysis was the individuals in a metropolitan municipality who completed the Effectiveness Survey (ES). Their responses to

the items of the ES were used to develop a framework to measure the organisational effectiveness of a metropolitan municipality in South Africa.

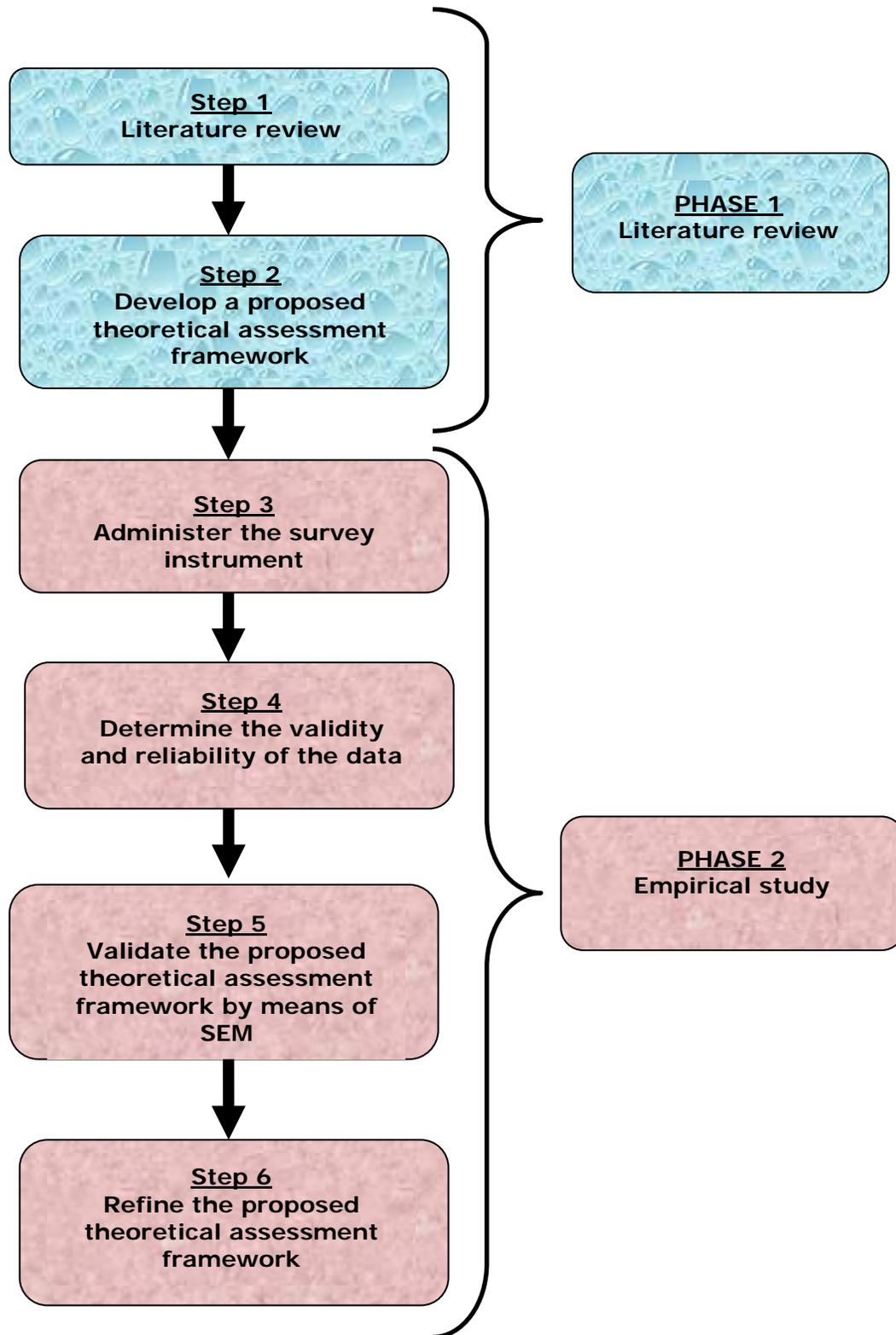
1.9 RESEARCH DESIGN

The research design refers to the plan, structure and steps that will be followed to answer the research question (Babbie, 2010; Creswell, 2009; Kerlinger, 1986). It consists of the research approach and the research method. Figure 1.3 below sets out the research design that was followed in this study.

For this study the research design consisted of the following two phases:

- Phase 1: Literature review. During this phase the construct of organisational effectiveness was investigated, both in the Private and Public Sectors. From the literature review a new proposed theoretical framework for measuring the organisational effectiveness of a metropolitan municipality in South Africa was conceptualised.
- Phase 2: Empirical study. During Phase 2, an empirical study was conducted to validate the new proposed theoretical assessment framework conceptualised during Phase 1. An *empirical approach* was chosen for this study as it would enable generated data to be linked to theoretical variables in order to answer the research question. This approach would also enable the research hypothesis to be accepted or rejected (Babbie, 2010).

Figure 1.3: The Research Design



The empirical study was conducted by gathering data from a metropolitan municipality in South Africa by means of a survey instrument. The data obtained from this survey were then statistically analysed and also exposed to Structural Equation Modelling (SEM) to determine possible relationships between the variables in the new proposed assessment framework (Hair, Black, Babin & Anderson, 2010). Finally, recommended refinements to the new proposed assessment framework were made.

1.10 RESEARCH APPROACH

The study followed a quantitative research approach in which post-positivist claims were used for developing knowledge. This includes cause-and-effect thinking, reduction to specific variables and hypotheses and questions, and the use of measurement (Creswell, 2009).

A cross-sectional survey strategy of inquiry was used and primary data were collected by means of a predetermined instrument to yield statistical data (Creswell, 2009). This strategy was decided on due to the fact that a cross-sectional survey provides a snap-shot at one point in time of a sample of the population which provides data that can be generalised to the population (Babbie, 2010).

1.11 RESEARCH METHOD

The research method refers to the specific methods of data collection and analysis (Creswell, 2009), and is explained below.

1.11.1 Research participants

The population for this study was all the employees of one of the largest metropolitan municipalities in South Africa, with a total of 16 006 members. A sample of 6715 of this population, which was 42%, was used for this study and the sampling method that was used was convenience sampling, a nonprobability sampling method (Babbie, 2010). This method was used as employees were invited to voluntarily complete the survey instrument. The following sampling criteria were applied in the selection of participants:

- A representative sample of all the employees of the metropolitan municipality at all the different levels of management; and
- A representative sample from all the different departments in the metropolitan municipality.

1.11.2 Measuring instrument

In order to gather the required data, the Effectiveness Survey (ES) based on the Employee Satisfaction Survey (ESS) developed by Martins and Coetzee (2007) was utilised. The ES was chosen due to its reliability and validity (Martins & Coetzee, 2007). It consisted of two sections, namely Biographical Information and the Survey Statements. A total of 118 statements were used to assess the following 13 dimensions:

- (1) Change management
- (2) Communication
- (3) Diversity
- (4) Employee engagement
- (5) Employee relations

- (6) Management
- (7) Rewards and recognition
- (8) Teamwork
- (9) Training and development
- (10) Trust
- (11) Values
- (12) Vision and mission
- (13) Work environment

A 5-point Likert scale (Likert, 1932) was used with the following descriptions:

Strongly disagree	Disagree	Unsure	Agree	Strongly agree
1	2	3	4	5

1.11.3 Research procedure

All employees of the metropolitan municipality were invited to participate in the survey in order to obtain self-generated data to test the validity of the new proposed theoretical assessment framework (Martinez-Pons, 1997). The participants completed the survey in one of two ways:

- For participants who had access to the Internet, an online version of the ES was distributed from an external web server.
- For participants who did not have access to the Internet, a paper-and-pencil version of the ES was completed in facilitator controlled group sessions.

All responses of the respondents were then imported into an electronic spreadsheet format.

1.11.4 Statistical analysis

All the data gathered were analysed using the Statistical Package for the Social Sciences [SPSS] (2006), which includes the AMOS (Analysis of Moment Structures) module, version 22. This comprehensive set of programmes is designed for use by social scientists and provides a wide range of statistical options (Durrheim, 2006).

1.11.4.1 Basic statistical analysis

The data obtained from the self-reporting survey instrument were used to compute descriptive statistics, conduct an item analysis of the survey instrument and conduct an exploratory factor analysis of the survey instrument items (Babbie, 2010; Church & Waclawski, 1998; Tredoux, Pretorius & Steel, 2006).

- Descriptive statistics

During this study descriptive statistics in the form of frequency distributions, means and standard deviations were calculated for the data gathered from the research sample by means of the ES (Babbie, 2010).

- Item analysis

An *item analysis* is an assessment of whether each of the items included in a composite measure makes an independent contribution or merely duplicates the contribution of other items in the measure (Babbie, 2010). An item

analysis was thus conducted to identify items that should remain in the ES and items that should be deleted from the instrument. Green and Salkind (2014) refer to this as internal consistency, which they define as the degree to which responses are consistent across the items within a measure.

- Exploratory factor analysis

Factor analysis is a statistical technique that is used to identify a relatively small number of factors in order to represent the relationship among sets of interrelated variables (Tredoux et al., 2006). In this study factor analysis was used to examine the results obtained from the ES instrument in order to determine interrelationships among the items and to identify clusters of items that share sufficient variation to justify their existence as a factor or construct in the proposed theoretical model to assess the organisational effectiveness of a metropolitan municipality in South Africa.

1.11.4.2 *Structural Equation Modelling (SEM)*

The data obtained from the self-reporting survey instrument were then used to conduct a *confirmatory factor analysis*, the main calculation used in Structural Equation Modelling (Hair et al., 2010). According to Hair et al. (2010), Structural Equation Modelling (SEM) simultaneously estimated the relationships between the indicators (manifested variables or survey items) and the constructs (latent variables or hypothesised theoretical constructs in the model). SEM was thus used to determine whether a pattern of relationships in the data matched the predictions in the hypothesised model, and in this way the validity of the proposed model of organisational effectiveness at metropolitan municipality level in South Africa was determined (Falletta, 2005; Hair et al., 2010).

As distinct from simple path analysis, SEM requires that a distinction be made between theoretical constructs and measurement indicators (Hair, Anderson, Tatham & Black, 1995; Hunter & Gerbing, 1982). The theoretical constructs in a model are the latent variables which are hypothesised to exist from a review of the research literature. In contrast, the measurement indicator (an item on a survey instrument) is termed the manifest variable. The behaviour of a latent variable can be observed or measured only indirectly, through its effects on a manifest variable. The manifest variable is also termed an observed variable because it can be directly measured (Hair et al., 2010). According to Hair et al. (1995), key features of SEM include the following:

- Both manifest and latent variables can be measured.
- Estimates of factor loadings, which indicate the influence of latent variables on manifest variables, are calculated.
- Estimates of the error variance within manifest variables are calculated.

The application of SEM has increased dramatically in organisational research over the past twenty years (Greenberg, 1994; Hair et al., 1995; Hunter & Gerbing, 1982). In a review of data analytic procedures used in organisational research during 1975-1993, the use of SEM has increased, while the use of simple path analysis has decreased markedly (Stone-Romero, Weaver, & Glenar, 1995). In this study the AMOS technique of the SPSS (2006) computer programme was used to estimate the model (Durrheim, 2006).

1.11.5 Refinement of the new proposed theoretical assessment framework

The new proposed theoretical assessment framework was finally refined by incorporating recommendations regarding which behavioural and organisational variables should be included in an assessment framework in order to measure the organisational effectiveness of metropolitan municipalities in South Africa.

1.12 CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

Conclusions reached from the study are presented after which the limitations regarding the study are discussed. Recommendations are then made for further research regarding the measurement of organisational effectiveness of metropolitan municipalities in South Africa.

1.13 CHAPTER LAYOUT

The Chapters in this thesis are as follows:

Chapter 1: Scientific orientation to the research

Chapter 2: The construct of organisational effectiveness

Chapter 3: Organisational effectiveness in Public Sector organisations,
including local government

Chapter 4: The assessment of organisational effectiveness

Chapter 5: Empirical study

Chapter 6: Research results

Chapter 7: Conclusions, limitations and recommendations

1.14 CHAPTER SUMMARY

In this Chapter the background to the study, motivation for this study, problem statement, aims, the paradigm perspective, the research variables and unit of analysis, the research design and the thesis Chapter layout was discussed. In the next Chapter the construct of organisational effectiveness will receive attention.

CHAPTER 2: THE CONSTRUCT OF ORGANISATIONAL EFFECTIVENESS

2.1 INTRODUCTION

In this Chapter the construct of organisational effectiveness will be discussed. The Chapter will start by making a distinction between organisational performance and organisational effectiveness, followed by a discussion of the lack of consensus on the meaning of organisational effectiveness. Thereafter the importance of organisational effectiveness as well as the difficulty of defining the construct will receive attention. The Chapter will be concluded by a discussion of the approaches to organisational effectiveness as well as a summary of the evolution of approaches to organisational effectiveness.

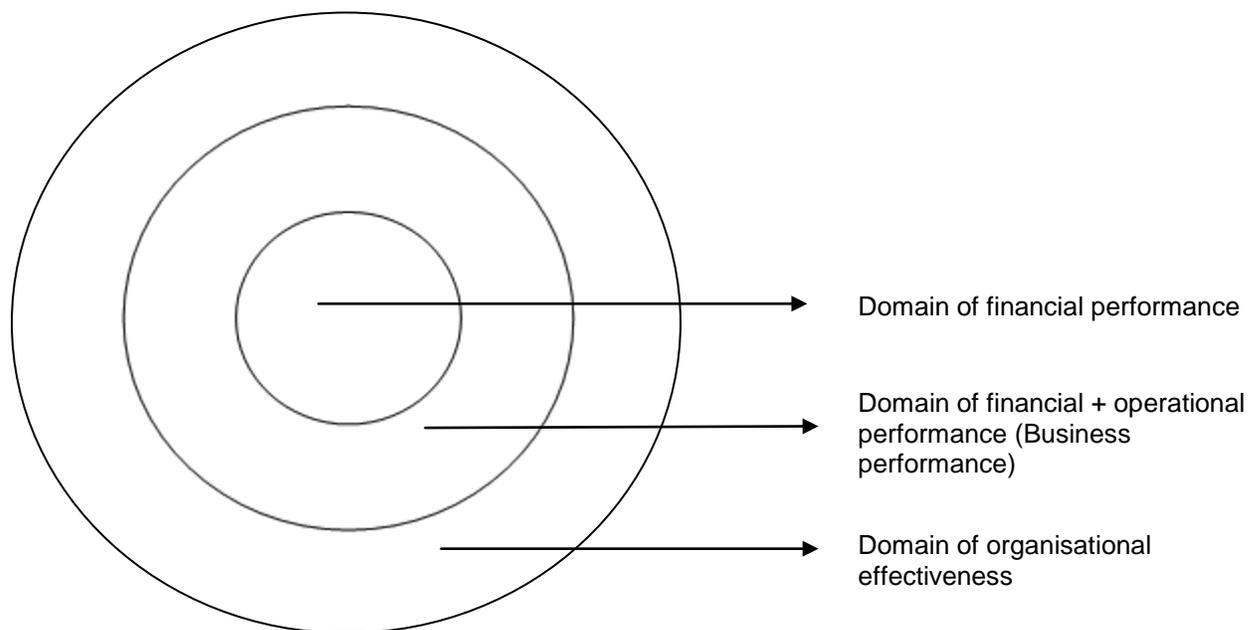
2.2 ORGANISATIONAL EFFECTIVENESS VERSUS ORGANISATIONAL PERFORMANCE

Before discussing the construct of organisational effectiveness, the researcher is of the opinion that it must firstly be distinguished from the concept of organisational performance, which, according to Venkatraman and Ramanujam (1986), is a recurrent theme in most branches of management and is of interest to both academic scholars and practising managers.

Venkatraman and Ramanujam (1986, p. 803), take the view that "business performance, which reflects the perspective of strategic management, is a subset of the overall concept of organizational effectiveness". The authors then provide a schematic representation of how they propose that business performance differs from organisational effectiveness, which is shown in Figure 2.1 below. According to Venkatraman and Ramanujam (1986), the domain of business performance refers to financial and operational

performance, which uses simple outcome-based financial indicators that are assumed to reflect the fulfilment of the economic goals of the firm, such as sales growth, profitability, return on equity, earnings per share, and so forth. Financial and operational performance, which they refer to as business performance, is seen as a subset of the wider construct of organisational effectiveness (Venkatraman & Ramanujam, 1986).

Figure 2.1: The domain of organisational effectiveness (Venkatraman & Ramanujam, 1986, p. 803)



This view is supported by Richard, Devinney, Yip and Johnston (2009), who state that organisational effectiveness is a broader construct that captures organisational performance, but with grounding in organisational theory that entertains alternate performance goals. To distinguish between the two, Richard et al. (2009, p. 722) provide the following two definitions:

Organizational performance encompasses three specific areas of firm outcomes: (a) financial performance (profits, return on assets, return on investment, etc.); (b) product market performance (sales, market share, etc.); and (c) shareholder return (total shareholder return, economic value added, etc.). *Organizational effectiveness* is broader and captures organizational performance plus the plethora of internal performance outcomes normally associated with more efficient or effective operations and other external measures that relate to considerations that are broader than those simply associated with economic valuation (either by shareholders, managers, or customers), such as corporate social responsibility”.

Further support for distinguishing between organisational effectiveness and performance is provided by Henri (2004, p. 93), who states that:

“As a response to theoretical and practical pressures, the evolution of organisational effectiveness models reflects a construct perspective, while the evolution of performance measures mirrors a process perspective”.

In this study the researcher will thus focus on the wider construct of organisational effectiveness as delineated by Henri (2004), Richard et al. (2009) and Venkatraman and Ramanujam (1986).

2.3 THE LACK OF CONSENSUS ON THE MEANING OF ORGANISATIONAL EFFECTIVENESS

As far back as 1957, Georgopoulos and Tannenbaum made the statement that "organisational effectiveness is one of the most complex and least tackled problems in the study of social organisations" (Georgopoulos & Tannenbaum, 1957, p. 534). Over the next 57 years the problem of finding an acceptable definition of organisational effectiveness has persisted, with this problem being re-emphasised by various authors up to the present. In 1967, Yuchtman and Seashore stated that "We are badly in need of an improved conceptual framework for the description and assessment of organisational effectiveness" (Yuchtman & Seashore, 1967, p. 891). Katz and Katz (1971) stated that most of what had been written on the meaning of criteria of organisational success and on their interrelatedness is judgmental and open to question. Steers (1975) stated that there is only a rudimentary understanding of what is actually involved in or constitutes the concept of organisational effectiveness. Two years later, Steers (1977) remarked again that an examination of the available literature on organisational effectiveness revealed little agreement concerning the exact nature of the construct. Adding to the debate, Hrebiniak (1978) concluded that measuring effectiveness is a critical but problematic issue. Connolly, Conlun and Deutsch (1980) also concluded that the field of organisational effectiveness research appears to be in conceptual disarray. Quinn and Rohrbaugh (1981) added to this by saying that despite the attention given to effectiveness, a widely shared definition of effectiveness has proven to be elusive. These views are supported by Rojas (2000, p. 97) who states that "The issue of organizational effectiveness has been one of the most sought out yet elusive of research subjects since the early development of organizational theory."

In a comprehensive summary of organisational effectiveness, Cameron and Whetten (1983, p. 1) state that:

"In the past two decades, at least seven books have been produced on the subject of organizational effectiveness. Without exception, each begins by pointing out the conceptual disarray and methodological ambiguity surrounding this construct. In addition, several hundred articles and book Chapters have been written in that period, and almost all acknowledge that little agreement exists regarding what organizational effectiveness means or how properly to assess it".

Indeed, as Cameron (1986) argued, the only consensus on organisational effectiveness is that there is no consensus on organisational effectiveness.

The question to be asked is: "Where does this state of affairs leave scholars and practitioners regarding the study of organisational effectiveness? Should we, as some authors have become, also be discouraged by the literature on effectiveness? Or should we even abandon the construct altogether in scholarly activity as advocated by Hannan and Freeman (1977)? The researcher is of the opinion that despite the chaotic conceptual condition of organisational effectiveness, the concept is far too important to the field of organisational psychology to abandon it. As Cameron and Whetten (1983) argue as well, that despite its chaotic conceptual condition, organisational effectiveness is not likely to go away.

2.4 THE IMPORTANCE OF ORGANISATIONAL EFFECTIVENESS

Organisations of all types and sizes play a vital role in today's world as we know it. As such they are a tool that people use to coordinate their actions in

order to obtain something that they desire or value (Jones, 2013; Steers, 1977). Owing to this important and vital role that they play, Hall (1999) argues that we need to study organisations for two main reasons. The first reason being to understand how and why organisations are effective or ineffective. We need to do this for various economic, political and moral reasons. The second reason for studying organisations, as postulated by Hall (1999), is in order to develop organisational theory. He states that we need such theory in order to better understand organisations and their functioning. In fact, he argues that the outcomes of structural arrangements, processes such as decision making and leadership, and dealing with the environment are all indeed designed to contribute to organisational effectiveness. This view is supported by Price (1972, p. 3) who states that "effectiveness is an important problem in the study of organisations", while Mohr (1982, p. 179) even goes so far as stating that "the theory of effectiveness is the Holy Grail of organisational research."

As far back as 1971, Ghorpade wrote that "During the past few years, the topic of organisational effectiveness has received considerable attention from social scientists" (Ghorpade, 1971, p. 1). He attributed the popularity of organisational effectiveness at that stage to two factors: Firstly, interest in the topic had been heightened by a growing appreciation of the vital role played by organisations in the lives of modern man. This was confirmed by the fact that man had become completely dependent upon organisations of various types for the satisfaction of his varied needs. Thus, understanding of the issues involved in the assessment of the effectiveness of organisations was of vital importance to society at large. Secondly, the interest in organisational effectiveness at that stage could be traced partly to the central nature of the topic to the field of organisational theory. Organisational effectiveness thus provided a valuable focal point for theoretical integration of the diversified field of organisational theory.

According to Steers (1977), the need to understand the nature and process of organisational effectiveness is of paramount importance to modern managers. He argues that the reason for this is that organisations are encountering greater difficulty in securing the scarce and valued resources necessary to meet both personal and organisational objectives. Steers (1977) further argues that if organisations were to survive and compete successfully in turbulent and often hostile environments, greater attention should be focused on efforts to identify those variables that differentiate successful organisations from less effective ones.

Goodman and Pennings (1977) have argued that effectiveness is the central theme in all organisational analysis and that it is difficult to conceive of a theory of organisations that does not include the effectiveness construct. This view is reiterated by Quinn and Rohrbaugh (1981).

Waterman et al. (1980) also mention organisational effectiveness as a general concern, prompting them to assemble a task force to consider the construct and its role in the work that they performed for their business clients.

Yuchtman and Seashore (1967) stated that nearly all studies of formal organisations make some reference to organisational effectiveness. According to them, the growing field of comparative organisational studies depends in part upon having some conceptual scheme that allows comparability among organisations with respect to effectiveness, and that guides the empirical steps of operationalisation and quantification.

Improved organisational performance is also claimed as the desired end in the applied fields of organisation development (French, Bell & Zawacki,

1978) and organisation design (Kilmann, Pondy & Slevin, 1976). Lewin and Minton (1986) state that the concern with the effectiveness of organisations has also permeated the popular culture, as is evident by the “best seller” status of popular and practitioner-oriented books on management such as *Theory Z* (Ouchi, 1981), *In search of excellence* (Peters & Waterman, 1982), and *The change masters* (Kanter, 1983). However, Minton (1986) states that this concern with effectiveness, productivity, efficiency or excellence is not new, having been the subject of lasting interest and motivation for the writings of economists, organisation theorists, management philosophers, financial analysts, management scientists, consultants and practitioners for many years.

According to Cameron and Whetton (1983) and Cameron (1986), the construct of organisational effectiveness is central to the organisational sciences and cannot be ignored in theory and research. Cameron and Whetton (1983) elaborate further by explaining that organisational effectiveness is important for the following theoretical, empirical and practical reasons:

- Theoretically, the construct of organisational effectiveness lies at the very centre of all organisational models. That is, all conceptualisations of the nature of organisations have embedded in them notions of the nature of effective organisations, and the differences that exist between effective and ineffective organisations.
- Empirically, the construct of organisational effectiveness is the ultimate dependent variable on organisational research. Relationships between structure and environment, design and innovation, or adaptation and uncertainty, for example, are

important because their results lead ultimately to organisational effectiveness.

- Practically, consumers, clients, resource providers, managers, regulators, members and other major stakeholders in organisations are continually faced with making judgements about effectiveness of organisations. Careers are often made or murdered on the basis of adherence to and support of some set of effectiveness indicators. Because criteria of effectiveness are neither stable nor static, maintaining harmony and congruency between one's own valued criteria and those valued by the organisation is an important determinant of the pragmatics of career success.

For these reasons Cameron and Whetton (1983) argue that organisational effectiveness as a construct should not be abandoned, but deserves more systematic and fine-grained analysis than it has received to date.

The importance of organisational effectiveness is also supported by Marcoulides and Heck (1993), who state that the intensification of research on organisational effectiveness has led to the formulation of theories about various factors within an organisation that can make a difference to performance.

According to Hall (1999), we study organisations primarily to understand their effectiveness. He states that in essence the outcome of structural arrangements, processes such as decision-making and leadership, and dealing with the environment are designed to contribute to organisational effectiveness.

Rojas (2000) and Henri (2004) state that organisational effectiveness has been an important subject for research in the development of organisational theory, while Higgins (2005) emphasises the fact that performance is an important outcome of successful organisational change.

Further support for organisational effectiveness is provided by Lee and Brower (2006) who state that for nearly 30 years, management scholars have identified organisational effectiveness as one of the most central topics in the study of organisations. They argue that even contemporary theorists and practitioners apply its basic questions through a variety of orientations to many types of organisations. Finally, Richard et al. (2009) state that organisational performance is the ultimate dependent variable of interest for researchers concerned with just about any area of management.

Owing to the above-mentioned arguments, the researcher is thus of the opinion that a thorough understanding of organisational effectiveness is essential for the functioning, growth and ultimate future survival of any organisation.

2.5 THE DIFFICULTY OF DEFINING ORGANISATIONAL EFFECTIVENESS

2.5.1 Introduction

The reasons for the difficulty of defining organisational effectiveness are many and diverse, but Thompson, McGrath and Whorton (1981, p. 190) provide a compelling context as to why this is so. They state that "*The concept of effectiveness, like the concept of leadership and motivation, is bewildering in its complexity and in the diversity of contexts in which it is applied*".

Traditionally, in the study of individual organisations, effectiveness has been viewed and operationalised mainly in terms of productivity. In this connection, as far back as 1949 Thorndike had noted a general tendency on the part of personnel and industrial psychologists to accept as “ultimate criteria” of organisational success the following: organisational productivity, net profit, the extent to which the organisation accomplishes its various missions, and the success of the organisation in maintaining or expanding itself.

However, according to Georgopoulos and Tannenbaum (1957), with the exception of organisational productivity, all variables used as criteria have been found inadequate and unsatisfactory. These authors state that the reason for this is that many difficulties arise with attempts to adequately define the concept of effectiveness. According to them, the difficulties stem from the closeness with which the concept becomes associated with the question of values as well as the fact that researchers choose *a priori* criteria of effectiveness that might be proper in one case but entirely inappropriate to other organisations.

According to Katz and Kahn (1966), the problem of defining and measuring organisational effectiveness lies in the inability of researchers to develop satisfactory criteria for organisational performance. They quote numerous studies which used different criteria to measure organisational effectiveness but which all produced poor results. The lack of consensus on organisational effectiveness criteria has also been extensively highlighted by Cameron (1978), Cameron and Whetton (1983), Harrison (2005), Henri (2004), Lee and Brower (2006), Rojas (2000) and Steers (1975; 1977).

2.5.2 Properties of organisational effectiveness making a common definition difficult

Cameron (1981) states that the following two major properties of organisational effectiveness have also contributed to the confusion and ambiguity regarding its definition:

2.5.2.1 Organisational effectiveness is a construct, and as such it cannot be observed directly

By this Cameron (1981) explains that a major distinguishing characteristic of a construct such as organisational effectiveness is that it cannot be pinpointed, counted or objectively specified. It has no objective basis in reality. Rather, it is an abstraction that is made up to give meaning to an idea or a scientific notion. The difference between a construct and a concept is that concepts can be generalized from specific notions, while constructs cannot. According to Cameron (1981), this difference between concepts and constructs helps explain why no single model of effectiveness is acceptable. None of the existing models of organisational effectiveness capture the total construct space or the total meaning of organisational effectiveness. It is thus difficult to define and measure organisational effectiveness because the construct space has never been fully mapped. This view is supported by Henri (2004) who argues that organisational effectiveness mainly reflects a construct perspective in which the focus is on the definition of the construct in terms of assessment and conceptualisation.

2.5.2.2 Organisational effectiveness is inherently subjective and is grounded in the values and preferences of strategic constituencies

Cameron (1981) states that criteria can be eliminated from the construct space of organisational effectiveness only if they are inconsistent with the values or preferences of the organisation's strategic constituencies. Strategic constituencies are individuals or groups who have a substantial stake in the organisation. Cameron (1981) quotes research by Frielander and Pickle (1968) and Whetten (1978) which found that different constituent groups use different criteria rating scales for evaluating the effectiveness of an organisation. Cameron (1981) argues that this subjective nature of effectiveness presents the following four major problems for researchers of organisational effectiveness:

- Firstly, it is difficult to identify criteria that match the preferences of more than one constituency.
- Secondly, preferences change, sometimes dramatically, over time.
- Thirdly, individuals frequently cannot even identify their own preferences for an organisation.
- And fourthly, a variety of contradictory preferences may be pursued simultaneously in an organisation.

Cameron (1981) thus argues that when researchers attempt to assess organisational effectiveness, confusion is caused by uncovering these contradictory preferences or criteria. He states that instead of accepting

contradictory criteria and models as existing simultaneously in organisations, researchers have typically attempted to replace one set with another (e.g. goal-related criteria for process criteria), or they have debated about the superiority of one model versus another (e.g. system resource models versus goal models). This view regarding the subjective nature of organisational effectiveness is also supported by Quinn and Rohrbaugh (1981) in their competing values approach to organisational effectiveness

Five years later, in 1986, Cameron added another reason why he thought that there was confusion regarding what effectiveness is and how to measure it. He argued that it is because of the fact that “organisational effectiveness is inherently paradoxical. To be effective, an organisation must possess attributes that are simultaneously contradictory, even mutually exclusive” (Cameron, 1986, pp. 544 – 545). According to Slaatte (1968), a paradox is an idea involving two opposing thoughts or propositions which, however contradictory, are equally necessary to convey a more imposing, illuminating, life-relating or provocative insight into truth than either factor can muster in its own right. Cameron (1986) explains this further by stating that a paradox involves contradictory, mutually exclusive elements that are present and operate equally at the same time. He states that organisational effectiveness, then, is inherently dependent upon the presence of paradox. He thus argues that because effectiveness is inherently tied to paradox, the construct of effectiveness can be understood in a limited manner only, without considering simultaneous contradictions.

2.5.3 Obstacles constraining the development of a common definition of organisational effectiveness

According to Martz (2008), three obstacles have constrained the development of a common definition of organisational effectiveness, namely:

2.5.3.1 Efficiency as effectiveness

The first obstacle mentioned by Martz (2008) is that attempts to define organisational effectiveness by equating it with organisational efficiency are common and incorrect. This argument was also mentioned by Ridley and Mendoza (1993), who explain that from an economist's perspective, a more efficient organisation is a more healthy and effective organisation. However, efficiency does not ensure effectiveness. Organisational efficiency is generally understood to be a ratio that reflects the comparison of some aspect of unit performance with the costs (e.g., time, money, and space) incurred for that performance. It is often used to measure aspects of a process other than just physical output, insofar as efficiency includes a reference to the number of resources involved. A higher ratio of energetic outputs to energetic inputs suggests a higher level of efficiency. The more efficient the operation, the less energetic return required to maintain ongoing activities. When sustained over time, the efficiency-generated surpluses result in organisational growth and survival power (Katz & Kahn, 1978). However, the efficiency ratio does not guarantee that the results are of any useful size. Because of this limitation, efficiency measures are generally supplemented by other measures of organisational performance or success. Although efficiency is essential to the effective functioning of an organisation, improvements in internal efficiency do not always suggest increased organisational effectiveness.

Martz (2008) further states that oversimplifying organisational effectiveness in terms of internal efficiency ignores the importance of the larger environmental context of the organisation as well as the ability of the organisation to procure inputs and disperse outputs. From this perspective, the organisation is treated as though it is a closed system. According to

Martz (2008) an open systems model has been shown to be a more accurate framework for conceptualizing social organisations by a number of prominent theorists (Brown, 2011; Katz & Kahn, 1978; Kurpius, Fuqua, & Rozecki, 1990; Robbins, 1987).

2.5.3.2 Organisation typology perspective

The second obstacle mentioned by Martz (2008) which constrains the development of a common definition of organisational effectiveness involves the organisation typology perspective. Martz (2008) states that the long-established approaches used by organisational theorists to define organisational effectiveness have emphasized different perspectives with respect to the organisation type and degrees of importance of the various constituency groups comprising the organisation. More specifically, definitions of the organisation and organisational effectiveness have focused primarily on the dissimilarities among organisations and their constituencies, while conceding efforts to identify common denominators of "organisation". Thus, according to Martz (2008), the focus on organisation differences and the unique perspectives of particular constituent groups have led to increased fragmentation of the conceptualization of organisational effectiveness and weakened its utility.

In an effort to address the growing divergence and identify salient effectiveness criteria, several scholars (e.g. Carper & Snizek, 1980; Rich, 1992) have attempted to develop typologies of organisations or to determine what major characteristics are typical of different types of organisations. However, Martz (2008) states that these efforts have failed to generate a common set of criteria, presumably because no "standard" organisation exists. The traditional focus on organisation type has perpetuated the ambiguity surrounding organisational effectiveness and severely limited

attempts to identify essential processes (i.e. functions) that are inherent across all types of organisations. By probing to identify underlying organisational functions that are shared by all organisations, it is possible to construct a universal conceptualization of organisation that can be applied to evaluating organisational effectiveness regardless of the type or purpose of the organisation.

2.5.3.3 The complexity issue

The third obstacle to conceptualizing organisational effectiveness mentioned by Martz (2008), is found within the inherent complexity of organisations. Organisational boundaries can be uncertain and fluid, goals are frequently contradictory, and competing interests are held by a variety of constituencies both internal and external to the organisation. Cohen and March (1974) describe this situation as organised anarchy. This orderly chaos is characterised by organisations that function with inconsistent and ill-defined preferences, organisational members that perform their duties without understanding organisational processes, and decision-makers that can change capriciously for any particular choice.

A related concept to organised anarchy used to illustrate the complex and ambiguous nature of organisation is referred to as loose coupling or loosely coupled system (Orton & Weick, 1990; Weick, 2001). Organisations seen as loose coupling systems do not function with tight linkages, but as loose couplings of actors, technology, and rewards. Higher education organisations are examples of loosely coupled systems (Cameron, 1986). According to Martz (2008), in these organisations several different means can produce the same result (i.e. more than one strategy produces the same outcome), influences from the external environment are partitioned across subunits and weaken quickly on spreading, and resource acquisition in one area or subunit

has no direct relationship to the outputs of another. Martz (2008) states that this abbreviated list of characteristics illustrates the complexity found in organisations that are loosely coupled and supports the argument that organisations are complex and that alternative perspectives are needed to understand and evaluate organisational effectiveness.

2.5.4 Barriers to developing a general operational model of organisational effectiveness

In addition to the obstacles constraining the development of a common definition of organisational effectiveness discussed in the previous section, Ridley and Mendoza (1993) argue that there are various barriers that have also prevented the development of a general operational model of organisational effectiveness.

2.5.4.1 An intrasystem perspective

According to Ridley and Mendoza (1993) a barrier that limits the conceptualisation of organisational effectiveness is the intrasystem perspective of the organisation. Along these lines, the organisation is usually defined as an open system. Open systems language is used to describe the internal workings of the organisation, and subgroups within the organisation are labelled as subsystems. Consultants working within this framework are cognisant of the fact that interventions in one subsystem of the organisation will have ramifications in other subsystems, and they are concerned that improvements in one area do not have a negative effect in another area. Attention is not focused entirely on any one criterion of organisational effectiveness, but on aspects of the organisation that are having an impact on the organisational system as a whole. Ridley and Mendoza (1993) argue that despite the homage paid to open systems theory through the use of

language, this perspective persists, albeit unintentionally, in treating organisations as closed systems or open systems with limited linkages to the external environment.

According to Ridley and Mendoza (1993), the problem with this perspective is that it creates the illusion of viewing the organisation as an open system without fully respecting and taking advantage of its interdependence with the surrounding suprasystem. Consequently, the consultation process is likely to involve - (1) a conceptualization of organisational effectiveness limited to the perspective of the organisation as an independent entity; (2) an assessment limited to intra-organisational variables; and (3) the use of interventions that are focused solely on the internal organisational environment. The external environment and the interface between the organisation and the external environment are excluded from assessment and subsequent intervention. If the external environment is considered at all, it is usually described in adversarial terms as something to be fought off, controlled, or appeased. Organisations are depicted as being "at war" with their environments. Little acknowledgment is given to the organisation's capacity to collaborate, build supportive networks, and foster healthy interdependencies with other systems in the external environment. According to Ridley and Mendoza (1993), this illusory conceptualisation of organisations is misleading and limits the definition of organisational effectiveness by functionally reducing it to an intra-system construct.

2.5.4.2 Constituent-dependent perspective

According to Ridley and Mendoza (1993), Katz and Kahn (1978) have described another limitation of existing theories of organisational effectiveness - that the definition of organisational effectiveness depends on the perspective of the individual or constituent group defining it. Katz and

Kahn (1978) have pointed out that each person or constituent group within or outside of an organisation may have different and sometimes conflicting definitions of organisational effectiveness.

Katz and Kahn (1978) assert that a particular constituent group may contribute beneficially to the shaping of organisational consultation goals. For the most part, however, they argue that constituents fall short of making optimal contributions because of their limited perspectives. Often, each constituent promotes its own perspective and has difficulty appreciating the others' images of effectiveness as legitimate and beneficial. In this respect Dubin (1976) suggested that organisational effectiveness as defined from the perspectives of the organisation and the larger society is irreconcilable, resulting in a need to trade off effectiveness in one area in order to increase effectiveness in the other. However, Katz and Kahn (1978) disagree with this viewpoint, arguing that reconciliation is possible once it has been recognised that organisational effectiveness is more than the limited perspective of a given constituent.

Ridley and Mendoza (1993) conclude by stating that they believe that this relativistic position in defining organisational effectiveness has acted as a barrier, focusing consultants' attention on the dissimilarities among organisations and precluding the identification of common denominators of organisational effectiveness. The authors further argue that it is possible to construct a general framework of organisational effectiveness that may be universally applied to consulting in many types of organisations. This framework could be independent of and more complete than organisational effectiveness as defined from the perspective of a single constituent. This general model incorporates the needs of all constituents into the framework and emphasizes coordination and a long-term focus over conflict and competition among constituent groups.

2.5.4.3 *The prescription perspective*

According to Ridley and Mendoza (1993), another barrier to defining organisational effectiveness is what they refer to as the "prescription perspective." This approach involves the formal or informal examination of "successful" organisations to identify the structural attributes or procedures that are characteristic of effective organisations. The result is a checklist definition of organisational effectiveness that serves as a yardstick for measuring effectiveness. The degree of effectiveness of an organisation is considered to be commensurate with the degree to which its attributes overlap with the list of criteria. As examples of this approach, Ridley and Mendoza (1993) refer to Peters and Waterman (1982), in their bestseller *In Search of Excellence* which offered "eight criteria for success," and to Beer and Walton (1990) who prescribed a "high-commitment work system".

According to Ridley and Mendoza (1993), the problem with this prescription perspective is that it derives a list of criteria from specific cases and assumes that these are generalisable across organisations. They argue that this perspective ignores the special attributes, goals, and environmental contexts of particular organisations that may influence organisational effectiveness. Moreover, the prescription perspective is impervious to the unique challenges that organisations face in adapting to changes in the environment.

Ridley and Mendoza (1993) state that although many of these "successful" organisations are indeed successful, they believe that their success hinges on operational processes not fully acknowledged or accounted for by the "prescription". By the same token, the authors believe that organisations that have been successful can lose their cutting edge because of their inattention to these critical processes. To prove their point, Ridley and Mendoza (1993) note that some of Peters and Waterman's (1982) "excellent"

companies are no longer successful, and that the highly publicised plight of International Business Machines (IBM) illustrates the decline of a company that once seemed invincible.

2.5.4.4 Organisational effectiveness as a static end-state

According to Ridley and Mendoza (1993), another barrier to defining organisational effectiveness is that many theorists write about organisational effectiveness as if it were a goal to achieve, as if at some point in time an organisation would have a final set of characteristics or reach a level of productivity, after which organisational effectiveness would have been attained. They argue that this approach denies the temporal reality of developing organisations, and it ignores the contribution of process to organisational effectiveness. Ridley and Mendoza (1993) further argue that it is largely agreed that organisational effectiveness depends on the organisation's ability to change, develop, and adapt over time. As such, they state that static characteristics fail to capture the dynamic nature of organisational effectiveness.

According to Ridley and Mendoza (1993), models conceptualising organisational effectiveness as a static end-state may appear successful upon terminating consultation, but in reality, they do little to promote long-term effective functioning. They believe that this is why consultants who leave organisations without improving operational processes usually are not helpful in the long run. For this reason Ridley and Mendoza (1993) endorse the use of process consultation, although arguing for greater specificity in identifying and describing key organisational processes.

2.6 APPROACHES TO ORGANISATIONAL EFFECTIVENESS

2.6.1 Introduction

According to Cameron and Whetten (1983), there have been major evolutionary shifts in the prevailing views of organisational effectiveness. A review of the organisational effectiveness literature over the past 57 years by the researcher has identified various approaches to the construct of organisational effectiveness.

2.6.2 The criteria approach to organisational effectiveness

Various and diverse criteria have been used to measure organisational effectiveness over the years. According to Thorndike (1949) and Yuchtman and Seashore (1967), there was a general tendency to use as the ultimate criteria of organisational success criteria such as organisational productivity, net profit, the extent to which an organisation accomplishes its various missions and the success of the organisation in maintaining or expanding itself. This is confirmed by Steers (1977) who states that effectiveness is typically measured in terms of performance, productivity and profit. Other variables that have been used in various contexts as criteria of effectiveness include morale (Kahn & Morse, 1951), commitment to the organisation (Katz & Kahn, 1971), personnel turnover and absenteeism, and member satisfaction (Kahn, 1956). However, Georgopoulos and Tannenbaum (1957) state, that with the exception of organisational productivity, practically all variables used as criteria of organisational effectiveness have been found inadequate and unsatisfactory.

In 1967 Yuchtman and Seashore published a report setting out a study conducted which entailed a factorial analysis of the annual performances of

75 insurance sales agencies over an 11-year period in order to discover the factorial elements that characterise the behaviour of small business organisations. Their reasoning was that if they started with a large number of variables describing the performance of organisations and examined the pattern of relationships among them, it would be possible to infer the underlying dimensions of performance from this pattern. As a result of their study, Yuchtman and Sheashore (1967) discovered that 10 factors served to describe most of the variance in the set of 75 selected performance indicators. These factors, listed in Table 2.1 below, accounted for about 70% of the total variance.

Table 2.1:

Factors accounting for 70% of total variance

Factor number	Assigned name
1	Business volume
2	Production cost
3	New member productivity
4	Youthfulness of members
5	Business mix
6	Manpower growth
7	Management emphasis
8	Maintenance cost
9	Member productivity
10	Market penetration

Yuchtman and Seashore (1967) found that the common denominator was that all 10 factors represented the acquisition of resources for organisational functioning from the organisation's environments. As such they defined the effectiveness of an organisation as "its ability to exploit its environments in the acquisition of scarce and valued resources to sustain its functioning" (p. 393).

Steers (1977) followed a similar approach to that of Yuchtman and Seashore (1967) to facilitate understanding of the construct of organisational

effectiveness. He examined the prevailing literature on organisational effectiveness to determine specific evaluation criteria that have been used to measure the construct. From this study, Steers (1977) found that approaches to the study of organisational effectiveness had tended to take one of two forms. One approach viewed the construct within a unidimensional (univariate) framework, focusing on only one evaluation criterion (for example, productivity). In contrast, the second approach to the study of organisational effectiveness viewed the construct within a multidimensional (multivariate) framework, focusing on several distinct criteria treated simultaneously.

(1) Univariate effectiveness measures

According to Steers (1977), initial attempts by Industrial Psychologists and Sociologists to measure organisational effectiveness typically viewed the construct in terms of the attainment of some ultimate criterion. Thorndike (1949), as discussed above, identified several of these early criteria as productivity, net profit, mission accomplishment and organisational growth and stability. Twenty-five years later, Campbell, John, Bownas, Peterson and Dunnette (1974) reviewed various measures employed to determine organisational success and identified 19 variables that were widely used. These are shown in Table 2.2 below.

Harrison (2005) found that different researchers used different criteria of organisational effectiveness depending on which assessment approach and domains (set of conceptually referral criteria) they used. For example, Harrison (2005) provided a Table which illustrates these different criteria as obtained from the work of Cameron (1981), Kanter and Brinkerhoff (1981) and Lewin and Minton (1986). A summary of these approaches, domains and criteria is given in Table 2.3 below (Harrison, 2005).

Table 2.2:

A Partial Listing of Univariate Measures of Organisational Effectiveness

Number	Variable
1	Overall Effectiveness
2	Productivity
3	Profit or rate of return on investment
4	Absenteeism
5	Quality
6	Readiness
7	Efficiency
8	Growth
9	Utilisation of environment
10	Stability
11	Turnover or retention
12	Accidents
13	Morale
14	Motivation
15	Satisfaction
16	Internalisation of organisation
17	Conflict – cohesion
18	Flexibility – adaption
19	Evaluations by external entities

Table 2.3:

Summary of Assessment Approach, Domains and Criteria

Approach and domains	Criteria
<i>Output Goals</i> Quality	Rates of rejects; errors
<i>Internal System State</i> Efficiency and costs	Productivity; wastage
<i>Systems Resources</i> Resource, quantity	Size; sales
<i>Multiple Stakeholder</i> Standards	Effectiveness

As can be seen from Table 2.3, the choice of assessment approach and domain influences the type of criteria used to measure organisational effectiveness.

In analyzing the univariate approach (focusing on one evaluation criterion) to measuring organisational effectiveness, Steers (1977) arrived at three conclusions:

- Firstly, it is difficult to support the use of many of these variables by themselves as adequate measures of organisational effectiveness.
- Secondly, several of these single variables appear to represent value judgments by researchers and managers of what “ought to be”, instead of objective measures of the ability of an organisation to accomplish something.
- Thirdly, there is a problem in integrating univariate measures to reach an understanding of the organisational effectiveness construct.

(2) Multivariate effectiveness measures

According to Steers (1977), a more meaningful approach to examining the role of effectiveness in organisations consists of model-building attempts, where the focus is on relationships between major variables that can affect organisational effectiveness. He refers to this as multivariate effectiveness measures which employ several distinct criteria treated simultaneously. Over the years several multivariate models have been proposed to explain the dynamics of organisational effectiveness. Typically such models suggest that successful organisational performance is a function of several specific factors found in or exhibited by organisations (Steers, 1977).

A comparison of various multivariate models of organisational effectiveness in the literature shows that there is a lack of consensus as to what constitutes a useful set of measures of organisational effectiveness. Steers (1975) summarized a representative sample of 17 such models which revealed a diversity of opinions as to how best to evaluate organisational effectiveness. He found little overlap among the approaches used in the 17 models reviewed. Of all the criteria, only one (Adaptability-flexibility) was mentioned in more than half the models. Steers (1975) concluded that there was a lack of convergence among the various models as to what actually constitutes effectiveness. The criteria used in these 17 models are summarized in Table 2.4 below (Steers, 1975).

Table 2.4:

Frequency of Occurrence of Evaluation Criteria in 17 Models of Organisational Effectiveness

Evaluation Criteria	Number of times mentioned
Adaptability - flexibility	10
Productivity	6
Satisfaction	5
Profitability	3
Resource acquisition	3
Absence of strain	2
Control over environment	2
Development	2
Efficiency	2
Employee retention	2
Growth	2
Integration	2
Open communications	2
Survival	2
All other criteria	1

As indicated by the research quoted above, whether one followed a univariate or multivariate approach to criteria of organisational effectiveness, there seems to be no consensus among researchers or managers as to which criteria should be included in the organisational effectiveness construct.

According to Cameron (1978), criteria problems are the major obstacle to the empirical assessment of organisational effectiveness. He states that these criteria problems are of two general kinds, namely the selection of the *type* of criteria indicating effectiveness, and the *sources* or originators of the criteria.

(1) Criteria type

Cameron (1978) states that problems of criteria type generally focus on:

- The aspect of the organisation being considered, that is, goal accomplishment, resource acquisition or internal processes
- The universality or specificity of criteria
- The normative or descriptive character of criteria
- The static or dynamic quality of criteria

(2) Sources of criteria

According to Cameron (1978), organisational effectiveness criteria are also likely to differ depending on whose viewpoint is taken, that is, on their sources. For example, (1) the appropriate organisational constituencies, as effectiveness criteria always represent someone's values and biases, (2) the level of analysis specified by the criteria, and (3) the use of organisational records versus perceptual reports.

According to Harrison (2005), the choice of criteria is guided by many considerations. He provides five guiding questions about effectiveness criteria:

- How applicable and appropriate are particular effectiveness criteria to focal organisations?
- How well do specific effectiveness criteria fit the goals and setting of the diagnostic study?
- How relevant are effectiveness criteria to clients?
- Are there strong normative or value reasons for preferring particular criteria?
- Will feedback based on the selected criteria contribute to constructive problem-solving?

According to Cameron and Whetten (1983), the solution to obtaining consensus on which criteria to use for describing and assessing organisational effectiveness, would be to firstly identify the boundaries of the construct space of effectiveness, or to determine what is and what is not a criterion of effectiveness. According to Cameron and Whetten (1983), there are two ways to identify the boundaries of the construct space of effectiveness. One way is theoretical. By developing a theoretical model of effectiveness it will be possible to map the total measuring of effectiveness. The other way is empirical. This approach generates lists of criteria that could be used as a framework to assess organisational effectiveness.

2.6.3 The goal approach to organisational effectiveness

According to Price (1972) and Brown (2011), the traditional way to study effectiveness has been the goal approach. This is supported by Beulens, Sinding, Waldstrom, Kreitner and Kinicki (2011) who state that goal accomplishment is the most widely used effectiveness criterion for organisations. Price (1972) and Brown (2011) state that its distinguishing characteristic is that it defines effectiveness in terms of the degree of goal achievement. The greater the degree to which an organisation achieves its goals, the greater its effectiveness. In this approach the definition of goal is important and the definition by Etzioni (1964, p. 6) is widely quoted: "An organizational goal is a desired state of affairs which the organization attempts to realize...."

According to Cameron (1986), the goal model states that an organisation is effective if it accomplishes its stated goals and that this model is preferred when goals are clear, time bound, consensual and measurable. According to Glunk and Wilderom (1999), the goal approach has its roots in the mechanistic view of the organisations. These authors explain that this approach centres on the degree to which organisations realize output goals such as profitability, growth and productivity. According to Martz (2008), the goal model defines effectiveness as a complete or at least partial realization of the organisation's goals.

Regarding the identification of an organisation's goals, Yuchtman and Seashore (1967) distinguish between two major doctrines. They refer to the first doctrine as the "prescribed goal approach", characterized by a focus on the formal charter of the organisation, or on some category of its personnel (usually its top management) as the most valid source of information concerning organisational goals. They refer to the second doctrine as the

“derived goal approach”. Here the investigator derives the ultimate goal of the organisation from his functional theory, thus arriving at goals which may be independent of the intentions and awareness of the members. Yuchtman and Seashore (1967) state that the “prescribed goal approach” is the most widely used by students of organisations.

According to Martz (2008), the goal model presumes organisations are rational, deliberate and goal seeking. It also incorporates a number of presuppositions, such as that organisational goals do in fact exist. Martz (2008) explains that other assumptions inherent in the model are that organisational goals are specific and measureable, realistic, operative and not simply officially stated goals relevant to the organisation purpose.

The goal approach has been supported by various authors. For example Cunningham (1977) states that the goal model gives feedback on the organisation’s effectiveness in achieving its goals. He further states that it focuses attention on the systematic relationship of each activity, role and function to the overall goals and objectives of the organisation. Steers (1977) also supports the goal model for evaluating organisational effectiveness. He argues that the major advantage of the goal approach is that organisation success is measured against organisational intentions instead of against an investigator’s value judgments. That is, what the organisation should be doing.

However, the goal model has also been criticized by various authors on numerous grounds. Etzioni (1964) attacks the assumption that the goal approach is an objective and reliable analytical tool, arguing that it is not as objective as it seems to be. Katz and Kahn (1966) argue that the stated purpose of an organisation given by its by-laws or identified by its leaders may idealize, rationalize, distort, omit or even conceal some essential

aspects of the functioning of the organisation, that is, its real purpose. Yuchtman and Seashore (1967) criticize the goal approach by stating that it has failed to provide a rationale for the empirical identification of goals as an organisational property. And, according to these authors, if the goals of an organisation cannot be distinguished, the effectiveness thereof cannot be measured. Ghorpade (1971) states that one of the major shortcomings of the goal model is that it frequently makes the studies' findings stereotyped as well as dependent on the model's assumptions. Many of these studies show that the organisation does not realize its goal effectively and/or that the organisation has different goals from those it claims to have. According to Glunk and Wilderom (1999), the prime limitation of the goal model relates to the content comparability of organisational goals. They argue that the reliable identification of comparable and practically relevant goals within groups of organisational settings is a major challenge for effectiveness researchers. Mohr (1982) names four fundamental reasons as to why the goal concept as used to explain organisational effectiveness is problematic, namely:

- The organisational goal is not an objective concept;
- Even if the organisational goal could be determined objectively, the content would in general be too difficult to specify;
- Even if the content of the organisational goal were not too difficult to specify, it is so intricately complicated and so dependent on persons and situations that there is probability zero that two organisations have the same goal; and
- Even if many organisations had the same goal, the efforts that go into achieving it are so complex that it is impossible to discern

which activities contribute how much to what aspect of the outcome.

Martz (2008) also argues that the goal approach lacks impartiality, as it reflects the values of some subjects, such as the dominant coalition, and not others. Martz (2008) also mentions further challenges with respect to goal attainment as the criterion of effectiveness. These include lack of specificity of goals, measurement of partial completion of goals, identification and handling of side effects, importance weighting, conflicting goals and confusing constraints with goals.

According to Cameron (1986), it would thus seem that the goal approach to assessing organisational effectiveness is most applicable in those organisations that have clearly defined, time-bound and precisely measurable goals. This view is supported by Robbins (1987) who states that there are five pre-conditions for the successful operationalisation of this approach, namely:

- Organisations must have ultimate goals.
- These goals must be clearly identified and defined.
- These goals must be few and easily manageable.
- There must be a general agreement on these goals in the organisation.
- These goals must be measurable.

However, Glunk and Wilderom (1999) pose the question as to how many organisations do in fact have goals to meet these criteria stipulated by Cameron (1986) and Robbins (1987). From the literature on organisational effectiveness there does not seem to be many. Despite this criticism, Hannan and Freeman (1977) point out that it would be unsatisfactory to totally discard the goal concept, since goals are part of the defining characteristics of organisations.

2.6.4 The systems resource approach to organisational effectiveness

This model was developed by Yuchtman and Seashore (1967) and is based on the open systems approach to organisations as propagated by Katz and Kahn (1966). According to Price (1972), this approach defines effectiveness, not with respect to the degree of goal-achievement, but in terms of the ability of the organisation to exploit its environment in the acquisition of scarce and valued resources. Accordingly, the greater the ability of the organisation to exploit its environment, the greater its effectiveness.

Beulens et al. (2011) explain that in this respect resources are all instruments, machines, processes, knowledge, information, systems, skills or any kind of tangible and intangible assets that the organisation possesses or can make use of. Unique and scarce resources can give some organisations an advantage over others.

This model thus stresses input over output variables (Beulens et al., 2011; Glunk & Wilderom, 1999). According to Glunk and Wilderom (1999), this approach views most organisations as entities that operate in order to survive, all the while competing for scarce and valued resources. Survival of the firm is seen here as the ultimate criterion of organisational effectiveness.

Yuchtman and Seashore (1967) used statistical testing on a set of data gathered over an eleven-year period to identify 10 penultimate criteria which accounted for about 70 percent of the total variance in performance. Owing to these results, they defined organisational effectiveness as “the ability of the organisation, in either absolute or relative terms, to exploit its environment in the acquisition of scarce and valued resources” (Yuchtman & Seashore, 1967, p. 898). They state that their proposed definition of organisational effectiveness is in response to the methodological and conceptual problems inherent in the goal approach.

However, Price (1972) offers three criticisms of the system-resource approach. He states that firstly, optimization, an important idea in this approach, has not been measured. Secondly, general measures, the utility of which is recognized by this approach, are seldom used. And thirdly, mutual exclusiveness, a basic rule of classification, is seriously violated by the definition of effectiveness.

Adding to this, Glunk and Wilderom (1999) state that two critical views question the merit of the system-resource approach. First, optimal resource acquisition itself can be regarded as a universal organisational goal. Consequently, this approach represents a mere variant of the rational-goal approach and this cannot be seen as a distinctively different organisational effectiveness approach. The second critical view considers system-resource acquisition as a necessary means to achieve organisational goals. Thus, the system-resource approach does not deal with organisational effectiveness, but rather with its predictors. Glunk and Wilderom (1999) further state that a problem with this approach is that a high volume of acquired resources does not guarantee effective usage. Moreover, it is difficult to define an optimal level of resource acquisition across different organisations.

This criticism of the system-resource approach to organisational effectiveness is supported by Hall (1999). He argues that it is actually a question of semantics whether or not growth in business volume is viewed as only one form of resource acquisition or as a goal. Furthermore, he states that resource acquisition does not just happen but is based on what the organisation is attempting to achieve, namely its goals.

According to Cameron (1986), it would thus seem that the system-resource approach to organisational effectiveness appears to be most useful in those organisations in which output goals are difficult to measure precisely, and when accurate input measures are available, such as in non-profit, budget oriented or social welfare agencies. In general, however, Glunk and Wilderom (1999) argue that a pure system-resource approach to measuring organisational effectiveness falls short for most organisations.

2.6.5 The internal processes approach to organisational effectiveness

According to Beulens et al. (2011), some refer to the internal processes model as the “healthy systems” approach. An organisation is said to be a healthy system if information flows smoothly and if employee loyalty, commitment, job satisfaction and trust prevail. It also means a harmonious balance of structural features and a well-fit organisation type. Healthy systems tend to have a minimum of dysfunctional conflict and destructive political manoeuvring.

According to Glunk and Wilderom (1999), this approach is rooted in both the system and the human-relations models of organisations. They state that it focuses on internal processes that increase the ability of organisations to

cope with changes in the environment. Thus, organisational effectiveness is defined as smooth internal functioning and is assessed through criteria of internal health, such as adaptability, a strong sense of identity and the capacity to test reality. In this respect Daft (1992) offers undistorted communication, strong corporate culture and a positive work climate as related possible factors contributing to the smooth internal functioning of an organisation, and thus ensuring effectiveness. Burke and Litwin (1992) refer to aspects such as a strong culture, effective leadership, healthy management practices and effective policies and procedures which influence performance. Smit (1999) and Nel and Haycock (2005) argue that effective leadership, good people management and effective processes result in organisational excellence, while Wiley (2010) propagates effective leadership practices, good communications, strong teamwork and full employee engagement as leading to high performance.

According to Beulens et al. (2011), criteria often used to evaluate the structural side of organisation processes, are efficiency and productivity. Whereas efficiency is achieved when certain output is realized with the lowest costs, productivity indicates the amount of output created with a given amount of input. However, they state that not all organisations have efficiency as an effectiveness criterion, as it may compete with other criteria such as flexibility or innovation.

According to Bluedon (1980), critics of the internal-process approach argue that it cannot result in valid indicators of organisational effectiveness itself. Instead, it is considered to be an approach for studying its assumed predictors. Additional limitations of this approach are stated by Martz (2008) as being that it does not address external forces beyond management control that can affect the organisation's performance, and the emphasis on internal process efficiencies may distract the organisation from perceiving

long-term environmental changes that make the organisation irrelevant or non-competitive.

According to Glunk and Wilderom (1999), the internal-process approach might apply only where comparable organisational outcomes cannot be assessed precisely, such as in private non-profit or public organisations.

2.6.6 The strategic constituencies approach to organisational effectiveness

According to Beulens et al. (2011), because organisations both depend on people and affect the lives of people, many consider the satisfaction of key interested parties to be an important criterion of organisational effectiveness. The authors define a strategic constituency as any group of individuals who have some stake in the organisation. Martz (2008) defines strategic constituencies more specifically by considering those persons who legally act on behalf of the organisation (which he says are employees, advisors, agents, members of boards, etc.), and those who are purely external to the organisation and act on their own behalf. Glunk and Wilderom (1999) state that the multi-constituencies, which they call stakeholders, view takes explicitly into account that organisations serve multiple goals: each type of organisational constituency is thus supposed to have different interests vis-à-vis the organisation, and will therefore apply different evaluation criteria.

Martz (2008) states that according to the strategic constituencies model, an effective organisation is one that satisfies the demands of the constituencies. This view is supported by Tsui (1984), who states that an organisation is effective to the extent that the needs of various relevant organisational constituencies are satisfied. Cameron and Whetton (1983) again argue that

an organisation is effective if all constituencies are at least minimally satisfied.

Various authors have pointed out that this approach has advantages, such as the fact that the approach has brought to the foreground a great deal of the complexity involved in assessing organisational effectiveness, its attempt to address the concerns of those who can most impact or ensure the survival of the organisation and its recognition of multiple constituencies and their preferences (Glunk and Wilderom, 1999; Martz, 2008; Tsui, 1984).

Various authors have also highlighted the limitations of the strategic constituencies approach. Beulens et al. (2011) point out that strategic constituencies generally have competing or conflicting interests, and that a never-ending challenge for management is to strike a balance between strategic constituencies so as to achieve at least minimal satisfaction on all fronts. For this reason Martz (2008) argues that each of the constituencies has a unique set of values that require consideration when assessing an organisation's effectiveness. Martz (2008) further states that the assumptions built into the strategic constituencies model are that survival is the ultimate criterion, vested interests compete for control over resources, constituencies can be identified and ranked, and that the preferences of a particular constituency should be satisfied.

Glunk and Wilderom (1999) have also emphasized various problems with the multiple-constituency approach. They question how to deal with the potentially competing goals of the various constituencies within an organisation. They also question how to balance long-term and short-term goals, and also how to handle the means-ends issue. Martz (2008) also states that this model has prominent limitations. The first is its bias favouring the most powerful coalitions within the organisational environment.

Secondly, the author states that an organisation can be found effective even when it does not possess any competitive advantage, as long as the expectations of the strategic constituencies are satisfied. Thirdly, Martz (2008) states that it is a challenge to separate strategic constituencies from the larger environment, and lastly, it is difficult evaluating organisational effectiveness in a dynamic environment where consistency preferences can shift over time.

According to Cameron and Whetton (1983), researchers using the multiple constituencies approach encountered four difficult methodological challenges:

- (1) When asked, individual stakeholders have difficulty explicating their personal expectations for an organisation.
- (2) A stakeholder's expectations change, sometimes dramatically, over time.
- (3) A variety of contradictory expectations is almost always pursued simultaneously in an organisation.
- (4) The expectations of strategic constituencies frequently are unrelated, or negatively related, to their overall judgments of an organisation's effectiveness.

Zammuto (1984) discusses various ways to deal with the dilemmas of unclear, contradictory and unrelated expectations held by an organisation's multiple stakeholders. He suggested four alternatives: (1) Strive to provide as much as possible to each stakeholder without harming any one stakeholder, (2) strive to satisfy the expectations of the most powerful or dominant stakeholder first, (3) favour the least advantaged stakeholders

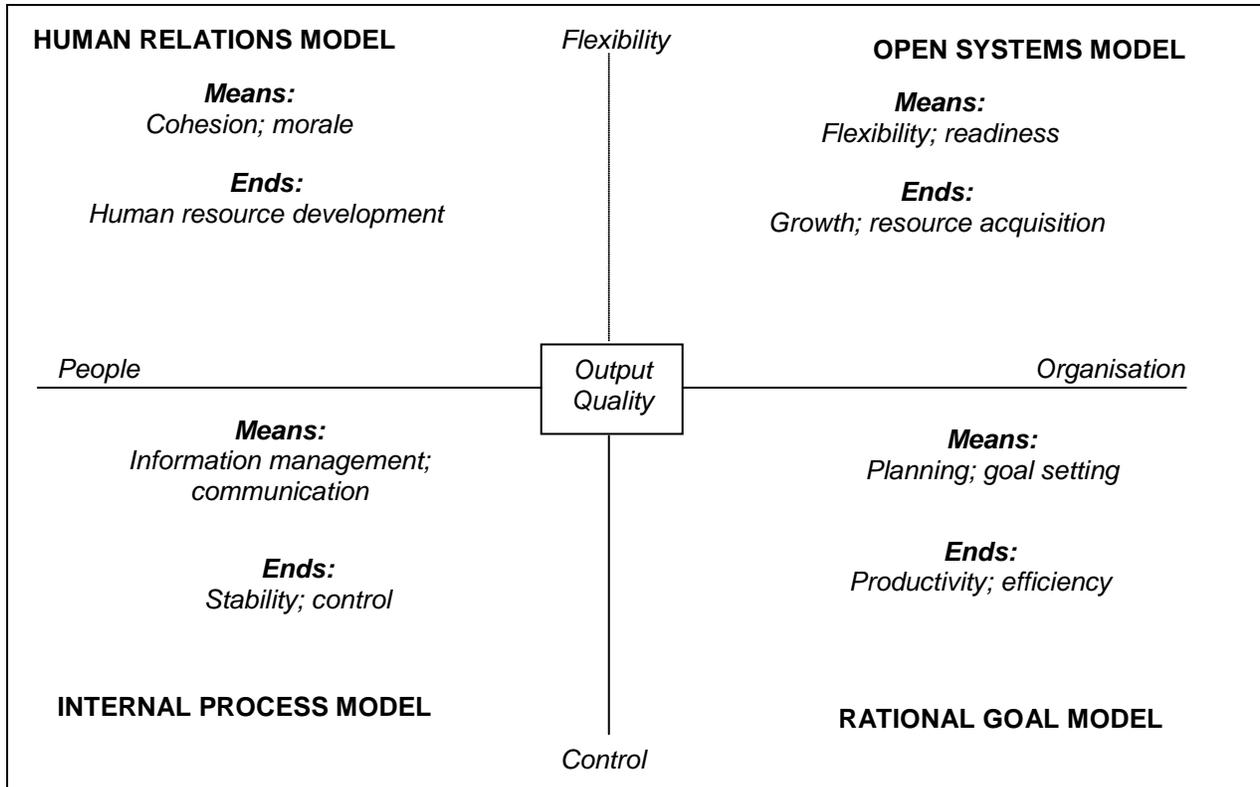
who are most likely to be harmed, and (4) develop the capacity to be flexible and adaptable so as to be able to respond to the changing set of stakeholder expectations.

2.6.7 The conflicting values approach to organisational effectiveness

According to Cameron and Whetton (1983), the recognition that organisations are simultaneously pulled in opposite directions by the expectations of multiple constituencies led Quinn and his associates (Faehrman & Quinn, 1985; Quinn & Cameron, 1983, Quinn & Rohrbaugh, 1981,) to introducing the competing values model of organisational effectiveness. According to Martz (2008), this model includes two fundamental premises: (1) there are multiple and conflicting criteria associated with assessing organisational effectiveness, and (2) multiple constituencies will give preference to certain values that differ according to their organisational perspective and the interests they represent. The methodological approach used by Quinn and Rohrbaugh (1981) in their original research focused on organisational effectiveness from the perspective of organisational theorists and researchers rather than organisational participants.

Quinn and Rohrbaugh (1981) used a panel of experts to rate a list of effectiveness criteria published by Campbell et al. (1974). Then a broader group of organisational theorists and researchers were asked to make judgments regarding the similarity or dissimilarity between pairs of effectiveness criteria that remained. The data were then analyzed resulting in a spatial model of competing value sets and effectiveness criteria (Glunk & Wilderom, 1999). This model is shown in Figure 2.2 below:

Figure 2.2: A Summary of the Competing Value Sets and Effectiveness Models (Quinn & Rohrbauch, 1981, p. 136).



The resulting taxonomy by Quinn and Rohrbauch (1981) reveals three dimensions with competing foci: (1) external versus internal, (2) control versus flexibility, and (3) means versus ends. They combined the first two dimensions into four organisational models, namely the human relations model, the open systems model, the internal process model and the rational goal model, which are suggested to represent the underlying value orientations of most organisations.

Quinn and Rohrbauch (1981) argue that the competing values model fulfils various requirements for a theoretical framework of organisational effectiveness, namely:

- There is consistency in that there is a single level of analysis.
- It integrates different theoretical perspectives and provides a more holistic view of organisational effectiveness.
- It reduces the criteria of effectiveness to a list that is a parsimonious set of discrete and well-defined criteria.
- It provides a set of testable statements about relationships between organisational effectiveness criteria.
- It recognizes the coalitional and dynamic nature of organisations and the viability of criteria across time and perspective.
- It facilitates the comparison and generalization of findings across studies.
- It offers a simple definition of organisational effectiveness which helps clarify the effectiveness literature. As such, Quinn and Rohrbaugh (1981, p. 138) offer the following definition of organisation effectiveness: "Organizational effectiveness is a valued-based judgment about the performance of an organization."

According to Glunk and Wilderom (1999), the competing values approach is not entirely original, but is rather a systematisation of earlier organisational effectiveness approaches. They state that although the approach points to the dynamic nature of organisational effectiveness by relating the various criteria to organisational life-cycle stages, and even though it introduces a means-ends dimension, it leaves the means-ends issue unresolved. Glunk

and Wilderom (1999) argue that the question still remains: should variables that traditionally have been seen as organisational means (such as planning, control or flexibility) be considered as effectiveness criteria? The mere fact that these variables were used as effectiveness criteria in previous studies is no proof of their status as a criterion rather than a predictor.

In a similar vein, Martz (2005) states that although the approach is useful for organisations to visualize improvement opportunities or to understand what organisation effectiveness looks like based on a stakeholder perspective, it does little to offer an evaluative conclusion with respect to organisational effectiveness.

2.7 WHICH IS THE BEST APPROACH TO ORGANISATIONAL EFFECTIVENESS?

The 1970s and 1980s were characterized by on-going debates in the scholarly literature about which approaches to organisational effectiveness were the best ones (Cameron & Whetten, 1983). Various scholars, as discussed previously, argued that the goals approach, systems resource approach, internal processes approach, strategic contingencies approach or the conflicting values approach was the best to conceptualize organisational effectiveness. However, according to Cameron and Whetten (1983) none of these approaches towards effectiveness emerged as the approach of choice, and no approach could be argued to be better than any other, therefore no approach towards effectiveness has an advantage over any other.

Henri (2004) postulates that when considering the relationship between the different approaches to organisational effectiveness, three different stances can be considered:

- The *exclusionary stance* represents the situation where an approach is presented as the single best approach, sufficient and applicable to any context and conditions.
- The *cumulative stance* reflects the position where various approaches are perceived as building blocks in a mapped domain in which the boundaries are specified. Every approach adds something to the previous ones in order to increase the accuracy of the whole picture.
- The *complementary stance* mirrors the situation where each approach is perceived as capturing one portion of the multiple facets of the reality along with the specific context to be applied.

It is the view of the researcher that the *complementary stance* (Henri, 2004) is the most applicable to organisational effectiveness, as each approach on its own offers a unique contribution to understanding the construct of organisational effectiveness, and as such cannot be totally eliminated or ignored. Each approach highlights important elements that contribute to an organisation's effectiveness, either individually or in combination with others. However, no approach on its own can be declared as the best or preferred. As such it is suggested that an attempt should be made to combine all the approaches into a composite model which could then be used to describe and assess the construct of organisational effectiveness. This model could then also be empirically tested to determine whether it can be used as a framework for assessing organisational effectiveness.

2.8 A SUMMARY OF THE EVOLUTION OF APPROACHES TO ORGANISATIONAL EFFECTIVENESS

From the above discussion it is clear that over the last 30 years the manner in which organisational effectiveness has been viewed has changed drastically. In fact, Cameron and Whetten (1983) are of the opinion that these shifts in views have yielded progressively more complex views of organisations as behavioural systems, and as a result, the theories of organisational effectiveness have also increased in complexity. These evolutionary shifts are summarised in Table 2.5 below and discussed in more detail thereafter.

Table 2.5:

Evolution of Approaches to Organisational Effectiveness

Theory	Basic approach	Common models
Ideal types	Matching the organisation's profile and the ideal type	<ul style="list-style-type: none"> • Goal model • Internal process model
Contingency theory	Matching the organisation's profile and environmental conditions	<ul style="list-style-type: none"> • System resource model
Multiple constituencies	Matching the organisation's activities and constituencies' expectations	<ul style="list-style-type: none"> • Strategic constituencies model
Paradox approach	Combining contradictory elements and managing inconsistent expectations	<ul style="list-style-type: none"> • Competing values model

2.8.1 Ideal types

According to Cameron and Whetten (1983), the earliest models of organisational effectiveness emphasized "ideal types", that is, forms of organisation which maximized certain attributes. This "rational-legal" form of organisation was characterised by decisions based on rules, equal treatment of all employees, separation of the position from its occupant,

staffing and promotions based on skills and expertise, specific work standards, and documented work performance (Hall, 1999). Typical models of organisational effectiveness under this theory were thus goal models and internal process models, all aimed at measuring effectiveness by the standard of an “ideal” organisation.

2.8.2 Contingency approaches

According to Cameron and Whetten (1983), challenges to the soundness of the “ideal” organisation gave rise to “contingency theory”. This perspective argued that effectiveness was not a function of the extent to which an organisation reflected the qualities of an ideal profile, but instead, it depended on the match between an organisation’s profile and environmental conditions. The critical difference between ideal type and contingency thinking was that the former assumed that “one size fits all”. In contrast, contingency theory argues that effective organisations match their profiles with prevailing environmental conditions. A typical model of organisational effectiveness under this theory is the system resource model.

2.8.3 Multiple constituencies

According to Cameron and Whetten (1983), a third approach to organisational effectiveness began to emerge when authors focused less on assessment criteria of abstract dimensions and more on the concrete expression of stakeholders’ expectations, as propagated by Connolly et al., (1980) and Zammuto (1984). Effective organisations were viewed as those which had accurate information about the expectations of strategically critical constituents and adapted internal organisational activities, goals, and values to match those expectations. A typical model under this theory is the strategic constituency model.

2.8.4 Paradox approach

According to Cameron and Whetten (1983), this approach recognises the inherently paradoxical nature of organisational functioning. That is, organisations are simultaneously pulled in opposite directions by the expectations of multiple constituencies. Administrators must thus make tradeoffs between day-to-day competing demands on the organisation's resources as well as balance competing expectations regarding the core identity of the organisation as an institution. An example of a model under this approach is the competing values model as propagated by Quinn and Rohrbaugh (1981).

2.9 CHAPTER SUMMARY

In this Chapter the construct of organisational effectiveness was discussed. The Chapter started by distinguishing between organisational performance and organisational effectiveness, followed by a discussion of the lack of consensus on the meaning of organisational effectiveness. After this the importance of organisational effectiveness as well as the difficulty of defining the construct received attention. The Chapter was concluded by a discussion of the approaches to organisational effectiveness as well as a summary of the evolution of approaches to organisational effectiveness.

In the next Chapter organisational effectiveness in Public Sector organisations, including local government, will be investigated.

CHAPTER 3: ORGANISATIONAL EFFECTIVENESS IN PUBLIC SECTOR ORGANISATIONS, INCLUDING LOCAL GOVERNMENT

3.1 INTRODUCTION

In this Chapter the construct of organisational effectiveness as applicable to Public Sector organisations, including local government, will be investigated. The difference in terminology between the Public and Private Sectors will firstly be discussed, after which the importance of organisational performance for Public Sector organisations will receive attention. The difference between Public and Private Sector organisational effectiveness will then be investigated, after which the importance of local government as part of the Public Sector will receive attention. Thereafter the objectives of local government in South Africa, the importance of metropolitan municipalities in Africa and South Africa, and the organisational performance of local government in South Africa will be discussed. Finally, conclusions will be made regarding the measurement of organisational effectiveness in the Public and Private Sectors.

3.2 CLARIFYING PUBLIC AND PRIVATE SECTOR ORGANISATIONAL EFFECTIVENESS TERMINOLOGY

Before discussing the difference between Public and Private Sector organisational effectiveness, the researcher is of the opinion that there is a need to clarify the difference in terminology used in the Public and Private Sectors when referring to effectiveness. In Chapter 2 of this thesis, in which the construct of organisational effectiveness was discussed in depth, a distinction was made between business performance and organisational effectiveness. The term business performance was clarified as meaning financial and operational performance (simple outcome-based financial

indicators), and was seen as a subset of the overall concept of organisational effectiveness (Richard et al., 2009; Venkatraman & Ramanujam, 1986). However, when discussing effectiveness in the Public Sector, the majority of authors tend to use the term *organisational performance* (emphasis added) when in fact they mean organisational effectiveness as conceptualised in Chapter 2 of this thesis (Behn, 2003; Boyne, 2003; Boyne & Chen, 2006; Denhardt, 2008; Nyhan & Marlowe, 1995; Shafritz & Hyde, 2007; Soni, 2011; Stevens, 2005; Vaughan, 2010; Waheed, Mansor & Ismail, 2010). As such, the terms organisational effectiveness and organisational performance will be used interchangeably when discussing organisational effectiveness in the Public Sector.

3.3 THE IMPORTANCE OF ORGANISATIONAL EFFECTIVENESS FOR PUBLIC SECTOR ORGANISATIONS

Most organisations today are facing an external environment characterised by rapid technological changes, a global economy, changing market requirements, and intense domestic and international competition (Achua & Lussier, 2010; Hamel, 2000; Immordino, 2010; Reddy, Haque & De Vries, 2008; Soni, 2011). This includes Public Sector organisations, as various authors have argued that the Public Sector represents a large part of a country's economy, and that this part is in fact getting bigger all the time (Immordino, 2010; Soni, 2011; Stevens, 2005). In addition to this, Reddy et al. (2008), state that governments at all levels are undergoing a process of fundamental political, economic, social and technological change in response to the pressing challenges that have to be addressed. This is elaborated on by Immordino (2010), who states that Public Sector organisations at all levels are under constant pressure to improve their efficiency, effectiveness, and responsiveness. Consequently, governments are globally under

increasing pressure to improve the quality of their services they deliver to the local populace.

According to Boyne (2003), governments across the globe are searching for ways to improve public services. This view is supported by Sowa et al. (2004), who state that citizens all over the world are increasingly demanding that Public Sector organisations improve their service delivery and prove that they have an impact on complex social problems, while tax payers are demanding an acceptable return on the taxes that they pay to governments at all levels. Further support for this view is provided by Waheed et al, (2010), who state that in these times of rapid changes in the economic and institutional environment, and an increased competition for scarce resources, it has become imperative for Public Sector organisations to assess their performance and take the necessary steps to address problems and weaknesses in order to maintain their credibility and attract a level of public funding. They argue that the ability to define and evaluate performance is an essential condition for its improvement. Soni (2011) adds to this by stating that improving the performance of Public Sector organisations is a major concern for public officials, administrators, and citizens in all democratic societies today.

3.4 THE DIFFERENCE BETWEEN PUBLIC SECTOR ORGANISATIONAL PERFORMANCE AND PRIVATE SECTOR ORGANISATIONAL EFFECTIVENESS

When discussing the difference between the Public and Private sectors, Immordino (2010, p. xv), asks the appropriate question: "How is the business of government different from that of the Private Sector?" Concerning organisational effectiveness, this leads the researcher to ask two additional questions, namely:

- How does organisational performance in the Public Sector in general, and in local governments in particular, differ from organisational effectiveness in the Private Sector?; and
- Can Private Sector *measures* (emphasis added) of organisational effectiveness be used as Public Sector *measures* (emphasis added) of organisational performance?

In answering the above questions it will be necessary to examine the views of various authors over the years regarding Public Sector performance and Private Sector effectiveness.

In this respect Carter (1981, p. 88) conducted a study in which he sought “To test the conventional wisdom that there is some particular quality about the Public Sector which makes transplanting techniques from the Private Sector inappropriate or difficult”. Carter (1981) states that when interviewing civil servants it was found that there was agreement that the assessment of performance in the Private Sector was different and easier. Carter (1981) states that two explanations were commonly used to clarify these differences in public/private performance measures:

- The first assumes that because private firms possess profit as the bottom line, the performance measurement is a straightforward technical procedure.
- The second assumes that there are particular social and political pressures operating on Public Sector organisations which are not present in private organisations.

Carter (1981) then asks what makes a good performance indicator, but states that there are no definite answers to such a question. Using a mixture of *a priori* reasoning combined with best practices he found in case studies, the author suggests that performance indicators:

- Should be relevant to the needs and objectives of the organisation. In other words, they should measure aspects of performance that are central to the efficient and effective delivery of quality services.
- Should be reliable, being based on data produced by accurate information systems.
- As far as possible, need to be unambiguous, that is, not open to challenge by staff.

This view is supported by Poister (2003), who states that various performance indicators have been used on which there is no consensus, such as Availability, Awareness, Extensiveness, Quality, Fairness, Degree of Equity, Predictability and Degree of Democratic Control.

It would seem that this view regarding the ambiguity of performance indicators for the Public Sector applies to local government as a component of the Public Sector as well. As Johnson (1978, p. 6) states:

Local governments vary in respect of the kinds of services provided, data collection and accounting procedures, and the level of professional competence, all of which complicate making broad generalizations about the kind of performance measures to collect. In addition, performance can differ

in different service areas in relation to area, topography, climate, population, citizen desires, etc.

Further support for this view is provided by Nyhan and Marlowe (1995), who state that despite many efforts by various researchers, there is a lack of progress in implementing meaningful performance measurement systems in the Public Sector. They argue that there are two primary factors which contribute to this, namely:

- A lack of utility of existing performance measures to enhance organisational effectiveness.
- The inability to compare measures across disparate programmes and organisational units.

Nyhan and Marlowe (1995) argue that even when meaningful performance measures are developed, significant problems remain in communicating performance information both internally to enhance the management of the organisation and externally to demonstrate that resources are being expended efficiently, within the precepts of public policy. They state that these problems are threefold:

(1) Size

The number of performance measures is large. For example, a local government may provide water distribution, transportation, police, fire, sanitation, and public health services. The problem for managers, elected officials, and the public is how to develop a composite picture of government performance based on complex, varying levels of performance across a large number of competing measures. The complexity of deciding whether the

department is effective based on a multitude of measures is daunting for most officials and for the public.

(2) Performance measures vary in degrees of importance

Indicators represent both macro-level performance and micro-level details. Reported performance levels reflect a mixture of above- and below-standard performance. Clearly, some measures have a greater impact on departmental effectiveness than others, implying varying levels of importance to the overall effectiveness of the organizational unit.

(3) Most indicators are unique to the particular organisational unit

Although some indicators are sufficiently generic to be aggregated at the top of the organisation, most are functionally unique at the department, division, or unit level. From the public and elected officials the question asked is: "How do I know we are getting value for our money?", and from the managers: "Where do I focus attention on improving service quality?"

Rainey and Steinbauer (1999, p.13), conceding that they cannot resolve the diversity of indicators and models of organisational performance for the Public Sector, proceed to use a relatively straightforward definition of what the performance of a government organisation entails:

The organisation performs well in discharging the administrative and operational functions pursuant to the mission. It achieves the mission as conceived by the organization and its stakeholders, or pursues achievement of it in an evidently successful way.

Rainey and Steinbauer (1999) state that this concept of effectiveness refers to whether the government organisation does well that which it is supposed to do, whether people in the organisation work hard and well, whether the actions and procedures of the organisation and its members are well suited to achieving its mission, and whether the organisation actually achieves its mission.

Regarding the measurement of Public Sector performance, Gawande and Wheeler (1999) and Poister and Streib (1999) state that an organisation whose actions are regulated by the government and whose objectives are not necessarily measurable in terms of financial qualities, poses a problem.

According to Van Thiel and Leeuw (2002), performance assessment systems should take the special characteristics of the Public Sector into account. The contested nature of performance indicators requires the use of multiple indicators, referring to different aspects of policy implementation and reflecting the interests of all stakeholders. Moreover, Van Thiel and Leeuw (2002) argue that a balance has to be found between too much and not enough measure pressure.

In an attempt to determine whether organisational effectiveness measures are the same or different for both the Private and Public Sectors, Parhizgari and Gilbert (2004) conducted a study in which they investigated the comparisons between Private (business) and Public (government) Sector effectiveness. They found that "there remains a lack of acceptable measures of organizational effectiveness that can be justifiably applied to both sectors" (Parhizgari & Gilbert, 2004, pp. 25-27). The authors argue that one of the reasons for this is that Public and Private Sector organisations serve different types of customers. Each has a unique set of conditions. The concept of performance in these sectors is complex, multi-dimensional and subject to

measurement limitations. Parhizgari and Gilbert (2004) state that the key features of effective performance in the Private Sector cannot be applied to the Public Sector, as the two sectors are also structured differently, namely:

- In the Private Sector, organisations are led by boards of directors and chief executive officers whose focus is to make profit and provide value to the organisations' shareholders (stakeholders) while doing so. Here the consumers' money largely influences company policy. As a consequence, the internal structures and processes of Private Sector companies are designed to satisfy their consumers.
- Contrarily, Public Sector organisations are led by elected officials who are voted into office and are accountable to their voting constituents (stakeholders). These stakeholders may not be the consumers or end users of the public entity's efforts. Thus, the criteria used to measure the effectiveness of major internal structures and processes of a consumer oriented business may not be the same as those of a government organisation.

In summary, Parhizgari and Gilbert (2004) state the following:

- In the Private Sector, productivity by means of efficiency is valued, while in the Public Sector, there is an obligation to serve the general good and this may result in highly redundant and inefficient systems.
- Public organisations are more politically driven, while private organisations are more financially driven.

- The criteria to assess an effective Private Sector organisation may be more closely associated with the financial bottom line, long-term customer satisfaction and customer retention than would be the case in the Public Sector.

As such Parhizgari and Gilbert (2004) argue that it is reasonable to assume that organisational effectiveness measures between public and private organisations may be quantitatively different.

This view is supported by Stevens (2005), who states that there are three main problems when measuring Public Sector performance:

- Identifying the outputs. This means that it is often difficult to identify what the outputs of Public Sector organisations are. This view is supported in a study by Boyne and Chen (2006), who found that the setting of clear output targets lead to Public Sector improvement.
- The absence of prices. Even if we can observe and measure the outputs of government - the services it provides - we seldom observe output prices.
- The problem of attrition. This means that many of the outcomes which government at all levels seeks to effect are influenced by many other factors.

These arguments are supported by Waheed et al. (2010), who state that it is generally acknowledged that measuring organisational performance in the Public Sector is a complicated and least attempted matter as compared to doing so in the Private Sector because:

- In the Public Sector, objectives are not clearly defined and are also multiple in numbers. This is undoubtedly a problem, as studies have found that the setting of clear output targets and the establishment of clear goals lead to improved performance and Public Sector improvement (Boyne & Chen, 2006; Poister, Pasha & Edwards, 2013).
- Objectives are centrally administered.
- Objectives do not have generally accepted performance indicators as compared to the Private Sector where profit or market share is used as a common indicator of performance. This is supported by Behn (2003), who states that the kinds of financial ratios the Private Sector uses to measure organisational performance are not appropriate for the Public Sector, while Baruch and Ramalho (2006) add that the primary purpose of private organisations is the profit motive, while Public Sector organisations have other reasons to justify their permanence.
- Their responsibility is diffused and fragmented due to interdependence and inter-linkages of their performance, which in turn makes the process of accountability difficult in the case of Public Sector organisations.

Waheed et al. (2010) state that in addition, evaluation of organisational performance in the Public Sector is not a fully developed concept and there is as yet no adequate, integrated, tested, comprehensive and operationalised model for the evaluation of organisational performance despite its wide use. Vaughan (2010) adds to this by stating that the assessment of non-profit

organisations is complicated by the absence of any single criterion on which to judge performance, while for-profit organisations are much easily assessable due to the efficiency metric of the profit margin.

From the above discussion it is clear that various authors support the view that it is more difficult to measure organisational performance in the Public Sector, which includes local government, than to measure organisational effectiveness in the Private Sector (Behn, 2003; Boyne & Chen, 2006; Gawande & Wheeler, 1999; Poister et al., 2013; Pollitt, 1986; Rainey & Steinbauer, 1999; Stevens, 2005; Vaughan, 2010; Waheed et al., 2010).

3.5 THE IMPORTANCE OF LOCAL GOVERNMENT AS PART OF THE PUBLIC SECTOR

3.4.1 Introduction

According to Mitlin (2000), local government is a very important sphere of government all over the world because it is the sphere of government closest to the people. Many basic services are delivered by local municipalities, and local ward councillors are the politicians closest to communities. Furthermore, local governments are increasingly required to play larger roles in providing services, alleviating poverty, and facilitating development (Andrews & Shah, 2003; Mitlin, 2000). This was further emphasised by Clos (2003), who said that:

“Local governments are key to the development of sustainable cities and alleviation of poverty. Strong local authorities, both in urban and rural areas, are crucial in implementing effective strategies for the future development of our communities.”

This view is supported by various authors who emphasise that local government is the closest form of government to the general populace and thus plays an important role in delivering services to communities (Cameron, 2005; Craythorne, 2006; Mortimer, 2004; Rakodi, 1997).

3.5.2 The objectives of local government in South Africa

The objectives of local government in South Africa are set out in its Constitution (Constitution of the Republic of South Africa, 1996), which according to Section 152, are:

- To provide democratic and accountable government of local communities;
- To ensure the provision of services to communities in a sustainable manner;
- To promote social and economic development;
- To promote a safe and healthy environment; and
- To encourage the involvement of communities and community organisation in the matters of local government.

However, a central challenge for the many new institutions of local government in South Africa has been their viability and ability to build strong organisations capable of delivering on the principles of Section 53 of the Constitution which states that:

“A municipality must structure and manage its administration and budgeting and planning processes to give priority to the basic needs of the community, and to promote the social and economic development of the community, and participate in national and provincial development programmes”.

3.5.3 The importance of metropolitan municipalities in Africa as a special form of local government

According to Suzuki (1998), a metropolitan municipality refers to a mother city with a very large urban area and with a population in excess of one million people. The entire urban area surrounding a metropolis is referred to as a metropolitan region or metropolitan area and it generally extends beyond the political boundaries of a single city.

According to Reddy (2008), a growing number of people in the developing world live in metropolitan areas. Reddy (2008) further states that metropolisation and unrelenting urban growth, particularly in developing countries, has resulted in urban problems such as poverty, lack of basic needs, infrastructural deficiencies and backlogs, and lack of human and financial resources which have had a negative impact on the metropolitan municipalities' capacity to perform their mandated functions. Reddy (2008) states that this is in direct contrast to the major metropolises of the developed world that often have the required resources and capacity to manage the process of metropolisation.

Metropolitan governance is described by various authors as regional management and implies that the required authority, funding and power are available to attain the goals of local governance. Metropolitan governance especially emphasizes the effectiveness of institutional arrangements,

decision-making processes, policy formulation, implementation capacity, information flows and the nature of the relationship between the rulers and the ruled (Cameron, 2005; Craythorne, 2006; Suzuki, 1998).

Various authors have suggested that metropolitan municipalities have four distinct potential roles (Barlow, 1991; Immordino, 2010; Khan and Maharaj, 1997; Reddy, 2008; Steytler, 2005; Suzuki, 1998.)

- A functional role. This refers to the provision of services that display economies of scale or require area-wide performance.
- A strategic role. This role denotes participation in land-use planning and economic development to facilitate and coordinate metropolitan growth.
- A role related to resource allocation. This role refers to the development of a policy and planning framework for the functioning of lower-level governments and the relevant distribution of financial resources.
- A managerial role. This involves directing the various components of the Public Sector into an overall system of metropolitan management.

According to Barlow (1991), Khan and Maharaj (1997) and Suzuki (1998), the strategic and managerial roles constitute the basis for metropolitan government as it requires actions and mandates that are quite broad based from an urban perspective and which can only be undertaken by a body of this nature; it would not be an ideal arrangement if these functions were undertaken by a higher governmental authority.

Various authors have also stated that it is generally accepted that nowhere is improved local governance more critical than in the metropolitan areas of the developing world (Clos, 2003; Craythorne, 2006; Reddy, 2008; Steytler, 2005). However, Steytler (2005) states that on a global level, there is no single or generally preferred model for metropolitan governance. He argues that it is even questionable whether the solution for the severe problems facing metropolitan areas is to be sought in the structure of metropolitan government. This is so owing to the fact that the options for structuring metropolitan governance range from the voluntary association of municipalities with minimal authority to formal statutory structures with wide powers of compulsion (Steytler, 2005). This view is supported by Cameron (2005) and Rakodi (1997).

3.5.4 The importance of metropolitan municipalities in South Africa as a special form of local government

Metropolitan areas in the South African context require special consideration in any local governance system as they are generally viewed as engines of economic growth, have a high population density and multiple overlapping externalities (Reddy, 2008). The Local Government: Municipal Demarcation Act, 1998 (Act No 27 of 1998) and the Local Government: Municipal Structures Act, 1998 (Act No 117 of 1998) define metropolitan areas as large urban settlements with high population densities, complex and diversified economies and a high degree of functional integration across a larger geographical area than the normal jurisdiction of a municipality.

According to the Department of Provincial Affairs and Constitutional Development (1998), the three compelling reasons advanced for introducing metropolitan municipalities in the South African context were:

- To create a basis for equitable and socially just local governance across the municipal jurisdiction;
- To promote strategic land-use planning; and
- To ensure coordinated public investment in physical and social infrastructure.

Planning takes place throughout the metropolitan area and services are shared across the metropolis to develop a metropolitan framework for economic and social development. Metropolitan structures are thought to be better equipped and positioned to enhance competitiveness and overall prosperity for their areas of jurisdiction as they are single functional entities for purposes of investment attraction and do not have to compete with other local municipalities to secure investment. (Department of Provincial Affairs and Constitutional Development, 1998).

As previously stated in Chapter 1, South Africa is divided into 283 municipalities, based on three legal categories, namely Metropolitan Municipalities (8), District Municipalities (44) and Local Municipalities (231). However, the eight metros constitute a significant segment of the total local government sphere in South Africa. See Table 1.1 which indicates that the eight metropolitan municipalities in South Africa have more than 20 million inhabitants, which is 38% of the total estimated mid-year population of 52.98 million of South Africa (Statistics South Africa, 2013).

3.6 THE ORGANISATIONAL EFFECTIVENESS OF LOCAL GOVERNMENT IN SOUTH AFRICA, INCLUDING METROPOLITAN MUNICIPALITIES

Given their constitutional responsibilities, how are local governments in South Africa currently performing? According to the State of Local Government in South Africa Report (DCOGTA, 2009), diverse challenges have been met that undermine the progress and successes achieved so far. The report (DCOGTA, 2009, pp. 4 – 5) states the following:

It is clear that much of local government is indeed in distress, and that this state of affairs has become deeply rooted within our system of governance.

The Report (DCOGTA, 2009, pp. 10 – 11) further states that:

The democratisation of the local sphere is now fraught with community frustration over poor institutionalisation of systems, poor service delivery and poor political governance. A culture of patronage and nepotism is now so widespread in many municipalities that the formal municipal accountability system is ineffective and inaccessible to many citizens. There is now a lack of citizen confidence and trust in the system. This has been publicly evidenced in the spate of community protests since 2004, which may be seen as a symptom of the alienation of citizens from local government.

This state of affairs regarding municipalities in South Africa is supported by an article in the Sunday Times Business Times (Municipal service capacity on the slippery slope, 2013, p. 4), which states that "...the ability of many

municipalities to deliver services to taxpayers and maintain their infrastructure continues to fail". The article further states that the situation has continued to deteriorate between 2008 and 2012.

Regarding the many community protests in South Africa over the last few years, Atkinson (2007) states that there are three main causes for this, namely:

- Municipal *ineffectiveness* in service delivery.
- The poor responsiveness of municipalities to citizens' grievances.
- The conspicuous consumption entailed by a culture of self-enrichment on the part of municipal councillors and staff.

Adding to this, Leibbrandt and Botha (2014) state that the inability to execute strategies is one of the main problems in local government in South Africa today.

It is thus clear that the majority of local governments in South Africa are currently underperforming, are deemed to be ineffective, and are in crisis (Atkinson, 2007; DCOGTA, 2009; Leibbrandt & Botha, 2014).

3.7 CONCLUSIONS REGARDING THE MEASUREMENT OF ORGANISATIONAL EFFECTIVENESS IN THE PUBLIC AND PRIVATE SECTORS

In conclusion, the researcher is of the opinion that:

- Organisational performance in the Public Sector is indeed different from organisational effectiveness in the Private Sector, and that Private Sector measures of organisational effectiveness cannot be used directly as Public Sector measures of organisational performance. (Behn, 2003; Boyne & Chen, 2006; Carter, 1981; Gawande & Wheeler, 1999; Immordino, 2010; Johnson, 1978; Parhizgari & Gilbert, 2004; Poister et al., 2013; Pollitt, 1986; Rainey & Steinbauer, 1999; Stevens, 2005; Van Thiel & Leeuw, 2002; Vaughan, 2010; Waheed et al., 2010).
- Owing to the fact that local government plays a critical role in providing essential services to its citizens in all countries in the world, including South Africa (Barlow, 1991; Constitution of the Republic of South Africa, 1996; Mitlin, 2000; Mortimer, 2004; Steytler, 2005; Suzuki, 1998), its organisational performance will need to be measured as a first step in improving its performance (Beer & Spector, 1993; Brown, 2011; Cummings & Worley, 2009; Falletta, 2005; French & Bell, 1978; Ghorpade, 1971; Hall, 1999; Harrison, 2005; Immordino, 2010; Lee & Brower, 2006; Lusthaus, Adrian, Anderson, Carden & Montalvan, 2002; Steers, 1977; Wiley, 2010).
- It is more difficult to measure organisational performance in the Public Sector, which includes local government, than to measure

organisational effectiveness in the Private Sector (Behn, 2003; Boyne & Chen, 2006; Gawande & Wheeler, 1999; Poister et al., 2013; Pollitt, 1986; Rainey & Steinbauer, 1999; Stevens, 2005; Vaughan, 2010; Waheed et al., 2010).

3.8 CHAPTER SUMMARY

In this Chapter the construct of organisational effectiveness as applicable to Public Sector organisations, including local government, was investigated. The difference in terminology between the Public and Private Sectors was firstly discussed, after which the importance of organisational performance for Public Sector organisations received attention. The difference between Public and Public Sector organisational effectiveness was then investigated, after which the importance of local government as part of the Public Sector received attention. Thereafter the objectives of local government in South Africa, the importance of metropolitan municipalities in Africa and South Africa and the organisational performance of local government in South Africa were all discussed. Finally, conclusions were made regarding the measurement of organisational effectiveness in the Public and Private Sectors.

In the next Chapter the assessment of organisational effectiveness will be discussed.

CHAPTER 4: THE ASSESSMENT OF ORGANISATIONAL EFFECTIVENESS

4.1 INTRODUCTION

In this Chapter the assessment of organisational effectiveness will be discussed. The discussion will begin with the reasons why it is important to assess organisational effectiveness, after which the difficulty of assessing organisational effectiveness will receive attention. After this the characteristics of assessment frameworks or models will be discussed while the evaluation of nine existing assessment frameworks or models which measure the organisational effectiveness of a total organisation will also receive attention. The applicability of the nine existing assessment frameworks to measure the organisational effectiveness of metropolitan municipalities in South Africa will then be discussed, and the Chapter will be concluded with a recommended new, customised, theoretical assessment framework for measuring the organisational effectiveness of a metropolitan municipality in South Africa.

4.2 THE IMPORTANCE OF ASSESSING ORGANISATIONAL EFFECTIVENESS

According to Lusthaus et al. (2002), healthy and vibrant organisations are an essential ingredient for a nation's development. Some organisations perform well, others less well, and some fail altogether. Lusthaus et al. (2002) state that organisations and the groups that comprise them are constantly trying to adapt, survive, perform and influence, and that sometimes they succeed and sometimes they do not. For this reason they argue that systematic diagnosis forms an important part of this process.

This view is supported by Whitefield and Landeros (2006) who state that organisations are continually searching for innovative ways of enhancing competitiveness, as evolving external forces, such as changing demographics, globalisation and technology, require managers to rapidly rethink and retool their organisational management strategies. According to Lee and Brower (2006) organisational leaders and theorists increasingly view organisational diagnosis as a key element in developing and maintaining competitive advantage.

Organisational diagnosis or assessment is also seen as one of the major phases in the organisational development process (Beer & Spector, 1993; Brown, 2011; Cummings & Worley, 2009; French & Bell, 1978), described as the process of understanding how an organisation is currently functioning and providing the information necessary to design improvement interventions (Brown, 2011). For this reason various authors have over the years emphasised the importance of assessing an organisation in order to understand it and improve its functioning (Brown, 2011; Ghorpade, 1971; Hall, 1999; Harrison, 2005; Lusthaus et al., 2002; Steers, 1977).

According to Lee and Brower (2006), the practical use of assessing organisational effectiveness stems from the intent to analyse the present state of an organisation to improve performance of the organisation in accordance with diagnostic findings. This view supports what Lewin (1947) propagated by saying that empirical research on the system should precede attempts to change it, and Martins and Coetzee (2009) state that such a diagnosis assists in understanding a system's current functioning.

Assessing or diagnosing an organisation can be an instrument for penetrating organisational defensiveness and for learning new patterns of behaviour

(Beer & Spector, 1993; Brown, 2011). According to Wiley (2010), it can be a process that helps organisations by doing the following:

- Enhancing their capacity to assess and change the culture of the organisation.
- Providing an opportunity for organisational members to acquire new insights into the dysfunctional aspects of their culture and patterns of behaviour as a basis for developing a more effective organisation.
- Ensuring that the organisation remains engaged in a process of continuous improvement.

This view is supported by Falletta (2005, p. 3), who states that “Organisational diagnosis involves diagnosing or assessing an organisation’s current level of functioning in order to design appropriate change interventions”.

According to Immordino (2010), in order to remain effective, organisations of all kinds must continually improve themselves in response to challenges confronting them, and those in the Public Sector are no exception. This is because governments at all levels are under constant pressure to improve their efficiency, effectiveness and responsiveness. To ensure this, government organisations must continually adopt the methodology of assessment which Immordino (2010, p. 7) defines as:

“A systematic process for examining an organization to create a shared understanding of the current state of the elements that is critical to the successful achievement of its purpose.”

From the above discussion it is thus clear that an assessment or diagnosis of an organisation is an important first step towards improving the effectiveness of any organisation, be it a private or public entity.

4.3 THE DIFFICULTY OF ASSESSING ORGANISATIONAL EFFECTIVENESS

Steers (1977) believes that the difficulty in assessing organisational effectiveness can be attributed to several problems inherent in the existing models of organisational success. He lists eight important problems of measurement that are both diverse in nature and their point of origin:

(1) Construct validity problem

Firstly, Steers (1977) states that a construct is an abstract hypothesis concerning the relationship among several variables. As such he argues that the problem is that we really do not know whether the construct of organisational effectiveness is truly meaningful or useful either for managers or organisational theorists. Thus, we do not have an effectiveness construct to utilize, but only various "pieces" that are somewhat related and that are believed to contribute in some fashion to organisational success. This view is supported by Cameron (1981) who argues that organisational effectiveness is a construct, and as such it cannot be observed directly.

(2) Criterion stability problem

A second problem of measuring organisational effectiveness that is highlighted by Steers (1977), is that many of the evaluation criteria that are employed in attempting to measure effectiveness in organisations have been found to be relatively unstable over time. That is, the criteria used to

measure effectiveness at one point in time may be inappropriate or misleading at a later time.

(3) Time perspective problem

The third problem highlighted by Steers (1977) concerns the time perspective which one wishes to use when evaluating effectiveness, e.g., a short-term, intermediate or long-term perspective. According to him, each perspective has implications regarding organisational success. This is supported by Cameron and Whetten (1983), who state that selecting an appropriate time frame for measuring the organisational effectiveness of an organisation is important because long-term effectiveness may be incompatible with short-term effectiveness.

(4) Multiple criteria problem

Although Steers (1977) acknowledges that a multivariate approach to evaluating effectiveness has a major advantage due to its comprehensive nature, integrating several factors into one unifying framework, he argues that this advantage can simultaneously represent a problem where such criteria are in conflict with each other. The fourth problem that he thus highlights is that if we accept such criteria for effectiveness, organisations by definition cannot be effective: they cannot maximize all dimensions.

(5) Measurement precision problem

The fifth problem of measuring organisational effectiveness that is highlighted by Steers (1977) concerns a measurement precision problem. He argues that when we discuss the "measurement" of organisational effectiveness, it is assumed that it is possible to quantify the construct in a

consistent and accurate fashion. However, he argues that such quantification or measurement is often made difficult due to the complexity and magnitude of the construct.

(6) Generalisability problem

Steers (1977) states that the sixth problem is the extent to which one can generalize evaluation criteria used to measure organisational effectiveness to other organisations. For example, he points out that appropriate evaluation criteria for a large business firm may be inappropriate for evaluating a Public Sector entity. Supporting this view Herman and Renz (1999) and Sowa et al. (2004) argue that there cannot be one universal model of organisational effectiveness. They state that a specific model must be developed for a specific organisation given its specific circumstances and incorporating multiple dimensions specific to that organisation.

(7) Theoretical relevance problem

A seventh problem highlighted by Steers (1977) concerns the theoretical significance of models of organisational effectiveness. He states that although various theories and models have been developed to reflect the nature of organisational effectiveness, there is doubt as to the purposes which are served by these models. Do they allow us to make predictions concerning future behaviour? If such models do not assist us in understanding organisational processes, structures or behaviours, Steers (1977) argues that they are of little value from a theoretical standpoint.

(8) Level of analysis problem

The last problem discussed by Steers (1977) concerns the level of analysis of organisational effectiveness. He states that most models of effectiveness deal solely at the macro level, but ignore the critical relation between individual behaviour and the larger issue of organisational success. He thus argues that there is in fact little integration between macro and micro models of performance and effectiveness. This view is supported by Chameron and Whetton (1983), who argue that the assessment of organisational effectiveness must be made at various levels, including individual, subunit or organisational levels.

4.4 CHARACTERISTICS OF ASSESSMENT FRAMEWORKS/ MODELS

4.4.1 Introduction

According to Lusthaus et al. (2002), organisational assessment is a framework for analysing the strengths and weaknesses of an organisation in relation to its performance. This view is supported by Immordino (2010), who states that an assessment process is a structured method of collecting and evaluating information about those areas of an organisation's operations that are most closely associated with organisational excellence.

Falletta (2005) argues that an organisational model is a representation of an organisation that helps us to understand more clearly and quickly what we are observing in organisations. Howard (1994) supports this view, explaining that organisational models are useful for enhancing our understanding of organisational behaviour, helping us to categorise and interpret data about an organisation, and helping to provide a common, short-hand language.

Falletta (2005) elaborates on this and states that a model provides a systematic way to collect data on the organisation and to understand and categorise the data. Both Falletta (2005) and Wiley (2010) state that models often identify vital organisational variables which are hypothesised to exist based on prior research and also depict the nature of the relationships between these key variables.

French et al. (1978) argue that models are important in organisational assessment, as they help to choose which data to attend to and which data to ignore, to determine what kinds of analysis should be applied to the data, and to interpret the meaning of the output of those analyses.

4.4.2 The basic components of an assessment framework/model

According to Harrison (2005), organisational assessment frameworks or models are primarily models of organisational behaviour. These models are aimed at explaining the patterns of behaviour that can be observed within and around organisations.

Harrison (2005) states that no matter what type of model is being discussed, a model will always contain three universal components. These common components are:

- An Objective. The formulation of a model begins with determining what it is that we want the model to do. Once the objective is known, the key variables that may affect this objective can be identified, their order classified, and relationships defined.

- Variables. General characteristics that can be measured and that change in either amplitude and/or intensity are called variables. These are critical or key elements that affect the objective we have stated. The discussion usually centres around three types of variables, namely dependant, independent and moderating variables. A dependant variable is a response that is affected by an independent variable. An independent variable affects the dependant variable. An independent variable is the presumed cause of the dependant variable; the presumed effect. Moderating variables abate the effects of the independent variable on the dependant variable.
- Relationships. What is the relationship among variables in our model? What is the cause and what is the effect? All models imply some or other relationship between the variables.

4.4.3 How assessment frameworks/models differ

According to French et al. (1978), the basic difference among models is in the choice of constructs and the specification of relationships among constructs. In the simplest of terms, which factors are important in understanding organisational behaviour, and how are those factors related to each other? French et al. (1978) provide the following list of other factors of importance:

- Level of analysis.
- Nature of model specified boundaries.
- Conceptions of organisational purpose.

- Level of specificity.
- Nature of relationships among constructs and variables.

4.4.4 Criteria for effective assessment frameworks/models

According to Borg and Mastrangelo (2008) and Harrison (2005), the following criteria can be used to determine the effectiveness and usefulness of an assessment model:

- It must be explicit.
- It must be theory - research based.
- It must be operationally defined.
- It must be empirically validated.
- It must have face validity.
- It must be generalisable.

Harrison (2005) argues that a listing of criteria such as the above is basically aspirational rather than descriptive of currently used models, as very few models at any of the levels of analysis meet all these criteria. On the other hand he argues that it is important to keep such criteria in mind when considering the choice of a set of models to use for assessment.

4.4.5 Benefits of using an assessment framework/model to measure organisational effectiveness

According to Borg and Mastrangelo (2008), Falletta (2005), Hausser (1980), Immordino (2010), and Wiley (2010), using a specific model in a diagnostic effort can provide many benefits, both theoretical and practical. The model can effectively guide the entire process from planning through analysis. Borg and Mastrangelo (2008), Hausser (1980), and Wiley (2010) mention several functions that a model can serve when a diagnosis is being planned:

- Using a model facilitates communication among the assessors, who will be able to approach their task with a common set of terms and frame of reference and avoid confusing, non-productive, and personalized abstractions of the domain to be covered.
- If a model can be represented graphically, it becomes a “map” of that domain to which everyone can refer and return when necessary.
- A model makes clear the factors and relationships that are of interest and, by implication, those that are not.
- A model is perhaps most beneficial in that it defines what should be assessed.
- A model can also indicate other predictors and possible moderators that should be measured to adequately account for the dependant variables. Because of this, gaps in the

assessment, which could later preclude meaningful explanations of the phenomena being studied, can be avoided.

- A further benefit that a model provides at the planning stage regards the generation of research hypotheses. The relationships that a model depicts usually translate rather easily into testable hypotheses.
- Models can to some degree suggest the analytic techniques that will be necessary to test the hypotheses derived from them.
- Once the assessment effort has begun and data been collected, a model again becomes an invaluable tool. The model organizes the data; that is, the measures have a priority place in the scheme of things and the assessors are not left with a mass of variables that they must sort out after collecting data. Just as the model was an aid in generating hypotheses, it can also be useful for drawing conclusions and interpreting the data.
- In situations where hypotheses are not supported by the data or where findings are generally confusing, a model can be of great benefit by indicating other dynamics in the system that may account for the results and thereby suggest additional tests and explications. If a specific model had not been used to plan the assessment so that other elements of the model could be measured, such refinements of the assessment effort would be difficult.
- Finally, models can be beneficial if the results of the assessment effort have to be communicated to others. In the research

community a model can provide a theoretical context into which the assessment can be seen to fit. If the results of the assessment are to be shared with an audience outside the scientific community (e.g., an organisation development client group), using a model can be of great help. The model can establish a common language for all involved and can provide a graphic, non-abstract representation of the issues of interest. It gives structure to any data feedback and thus minimizes a potpourri or “data dump” effect. Also, the model’s facilitation of communication and comprehension can help maintain continuity if the effort is to be conducted over a long period of time.

4.5 AN EVALUATION OF EXISTING ASSESSMENT FRAMEWORKS/ MODELS WHICH MEASURE THE ORGANISATIONAL EFFECTIVENESS OF A TOTAL ORGANISATION TO DETERMINE THEIR APPLICABILITY TO METROPOLITAN MUNICIPALITIES IN SOUTH AFRICA

4.5.1 Introduction

According to Brown (2011), Cummings and Worley (2009), French et al. (1978), Harrison (2005) and Hausser (1980), all existing assessment frameworks/models can be grouped into three levels, namely individual-level, group-level and organisation-level. The first two categories focus on individual and group levels of functioning in organisations, while the latter category focuses on the functioning of the entire organisation. Many frameworks and models exist for assessing the *total functioning* of Private and Public Sector organisations (Burke & Litwin, 1992; Falletta, 2005; Kaplan & Norton, 1992; Lawrence & Lorsch, 1969; Nadler & Tushman, 1977; Porter, et al., 1976; Tichy, 1983; Weisbord, 1976). However, not all organisation-

level diagnostic frameworks or models assess the *organisational effectiveness* (emphasis added) of an organisation.

As stated in the Problem Statement in Chapter 1 of this thesis, *only assessment frameworks which assess the organisational effectiveness of a total organisation* (emphasis added) will be evaluated to determine their applicability to metropolitan municipalities in South Africa.

Table 4.1 below sets out the nine assessment frameworks/models which comply with the abovementioned criterion and which will be subsequently evaluated. Each of the below-mentioned frameworks/models will thus be discussed and evaluated to determine their applicability to metropolitan municipalities in South Africa.

4.5.2 Porter, Lawler and Hackman's Model of Individual Performance in Organisations

4.5.2.1 An explanation of the model

In their text on behaviour in organisations, Porter et al. (1976) have included a model of individual performance in organisations. To the degree that an organisation's functioning can be conceived of as the combined performance of its individual members, *this model can be considered one of total organisational functioning* (emphasis added). See Figure 4.1 below for a visual exposition of this model. The variables and processes that comprise the model suggest that it has grown out of its developers theoretical and

Table 4.1:

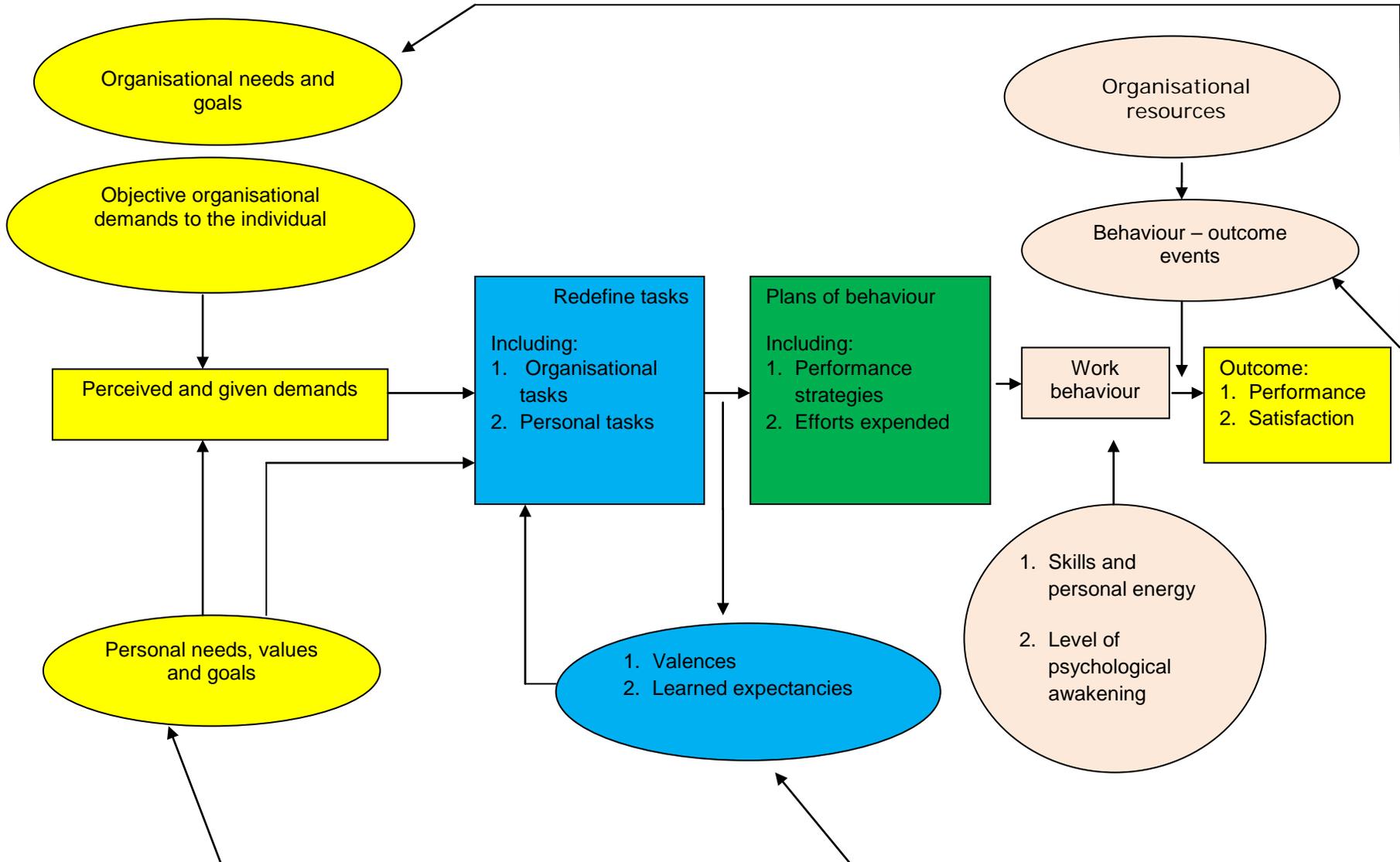
Assessment Frameworks/Models which Assess the Organisational Effectiveness of a Total Organisation

Name of framework or model	Reference(s)
Porter, Lawler and Hackman's Model of Individual Performance in Organisations	Porter, Lawler & Hackman (1976)
Weisbord's Six-Box Model	Weisbord (1976)
The Nadler-Tushman Congruence Model for Organizational Analysis	Nadler & Tushman (1977)
The 7-S/8-S Framework	Waterman, Peters & Phillips (1980); Higgins (2005)
Tichy's Technical Political Cultural (TPC) Framework	Tichy (1983)
The Causal Model of Organizational Performance	Burke & Litwin (1992)
The Balanced Scorecard	Kaplan & Norton (1992)
The South African Excellence Model for Local Government	Nel & Haycock, 2005
The High Performance Model	Wiley (2010)

research interests in such areas as the impact of individual differences, models of work motivation, and individual responses to task demands. It is based on an extensive range of empirical research rather than being the product of a single programme of research undertaken to produce a performance model.

Basically, the model describes stages in the performance process. Although its focus is clearly at the individual level, certain organisation-level variables are also considered as they impact on the process. The model specifies five stages in the performance process ranging from expectations to outcomes.

Figure 4.1: Porter, Lawler & Hackman's Model of Individual Performance in Organisations (Porter et al., 1976)



- In the first stage, called perception and appraisal of organisational demands, expectations about work behaviour are set for the individual. This occurs primarily through the communication of organisational demands on the individual, which were determined according to the needs and goals of the organisation. At the same time, however, the perception and appraisal of those behavioural demands may be affected by the personal needs and values of the individual.
- Having perceived an organisational demand, the individual proceeds to the second stage of performance where task redefinition occurs. Once again personal needs and values may operate to redefine the task to the point where there is congruence between those individual factors and the accepted task. In addition, in the case where multiple or conflicting tasks are facing the individual, perceived outcome expectancies and the valences for those outcomes are applied to the redefinition of the task. In other words, the choice of task to be ultimately performed operates according to the principles of an expectancy theory of motivation.
- These expectancy principles also apply as the individual comes to the third stage of performance, called behavioural plan development. Here, the individual decides on the particular performance strategy to be used and the amount of effort to be expended, depending on the expectancies and valences associated with alternative behavioural plans.
- The fourth performance stage amounts to the actual work behaviour of the individual. While this behaviour proceeds rather

directly from the third stage - choice of a behavioural plan - it can be affected by the level of skills and energy of the performer. Finally, at the fifth stage, outcomes are obtained, which include both performance or production outcomes and personal or attitude outcomes. Although the individual's work behaviour contributes directly to these outcomes, obtaining them is also determined by contingencies operating in the organisation to allow particular outcomes to result from particular behaviours. Those behaviour-outcome contingencies are set up according to the way the organisation applies its resources.

The development of these outcomes and operation of these contingencies actually produce an additional stage in the performance process. Feedback to both the organisation and individual allows the organisation to redefine its demands or alter behaviour-outcome contingencies if necessary and reinforces or changes the learned expectancies of the individual. Perhaps the two most distinguishing features of this model are its clear focus at the individual level and its thorough incorporation of an expectancy model of motivation. Although it certainly does not ignore organisation-level variables, the model takes account of the heart of the individual difference domain of variables such as personal needs and values, outcome valences, and level of skill and arousal. Further, the dynamics of an expectancy model, including the operation of organisational behaviour-outcome contingencies and the feedback processes they trigger, are integrated into the model at relevant stages in the performance process. A basic functional model has been made more robust by the interweaving of organisational processes.

4.5.2.2 An assessment of the applicability of the individual performance model to measure the organisational effectiveness of a metropolitan municipality

This researcher is of the opinion that, although this model considers the functioning of a total organisation, the emphasis is primarily on individual behaviour. Although reference is made to certain internal aspects such as personal and organisational tasks, performance strategies and work behaviour, these are all related to individual motivation and behaviour, and not to the effective internal functioning of the organisation. And, although reference is also made to organisational outcomes such as performance, which one could assume to include the achievement of organisational goals (the goal approach to organisational effectiveness - Beulens et al., 2011; Cameron, 1986; Cunningham, 1977; Glunk & Wilderom, 1999; Hannan & Freeman, 1977; Martz, 2008; Price, 1972; Steers, 1977; Yuchtman & Seashore, 1967), individual behaviour is considered to be the main input which ultimately determines these organisational outcomes (Porter et al., 1976).

The model makes no mention of exploiting the environment for resources (system resource approach to organisational effectiveness - Beulens et al., 2011; Cameron, 1986; Glunk & Wilderom, 1999; Price, 1972; Yuchtman & Seashore, 1967), the healthy functioning of internal processes (internal processes approach to organisational effectiveness - Beulens et al., 2011; Bluedorn, 1980; Cameron & Whetten, 1983; Daft, 1992; Glunk & Wilderom, 1999; Martz, 2008), satisfying the needs of key stakeholders (strategic constituencies approach to organisational effectiveness - Beulens et al., 2011; Cameron & Whetten, 1983; Daft, 1992; Glunk & Wilderom, 1999; Martz, 2008; Tsui, 1984; Zammuto, 1984), or the conflicting values approach to organisational effectiveness (Cameron and Whetton, 1983;

Faehrman & Quinn, 1985; Glunk & Wilderom, 1999; Martz, 2008; Quinn & Cameron, 1983; Quinn & Rohrbaugh, 1981). Furthermore, this model was not specifically developed to measure the performance of the Public Sector in general or metropolitan municipalities in particular (Porter et al., 1976). As such this researcher is of the opinion that this model does not fulfil the requirement of being a valid framework for measuring the total organisational effectiveness of a metropolitan municipality in South Africa.

4.5.3 Weisbord's Six-Box Model

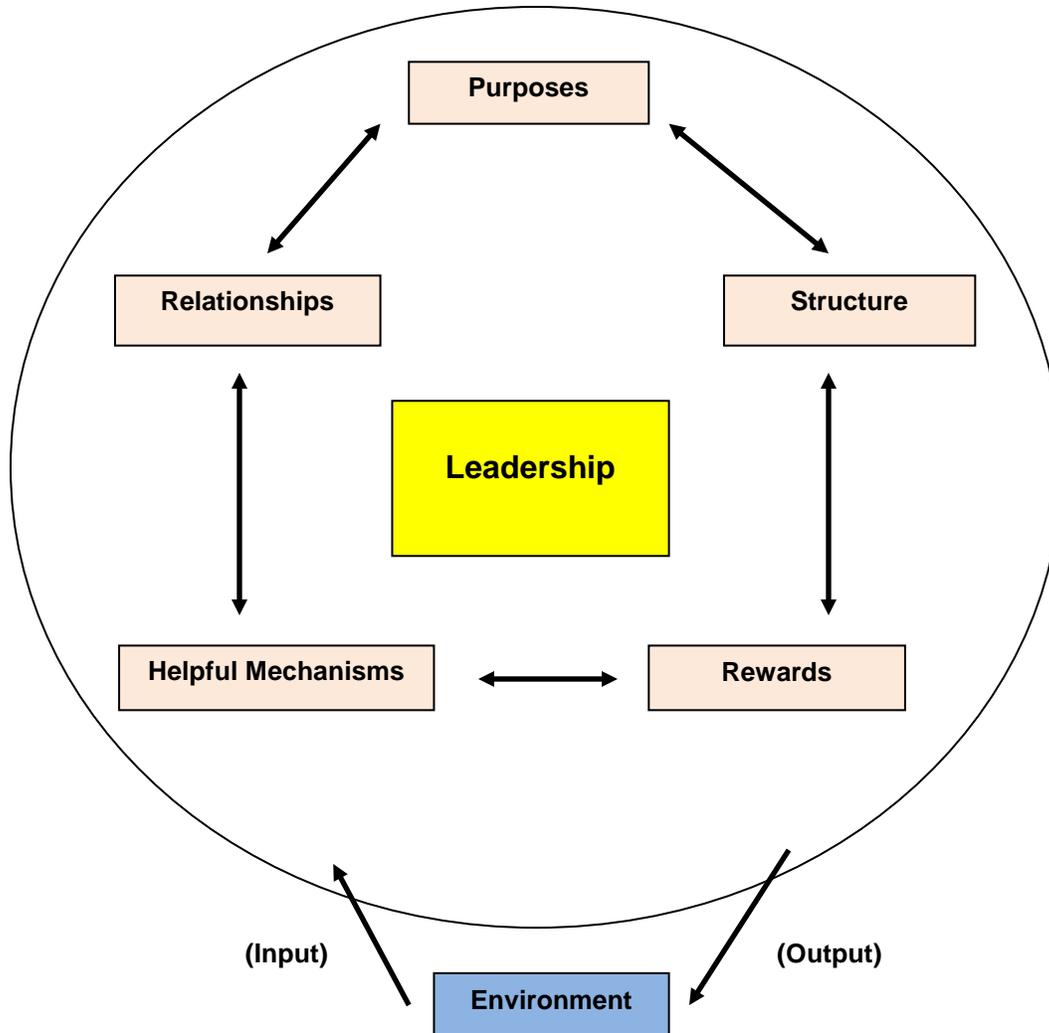
The Six-Box Model of organisational diagnosis, developed by Weisbord (1976), identifies six interrelated processes inherent in all organisations. Weisbord (1976) notes that process issues usually are systemic (part of the organisation's management culture), and that this culture can be described in two ways:

- The "fit" between organisation and environment; the extent to which purposes and structure support high performance and ability to change with conditions; and/or
- The "fit" between individual and organisation; the extent to which people support or subvert formal mechanisms intended to carry out an organisation's purposes.

4.5.3.1 Organisational environment

As can be seen from the visual exposition of this model in Figure 4.2 below, Weisbord (1976) hypothesised that organisations exist in environments, forces that are difficult to control from inside and that demand a response.

Figure 4.2: Weisbord's Six-Box Model (Weisbord, 1976)



He stated that such forces include customers, governments, unions, families, and communities. Although organisations are "open systems", Weisbord (1976) argued that they must establish some boundaries, and judgments must be made about where these lie. A boundary can be drawn around contracts, lines of business, formal membership, and similar areas. Within

the boundary, the six boxes interact to create an input/output system whose function is to transform resources into goods or services.

4.5.3.2 Purposes

According to Weisbord's (1976) model, when we examine an organisation's purpose, we must be concerned with both the formal goal clarity and the informal commitment to those goals. Goal clarity must exist before goal agreement is possible. People's purposes are some balance between "what we have to do" and "what we want to do" (for growth, self-expression, idealism, and so on). The result is priorities. Poorly defined or overly broad purposes create anxiety. When people disagree on priorities, conflict exists. Some individuals may resist efforts to focus organisational efforts because their individual power is based on the existing confusion or diffusion.

4.5.3.3 Structure

According to Weisbord (1976), when we consider structure, we need to be aware of the formal organisational chart and the informal ways in which work actually is accomplished (or not accomplished). It is important to look for the fit between the goal (output) and the structure producing it (formal system), then notice how the work actually is assigned and performed and how people use or subvert the organisational chart.

4.5.3.4 Relationships

The formal aspects of relationships are described by Weisbord (1976) as involving who deals with whom on what issues; the informal aspects involve the quality of those relationships. The following three types of work relationships are most important:

- Between people (peers) or boss-subordinate;
- Between units that do different tasks;
- Between people and their technologies (for example, systems or equipment).

In the formal system, it is important to consider relationships in terms of how much interdependence is required to get the work done. There are two possible dysfunctions: (1) people need to work together and do not do it well; or (2) people do not need to work together, but try to force collaboration (in the belief that they should).

A second level of relationship diagnosis relates to the degree of built-in conflict. The more people or units work together to achieve organisational results, the more the quality of their relationships matters. Some units may always be in conflict; this is legitimate because each unit needs to see things differently from the other in order to do its work. Such conflict is potentially useful and should be managed rather than suppressed. A third important issue is how conflict is managed.

4.5.3.5 *Rewards*

According to Weisbord (1976), when examining an organisation's rewards or incentives system, one must consider both the explicit system of salaries, wages, bonuses, and the like, and the more implicit rewards of how members of the organisation respond emotionally to successful task accomplishment and how much support for achievement there is in the system. Having a formal reward system does not guarantee that people will

feel or act as if they are rewarded. Studies of motivation indicate that a reward system that pays only salary and fringe benefits is inadequate unless people value their work and perceive in it a chance to grow. The fit between person and organisation improves when there is a chance for growth, responsibility, and achievement.

A second important issue is "equity" or fairness among members of the organisation. Weisbord (1976) states that people's feelings or beliefs determine whether or not they act as if they are rewarded. It is important to consider what the organisation says it pays for or rewards, what it actually rewards, and what people feel rewarded or punished for doing.

4.5.3.6 Leadership

Weisbord (1976) states that in the area of leadership, one needs to note both what the management responsibilities of the leaders are and how effectively they carry out these responsibilities. There is evidence that different management styles are more or less effective depending on the situation. The best a manager can do is to try to understand the organisation and its requirements and then judge how much his or her usual style contributes to or blocks progress and how possible it would be to learn new skills. Although interpersonal skills are necessary (and most functional in unstructured situations), they contribute little to organisational performance in the absence of goal clarity and goal agreement.

According to Weisbord (1976), the four essential leadership tasks are (1) defining purposes, (2) embodying purposes in programmes, (3) defending institutional integrity, and (4) managing internal conflict. Much turmoil in organisations, especially at administrative levels, results from the failure of leadership to accomplish these four tasks. Leaders should know where the

trouble spots are and how they affect the organisation. Leaders need to scan the six boxes, look for problems in both formal and informal systems, and fix them appropriately. This task can be shared but not delegated. Leadership requires, in addition to behavioural skill, an understanding of the environment and a will to focus purposes, especially if there is a problem in one of the six boxes. A large part of a leader's role is to use mechanisms designed to keep formal and informal systems in balance (Weisbord, 1976).

4.5.3.7 Helpful Mechanisms

Weisbord (1976) explains helpful mechanisms as the procedures, policies, meetings, systems, committees, bulletin boards, memos, reports, spaces, information, and so on, that facilitate efforts related to the contents of all the other boxes. Mechanisms typically facilitate problem solving, planning, budgeting, control, and measurement (information). An effective organisation continually revises its mechanisms as the need arises. Problems with mechanisms are understood most easily by observing the flow of work at the points at which it seems clogged.

4.5.3.8 Use of the model

Weisbord (1976) states that the Six-Box Model provides a useful overview of the critical components of organisational life. It is a framework that can be applied in various settings, particularly to guide diagnoses and interventions.

4.5.3.9 An assessment of the applicability of the Six-Box Model to measure the organisational effectiveness of a metropolitan municipality

It is the researcher's view that although Weisbord's (1976) model considers the functioning of a total organisation, it addresses only one of the traditional approaches to organisational effectiveness, namely the internal processes approach (Beulens et al., 2011; Bluedorn, 1980; Cameron & Whetten, 1983; Daft, 1992; Glunk & Wilderom, 1999; Martz, 2008). It is thus useful to assess the "health" of the internal processes of an organisation, which, according to Weisbord (1976), equates to the effectiveness of the organisation. Although it mentions an organisation's response to forces in the external environment (such as satisfying the needs of customers and clients), it does not specifically address an organisation's exploitation of the external environment (systems resource approach to organisational effectiveness - Beulens et al., 2011; Cameron, 1986; Glunk and Wilderom, 1999; Price, 1972; Yuchtman & Seashore, 1967), in order to obtain critical resources needed to ensure its effective functioning or the impact of the external environment on organisational effectiveness.

Although the model states that the purpose of an organisation must be clarified (Weisbord, 1976), it does not emphasise that the achievement of these organisational goals is important for effective functioning (the goal approach to organisational effectiveness - Beulens et al., 2011; Cameron, 1986; Cunningham, 1977; Glunk & Wilderom, 1999; Hannan & Freeman, 1977; Martz, 2008; Price, 1972; Steers, 1977; Yuchtman & Seashore, 1967). The model also does not address the importance of satisfying the needs of key stakeholders (the strategic constituencies approach to organisational effectiveness - Beulens et al., 2011; Cameron & Whetten, 1983; Daft, 1992; Glunk & Wilderom, 1999; Martz, 2008; Tsui, 1984; Zammuto, 1984), nor the

conflicting values approach to organisational effectiveness (Cameron and Whetton, 1983; Faehrman & Quinn, 1985; Glunk & Wilderom, 1999; Martz, 2008; Quinn & Cameron, 1983; Quinn & Rohrbaugh, 1981). Furthermore, this model was not specifically developed to measure the performance of the Public Sector in general or metropolitan municipalities in particular (Weisbord, 1976). As such the researcher is of the opinion that this model does not fulfil the requirement of being a valid framework for measuring the total organisational effectiveness of a metropolitan municipality in South Africa.

4.5.4 The Nadler-Tushman Congruence Model of Organisational Behaviour

4.5.4.1 An explanation of the model

According to Burke (2011), Nadler and Tushman (1977) developed their model at about the same time as Weisbord (1976) was creating his, and they made the same assumptions: that an organisation is an open system and therefore influenced by its environment (inputs) and also shapes its environment, at least to some extent, by its outputs.

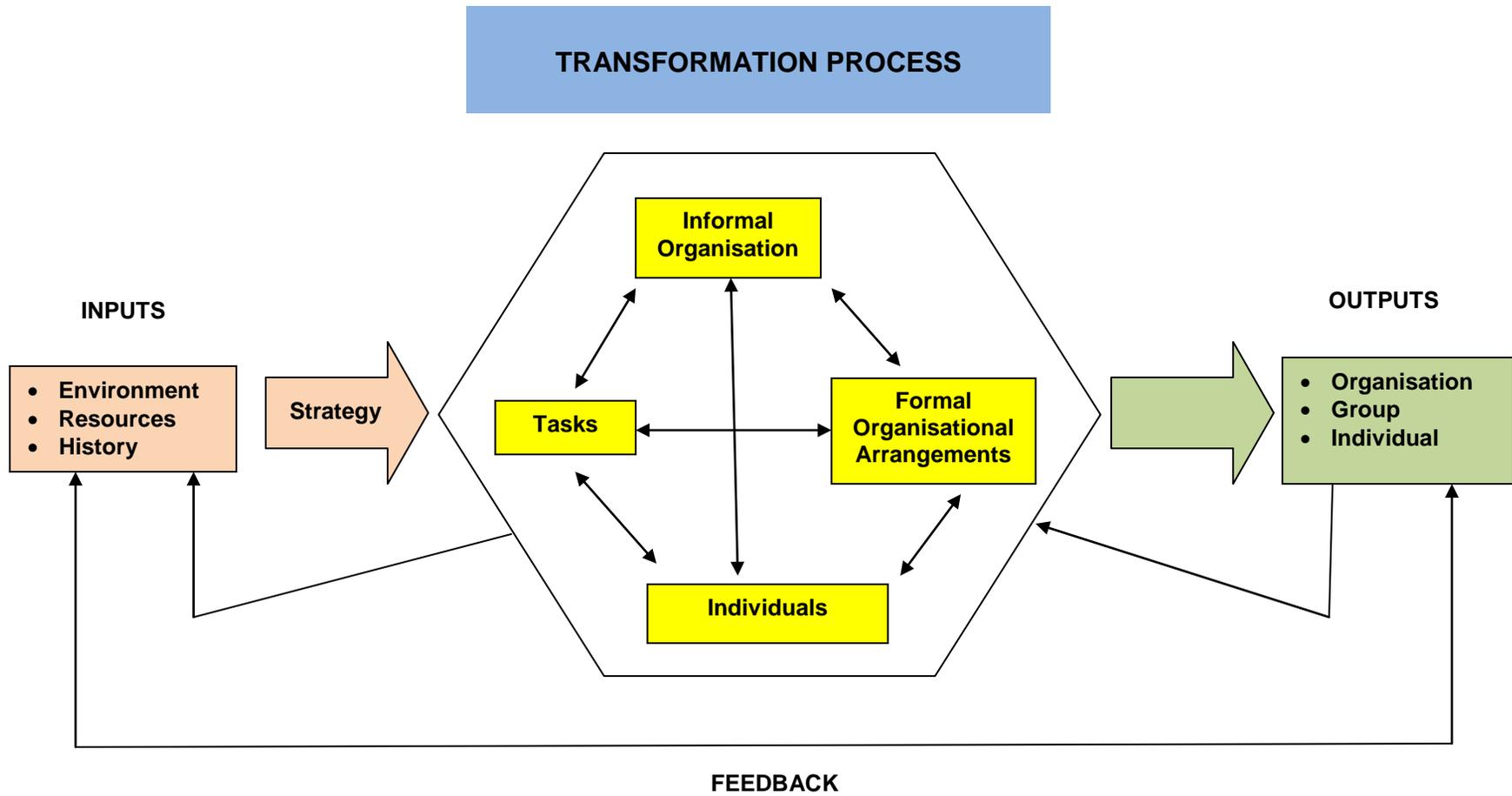
According to Katz and Kahn (1966), as a system an organisation is composed of interdependent parts. Change in one part of the system produces changes in other parts. An organisation also has the property of equilibrium; the system generates energy to move toward a state of balance among its parts. In addition, an organisation needs to maintain favourable ratios of input and output with the environment in order to survive over time.

According to Falletta (2005), although the system perspective is useful, it alone may be too abstract to be useful to managers. In response, a number of organisational theorists have attempted to develop more pragmatic theories or models based on the system paradigm (Falletta, 2005). Nadler and Tushman's (1977) approach, which they call the Congruence Model of Organisational Behaviour, represents such an attempt. See Figure 4.3 below for a visual exposition of this model. Nadler and Tushman's (1977) model depends on the relationships between input, transformation, and output.

In this framework, the principal inputs to the system of organisational behaviour are the following:

- Environment, which provides constraints, demands, and opportunities;
- Resources available to the organisation;
- History of the organisation; and
- Organisational strategy, which may be the most crucial input because it consists of key decisions regarding the match of the organisation's resources with the constraints, demands, and opportunities in the environment and within a historical context.

Figure 4.3: Nadler & Tushman's Congruence Model of Organisational Behaviour (Nadler & Tushman, 1977)



In general, Nadler and Tushman (1977) state that *the output of the system is the organisation's effectiveness* (emphasis added) at performing in a manner consistent with its strategic goals. Specifically, the output includes not only organisational performance as a whole but also its major contributors, which are group performance, individual behaviour, and affect. Thus, the organisation is viewed as a mechanism that takes inputs (strategy and resources in the context of history and environment) and transforms them into outputs (patterns of individual, group, and organisational behaviour).

Nadler and Tushman (1977) argue that the major focus of organisational analysis should therefore be this process of transformation. According to their congruence model, the organisation is composed of the following four major components:

- The tasks of the organisation, or the work to be done and its critical characteristics;
- The people who are to perform organisational tasks;
- The formal organisational arrangements, which include various structures, processes, and systems that are designed to motivate individuals and to facilitate task completion; and
- The informal organisational arrangements, which include patterns of communication, power, and influence as well as values and norms that are neither planned nor written but tend to emerge over time and that ultimately characterize actual functioning.

The basic hypothesis of the model is that *an organisation is most effective when its major components are congruent with one another* (emphasis added). Organisational problems, such as ineffectiveness, stem from poor fit or lack of congruence among organisational components. For example, the skills and abilities of the individuals who are available to do the necessary tasks must be congruent with the demands of those tasks; at the same time, the rewards that the work provides must be congruent with the needs and desires of the individuals (Nadler & Tushman, 1977).

This approach to organisations is a contingency approach. There is no one best organisational design or style of management or method of working; rather, different patterns of organisation and management are most appropriate in different situations. The model recognizes the fact that individuals, tasks, strategies, and environments may differ greatly from organisation to organisation (Nadler & Tushman, 1977).

4.5.4.2 An assessment of the applicability of the congruence model for organisational analysis to measure the organisational effectiveness of a metropolitan municipality

It is the researcher's view that although Nadler and Tushman's (1977) model considers the functioning of a total organisation, it addresses only one of the traditional approaches to organisational effectiveness, namely the internal processes approach (Beulens et al., 2011; Bluedorn, 1980; Cameron & Whetten, 1983; Daft, 1992; Glunk & Wilderom, 1999; Martz, 2008). Like Weisbord's Six-Box Model (Weisbord, 1976), it is thus useful to analyse the internal functioning of an organisation as part of the transformation process. An organisation would then be most effective when its major components are congruent with one another (Nadler & Tushman, 1977; Weisbord, 1976).

However, the model does not address an organisation's exploitation of the external environment (systems resource approach to organisational effectiveness - Beulens et al., 2011; Cameron, 1986; Glunk and Wilderom, 1999; Price, 1972; Yuchtman & Seashore, 1967), the achievement of organisational goals (the goal approach to organisational effectiveness - Beulens et al., 2011; Cameron, 1986; Cunningham, 1977; Glunk & Wilderom, 1999; Hannan & Freeman, 1977; Martz, 2008; Price, 1972; Steers, 1977; Yuchtman & Seashore, 1967), the satisfaction of the needs of key stakeholders (the strategic constituencies approach to organisational effectiveness - Beulens et al., 2011; Cameron & Whetten, 1983; Daft, 1992; Glunk & Wilderom, 1999; Martz, 2008; Tsui, 1984; Zammuto, 1984), nor the conflicting values approach to organisational effectiveness (Cameron and Whetton, 1983; Faehrman & Quinn, 1985; Glunk & Wilderom, 1999; Martz, 2008; Quinn & Cameron, 1983; Quinn & Rohrbaugh, 1981).

A further criticism of this model is that it was not specifically developed to measure the organisational effectiveness of the Public Sector in general or metropolitan municipalities in particular (Nadler & Tushman, 1977). As such the researcher is of the opinion that this model does not fulfil the requirement of being a valid framework for measuring the total organisational effectiveness of a metropolitan municipality in South Africa.

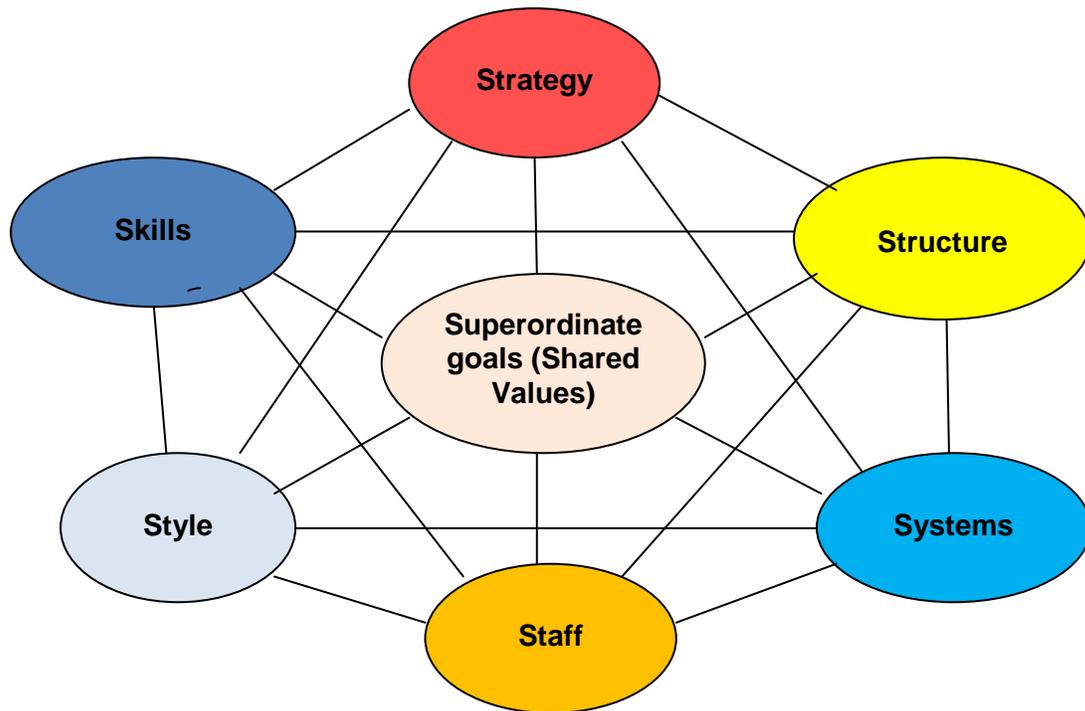
4.5.5 The 7-S/8-S Framework

4.5.5.1 An explanation of the framework

In 1980, Waterman et al. developed the 7-S Framework using their experience gained from consulting for major clients. The authors stated that the framework was useful in diagnosing the causes of organisational

problems as well as for formulating programmes for organisational improvement. Figure 4.4 below gives a visual exposition of this model.

Figure 4.4: The 7-S Framework (Waterman et al., 1980)



Waterman et al. (1980) claim that effective organisational change is the relationship between structure, strategy, systems, style, skills, staff and superordinate goals (also called shared values). They state that organisational effectiveness stems from the interaction of these seven elements and that there is no starting point or implied hierarchy. The authors explain each of the seven elements as follows:

- Structure. Structure is defined as the skeleton of the organisation or the organisational chart. They state that the challenge lies in developing the ability to focus on those dimensions which are important to the organisation's evolution.

- Strategy. By strategy the authors mean “those actions that a company plans in response to or anticipation of changes in the external environment” (Waterman et al., 1980, p. 20.)
- Systems. These are explained as all the procedures, formal and informal, that make the organisation go, day by day and year by year.
- Style. Style is explained as the way in which managers behave, and they state that it is a reflection of an organisation’s culture.
- Staff. The authors see staff as the people in an organisation which comprise a pool of resources to be nurtured, developed, guarded, and allocated.
- Skills. Skills are seen as the dominant attributes, or capabilities of the organisation.
- Superordinate goals. Also called shared values, the superordinate goals are explained as the guiding concepts, a set of values and aspirations, often unwritten, that go beyond the conventional formal statement of organisational objectives.

4.5.5.2 *Use of the framework*

Although Waterman et al. (1980) continuously refer to the 7-S Framework as a model of organisational change, and although the notion of performance or effectiveness is not made explicit in the model (Falletta, 2005), the authors often use the term “organisational effectiveness”. As such they state that “Our central idea is that organization effectiveness stems from the

interaction of several factors", referring to the seven factors in the framework (Waterman et al., 1980, p. 17).

Higgins (2005) adapted the Waterman et al. (1980) 7-S Framework and called it the 8-S Model. The 8-S Model differs from the original 7-S Framework in two ways, namely:

- Resources has replaced Skills. Higgins (2005) explains that an organisation cannot successfully execute strategy without using additional resources, besides the skills of the 7-S Framework, such as money, information, technology and the time required of top management and others in the organisation.
- An eighth "S", Strategic Performance, has been added. The introduction of Strategic Performance by Higgins (2005) gives focus and refers to the results which the organisation achieves, such as the setting of strategic objectives to measure results.

By adding Strategic Performance, Higgins (2005) has moved the adapted 7-S Framework closer to a model of organisational effectiveness, as he argues that the alignment of the eight elements can lead to organisational performance. However, he still sees the model as a roadmap for implementation for "what needs to be changed in the organization in order for the strategy to work" (Higgins, 2005, p. 12).

4.5.5.2 An assessment of the applicability of the 7-S/8-S Framework to measure the organisational effectiveness of a metropolitan municipality

It is the researcher's view that although the 7-S Framework considers the functioning of a total organisation, it addresses only one of the traditional approaches to organisational effectiveness, namely the internal processes approach (Beulens et al., 2011; Bluedorn, 1980; Cameron & Whetten, 1983; Daft, 1992; Glunk & Wilderom, 1999; Martz, 2008). Furthermore, although an organisation is considered to be effective if the variables are congruent as a system (Waterman et al., 1980), the notion of organisational effectiveness is not made explicit in the model (Falletta, 2005), but rather implied as a result of the alignment of the seven elements.

The model also does not address an organisation's exploitation of the external environment (systems resource approach to organisational effectiveness - Beulens et al., 2011; Cameron, 1986; Glunk and Wilderom, 1999; Price, 1972; Yuchtman & Seashore, 1967), the achievement of organisational goals (the goal approach to organisational effectiveness - Beulens et al., 2011; Cameron, 1986; Cunningham, 1977; Glunk & Wilderom, 1999; Hannan & Freeman, 1977; Martz, 2008; Price, 1972; Steers, 1977; Yuchtman & Seashore, 1967), the satisfaction of the needs of key stakeholders (the strategic constituencies approach to organisational effectiveness - Beulens et al., 2011; Cameron & Whetten, 1983; Daft, 1992; Glunk & Wilderom, 1999; Martz, 2008; Tsui, 1984; Zammuto, 1984), nor the conflicting values approach to organisational effectiveness (Cameron and Whetton, 1983; Faehrman & Quinn, 1985; Glunk & Wilderom, 1999; Martz, 2008; Quinn & Cameron, 1983; Quinn & Rohrbaugh, 1981).

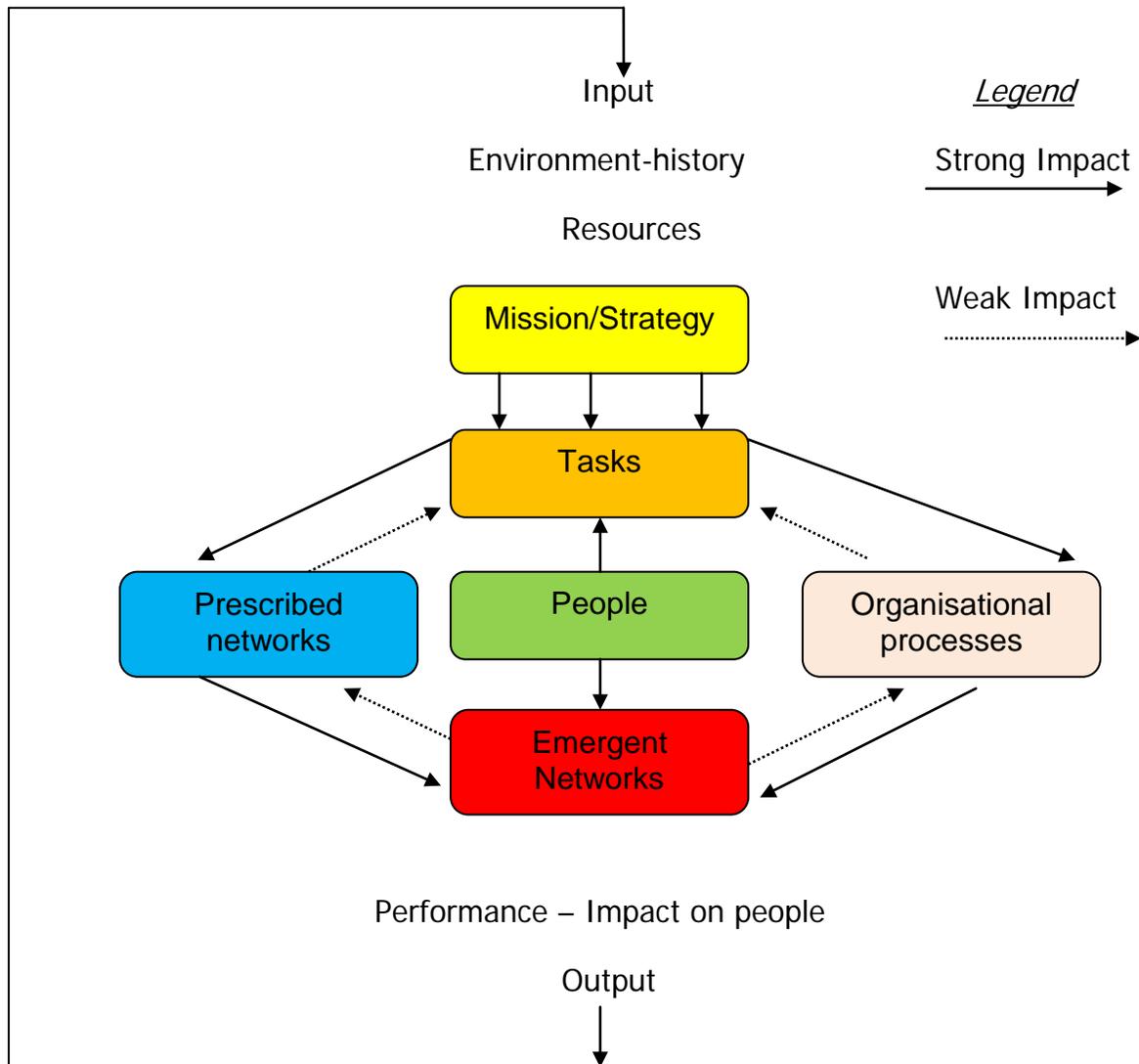
With the introduction of the eighth element of Strategic Performance to form the 8-S Model, Higgins (2005) does address the achievement of organisational goals (the goal approach to organisational effectiveness), which is a move closer to organisational performance. However, the 7-S and 8-S models remain mainly a model for introducing change into an organisation (Higgins, 2005; Waterman et al., 1980), and not a model for measuring the effectiveness of an organisation. An additional criticism of the model is that it was not specifically developed for the Public Sector in general or metropolitan municipalities in particular (Falletta, 2005). As such the researcher is of the opinion that this model does not fulfil the requirement of being a valid framework for measuring the total organisational effectiveness of a metropolitan municipality in South Africa.

4.5.6 Tichy's Technical Political Cultural (TPC) Framework

4.5.6.1 An explanation of the model

According to Falletta (2005), Tichy's (1983) model is similar to some of the previous models discussed, as it includes inputs, throughputs, and outputs, which is consistent with the open systems perspective discussed earlier (Katz & Kahn, 1966). See Figure 4.5 below for a visual exposition of this model. Tichy (1983) identifies key variables in the model which are important to the change management process. The environment and history (broadly construed) are two major categories of input to the organisation, whereas resources are a third category of input. The throughput variables, or change levers, identified in the model include mission/strategy, tasks, prescribed networks, people, organisational processes, and emergent networks (Falletta, 2005).

Figure 4.5: Tichy's Technical Political Cultural Framework (Tichy, 1983)



Tichy (1983) defines the mission/strategy variable as the organisation's approach to carrying out its mission and strategy and criteria for effectiveness (i.e., the organisation's purpose). The tasks variable refers to the technology by which the organisation's work is accomplished. The prescribed networks (i.e., the formal organisation) involve the designed social structure of the organisation, such as the organisation of departments and the communication and authority networks. The people variable refers to

the characteristics of organisational members, including their background, motivation, and managerial style. The mechanisms which enable the formal organisation to carry out the work are termed the organisational processes; these include organisational communication, decision-making, conflict management, control, and reward systems. The final throughput variable, emergent networks, refers to the structures and processes in the organisation which emerge informally (Tichy, 1983).

The focal point of Tichy's (1983) model is the output variable, which he terms *organisational effectiveness* (emphasis added). Of course, the output is dependent upon the input and throughput variables. All of the variables, including the input and output categories, are considered to be interrelated in the model. While some variables have a strong impact on other variables, other variables have a weaker, or reciprocal, relationship on other variables, as denoted by the straight and dashed lines (Falletta, 2005).

In considering the variables in the model, Tichy (1983) applies an overlay which is vital to his theorising. This overlay concerns the technical, political, and cultural dynamics going on within the variables of the model (abbreviated as TPC). The TPC overlay raises four questions which are vital to organisational diagnosis. These questions address the technical, political, and cultural dynamics of the organisation. These questions follow:

- How well are the parts of the organisation aligned with each other for solving the organisation's technical problems?
- How well are the parts of the organisation aligned with each other for solving the organisation's political problems?

- How well are the parts of the organisation aligned with each other for solving the organisation's cultural problems?
- How well are the three subsystems of the organisation aligned with each other (technical, political and cultural)?

Tichy (1983) explains that the technical dynamics are those aspects of the organisation which are knowable, such as production processes or available resources. The political dynamics are the views of dominant groups, including bargaining by powerful organisational groups. The cultural dynamics constitute the shared symbols and values which make up the organisational culture. As depicted in the illustration of the model, Tichy (1983) uses a rope metaphor to emphasize the strategic importance of the three strands (technical, political, and cultural) in the change process. The three strands must be managed together, or realigned, for effective change.

4.5.6.2 *An assessment of the applicability of Tichy's TPC framework to measure the organisational effectiveness of a metropolitan municipality*

It is the researcher's view that although Tichy's (1983) model considers the functioning of a total organisation and refers to the final output as the effectiveness of the organisation, it addresses only one of the traditional approaches to organisational effectiveness, namely the internal processes approach (Beulens et al., 2011; Bluedorn, 1980; Cameron & Whetten, 1983; Daft, 1992; Glunk & Wilderom, 1999; Martz, 2008). This is confirmed by the four questions which he asks when diagnosing an organisation, which all refer to "How well are the parts of the organisation/the three subsystems aligned with each other". An organisation would thus be *most effective when its major components are all aligned with each other* (emphasis added) in

order to solve the organisation's technical, political and cultural problems (Falletta, 2005; Tichy, 1983).

The model also does not address an organisation's exploitation of the external environment (systems resource approach to organisational effectiveness - Beulens et al., 2011; Cameron, 1986; Glunk and Wilderom, 1999; Price, 1972; Yuchtman & Seashore, 1967), the achievement of organisational goals (the goal approach to organisational effectiveness - Beulens et al., 2011; Cameron, 1986; Cunningham, 1977; Glunk & Wilderom, 1999; Hannan & Freeman, 1977; Martz, 2008; Price, 1972; Steers, 1977; Yuchtman & Seashore, 1967), the satisfaction of the needs of key stakeholders (the strategic constituencies approach to organisational effectiveness - Beulens et al., 2011; Cameron & Whetten, 1983; Daft, 1992; Glunk & Wilderom, 1999; Martz, 2008; Tsui, 1984; Zammuto, 1984), nor the conflicting values approach to organisational effectiveness (Cameron and Whetton, 1983; Faehrman & Quinn, 1985; Glunk & Wilderom, 1999; Martz, 2008; Quinn & Cameron, 1983; Quinn & Rohrbaugh, 1981). An additional criticism of the model is that it was not specifically developed to measure the performance of the Public Sector in general or metropolitan municipalities in particular (Tichy, 1983; Falletta, 2005). As such the researcher is of the opinion that this model does not fulfil the requirement of being a valid framework for measuring the total organisational effectiveness of a metropolitan municipality in South Africa.

4.5.7 The Causal Model of Organisational Performance

4.5.7.1 An explanation of the model

According to Burke and Litwin (1992), the original thinking behind this model came from George Litwin and others during the 1960s. Since then the model

has been refined through a series of studies and recent collaboration has led to the current form of the model, which attempts the following:

- To specify the interrelationships of organisational variables; and
- To distinguish transformational and transactional dynamics in organisational behaviour and change.

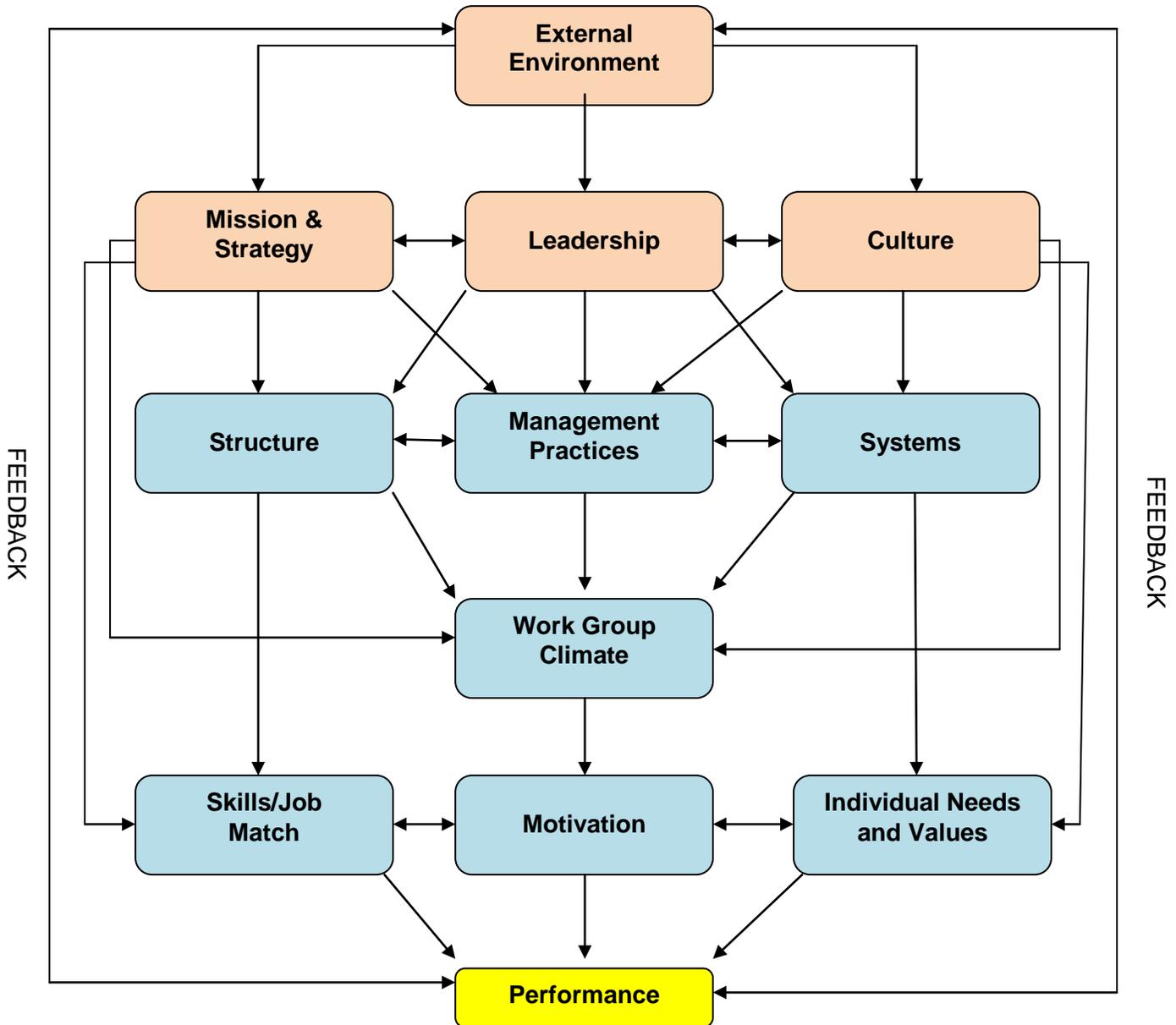
Burke and Litwin (1992) state that although the model is complex, it is an oversimplification in its two-dimensional form; a hologram would be a better representation. See Figure 4.6 below for a visual exposition of this model.

According to Martins and Coetzee (2009), the model is founded on a functional cause-and-effect framework. The model explains linkages that hypothesise how organisational performance and overall effectiveness are affected, as well as how deliberate and effective change can be influenced. Martins and Coetzee (2009) state that the model is reported to clearly show cause-and-effect relationships between the organisation's internal and external environments, aimed at explaining their link to organisational effectiveness.

According to Burke and Litwin (1992), the model depicts the following:

- The primary variables that need to be considered in any attempt to predict and explain the total behavioural output of an organisation;
- The most important interactions among these variables; and
- How the variables affect change.

Figure 4.6: The Causal Model of Organisational Performance (Burke & Litwin, 1992)



4.5.7.2 Transformational and transactional dynamics

According to Jones and Brazzel (2006) and Martins and Coetzee (2009), the Burke and Litwin (1992) model highlights two distinct sets of organisational dynamics. One set is primarily associated with the transactional level of

human behaviour, or the everyday interactions and exchanges that create the climate of the organisation. The second set of dynamics is concerned with processes of human transformation, amounting to sudden “leaps” in behaviour. Burke and Litwin (1992) state that transformational variables refer to areas in which alteration is probably caused by interaction with environmental forces (both within and without) and which require entirely new sets of behaviour on the part of organisational members, while the transactional variables refer to alteration that occurs primarily via relatively short-term reciprocity among people and groups.

4.5.7.3 Transformational factors affecting organisational performance and effectiveness

According to Burke and Litwin (1992) and Martins and Coetzee (2009), the following transformational factors affect organisational performance and effectiveness:

- External Environment. Any outside condition or situation that influences the performance of the organisation. These conditions include marketplaces, world financial conditions, political/governmental circumstances, and so on.
- Mission and Strategy. What employees believe is the central purpose of the organisation and how the organisation intends to achieve that purpose over time.
- Leadership. Executive behaviour that encourages others to take necessary actions. For purposes of data gathering, this box includes perceptions of executive practices and values.

- Culture. "The way we do things around here". Culture is the collection of overt and covert rules, values, and principles that guide organisational behaviour and that have been strongly influenced by history, custom, and practice.
- Individual and Organisational Performance. The outcomes or results, with indicators of effort and achievement. Such indicators might include productivity, customer or staff satisfaction, profit, and service quality.

4.5.7.4 *Transactional factors affecting organisational performance and effectiveness*

According to Burke and Litwin (1992) and Martins and Coetzee (2009), the following transactional factors affect organisational performance and effectiveness:

- Structure. The arrangement of functions and people into specific areas and levels of responsibility, decision-making authority, and relationships. Structure assures effective implementation of the organisation's mission and strategy.
- Management Practices. What managers do in the normal course of events to use human and material resources to carry out the organisation's strategy.
- Systems. Standardised policies and mechanisms that facilitate work. Systems primarily manifest themselves in the organisation's reward systems and in control systems such as goal and budget development and human resource allocation.

- Work Group Climate. The collective current impressions, expectations, and feelings of the members of local work units. These, in turn, affect members' relations with supervisors, with one another, and with other units.
- Skills/job match. The behaviour required for task effectiveness, including specific skills and knowledge required for people to accomplish the work assigned and for which they feel directly responsible. This box concerns what is often referred to as job-person match.
- Individual Needs and Values. The specific psychological factors that provide desire and worth for individual actions or thoughts.
- Motivation. Aroused behavioural tendencies to move toward goals, to take necessary action, and to persist until satisfaction has been attained. This is the net resultant motivation; that is, the resultant net energy generated by the sum of achievement, power, affection, discovery, and other important human motives.

4.5.7.5 *An assessment of the applicability of Burke and Litwin's (1992) causal model of organisational performance to measure the organisational effectiveness of a metropolitan municipality*

It is the researcher's view that although Burke and Litwin's (1992) causal model considers the functioning of a total organisation and also addresses organisational performance and effectiveness, it is primarily a model of planned change (Burke & Litwin, 1992; Jones & Brazzel, 2006; Martins & Coetzee, 2009). It in fact addresses only one of the traditional approaches to

organisational effectiveness, namely the internal processes approach (Beulens et al., 2011; Bluedorn, 1980; Cameron & Whetten, 1983; Daft, 1992; Glunk & Wilderom, 1999; Martz, 2008). This implies that *if all the transformational and transactional variables were in balance with each other, the organisation would then be effective* (emphasis added).

The model does not address an organisation's exploitation of the external environment (systems resource approach to organisational effectiveness - Beulens et al., 2011; Cameron, 1986; Glunk and Wilderom, 1999; Price, 1972; Yuchtman & Seashore, 1967), the achievement of organisational goals (the goal approach to organisational effectiveness - Beulens et al., 2011; Cameron, 1986; Cunningham, 1977; Glunk & Wilderom, 1999; Hannan & Freeman, 1977; Martz, 2008; Price, 1972; Steers, 1977; Yuchtman & Seashore, 1967), the satisfaction of the needs of key stakeholders (the strategic constituencies approach to organisational effectiveness - Beulens et al., 2011; Cameron & Whetten, 1983; Daft, 1992; Glunk & Wilderom, 1999; Martz, 2008; Tsui, 1984; Zammuto, 1984), nor the conflicting values approach to organisational effectiveness (Cameron and Whetton, 1983; Faehrman & Quinn, 1985; Glunk & Wilderom, 1999; Martz, 2008; Quinn & Cameron, 1983; Quinn & Rohrbaugh, 1981).

A further criticism of this model is that it was not specifically developed to measure the performance of the Public Sector in general or metropolitan municipalities in particular (Burke & Litwin, 1992; Martin & Coetzee, 2009). Although the model has been shown to be valid as a diagnostic tool for assessing the functioning of an organisation (Martins & Coetzee, 2009), the researcher is of the opinion that this model does not fulfil the requirement of being a valid framework for measuring the total organisational effectiveness of a metropolitan municipality in South Africa.

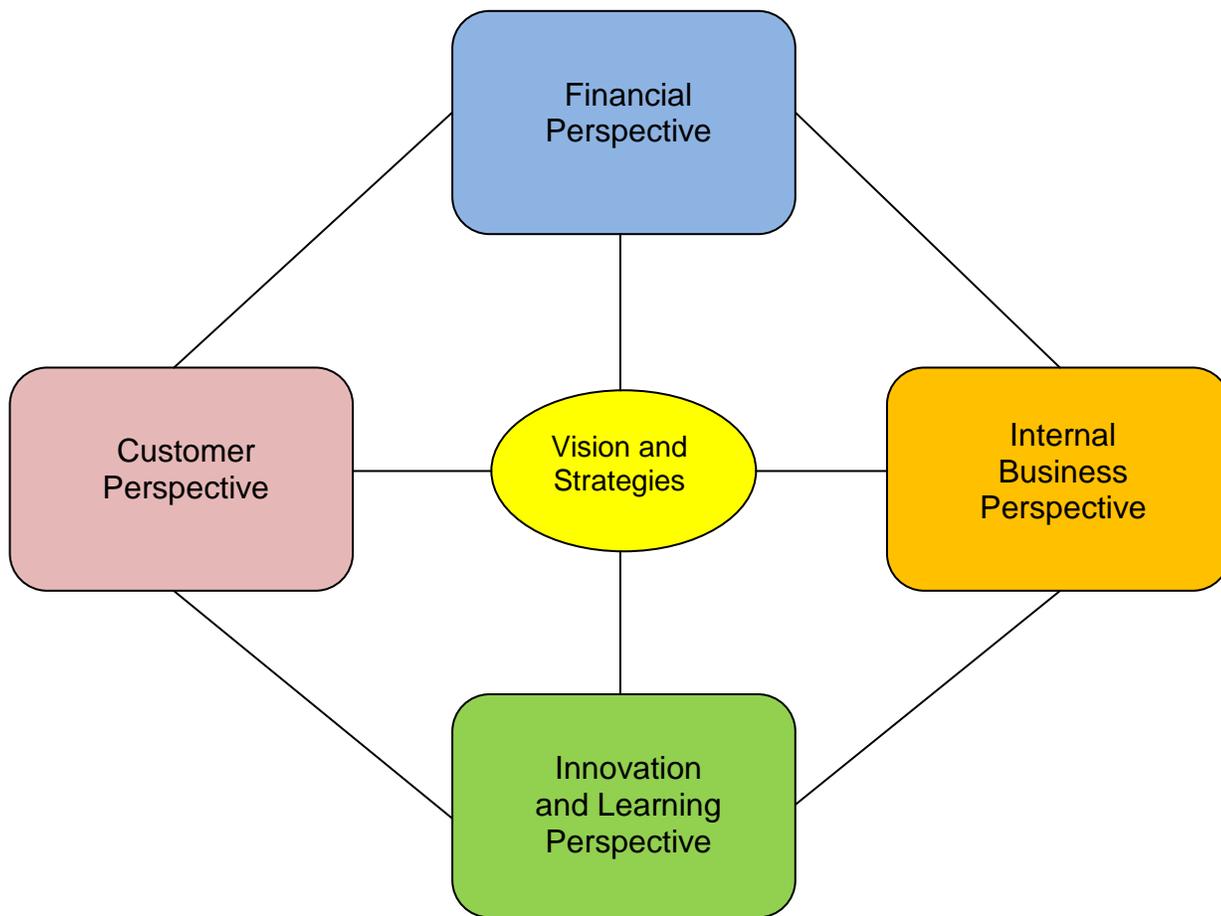
4.5.8 The Balanced Scorecard

4.5.8.1 *An explanation of the Balanced Scorecard*

In 1992 Kaplan and Norton developed a set of measures that they refer to as "a balanced scorecard". These measures give top managers a fast but comprehensive view of the organisation's performance and include both process and results measures. Kaplan and Norton (1992) compare the balanced scorecard to the dials and indicators in an airplane cockpit. For the complex task of flying an airplane, pilots need detailed information about fuel, air speed, altitude, bearing, and other indicators that summarize the current and predicted environment. Reliance on one instrument can be fatal. Similarly, the complexity of managing an organisation requires that managers be able to view performance in several areas simultaneously. A balanced scorecard or a balanced set of measures provides that valuable information (Kaplan & Norton, 1992). See Figure 4.7 below for a visual exposition of the balanced scorecard.

- The customer perspective. Managers must know if their organisation is satisfying customer needs. They must determine the answer to the question: "How do customers see us?"
- The internal business perspective. Managers need to focus on those critical internal operations that enable them to satisfy customer needs. They must answer the question, "What must we excel at?"

Figure 4.7: The Balanced Scorecard (Kaplan & Norton, 1992)



- The innovation and learning perspective. An organisation's ability to innovate, improve and learn, ties in directly with its value as an organisation. Managers must answer the question: "Can we continue to improve and create value for our services?"
- The financial perspective. In the Private Sector, these measures have typically focused on profit and market share. For the Public Sector, financial measures could include the results oriented measures required by Government legislation. Managers must answer the question: "How do we look to important stakeholders?"

Pearce and Robinson (2000) also refer to the balanced scorecard as an evaluation of a company from four perspectives, namely financial performance, customer knowledge, internal business processes and learning and growth. As such, they state that the balanced scorecard can be used in individual and team goal-setting, compensation, resource allocation, budgeting and planning, and strategic feedback and learning.

Cummings and Worley (2009, p. 746) refer to it as a “control and information system that balances traditional financial measures with operational measures relating to an organisation’s critical success factors”.

4.5.8.2 Using the balanced scorecard as a strategic management system

As a further innovation, Kaplan and Norton (1996) proposed using their balanced scorecard as a strategic management system. They argue that a company can use their scorecard to:

- Clarify and update strategy;
- Communicate strategy throughout the company;
- Align unit and individual goals with the strategy;
- Link strategic objectives to long-term targets and annual budgets;
- Identify and align strategic initiatives; and

- Conduct period performance reviews to learn about and improve strategy.

4.5.8.3 *An assessment of the applicability of the balanced scorecard to measure the organisational effectiveness of a metropolitan municipality*

The balanced scorecard has received much attention in the organisational and management literature as an organisational performance measure (Cummings & Worley, 2009; Kaplan & Norton, 1992; Kaplan & Norton, 1996; Pearce & Robinson, 2000). Another positive factor is that although it was developed with the Private Sector in mind (Kaplan & Norton, 1992), it can be used for the Public Sector as well (Kaplan & Norton, 1996).

However, the researcher's view is that although it addresses the functioning of a total organisation, it focuses only on four specific performance areas (Kaplan & Norton, 1992). Furthermore, it does not directly measure the organisational effectiveness of a total organisation, but only stipulates four specific performance areas that must be continuously monitored by management, who can then give an indication of how the organisation is performing on these four specific measures (Kaplan & Norton, 1992). Its *internal business perspective* (emphasis added) addresses the internal processes approach to organisational effectiveness (Beulens et al., 2011; Bluedorn, 1980; Cameron & Whetten, 1983; Daft, 1992; Glunk & Wilderom, 1999; Martz, 2008), and its *customer perspective* (emphasis added) addresses the strategic constituencies approach to organisational effectiveness (Beulens et al., 2011; Cameron & Whetten, 1983; Daft, 1992; Glunk & Wilderom, 1999; Martz, 2008; Tsui, 1984; Zammuto, 1984). However, it does not address the goal approach (Beulens et al., 2011; Cameron, 1986; Cunningham, 1977; Glunk & Wilderom, 1999; Hannan &

Freeman, 1977; Martz, 2008; Price, 1972; Steers, 1977; Yuchtman & Seashore, 1967), the systems resource approach (Beulens et al., 2011; Cameron, 1986; Glunk & Wilderom, 1999; Price, 1972; Yuchtman & Seashore, 1967), nor the conflicting values approach (Cameron and Whetton, 1983; Faehrman & Quinn, 1985; Glunk & Wilderom, 1999; Martz, 2008; Quinn & Cameron, 1983; Quinn & Rohrbaugh, 1981) to organisational effectiveness.

In summary, the researcher is of the opinion that the balanced scorecard does not address all the traditional approaches to organisational effectiveness, neither was it specifically developed to measure the performance of the Public Sector in general or metropolitan municipalities in particular. As such the researcher is of the opinion that this model does not fulfil the requirement of being a valid framework for measuring the total organisational effectiveness of a metropolitan municipality in South Africa.

4.5.9 The South African Excellence Model for Local Government

4.5.9.1 Business excellence and its history

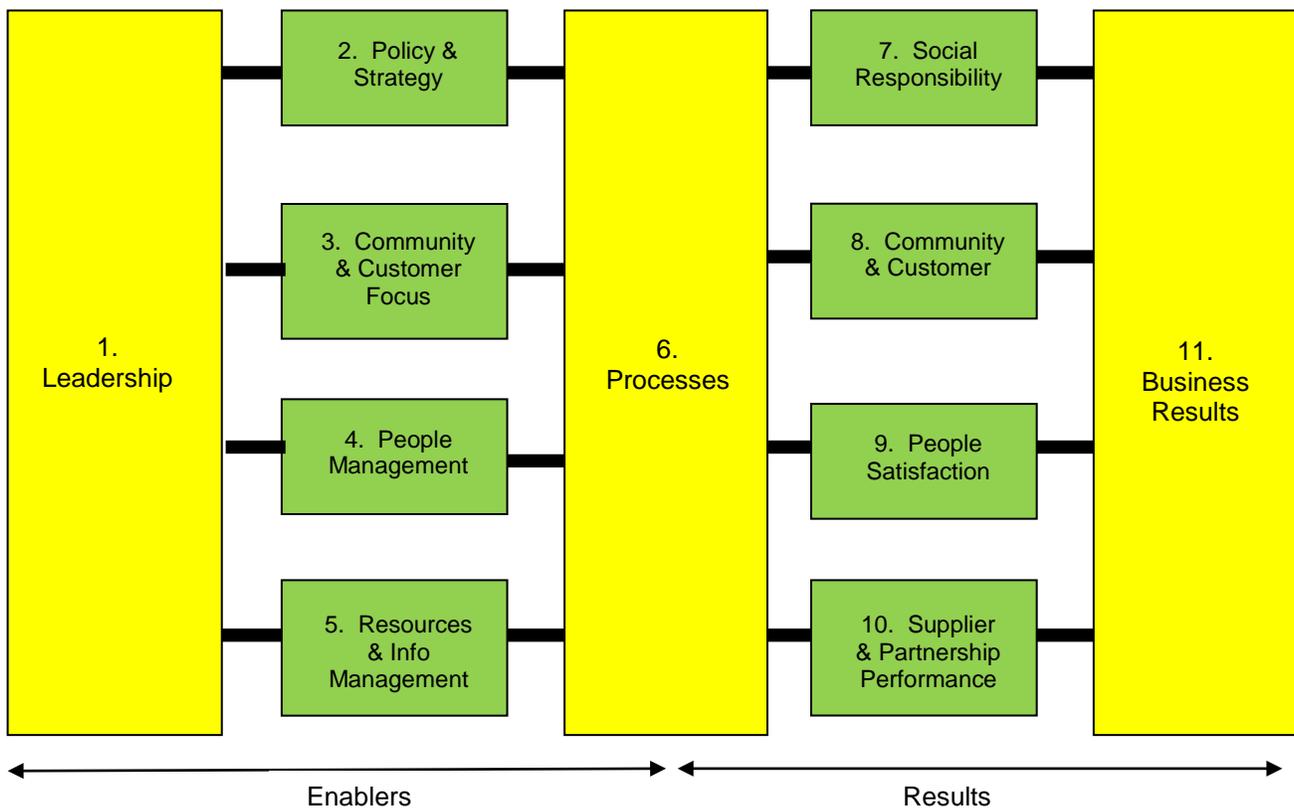
As explained by Smit (1999), the South African Quality Institute (SAQI) launched the South African Business Excellence Model (SABEM) in August 1997. As the model had also been made applicable to non-profit organisations in South Africa, the word "business" was removed from the model (Smit, 1999). According to Nel (2010) the South African Excellence Model (SAEM) is the basis of the national South African Excellence Award. This model is a full hybrid of the USA Malcolm Baldrige National Quality Award (MBNQA) and the European Quality Association (EQA). BESA (1998) reports that the SAEM has been adopted throughout the Southern African Development Community (SADC) countries and is duly recognised by both

the Malcolm Baldrige National Quality Award and the European Foundation for Quality Management (EFQM). The SAEM (as are the other excellence models) is a tool for measuring current business excellence levels in order to plan and direct improvement strategies (Smit, 1999).

4.5.9.2 *Adaptation of the South African Excellence Model for use at local government level*

The South African Excellence Foundation (SAEF) adapted the South African Excellence Model to make it applicable to local governments (Nel & Haycock, 2005). See Figure 4.8 below for a visual exposition of this model.

Figure 4.8: The South African Excellence Model for Local Government (Nel & Haycock, 2005)



The model has 11 criteria which have also been adapted for local government and they cover the spectrum of the local government environment. The details of the criteria and sub-criteria are derived from the requirements of the MBNQA and the EFQM (Nel & Haycock, 2005; Smit, 1999). The 11 criteria are given in Table 4.2 below. This framework provides local government with an integrated, results-orientated framework for implementing and assessing processes for managing all organisational functions. The first six criteria are the “Enablers” which relate to what is done to operate the organisation. The last five criteria are the “Results”, in other words a yardstick for the organisation to measure its performance against its targets (Nel & Haycock, 2005).

Table 4.2:

The South African Excellence Model for Local Government Criteria

No	Criterion Name	Weight	Criterion Definition
1	Leadership	10%	How the behaviour and actions of the executive team and all the other leaders inspire, support and promote a culture of business excellence
2	Policy & strategy	7%	How the organisation formulates, deploys, reviews and turns policy and strategy into plans and actions
3	Community & customer focus	6%	How the organisation determines needs, requirements, expectations; enhances relationships, and determines satisfaction of communities, customers and markets
4	People management	9%	How the organisation releases the full potential of its people
5	Resources & information management	6%	How the organisation manages and uses resources and information effectively and efficiently
6	Processes	12%	How the organisation identifies, manages, reviews and improves processes
7	Social responsibility	6%	What the organisation is achieving in satisfying the needs and the expectations of the local, national and international community at large (as appropriate)
8	Community & customer	17%	What the organisation is achieving in relation to the

			satisfaction of its external customers
9	People satisfaction	9%	What the organisation is achieving in relation to the satisfaction of its people
10	Supplier & partnership performance	3%	What the organisation is achieving regarding the management of suppliers and partners
11	Business results	15%	What the organisation is achieving in relation to its planned business objectives and in satisfying the needs and expectations of everyone with a financial interest or other stake in the organisation

According to the SAEF (Nel & Haycock, 2005), the criteria and their definitions outline the issues that one would expect to improve in a local government, in order to reach world-class benchmarks. Based on analyses of other awards and past winners, the criteria have been allocated weights (see Table 4.2 above) to assist would-be participants.

According to Smit (1999), there are two key differences between the ISO 9000 approach to quality and the business excellence model approach. The first is that the business excellence model approach focuses on all aspects of business, not just the execution processes as in the ISO 9000 approach. The second major difference is that the business excellence model is divided into two distinct areas, "Enablers", i.e. those processes that are put in place to enable something to happen and "Results", i.e. those means that deal with the outcomes of the "Enablers". The ISO 9000 system only looks at enabling processes, while the business excellence model approach looks at whether the right issues have been addressed in the right way to obtain the desired results.

4.5.9.3 Using the SAEM for local government to measure organisational effectiveness

According to Smit (1999), a set of simple questions have been devised and tested for each of the 11 criteria in the SAEM for local government. The answer values for each question are simply added, then averaged by the number of questions for the specific criterion to give a percentage for the criterion. In this manner the scores for each criterion can be determined and used as a base line for the organisation to determine development in wanting areas.

4.5.9.4 An assessment of the applicability of the SAEM for local government to measure the organisational effectiveness of a metropolitan municipality

It is the researcher's view that the SAEM is a useful assessment framework for measuring the total functioning of an organisation, be it Public or Private Sector. It addresses the goal approach to organisational effectiveness (business results criterion - Beulens et al., 2011; Cameron, 1986; Cunningham, 1977; Glunk & Wilderom, 1999; Hannan & Freeman, 1977; Martz, 2008; Price, 1972; Steers, 1977; Yuchtman & Seashore, 1967), the internal processes approach (the processes criterion - Beulens et al., 2011; Bluedorn, 1980; Cameron & Whetten, 1983; Daft, 1992; Glunk & Wilderom, 1999; Martz, 2008) and the strategic constituencies approach (the impact on society and customer criteria - Beulens et al., 2011; Cameron & Whetten, 1983; Daft, 1992; Glunk & Wilderom, 1999; Martz, 2008; Tsui, 1984; Zammuto, 1984). However, it does not directly address the system resource approach (Beulens et al., 2011; Cameron, 1986; Glunk and Wilderom, 1999; Price, 1972; Yuchtman & Seashore, 1967) nor the conflicting values approach (Cameron & Whetton, 1983; Faehrman & Quinn, 1985; Glunk &

Wilderom, 1999; Martz, 2008; Quinn & Cameron, 1983; Quinn & Rohrbaugh, 1981) to organisational effectiveness.

A further criticism of this model is that although it had been developed and was then adapted to measure the performance of organisations in the Private or Public Sectors, it had not specifically originally been developed to measure the organisational effectiveness of metropolitan municipalities in particular. As such, the researcher is of the opinion that this model should be used with caution as it does not fulfil the requirement of being a valid framework for measuring the total organisational effectiveness of a metropolitan municipality in South Africa.

4.5.10 The High Performance Model

4.5.10.1 An explanation of the model

According to Wiley (1996), using employee surveys to indicate business success is tied to linkage research, which explores the relationship between how employees describe their work environment (employee surveys) and other success measures. Wiley (2010) states that the High Performance Model (HPM) integrates all previous research to produce a more comprehensive understanding than would be achieved by focusing on single linkage research. The HPM is shown in Figure 4.9 below.

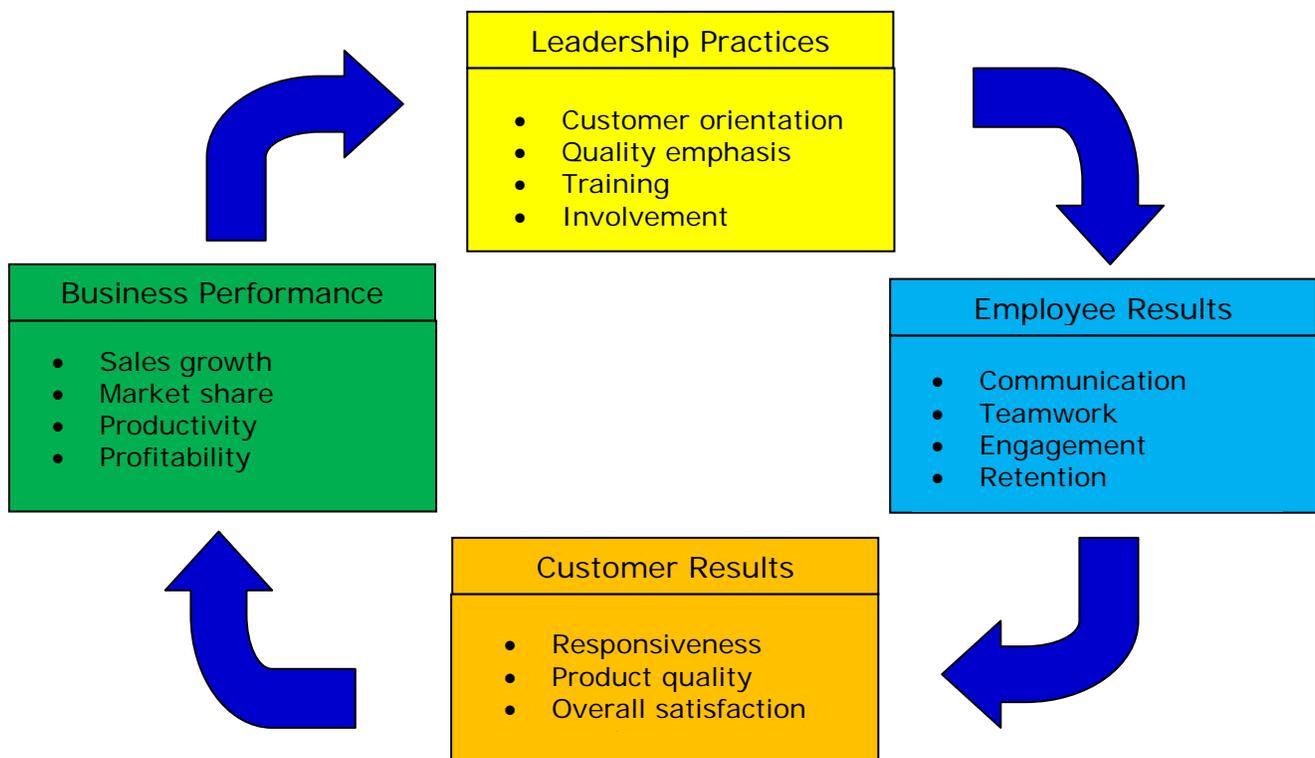
The HPM describes how four leadership practices create positive results for employees. This then leads to higher customer satisfaction and loyalty that generates better business performance over time (Wiley, 2010). The author then compiled a taxonomy of the high performance organisational climate, describing how high-performing units differed from low-performing units in

the same organisation. This taxonomy sets out the types of questions that a survey should include for each of the dimensions of the HPM.

4.5.10.2 Using the High Performance Model to measure organisational effectiveness

According to Wiley (2010), given the HPM's employee-customer-performance relationship, an employee survey featuring the dimensions of the model positions an organisation to diagnose its strengths and weaknesses in the cycle of performance. Wiley (2010) argues that if the goal were to use survey results as leading indicators of business success, then the High Performance Model clearly implies that the survey content should contain the types of internal practice measures of organisational effectiveness displayed in the model. The more the survey contains these types of measures, the more likely it will be that the results will correlate positively and significantly with business performance.

Figure 4.9: The High Performance Model (Wiley, 2010)



4.5.10.3 An assessment of the applicability of the HPM to measure the organisational effectiveness of a metropolitan municipality

It is the researcher's view that although Wiley (2010) states that the measures contained in the HPM can give an indication of an organisation's effectiveness, the main emphasis is on business performance, which various authors consider to be but a subset of the larger construct of organisational effectiveness (Henri, 2004; Richard et al., 2009; Venkatraman & Ramanujam, 1986). The HPM places a strong emphasis on the internal functioning of an organisation and the subsequent contribution of this towards Business Performance (Wiley, 2010), which supports the internal processes approach to organisational effectiveness (Beulens et al., 2011; Bluedorn, 1980; Cameron & Whetten, 1983; Daft, 1992; Glunk & Wilderom, 1999; Martz, 2008). The inclusion of Customer Results could be viewed as supporting the strategic constituencies approach to organisational effectiveness, as the customer can be seen as one of the organisation's key stakeholders or constituencies (Beulens et al., 2011; Cameron & Whetten, 1983; Daft, 1992; Glunk & Wilderom, 1999; Martz, 2008; Tsui, 1984; Zammuto, 1984). However, this is the only key stakeholder that is considered. The HPM does not emphasise the achievement of organisational goals (the goal approach to organisational effectiveness - Beulens et al., 2011; Cameron, 1986; Cunningham, 1977; Glunk & Wilderom, 1999; Hannan & Freeman, 1977; Martz, 2008; Price, 1972; Steers, 1977; Yuchtman & Seashore, 1967], the importance of exploiting an organisation's external environment (system resource approach to organisational effectiveness - Beulens et al., 2011; Cameron, 1986; Glunk & Wilderom, 1999; Price, 1972; Yuchtman & Seashore, 1967) nor the conflicting values approach to organisational effectiveness (Cameron and Whetton, 1983; Faehrman & Quinn, 1985; Glunk & Wilderom, 1999; Martz, 2008; Quinn & Cameron, 1983; Quinn & Rohrbaugh, 1981). An additional criticism of the

model is that it was not specifically developed to measure the performance of the Public Sector in general or metropolitan municipalities in particular. As such the researcher is of the opinion that the HPM does not fulfil the requirement of being a valid framework for assessing the total organisational effectiveness of a metropolitan municipality in South Africa.

4.6. THE APPLICABILITY OF EXISTING ASSESSMENT FRAMEWORKS WHICH MEASURE THE ORGANISATIONAL EFFECTIVENESS OF A TOTAL ORGANISATION TO THE MEASUREMENT OF ORGANISATIONAL EFFECTIVENESS IN METROPOLITAN MUNICIPALITIES IN SOUTH AFRICA

4.6.1 Summary

The nine assessment frameworks or models which measure the organisational effectiveness of a total organisation reviewed in the previous section can all be classified as normative models, which attempt to specify those things an organisation must do to become effective. This is in contrast with descriptive models, which attempt to summarise the characteristics found in successful organisations (Noolen, 2006).

From the comparison set out in Table 4.3 below, it is clear that none of the assessment frameworks or models reviewed fully incorporate all five of the traditional approaches to organisational effectiveness previously discussed. The SA Excellence Model adapted for Local Government, which incorporates three of the five traditional approaches, performs the best. Furthermore, and most importantly, none of the nine assessment frameworks reviewed had been specifically developed to assess the total organisational effectiveness of a metropolitan municipality in South Africa.

The questions that now need to be asked are: “Which of the frameworks or models are applicable and appropriate and should be used to measure the organisational effectiveness of a metropolitan municipality in South Africa”? “Should the one which complies with most of the traditional approaches to organisational effectiveness be chosen, or should a totally new framework be developed”?

Table 4.3:
Comparison between Assessment Frameworks/Models and Traditional Approaches to Organisational Effectiveness

Assessment framework or model	Traditional approaches to organisational effectiveness				
	Goal approach	Systems resource approach	Internal processes approach	Strategic constituencies approach	Conflicting values approach
Porter, Lawler and Hackman’s Model of Individual Performance (1976)	√	X	X	X	X
Weisbord’s Six-Box Model (1976)	X	X	√	√	X
The Nadler-Tushman Congruence Model (1977)	X	X	√	X	X
The 7-S (1980) and 8-S Framework (2005)	√	X	√	X	X
Tichy’s TPC Framework (1983)	X	X	√	X	X
The Burke-Litwin Causal Model of Organizational performance (1992)	X	X	√	X	X
The Balanced Scorecard (1992)	X	X	√	√	X
The South African Excellence Model for Local Government (1997)	√	X	√	√	X
The High Performance Model (2010)	X	X	√	√	X

4.6.2 Conclusions

It is the view of the researcher that each assessment framework on its own offers a unique contribution to understanding the construct of organisational effectiveness, and as such cannot be totally eliminated or ignored. Each framework highlights important elements that contribute to an organisation's effectiveness, either individually or in combination with others. However, no framework on its own can be declared as the best or preferred. This view is supported by Jackson (1984, p. 25) who states the following when commenting on the complexity of trying to measure performance in Local Government:

“Too much concentration on a single aspect of performance measurement can distort the picture and affect the quality of the decision-taking. There needs to be a variety of different approaches, recognizing different and sometimes conflicting interest. The task needs to be tackled on a systematic basis.”

A review of the organisational effectiveness literature has clearly indicated that all of the existing organisational assessment frameworks evaluated, are not valid for specifically measuring the organisational effectiveness of a metropolitan municipality in South Africa. The researcher is thus of the opinion that a new, customised, normative assessment framework needs to be developed for this purpose. This assessment framework should incorporate behavioural and organisational variables currently found in the existing assessment frameworks reviewed, which are applicable to local government and also address as many of the traditional five approaches to organisational effectiveness as possible. Such a new assessment framework can then be empirically tested to determine its validity for measuring the

total organisational effectiveness of a metropolitan municipality in South Africa.

This view is supported by Seashore (1983) who argues that there is no need to choose one among the different models, rejecting the others, for they are not competitive as explanatory devices. Instead, Seashore (1983) argues that they are in fact complementary, referring to different but interdependent facets of organisational behaviour.

Further support for this view is forthcoming from Cameron and Whetton (1983, p. 262) who, after reviewing various authors' inputs on the subject of organisational effectiveness, state that: "There cannot be one universal model of organisational effectiveness". This implies that the solution is to have a customised assessment framework or model to specifically measure the organisational effectiveness of a metropolitan municipality in South Africa. This viewpoint is also supported by Steers (1975, p. 555), who states that: "The suggestions made here rest on the argument that a clear understanding of an organisation's functioning and environmental uniqueness is a prerequisite to assess its effectiveness".

Other authors who also support this view are Waheed et al. (2010). After reviewing the literature on assessing organisational performance, Waheed et al. (2010) state that there is evidence in the literature that there is no single model for the evaluation of organisational performance that everyone can agree on, but that organisational theorists offer complementary approaches. Furthermore, Waheed et al. (2010, p. 335) state that the problem with the models of organisational performance that they reviewed is that "they do not cover all the aspects and functions of an organisation while evaluating organisational performance".

From the previous analysis it is thus clear that the answer to the questions posed above is to develop a new, customised, normative assessment framework to measure the total organisational effectiveness of a metropolitan municipality in South Africa.

4.7 RECOMMENDED NEW, CUSTOMISED, THEORETICAL ASSESSMENT FRAMEWORK FOR MEASURING THE ORGANISATIONAL EFFECTIVENESS OF A METROPOLITAN MUNICIPALITY IN SOUTH AFRICA

4.7.1 Introduction

In the book *Organizational Effectiveness: A comparison of multiple models*, edited by Cameron and Whetten (1983), various theories and research by 16 authors regarding organisational effectiveness are reviewed. After considering all the inputs, Cameron and Whetton (1983) reach two very important conclusions regarding organisational effectiveness:

Conclusion 1: There cannot be one universal model of organisational effectiveness. This implies that a specific model must be developed for a specific organisation given its specific circumstances and incorporating multiple dimensions specific to that organization. This view is also supported by Henri (2004), Herman and Renz (1999), Sowa et al. (2004), and Venkatraman and Ramanujam (1986). The researcher is thus of the opinion that existing models of organisational effectiveness should be used with caution when measuring the organisational effectiveness of a metropolitan municipality. It also implies that the most appropriate framework for measuring the organisational effectiveness of a metropolitan municipality in South Africa will be one specifically developed for this purpose.

Conclusion 2: It is more worthwhile to develop frameworks for assessing effectiveness than trying to develop theories of effectiveness. This view is also supported by Henri (2004), Richard et al. (2009), Rojas (2000) and Sowa et al. (2004).

The above two conclusions are directly related to the problem statement formulated at the beginning of this thesis, namely that there exists no generally accepted framework to measure the organisational effectiveness of a metropolitan municipality in South Africa. The above conclusions are also directly related to the aim of this thesis, namely to develop and validate a framework to measure the organisational effectiveness of a metropolitan municipality in South Africa.

The question then remains: How should such an assessment framework look? Cameron (1981) argues that six critical questions need to be answered when organisational effectiveness is to be assessed, and this was expanded to seven questions by Cameron and Whetton in 1983. These questions are considered by the researcher as critical in developing a theoretical framework for measuring the organisational effectiveness of a metropolitan municipality in South Africa.

4.7.2 Answering seven critical questions when measuring organisational effectiveness

Question1: Whose perspective, or which constituency's point of view should be considered when assessing organisational effectiveness? According to Cameron and Whetton (1983), organisational effectiveness must be defined from someone's viewpoint, and it is important that the viewpoint be made explicit. This view is supported by Brewer and Selden (2000, p. 689) who ask the question: "Effectiveness from whose perspective?"

In the case of metropolitan municipalities in South Africa, Chapter 7 of the Constitution of the Republic of South Africa (1996, p. 63) compels local governments to:

- Provide democratic and accountable government for local communities.
- Ensure the provision of services to communities in a sustainable manner.
- Encourage the involvement of communities and community organisations in the matters of local government.
- Structure and manage its administration and budgeting and planning processes to give priority to the basic needs of the community.
- Promote the social and economic development of the community.

In fact, the word “community” or “communities” is emphasized five times in Chapter 7. This emphasis is supported by the Local Government: Municipal Systems Act, 2000 (Act No 32 of 2000), which states the following:

- The administration of a municipality must be responsive to the needs of the local community.
- It must establish clear relationships, and facilitate co-operation and communication, between it and the local community.

- It must give members of the local community full and accurate information about the level and standard of municipal services they are entitled to receive.
- It must inform the local community how the municipality is managed, of the costs involved and the persons in charge.

It is thus clear that according to the Constitution of the Republic of South Africa (1996) and other relevant local government legislation, communities are an important constituency in assessing the organisational effectiveness of metropolitan municipalities.

However, local communities are not the only constituencies that should be considered. According to Sowa et al. (2004) and Wiley (2010), management and line staff are also important constituencies from which effectiveness data should be obtained. This view is supported by Brewer and Selden (2000) who used, amongst others, permanent full-time employees to provide data for assessing the organisational effectiveness in Federal Agencies. Cameron and Whetten (1983) refer to the expectations of strategically critical constituencies when considering organisational effectiveness. These would be individuals and groups such as shareholders, unions, customers, government regulators, etc. Connolly et al. (1980) also describe constituencies as owners, managers, employees, customers, suppliers, etc.

The fact is that each constituency has a different set of values and criteria when assessing an organisation's effectiveness (Cameron and Whetten, 1983; Martz, 2008) and the most important constituencies whose viewpoints will be the most critical must be made explicit. In the case of metropolitan municipalities in South Africa, it would thus seem that the most important constituency is local communities. However, in order to give a more

balanced view of a metropolitan municipality's current effectiveness, it is the researcher's opinion that the view of managers and employees at all levels in the municipality should also be used when measuring effectiveness.

Question 2: On what domain of activity should the assessment of organisational effectiveness be focused? According to Meyer (1975), organisational domains are circumscribed by the constituencies served, the technologies employed, and the services or outputs produced. This view is supported by Cameron (1981), who states that domains arise from the activities or primary tasks that are emphasized in the organisation, from the competencies of the organisation, and from the demands placed upon the organisation by external forces.

The Constitution of the Republic of South Africa (1996) identifies the following domains for local government:

- Service delivery to communities [Sections 152(1) (b) and 153(a)].
- The achievement of specific goals (outputs) listed in Section 152(1).

The Local Government: Municipal Systems Act, 2000 (Act No 32 of 2000) adds the domain of internal affairs [Section 11(3) (d) and 38 (c)].

Question 3: What level of analysis should be used? According to Cameron and Whetton (1983), assessment of organisational effectiveness can be made at various levels, including individual, subunit or organisational.

The Constitution of the Republic of South Africa (1996) as well as the Local Government: Municipal Systems Act, 2000 (Act No 32 of 2000), continually refers to a local government as an organisational entity. The researcher is thus of the opinion that when assessing the organisational effectiveness of a metropolitan municipality in South Africa, it must be conducted at the organisational level.

Question 4: What is the purpose of the assessment? The purpose of assessing the organisational effectiveness of a metropolitan municipality in South Africa would be to determine:

- Whether it was complying with the Constitution of the Republic of South Africa (1996).
- Whether it was complying with the Local Government: Municipal Systems Act, 2000 (Act No 32 of 2000).

Question 5: What time frame should be employed? Cameron and Whetten (1983), state that selecting an appropriate time frame for assessing the organisational effectiveness of an organisation is important because long-term effectiveness may be incompatible with short-term effectiveness.

According to Section 159 of the Constitution of the Republic of South Africa (1996), the term of an elected Municipal Council of a metropolitan municipality may be no more than four years. The researcher is thus of the opinion that the effectiveness of a metropolitan municipality should be measured only after a period of at least four years from the inauguration of a new Municipal Council. This will give the municipality a fair amount of time to reach effectiveness.

Question 6: What type of data should be used to assess effectiveness? According to Cameron and Whetton (1983), this is a choice between using information collected by the organisation itself and stored in official documents, or relying on perceptions obtained from members of the organisation. That is, the choice is between objective data (organisational records) or subjective, perceptual data (interviews or questionnaire responses).

Organisational archives, which Cameron and Whetton (1983) refer to as objective data, include things such as organisational history, productivity records, financial records, personnel records, time records and government regulatory reports. According to Jones and Brazzel (2006), their strengths lie in the fact that they are relatively inexpensive with minimum time necessary to collect, and they are also less biased than individual perceptions. However, weaknesses are that selective editing can be applied so that reports are then "doctored", resulting in data being gathered only on "official" effectiveness criteria or on criteria that are used only for public image purposes.

Interviews and surveys, which Cameron and Whetton (1983) refer to as subjective, perceptual data, also have their own strengths and weaknesses. They are usually easy to apply, can reach a wide audience, and a broader set of effectiveness criteria can be assessed (Jones & Brazzel, 2006).

Weaknesses include biased and dishonest responses, questionable validity, and the difficulty of making generalizations (Jones & Brazzel, 2006). Another weakness of the interview, according to Bergh (2006), is that its effectiveness, especially as an assessment instrument, is highly dependent on how well it is planned and conducted.

According to Church and Waclawski (1998), it is always best to gather information from a variety of sources. This is supported by Cummings and Worley (2009) as well as by Jones and Brazzel (2006), who state that using more than one method of data collection also ensures greater confidence in the data obtained. Sowa et al. (2004) also argue for the use of both objective and subjective measures to fully capture the dimensions of effectiveness. From the above discussion it is thus clear that in order to comprehensively measure the effectiveness of a metropolitan municipality in South Africa, a combination of objective and subjective data should be used.

Question 7: What is the referent against which effectiveness is judged? According to Cameron and Whetton (1983), there are a variety of referents or standards against which effectiveness can be judged, namely:

- Comparative judgment. Comparing the performance of two different organisations against the same set of indicators.
- Ideal performance level. Comparing the performance of an organisation against a selected standard or ideal performance level.
- Goal-centred judgment. Comparing an organisation's performance against the stated goals of the organisation.
- Improvement judgment. Comparing an organisation's performance against its own past performance.
- Trait judgment. Evaluating an organisation on the basis of the static characteristics it possesses, independent of its performance on certain indicators.

The researcher is of the opinion that metropolitan municipalities should use all five of the above-mentioned referents when measuring their effectiveness, for the following reasons:

- Comparative judgment. As there are currently eight metropolitan municipalities in South Africa, various stakeholders want to know how a metropolitan municipality is performing compared to the other seven metropolitan municipalities. This view is supported by Herman and Renz (1999), who argue that non-profit organisational effectiveness is always a matter of comparison.
- Ideal performance level. The Constitution of the Republic of South Africa (1996) as well as the Local Government: Municipal Systems Act, 2000 (Act No 32 of 2000) make reference to various standards of performance, such as providing democratic and accountable government, ensuring the provision of services, managing administration effectively, and establishing clear relationships with communities. These can all be regarded as standards towards which metropolitan municipalities must strive.
- Goal-centred judgment. The Constitution of the Republic of South Africa (1996) as well as the Local Government: Municipal Systems Act, 2000 (Act No 32 of 2000) compels local governments to achieve various goals as part of their functioning. These include providing democratic and accountable government, providing sustainable services to communities, ensuring involvement of communities, establishing clear relationships with communities, and informing the local community how the municipality is managed.

- Improvement judgment. It is implied in the Local Government: Municipal Systems Act, 2000 (Act No 32 of 2000) as well as the Local Government: Municipal Finance Management Act, 2003 (Act No 56 of 2003) that municipalities should continually attempt to increase their effectiveness regarding all areas, including financial management. Metropolitan municipalities would thus need to compare their performance each year against their performance in previous years.
- Trait judgment. The Constitution of the Republic of South Africa (1996), the Local Government: Municipal Systems Act, 2000 (Act No 32 of 2000) as well as the Local Government: Municipal Finance Management Act, 2003 (Act No 56 of 2003), mention various characteristics that municipalities must ensure are functioning effectively. These include governance systems, administrative mechanisms, communication systems, financial systems, control mechanisms, etc. This view is supported by Sowa et al. (2004) who state that possessing appropriate management capacity, and having systems and certain structures and processes in place that support the operations of the organisation, are critical indicators of the effectiveness of an organisation.

The seven critical questions and their suggested answers are summarized in Table 4.4 below:

Table 4.4:

Seven Critical Questions in Assessing Organisational Effectiveness

Critical question	Suggested answer
1. Whose perspective?	<ul style="list-style-type: none">• Local communities• Managers• Employees
2. What domains?	<ul style="list-style-type: none">• Service delivery• Goal achievement• Internal functioning
3. Level of analysis?	<ul style="list-style-type: none">• Organisation wide
4. Purpose of assessment?	<ul style="list-style-type: none">• Compliance with relevant legislation
5. Timeframe?	<ul style="list-style-type: none">• Every four years
6. Type of data?	<ul style="list-style-type: none">• Combination of objective and subjective data
7. What referent?	<ul style="list-style-type: none">• Comparative judgment• Ideal performance level• Goal-centred judgment• Trait judgment

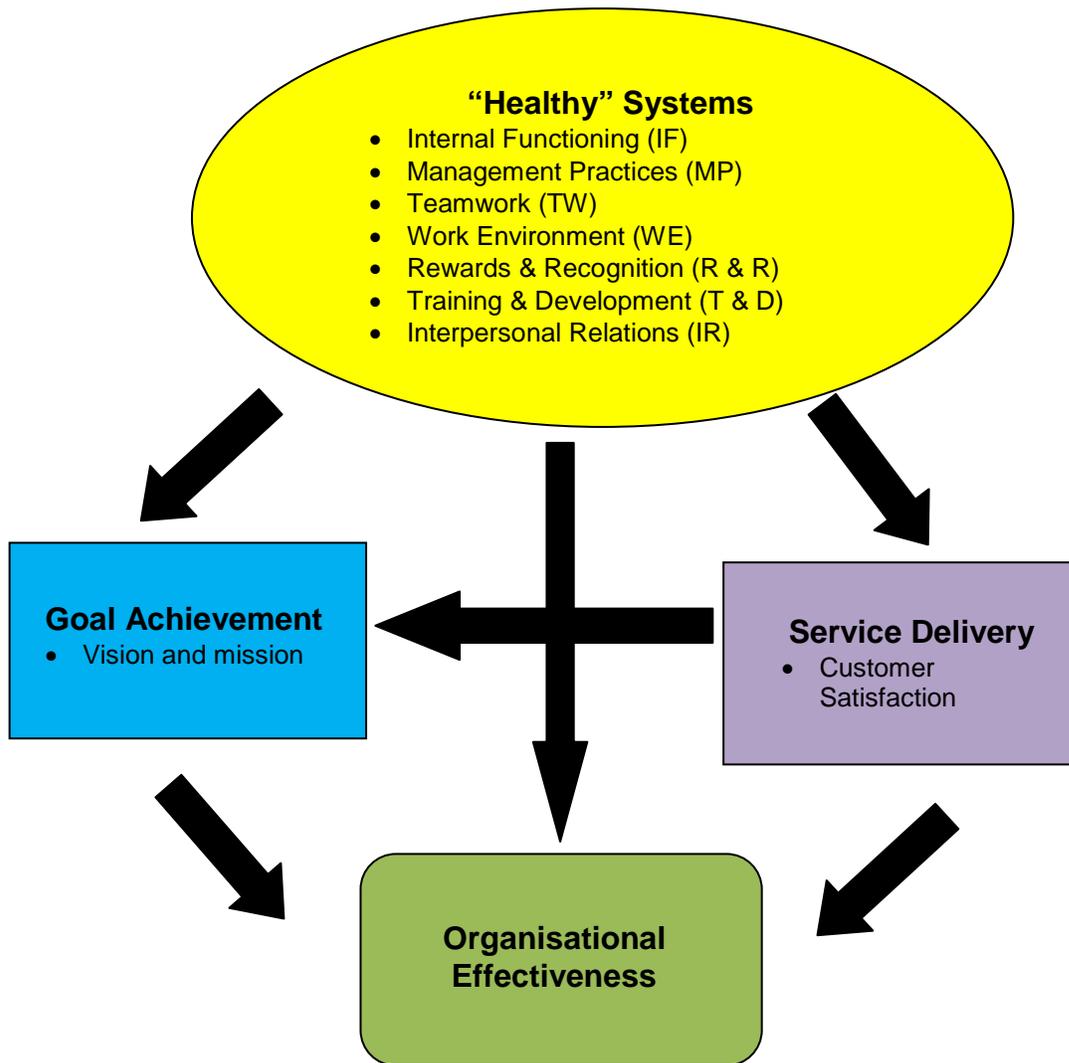
4.7.3 The recommended theoretical framework to measure the organisational effectiveness of a metropolitan municipality in South Africa

From the above-mentioned literature review, a recommended theoretical framework to measure the organisational effectiveness of a metropolitan municipality in South Africa is depicted in Figure 4.10 below.

This theoretical model indicates that:

- If a metropolitan municipality has “healthy” systems in place, it will facilitate the achievement of its goals as stipulated in its vision and mission.

Figure 4.10: Recommended Theoretical Framework to Measure the Organisational Effectiveness of a Metropolitan Municipality in South Africa



- If a metropolitan municipality has "healthy" systems in place, it will ensure service delivery.

- If a metropolitan municipality has “healthy” systems in place, it will affect the degree of organisational effectiveness attributed to the metropolitan municipality.
- If a metropolitan municipality delivers the services that it must, ensuring customer satisfaction, it will positively affect the achievement of its goals as stipulated in its vision and mission.
- If a metropolitan municipality achieves its goals as stipulated in its vision and mission, and provides the services that it must, leading to customer satisfaction, it will affect the degree of organisational effectiveness attributed to the metropolitan municipality.

4.7.3.1 “Healthy” systems

Beulens et al. (2011, p. 486) use the words “healthy” systems to refer to an organisation that functions smoothly with a minimum of internal strain. That is, information flows smoothly, employees are loyal and committed, and job satisfaction and trust prevail. It also means a harmonious balance of structural features and a well-fit organisation type. Healthy systems also tend to have a minimum of dysfunctional conflict and destructive political manoeuvring (Beulens et al., 2011).

According to Glunk and Wilderom (1999), this approach is rooted in both the systems model and the human-relations model of organisations. They state that it focuses on internal processes that increase the ability of organisations to cope with changes in the environment. From the literature review it was also shown that if an organisation’s systems were healthy and in harmony, it could contribute towards *the achievement of organisational goals* (emphasis

added - Beulens et al., 2011; Burke & Litwin, 1992; Immordino, 2010; Kaplan & Norton, 1992; Kushner & Poole, 1996; Nadler & Tushman, 1977; Nel & Haycock, 2005; Porter et al., 1976; Tichy, 1983; Waterman et al., 1980; Weisbord, 1976; Wiley, 2010) and *service delivery and customer satisfaction* (emphasis added - Burke & Litwin, 1992; Immordino, 2010; Kaplan & Norton, 1992; Kushner & Poole, 1996; Nadler & Tushman, 1977; Nel & Haycock, 2005; Wiley, 2010).

The literature review identified, amongst others, the following seven elements which will assist in creating “healthy” systems:

- Internal functioning. Internal functioning refers to a variety of processes taking place in an organisation, such as the treatment and involvement of employees (Robbins, Judge, Odendaal & Roodt, 2009), the flow of communications (Beulens et al, 2011), the effectiveness of processes and procedures (Eriksson-Zetterquist, Müllern & Styhre, 2011), and the implementation of changes for improvement (Cummings & Worley, 2009; Grievess, 2010; Senior & Swailes, 2010). Weisbord (1976) refers to these processes as “helping mechanism” and states that they are important for achieving an organisation’s goals, while Nadler and Tushman (1977) refer to them as “formal organisational arrangements”. According to Glunk and Wilderom (1999), internal functioning is one of the cornerstones of organisational effectiveness and is assessed through criteria of internal health, such as adaptability, a strong sense of identity, and the capacity to test reality. Cummings and Worley (2009, p. 506) refer to this as “internal company dynamics” which can have an effect on the setting, revision and achievement of organisational goals. In fact,

they encourage work-group involvement in the setting of goals to ensure that they are achieved.

- Management practices. Management practices refer to what managers and leaders do in the normal course of effects with the human and material resources at their disposal to carry out the organisation's strategy in order to achieve its goals. (Beulens et al., 2011; Burke & Litwin, 1992; Weisbord, 1976; Wiley, 2010). It is also seen as people, resource and information management which acts as an enabler for customer/stakeholder satisfaction and organisational results, including the achievement of goals (Nel & Haycock, 2005), and as the way in which key managers behave in achieving organisational goals (Waterman et al., 1980). Research has shown that managers who have a strong service orientation inspire employees to deliver superior customer service (Burke & Litwin, 1992; Wiley, 2010). Immordino (2010) also reported that effective management practices create an effective workplace leading to the successful achievement of goals and superior service delivery.
- Teamwork. Teamwork occurs when employees within and across functions cooperate to achieve goals, and workload is managed effectively and divided fairly (Wiley, 2010). Work teams also generate positive synergy through coordinated effort resulting in a level of performance greater than the sum of these individual inputs. Effective teams are also able to achieve performance goals and deliver better results than individuals working on their own (Katzenbach & Douglas, 1993; Robbins et al., 2009; Wilson, 2010). Various authors have also shown a link between teamwork and organisational performance (Dunphy & Bryant,

1996; Hammer & Champy, 1993; Harley, 1999; Womack, Jones & Roos, 1990), and between teamwork and customer service (Buchanan, 2000; Wiley, 2010).

- Work environment. Work environment refers to the availability of the required resources for employees to do their work as well as the physical aspects of the actual work space (Bateman & Zeithaml, 1993; Beulens et al., 2011; Robbins et al., 2009; Wiley, 2010). Research has shown that a work environment that encourages high-quality practices, enables and motivates employees to achieve goals, and achieves a high level of service delivery (Immordino, 2010). A healthy work environment will also improve employee involvement which will contribute towards service delivery and customer satisfaction (Wiley, 2010). The availability of required resources is also seen as an enabler for customer/stakeholder satisfaction and organisation results (Nel & Haycock, 2005).
- Rewards and recognition. Rewards and recognition refer to what is done to compensate employees for work delivered and to recognise superior performance by employees; these can take many forms, including material, social and psychological rewards (Beulens et al., 2011; Weisbord, 1976). Various studies have shown a positive link between rewards and recognition and goal achievement (Bartol & Locke, 2000; Flannery, Hofrichter & Platten, 1996; Risher, 2002; Robbins et al., 2009; Robinson & Perotin, 1997), and between rewards and recognition and service delivery (Robbins et al., 2009).

- Training and development. Training and development refers to a systematic effort by organisations to facilitate the learning of job-related knowledge and behaviours (e.g., skills, rules, concepts or attitudes) that result in improved performance (Colquitt, LePine & Wesson, 2011; Goldstein & Ford, 2002). Robbins et al. (2009) state that it can include everything from teaching basic reading skills to advanced leadership skills. The effectiveness of training programmes varies greatly depending on various situational factors such as training method and the motivation of individual employees (Arthur, Bennet, Edens & Bell, 2003; Colquitt, LePine & Noe, 2000). Employee training and development has also been shown to be a primary tool to accomplish the goals of a government institution (Immordino, 2010), and it also contributes to higher customer satisfaction and output measures (Wiley, 2010).
- Interpersonal relations. Interpersonal relations refer to how people relate to each other in the workplace and include aspects such as how people feel about each other, how they support each other, how they work together and cooperate, to what degree they trust each other and how conflict is handled (Albertyn & Bergh, 2006; Wiley, 2010). Weisbord (1976) calls it the ways in which people and units interact to ensure an effectively functioning organisation, while Nadler and Tushman (1980) refer to it as the informal organisational arrangements which contribute towards organisational outputs. Interpersonal relations have also been shown to play a role in motivating people to achieve (Martin & Dowson, 2009). Trust, a key component of interpersonal relations (Albertyn & Bergh, 2006), has in turn been shown to indirectly influence performance (Dirks, 1999).

4.7.3.2 *Goal achievement*

Beulens et al. (2011) state that goal accomplishment is the most widely used effectiveness criterion for organisations. Price (1972) states that its distinguishing characteristic is that it defines effectiveness in terms of the degree of goal achievement. The greater the degree to which an organisation achieves its goals, the greater its effectiveness (Beulens et al., 2011; Cameron, 1986; Glunk and Wilderom, 1999; Martz, 2008; Price, 1972).

According to Glunk and Wilderom (1999), the goal approach has its roots in the mechanistic view of the organisations. These authors explain that this approach centres on the degree to which organisations realize output goals such as profitability, growth and productivity. Cameron (1986) states that the goal model implies that an organisation is effective if it accomplishes its goals and that this model is preferred when goals are clear, time bound, consensual and measurable. These views are supported by Martz (2008), who states that the goal model defines effectiveness as a complete or at least partial realisation of the organisation's goals.

The goal approach has been supported by various authors. For example, Cunningham (1977) states that the goal model gives feedback on the organisation's effectiveness in achieving its goals. He states that it focuses attention on the systematic relationship of each activity, role and function to the overall goals and objectives of the organisation. Steers (1977) also supports the goal model for evaluating organisational effectiveness. He argues that the major advantage of the goal approach is that organisational success is measured against organisational intentions instead of against an

investigator's value judgments. That is, what the organisation should be doing.

- Vision and mission. This refers to what top managers believe are and have declared as the organisation's vision and mission as well as what employees believe is the central purpose of the organisation; the means by which the organisation intends to achieve its goals over time (Beulens et al., 2011; Burke & Litwin, 1992; Kaplan & Norton, 1992; Nel & Haycock, 2005; Waterman et al., 1980; Weisbord, 1976; Wiley, 2010). According to Immordino (2010) government organisations use strategic planning to determine the goals that they have to achieve at every level, and these goals are articulated in an organisation's vision and mission. Immordino (2010) further states that the accomplishment of a government organisation's mission signified organisational performance.

4.7.3.3 *Service delivery*

According to Beulens et al. (2011), because organisations both depend on people and affect the lives of people, many consider the satisfaction of key interested parties to be an important criterion of organisational effectiveness. For this reason they define a strategic constituency as any group of individuals who have some stake in the organisation. Martz (2008) defines strategic constituencies more specifically by considering those persons who legally act on behalf of the organisation (which he says are employees, advisors, agents, members of boards, etc.), and those who are purely external to the organisation and act on their own behalf. Glunk and Wilderom (1999) state that the multi-constituencies (which they call stakeholders) view takes explicitly into account that organisations serve

multiple goals: each type of organisational constituency is thus supposed to have different interests vis-à-vis the organisation, and will therefore apply different evaluation criteria.

Martz (2008) states that according to the strategic constituencies model, an effective organisation is one that satisfies the demands of the constituencies. Tsui (1984) states that an organisation is effective to the extent that the needs of various relevant organisational constituencies are satisfied. Cameron and Whetten (1983) again argue that an organisation is effective if all constituencies are at least minimally satisfied.

- Customer satisfaction. In the literature, customer satisfaction and service delivery are often used to refer to the same concept (Immordino, 2010; Nel & Haycock, 2005; Wiley, 2010). Immordino (2010) states that customer satisfaction in a government institution has to do with the identification of needs, expectations, perspectives and satisfaction level of its constituencies: the individuals, groups, the public and organisations for which it provides programmes or services. Research has shown that customer and stakeholder satisfaction leads to goal achievement, performance excellence and positive organisational results (Baldrige National Quality Program, 2007; Immordino, 2010; Nel & Haycock, 2005; Wiley, 2010).

4.7.3.4 *Organisational effectiveness*

The construct of organisational effectiveness was comprehensively covered in Chapter 3 of this thesis. Owing to a lack of consensus regarding a definition of organisational effectiveness (Cameron, 1986; Cameron and Whetten (1983), Connolly et al., 1980; Georgopoulos & Tannenbaum, 1957; Hrebiniak

(1978); Mohr, 1982; Quinn & Rohrbaugh (1981); Steers, 1977; Yuchtman & Seashore, 1967;) the conclusion was reached that it was more worthwhile to develop frameworks for assessing effectiveness than trying to develop theories of effectiveness (Cameron and Whetten (1983; Sowa et al., 2004).

The theoretical model in Figure 4.10 indicates that if a metropolitan municipality has “healthy” systems in place, it will facilitate the achievement of its goals as stipulated in its vision and mission (Beulens et al., 2011; Burke & Litwin, 1992; Immordino, 2010; Kaplan & Norton, 1992; Kushner & Poole, 1996; Nadler & Tushman, 1977; Nel & Haycock, 2005; Porter et al., 1976; Tichy, 1983; Waterman et al., 1980; Weisbord, 1976; Wiley, 2010), and also enable it to deliver the services that it must, ensuring customer and constituency satisfaction (Immordino, 2010). The successful achievement of its goals and the delivery of required services will in turn affect the degree of organisational effectiveness attributed to the metropolitan municipality (Burke & Litwin, 1992; Immordino, 2010; Kaplan & Norton, 1992; Kushner & Poole, 1996; Nadler & Tushman, 1977; Nel & Haycock, 2005; Wiley, 2010).

4.7.4 Conclusions

The theoretical model proposed above incorporates three of the traditional approaches to organisational effectiveness, namely the goal approach (Beulens et al., 2011; Cameron, 1986; Cunningham, 1977; Glunk & Wilderom, 1999; Hannan & Freeman, 1977; Martz, 2008; Price, 1972; Steers, 1977; Yuchtman & Seashore, 1967), the internal processes approach (Beulens et al., 2011; Bluedorn, 1980; Cameron & Whetten, 1983; Daft, 1992; Glunk & Wilderom, 1999; Martz, 2008), and the strategic constituencies approach (Beulens et al., 2011; Cameron & Whetten, 1983; Daft, 1992; Glunk & Wilderom, 1999; Martz, 2008; Tsui, 1984; Zammuto, 1984). It also supports the views of prominent organisational effectiveness

researchers in that - (1) it has been specifically developed to measure the organisational effectiveness of a metropolitan municipality in South Africa incorporating multiple behavioural and organisational variables specific to that organisation (Cameron, 1981; Cameron & Whetten, 1983; Henri, 2004; Herman & Renz, 1999; Richard et al., 2009; Sowa et al., 2004; Venkatraman & Ramanujam, 1986); and (2) it does not attempt to define the construct of organisational effectiveness but rather proposes a framework to measure it (Cameron & Whetten, 1983; Henri, 2004; Richard et al., 2009; Rojas, 2000; Sowa et al., 2004). It also incorporates many of the behavioural and organisational variables used in the nine assessment models which assess the organisational effectiveness of a total organisation discussed above (Burke & Litwin, 1992; Kaplan & Norton, 1992; Nadler & Tushman, 1977; Nel & Haycock, 2005; Porter et al., 1976; Tichy, 1983; Waterman et al., 1980; Weisbord, 1976; Wiley, 2010). The next step would be to determine the validity of this model by means of an empirical study.

4.8. CHAPTER SUMMARY

In this Chapter the assessment of organisational effectiveness was discussed. The discussion began with the reasons why it was important to assess organisational effectiveness, after which the difficulty of assessing organisational effectiveness received attention. After this the characteristics of assessment frameworks/models were discussed while the evaluation of nine existing assessment frameworks/models which measure the organisational effectiveness of a total organisation received attention. The applicability of the nine existing assessment frameworks to measure the organisational effectiveness of metropolitan municipalities in South Africa was then discussed, and the Chapter was then concluded with a recommended new, customised, theoretical assessment framework for

measuring the organisational effectiveness of a metropolitan municipality in South Africa.

In the next Chapter the empirical study will be discussed.

CHAPTER 5: EMPIRICAL STUDY

5.1 INTRODUCTION

In this Chapter the empirical study will be discussed. The discussion will include an overview of the steps in the research design, namely the literature review, data gathering and analysis, validation of the proposed theoretical model by means of Structural Equation Modelling (SEM) and how the proposed assessment framework was refined.

5.2 THE RESEARCH DESIGN

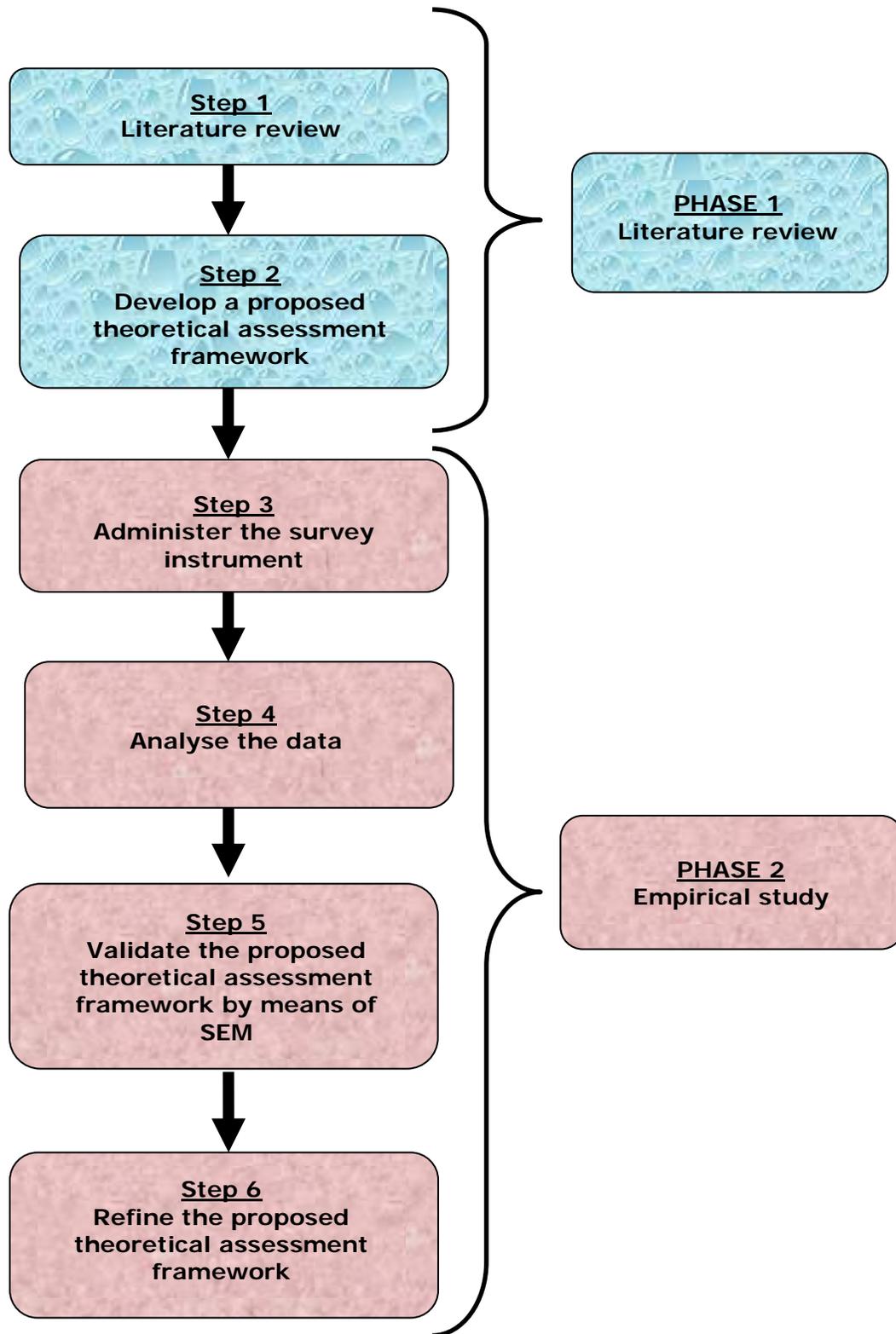
The research design refers to the plan, structure and steps that will be followed to answer the research questions (Babbie, 2010; Creswell, 2009; Kerlinger, 1986). It consists of the research approach and the research method. Figure 5.1 below again sets out the research design that was followed in this study (See Figure 1.3 in Chapter 1).

The research design consisted of the following two phases:

5.2.1 Phase 1: Literature review

According to Boote and Beile (2005), a literature review is an evaluative report of studies found in the literature related to your selected area. The review should describe, summarize, evaluate and clarify this literature and should give a theoretical basis for the research and help determine the nature of your own research. The literature phase of this study consisted of the following two steps:

Figure 5.1: The Research Design



5.2.1.1 Step 1: Literature review

During this step, the concept of organisational effectiveness was investigated, both in the Private and Public Sectors. The literature review for this study served the following purposes (Boote & Beile, 2005):

- It provided a context for the research.
- It justified the research.
- It ensured that the research had not been done before.
- It showed where the research fitted into the existing body of knowledge and illustrated how the subject had previously been studied.
- It highlighted flaws and outlined gaps in previous research.

This step was comprehensively covered in Chapter 2 and 3 of this thesis.

5.2.1.2 Step 2: Develop a proposed theoretical assessment framework

During this step, the literature review was used to conceptualise a new, proposed theoretical assessment framework for measuring the organisational effectiveness of a metropolitan municipality in South Africa. This step was comprehensively covered in Chapter 4 of this thesis.

5.2.2 Phase 2: Empirical study

According to Goodwin (2013), empirical research is a way of gaining knowledge by means of direct and indirect observation or experience. Empirical evidence (the record of one's direct observations or experiences) can then be analysed to better answer questions which cannot be studied in laboratory settings.

During Phase 2 of the research, an empirical study was conducted to validate the new, proposed theoretical assessment framework conceptualised during Phase 1. An empirical approach was chosen for this study as it would enable generated data obtained from a survey to be matched to theoretical variables in a hypothesised model, in order to determine whether the model is consistent with the data collected to reflect this theory (Babbie, 2010; Goodwin, 2013; Lei & Wu, 2007). The empirical study was conducted by gathering data from a metropolitan municipality in South Africa by means of a survey. The data obtained from this survey were statistically analysed and also exposed to Structural Equation Modelling (SEM) to determine possible relationships between the variables in the new, proposed theoretical assessment framework. Finally, recommended refinements to the new, proposed theoretical assessment framework were made. The empirical study consisted of the following three steps:

5.2.2.1 Step 3: Administering the survey instrument

(a) Data gathering approach

A cross-sectional survey strategy of inquiry was used and primary data were collected by means of a predetermined instrument to yield statistical data (Creswell, 2009). This strategy was decided on owing to the fact that a

cross-sectional survey provides a snap-shot at one point in time of a sample of the population which provides data that can be generalised to the population (Babbie, 2010).

(b) Population and sample

The population for this study was all the employees of one of the largest metropolitan municipalities in South Africa, with a total of 16 006 members. The convenience sampling method was used for this study, a nonprobability sampling method (Babbie, 2010). This method was used as all 16 006 employees were invited to voluntarily complete the survey instrument. A total of 6715 responses were received, 2096 electronically and 4619 hard copies, which comprised a sample of 42%. According to Babbie (2010), Curry and Gay (1987), Martinez-Pons (1997) and Wiley (2010), this sample size is an adequate representation of the population for survey purposes.

(c) The measuring instrument

In order to gather the required data to validate the new, proposed theoretical assessment framework for measuring organisational effectiveness, the Effectiveness Survey (ES) developed by Martins and Coetzee (2007) was utilised. The ES is a self-evaluation survey questionnaire which can be administered electronically over the Intranet or Internet, or by means of hard copies to individuals or groups. It takes between 20 and 30 minutes to complete the questionnaire, although respondents are not given a time limit (Ledimo, 2012). Martins and Coetzee (2007) state that the ES was developed on the basis of intense interviews and focus groups specifically for a South African organisation. The questionnaire consisted of two sections, namely Biographical Information and Survey Statements.

(i) Biographical information

This part gathered information on seven (7) biographical variables, namely Age, Gender, Qualifications, Occupational Level, Home Language, Employment Equity Group (Race), and Department.

(ii) Survey statements

A total of 78 statements were used to assess the following 13 dimensions as set out in Table 5.1 below.

Table 5.1:

ES Dimensions and Number of Statements per Dimension

ES dimension	Number of statements
1. Change management	8
2. Communication	4
3. Diversity	10
4. Employee engagement	10
5. Employee relations	5
6. Management	9
7. Rewards & recognition	5
8. Teamwork	3
9. Training & development	6
10. Trust	5
11. Values	6
12. Vision & mission	3
13. Work environment	4
Total	78

Latent factor (dimension) values were obtained by calculating the mean scores for the items that loaded on each latent factor (dimension).

The researcher decided, for various reasons, to utilise the ES to gather the required data to validate the new, proposed theoretical assessment framework. Firstly, according to Martins and Coetzee (2007), it is reliable,

valid, affordable and easy to administer. Secondly, the researcher is of the opinion that of all survey instruments developed in South Africa to gather data which is related to organisational effectiveness (Martins & Coetzee, 2007), the ES covers the most of the hypothesised variables in the proposed theoretical assessment framework. This is illustrated in Table 5.2 below.

(iii) *The ES scale*

Respondents are required to rate each of the 78 statements on a 5-point Likert scale (Likert, 1932), as shown below (Martins & Coetzee, 2007):

Strongly disagree	Disagree	Unsure	Agree	Strongly agree
1	2	3	4	5

Each of the 13 dimensions is measured separately and reflects the respondents' evaluation of these dimensions. Each of the 13 dimensions can produce a separate score for the dimension and all the dimensions can be added to provide a total score (Ledimo, 2012).

A pilot study was conducted with a draft version of the questionnaire in order to customise it. A group of human resource managers representing all the different departments and business units in the metropolitan municipality, as well as union representatives, were requested to complete the questionnaire. The purpose of this pilot study was to test the questionnaire's content validity, as respondents were requested to check the following four aspects:

- Was the terminology used appropriate for the metropolitan municipality?
- Did they understand the questions posed?

- Did the questions cover all relevant issues in the metropolitan municipality?
- Was the correct biographical information requested from respondents?

Table 5.2:

The Dimensions of the ES Coupled to the Hypothesised Variables in the Proposed Theoretical Measurement Model

Hypothesised variables in the proposed theoretical framework	The 13 dimensions measured by the ES
<u>Healthy systems</u>	
1. Internal functioning	1. Trust 2. Communication 3. Change management 4. Employee relations
2. Management practices	5. Management 6. Employee engagement
3. Teamwork	7. Teamwork
4. Work environment	8. Work environment
5. Rewards and recognition	9. Rewards and recognition
6. Training and development	10. Training and development
7. Interpersonal relations	11. Interpersonal relations
<u>Goal achievement</u>	
8. Vision and mission	12. Vision and mission
<u>Service delivery</u>	
9. Customer satisfaction	13. Customer satisfaction

Respondents were satisfied with the questionnaire and no changes were suggested. The draft questionnaire was thus accepted as the final version and was then used to gather data from the members of the municipality.

(d) Data gathering

The actual data were gathered by inviting all employees of the metropolitan municipality to participate in the survey in order to obtain self-generated data to test the validity of the new, proposed theoretical assessment framework (Martinez-Pons, 1997). The organisation's internal methods such as e-mails, 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 actions 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 ES 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.

The participants completed the survey in one of two ways:

- For those who had access to the Internet, an online version of the Effectiveness Survey (ES) was distributed to participants from an external web server. This method of data collection included posting the questionnaire on the organisation's Intranet 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 an invitation letter via e-mail, 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 the confidentiality and anonymity of the data collection process, as well as assuring the participants thereof.

- For those participants who did not have access to the Internet, a paper-and-pencil version of the ES was completed in facilitator controlled group sessions. This method 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, 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 e-mail address and fax numbers to enable them to send their surveys.

- (e) Justification for using online and paper-and-pencil data gathering methods

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

- 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) 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).

- Paper-and-pencil surveys have traditionally served as the primary method for gathering survey information, mainly because paper-and-pencil surveys are 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.
- 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 e-mails 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.

(f) 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 Survey Package. Data processing of the online surveys considered only 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 SPSS (2006) computer programme. Data were checked for missing values. Missing data were coded or identified and listwise deletion used to remove the missing data. The data were then analysed by means of the SPSS (2006) to execute statistical and quantitative procedures.

(g) Ethical considerations

In terms of the ethical considerations in this study, the permission of the metropolitan municipality was obtained to gather the survey data. The research survey itself 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 how feedback on the research results would be given (Wiley, 2010). 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.

5.2.2.2 Step 4: Analysis of the data

All the data gathered were analysed using the SPSS (2006). This comprehensive set of programmes is designed for use by social scientists and provides a wide range of statistical options (Durrheim, 2006).

The data obtained from the self-reporting survey instrument were used to produce descriptive statistics (Church & Waclawski, 1998), to conduct an item analysis to test the reliability of the instrument (Babbie, 2010), to conduct an exploratory factor analysis to identify the underlying relationships between the measured variables (Hair et al., 2010), and to conduct a confirmatory factor analysis as part of the Structural Equation Modelling process (Hair et al., 2010).

(a) Descriptive statistics

Descriptive statistics are statistical computations describing the general characteristics of a set or distribution of scores in a sample, and thus merely summarise a set of sample observations (Babbie, 2010; Green & Salkind, 2014). During this study descriptive statistics in the form of frequency

distributions, means and standard deviations were calculated for the data gathered from the research sample by means of the ES.

- Frequency distributions. Frequency distributions were used in this study to present the distribution of the biographical data, namely Age, Gender, Qualifications, Occupational Level, Home Language, Employment Equity Group (Race) and Department. According to Babbie (2010, p.428), "A description of the number of times that the various attributes of a variable are observed in a sample is called a frequency distribution". The frequency distributions that were calculated will be represented in graphical and tabular form.
- Means. Means were used as a measure of central tendency in this study to present the scores generated for each of the 78 items and 13 dimensions of the ES. A mean is an arithmetical average computed by summing the values of several observations and dividing by the number of observations (Babbie, 2010). Although the mean, the median and the mode provide different types of information and should be used in different ways, Green and Salkind (2014) recommend using the mean when the levels of measurement are interval and ratio, as is the case in this study. The mean also provides relatively more information than the mode or the median.
- Standard deviations. All data sets contain variability between the values of different observations. Measures of variability estimate the degree to which a set of scores differs from some measure of central tendency, most often the mean (Durrheim, 2006; Green & Salkind, 2014). Babbie (2010) refers to this as dispersion, which is described as the distribution of values around some

central value. According to Green and Salkind (2014), the standard deviation is the most commonly used measure of variability. For this reason the standard deviation was used in this study as a measure of variance or dispersion to estimate the average amount that each of the individual scores on the 78 items and the 13 dimensions of the ES instrument varies from the mean of the set of scores. The smaller the standard deviation, the more tightly the values are clustered around the mean; if the standard deviation is high, the values are widely spread out (Babbie, 2010).

(b) Reliability of dimensions

An item analysis is an assessment of whether each of the items included in a composite measure makes an independent contribution or merely duplicates the contribution of other items in the measure (Babbie, 2010). An item analysis will thus identify items that should remain in the instrument and items that should be deleted from the instrument. Green and Salkind (2014) refer to this as internal consistency, which they describe as the degree to which responses are consistent across the items within a measure. According to Kline (2011), in any type of statistical analyses it is critical to select measures with strong psychometric characteristics. This is because you analyse the product of measures, namely scores, and if the scores do not have good psychometric properties, then your results can be problematic. The statistic most often used in the literature to measure this internal consistency reliability is the reliability coefficient, called the coefficient alpha, also called Cronbach's Alpha (Babbie, 2010; Green & Salkind, 2014; Kline, 2011). According to Kline (2011), if the internal consistency is low, then the content of the items may be so heterogeneous that the total score is not the best possible unit of analysis for the measure.

In this study Cronbach's Alpha will be used to analyse the internal consistency of the scores obtained on the ES for the research sample. According to Hair et al. (1995, p. 641), "A commonly used threshold value for acceptable reliability is 0.70", while Durrheim and Painter (2006, p. 154) state that "Although an acceptable internal consistency depends on what is being measured, as a general rule of thumb, questionnaire-type scales with an alpha value of greater than 0.75 is considered reliable (internal consistent)". For this study the researcher used a Cronbach's Alpha coefficient of 0.70 or greater, as suggested by Hair et al. (1995) to determine the acceptability of internal consistency efficiencies obtained from analysing the scores obtained on the ES instrument for the research sample.

(c) Exploratory factor analysis

Factor analysis is a method to discover patterns among the variations in values of several variables (Babbie, 2010). More specifically, it is a statistical technique that is used to identify a relatively small number of factors in order to represent the relationship among sets of interrelated variables (Tredoux et al., 2006). Factor analysis usually involves three steps: (1) computing the intercorrelations between the variables, (2) extracting initial factors, and (3) rotating the factors to obtain a clearer picture of the factor content (Tredoux et al., 2006). In this study factor analysis was used to examine the results obtained from the ES survey instrument in order to determine interrelationships among the items and to identify clusters of items that share sufficient variation to justify their existence as a factor or construct in the proposed theoretical model to assess the organisational effectiveness of a metropolitan municipality in South Africa.

(d) Statistical significant levels

Statistical significance is the probability that an effect is not due to just chance alone (Coolidge, 2012). In statistics, a result is considered significant not because it is important or meaningful, but because it has been predicted as unlikely to have occurred by chance alone (Sirkin, 2005). However, Shaver (2014) argues that to know only whether a result is statistically significant, tells one virtually nothing about the magnitude or importance of the result. For this reason Pedhazur and Schmelkin (1991) encourage researchers to also report the effect size along with the p -value. In this study effects will be considered to be statistically significant at the 0.05 level, but the effect size will also be reported and considered in the analysis (Shaver, 2014).

5.2.2.3 *Step 5: Validating the proposed theoretical assessment framework by means of SEM*

(a) Introduction to SEM

Structural equation modelling (SEM) does not designate a single statistical technique, but instead refers to a family of related procedures known by many names, among them covariance structure analysis, latent variable analysis and confirmatory factor analysis (Hair et al., 1995; Kline, 2011). According to Hair et al. (1995, p. 622), "... all structural equation modelling techniques are distinguished by two characteristics: (1) estimation of multiple and interrelated dependence relationships, and (2) the ability to represent unobserved concepts in these relationships and account for measurement error in the estimation process".

According to Lei and Wu (2007), SEM is used to evaluate the validity of substantive theories with empirical data. The goal is thus to determine whether a hypothetically theorised model is consistent with the data collected to reflect this theory. According to Kline (2011), the purpose of SEM is to mainly allow the researcher to examine the relations between indicators and their associated latent variables representing the constructs in the theory, as represented in the confirmatory factor analysis measurement model. For this reason Falletta (2005, p. 38) states that "SEM can be used to determine whether an organizational model is valid".

SEM requires that a distinction be made between theoretical constructs and measurement indicators (Hair et al., 1995; Hunter & Gerbing, 1982). The theoretical constructs in a model are the latent variables which are hypothesised to exist from a review of the research literature. In contrast, the measurement indicator (an item on a survey instrument) is termed the manifest variable. The behaviour of a latent variable can be observed or measured only indirectly, through its effects on a manifest variable. The manifest variable is also termed an observed variable because it can be directly measured (Hair et al., 1995; Hunter & Gerbing, 1982; Kline, 2011). According to Hair et al. (1995), key features of SEM include the following:

- Both manifest and latent variables can be measured.
- Estimates of factor loadings, which indicate the influence of latent variables on manifest variables, are calculated.
- Estimates of the error variance within manifest variables are calculated.

Owing to the fact that SEM simultaneously estimates the relationships between the indicators (manifested variables or survey items) and the constructs (latent variables or hypothesised theoretical constructs in a model), it can be used to determine whether a pattern of relationships in the data matches the predictions in the hypothesised model, and in this way the validity of a proposed theoretical model can be determined (Hair et al., 1995; Kline, 2011). According to Sowa et al. (2004), a model of organisational effectiveness requires an appropriate analytical method to help analyse and validate its key aspects. SEM offers such a method (Hair et al., 1995; Hoyle, 1995; Kline, 2011). As the aim of this research study is to develop and validate an assessment framework for measuring the organisational effectiveness of a metropolitan municipality in South Africa, this researcher is of the opinion that SEM is ideal for this purpose.

(b) The advantages and disadvantages of SEM

As is the case with any statistical methodology, SEM has both advantages and disadvantages. According to Kline (2011) and Ledimo (2012), the following are some of the advantages of SEM:

- It can be used for theory testing and development.
- It can represent, estimate and test 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.

- It is a multivariate technique incorporating observed (measured) and unobserved variables (latent constructs).
- It allows researchers to recognise the imperfect nature of their measures.

The main disadvantages of SEM are the following:

- It provides no straightforward tests to determine model fit, it is complex, it requires large samples (> 200), it can be model driven, and there is no single “golden standard” for goodness-of-fit assessment (Kline, 2011; Ledimo, 2012).
- It 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; Ledimo, 2012).

It would seem that the advantages of SEM outweigh the disadvantages (Ledimo, 2012), as despite its limitations, the application of SEM has increased dramatically in organisational research over the past twenty years (Greenberg, 1994; Hair et al., 1995; Hunter & Gerbing, 1982). In a review of data analytic procedures used in organisational research during 1975-1993, Stone-Romero et al. (1995) found that the use of SEM has increased, while the use of path analysis has decreased markedly.

(c) Choosing a SEM strategy

According to Hair et al. (1995), the ultimate outcome of SEM is always the assessment of a series of relationships. However, this can be achieved through different strategies in applying SEM, and the choice of the most

appropriate one will depend on the aim of the analysis. In this respect Hair et al. (1995) define three distinct strategies in the application of SEM:

- Confirmatory modelling strategy. This is the most direct application of SEM wherein the analyst specifies a single model and SEM is used to assess its significance. While this is the most rigorous application, it is not the most stringent test of a proposed model, as the proposed model may only be one of several possible acceptable models. Thus, the more rigorous test is achieved by comparing models.
- Competing models strategy. As a means of evaluating the estimated model with alternative models, overall model comparisons can be performed in this strategy. The strongest test of a proposed model is to identify and test competing models that represent truly different hypothetical structural relationships. When comparing these models, the researcher comes much closer to a test of competing “theories”, which is a much stronger test than just a slight modification of a single “theory”.
- Model development strategy. This approach differs from the previous two strategies in that while a model is proposed, the purpose of the modelling effort is to improve the model through modifications of the structural and/or measurement models. In many cases theory can provide only a starting point for the development of a theoretically justified model that can be empirically tested. Thus, the analyst must employ SEM not only to empirically test the model but also to provide insights into its re-specification.

As the aim of this research study is to develop and validate a model to measure organisational effectiveness, this researcher will follow a model development strategy in the application of SEM. This will allow the researcher to start with a proposed theoretical model, empirically test it, and modify and improve it until it has acceptable fit for measuring the organisational effectiveness of a metropolitan municipality in South Africa (Hair et al., 1995).

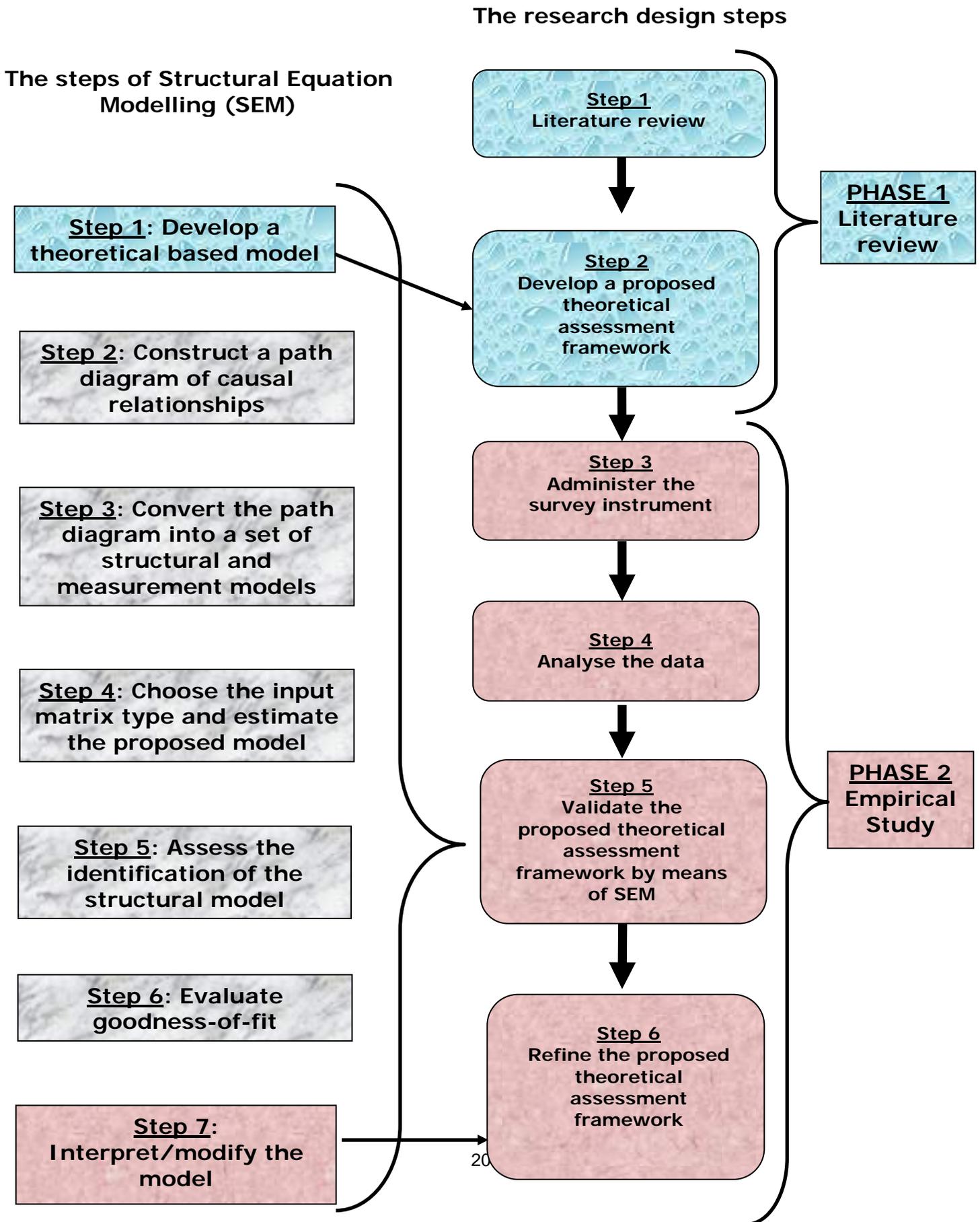
(d) Integrating SEM into the research design

Hair et al. (1995) propose a 7-stage model development strategy for using SEM:

- Stage 1: Develop a theoretical model.
- Stage 2: Construct a path diagramme of causal relationships.
- Stage 3: Convert the path diagramme into a set of structural and measurement models.
- Stage 4: Choose the input matrix type and estimate the proposed model.
- Stage 5: Assess the identification of the structural model.
- Stage 6: Evaluate goodness-of-fit (GOF).
- Stage 7: Interpret and modify the model.

As the application of these 7 stages is most appropriate for the model development strategy applicable to the aim of this research study (Hair et al. 1995; Kline, 2011), the stages were integrated into the overall research design for this study as set out in Figure 5.2 below.

Figure 5.2: Integrating SEM with the Research Design



(e) The detailed SEM steps

An explanation of the detail of each of the seven stages proposed by Hair et al. (1995) for using SEM as a strategy for model development is discussed below. Included in this explanation is how the researcher applied each stage to the overall research design in order to achieve the aim of this study.

Stage 1: Develop a theoretical model

According to Hair et al. (1995), structural equation modelling is based on causal relationships, in which the change in one variable is assumed to result in a change in another variable. The strength and conviction with which the researcher can assume causation between two variables lies not in the analytical methods chosen but in the theoretical justification provided to support the analyses. In this respect Lei and Wu (2007) argue that a sound model is theory based, and that theory is based on findings in the literature, knowledge in the field, or one's educated guesses. This view is supported by Hair et al. (2010) who state that all available relevant theory, research and information must be used to construct the theoretical model of the construct.

During Step 2 of the literature review (Phase 1) above, a proposed theoretical model for measuring the organisational effectiveness of a metropolitan municipality in South Africa was compiled. This theoretical model is depicted in Figure 4.10 in Chapter 4. The proposed theoretical model shows that there are three latent constructs and hypothesises that there is a causal relationship between Healthy Systems, Goal Achievement and Service Delivery, and a causal relationship between Goal Achievement, Service Delivery and Organisational Effectiveness.

Stage 2: Construct a path diagramme of causal relationships

In Stage 1 broad causal relationships were expressed in the proposed theoretical model. In the next stage these broad causal relationships need to be portrayed by means of a path diagram, which will be used to depict a series of causal relationships (Hair et al., 1995). According to Hair et al. (1995), a construct is a theoretical based concept that acts as a building block used to define relationships. They thus suggest that a researcher should define a path diagramme in terms of constructs. In constructing a path diagramme, which will be shown in the next Chapter, the relationships between constructs are represented with arrows. A straight arrow line indicates a direct causal relationship from one construct to another. A double arrow line between constructs indicates just a correlation between constructs (Hair et al., 1995).

Stage 3: Convert the path diagramme into a set of structural and measurement models

According to Hair et al. (1995), once the theoretical model has been developed and portrayed in a path diagramme, the model must be specified in more formal terms through a series of equations that define - (1) the measurement model specifying which variables measure which constructs; (2) the structural equations linking latent constructs; and (3) a set of matrices indicating any hypothesised correlations among constructs or variables.

- The measurement model. According to Hair et al. (1995), to specify the measurement model, we have to make the transition from factor analysis where we had no control over which variables describe each factor, to a confirmatory factor analysis

mode where we specify which variables define each construct. Tredoux et al. (2006) explains that the measurement model specifies the indicators for each construct and assesses the validity of each construct for purposes of estimating the hypothesised directional (causal) relationships. According to Preedy and Watson (2009), the objective of confirmatory factor analysis is to test whether the data fit a hypothesised measurement model. Thus for this study a confirmatory factor analysis was conducted on the data obtained from the ES survey instrument to specify and validate the measurement model (Hair et al., 1995; Tredoux et al., 2006) using the Analysis of Moment Structures (AMOS) 7.0 technique of SPSS (Durrheim, 2006).

- The structural model. Once the measurement model has been specified, the structural model must be specified by assigning relationships from one construct to another based on the proposed theoretical model (Hair et al., 2010; Tredoux et al., 2006). A distinction was also made between endogenous constructs and exogenous constructs. Then, firstly, each endogenous construct was made the dependent variable in a separate equation. Secondly, the predictor variables were then all constructs at the end, or tails, of the straight arrows leading into the endogenous variable (Hair et al., 1995; Tredoux et al., 2006). The structural model constructed for this study is illustrated in the following Chapter.

Stage 4: Choose the input matrix type and estimate the proposed model

- Choosing the input matrix. According to Hair et al. (1995), SEM also differs from other multivariate techniques in that it uses only

the variance/covariance or correlation matrix as its input data. Although individual observations can be input into the programmes, the focus of SEM is not on individual observations but on the pattern of relationships across respondents. Input for the programme is a correlation or variance/covariance matrix of all indicators used in the model. The measurement model then specifies which indicators correspond to each construct, and the latent construct scores are then employed in the structural model (Hair et al., 1995; Tredoux et al., 2006).

Hair et al. (1995) recommend using the variance/covariance matrix as the input for SEM when a true test of theory is being performed, as the variance/covariances satisfy the assumptions of the methodology and are the appropriate form of the data for validating causal relationships. Hair et al. (1995) also state that the most widely used means of computing the variances/covariances between manifest variables is the Pearson product-moment correlation. As such a variance/covariance matrix was compiled for this study as the input to estimate the proposed theoretical assessment model of organisational effectiveness using the Pearson product-moment correlation coefficient. This matrix is shown in the following Chapter.

- Estimating the proposed model. The AMOS 7.0 computer programme was used to conduct the CFA, as it is a module of SPSS (2006) and uses a graphical interface for all functions so that the researcher does not have to use any syntax commands or computer code (Hair et al., 2010). According to Arbuckle (2006), AMOS enables a researcher to specify, estimate, assess and present models to show hypothesised relationships among

variables and the software allows you to build models more accurately than with standard multivariate statistics techniques. Users can choose either the graphical user interface or non-graphical, programmatic interface, and it allows you to build attitudinal and behavioural models that reflect complex relationships. The software thus provides SEM that is easy to use and allows a researcher to easily compare, confirm and refine models.

Stage 5: Assess the identification of the structural model

According to Hair et al. (1995), identification is a relatively simple matter in confirmatory factor analysis, as the diagnostic procedures of the software programme used to compute the confirmatory factor analysis are usually sufficient to detect identification problems. In this regard Hair et al. (1995) state that the most common problem would occur if multiple variables were hypothesised to be indicators for two or more constructs. An identification problem is thus in simple terms the inability of the proposed model to generate unique estimates. The results of the AMOS 7.0 (SPSS, 2006) software analysis and identification aspects will be discussed in the following Chapter.

Stage 6: Evaluate goodness-of-fit (GOF)

According to Hair et al. (1995), the results must firstly be evaluated to assess the degree to which the data and proposed models meet the assumptions of SEM. Then the results must be examined for "offending estimates", which are estimated coefficients in either the structural or measurement models that exceed acceptable limits. Hair et al. (1995) state that the most common examples of offending estimates are - (1) negative

error variances or non-significant error variances for any construct; (2) standardised coefficients exceeding or very close to 1.0; or (3) very large standard errors associated with any estimated coefficient. In the next Chapter the results of the assessment of the assumptions and offending estimates will be reported.

According to Hair et al. (1995), once the researcher has established that the data meet the assumptions and that there are no offending estimates, the next step is to assess the overall model fit with one or more goodness-of-fit measures. Goodness-of-fit is a measure of the correspondence of the actual or observed input covariance matrix with that predicted from the proposed model. According to Suhr (2006), most statistical methods require only one statistical test to determine the significance of the analysis, while in confirmatory factor analysis several statistical tests are used to determine how well the model fits to the data.

The first assessment of model fit must be done for the overall model, before evaluating the structural and measurement models, to ensure that the overall model is an adequate representation of the entire set of causal relations (Hair et al., 1995). Hair et al. (2010) classify GOF measures into three general groups, namely (1) absolute measures, (2) incremental measures, and (3) parsimony fit measures. The authors further suggest using three to four fit indices to provide adequate evidence of model fit, with at least one incremental index and one absolute index in addition to the chi-square and the associated degrees of freedom. As such the researcher decided to utilise the following GOF indices:

(i) *Absolute Fit Indices*

- Chi-square (CMIN). The X^2 test indicates the difference between the observed covariance matrix and the expected covariance matrix (Gatignon, 2010; Kline, 2011). According to Hoe (2008) values closer to zero, indicating non-significance, would indicate a good fit. However, Kline (2011) states that passing the X^2 test is not the final word in model testing, and for this reason Gatignon (2010) suggests that other measures of fit should also be used. The size of the sample can also affect the observed value of X^2 , with researchers tending to disregard the X^2 index if the sample exceeds 200 and the other indices indicate that the model is acceptable (Hair et al., 1995).
- Goodness-of-Fit Index (GFI). The goodness-of-fit index (GFI) is a measure of fit between the hypothesised model and the observed covariance matrix. The GFI ranges between 0 and 1, with a cut-off value of 0.9 generally indicating acceptable model fit (Baumgartner & Hombur, 1996; Kline, 2011).
- Root Mean Square Error of Approximation (RMSEA). The RMSEA avoids issues of sample size by analysing the discrepancy between the hypothesised model, with optimally chosen parameter estimates, and the population covariance matrix (Hooper, Coughlan & Mullen, 2008). According to Hu and Bentler (1999) and Kline (2011), the RMSEA ranges from 0 to 1, with smaller values indicating better model fit, and a value of 0.06 or less being indicative of acceptable model fit.

(ii) *Incremental Fit Indices*

- Normed Fit Index (NFI). The NFI analyses the discrepancy between the chi-square value of the hypothesised model and the chi-square value of the null model (Bentler & Bonnet, 1980). According to Hu and Bentler (1999), values for the NFI should range between 0 and 1, while Hair et al. (1995) recommend a level of 0.90 or above as indicating a good model fit.
- Tucker Lewis Index (TLI). The TLI is similar to the NFI, but is not normed, and these values can fall below 0 or above 1 (Hair et al., 2010). Hair et al. (1995) recommend a level of 0.90 or above as indicating a good model fit.
- Comparative Fit Index (CFI). The comparative fit index (CFI) analyses the model fit by examining the discrepancy between the data and the hypothesised model, while adjusting for the issues of sample size inherent in the chi-squared test of model fit (Gatignon, 2010). According to Hu and Bentler (1999) and Hoe (2008), CFI values range from 0 to 1, with larger values indicating better fit, while a value of 0.90 or larger is generally considered to indicate acceptable model fit.

Stage 7: Interpret and modify the model

In this final stage of the SEM process Hair et al. (1995) state that once the model has been deemed acceptable, the researcher may wish to examine possible model modifications to improve the theoretical explanation or the

goodness-of-fit. In this study the following were used to look for model improvements (Hair et al., 1995):

- An examination of the standardised residuals (also called normalised residuals) of the predicted covariance matrix as obtained from the AMOS programme (SPSS, 2006).
- An examination of the modification indices, which were calculated for each non-estimated relationship.

The proposed model to measure organisational effectiveness was also subjected to a thorough literature review of existing organisational effectiveness theory.

5.2.2.4 Step 6: Refinement of the new, proposed theoretical assessment framework

The new, proposed theoretical assessment framework to measure the organisational effectiveness of a metropolitan municipality in South Africa was finally refined by incorporating the results of the SEM process.

5.3 CHAPTER SUMMARY

In this Chapter the empirical study was discussed. The discussion included an overview of the steps in the literature review, data gathering and analysis, validation of the proposed theoretical model by means of Structural Equation Modelling (SEM) and how the proposed assessment framework was refined.

In the next Chapter the research results will be discussed.

CHAPTER 6: RESEARCH RESULTS

6.1 INTRODUCTION

In this Chapter the results of the empirical study will be discussed. The Chapter will start with a discussion of descriptive statistics followed by a discussion of the item analysis that was conducted on the Effectiveness Survey (ES) to determine the reliability of the dimensions. Next the exploratory factor analysis that was conducted will be explained. Thereafter the confirmatory factor analysis that was conducted as part of Structural Equation Modelling will be discussed, and the Chapter will be concluded with a comparison of the SEM structural model and original theoretical model developed in Chapter 4.

6.2 DESCRIPTIVE STATISTICS

During this study descriptive statistics in the form of frequency distributions, means and standard deviations were determined for the research sample.

6.2.1 Descriptive statistical analysis: Biographical information

Frequency distributions were used in this study to present the distribution of the biographical data, namely Age, Gender, Qualifications, Occupational Level, Home Language, Employment Equity Group (Race) and Department. 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". The frequency distributions that were calculated are shown in Figures 6.1 to 6.7 below.

Figure 6.1 indicates that the largest age group of the sample (40%) was 46 years or older, while the smallest portion of the sample was under 25 years of age. The majority of the sample (96.4%) was 25 years or older, indicating that very few young employees took part in the survey.

Figure 6.1: Frequency Distribution of Age of Respondents

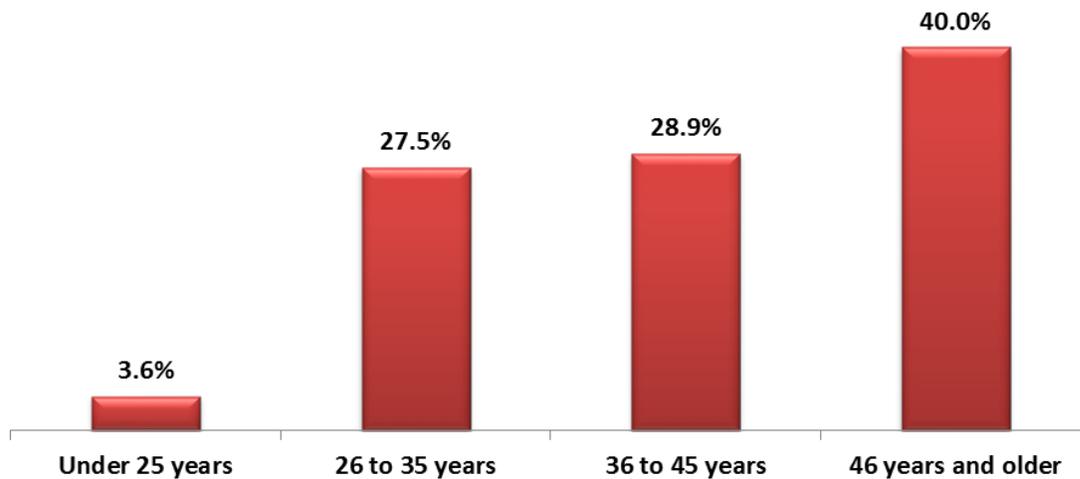


Figure 6.2 below indicates that the majority of the sample (62%) was female.

Figure 6.2: Frequency Distribution of Gender of Respondents

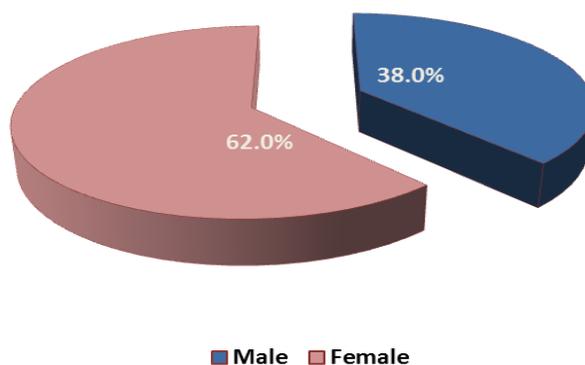


Figure 6.3 below indicates that 50.4% of the sample has a Matric or lower qualification, while only 20% had a university degree as qualification.

Figure 6.3: Frequency Distribution of Qualifications of Respondents

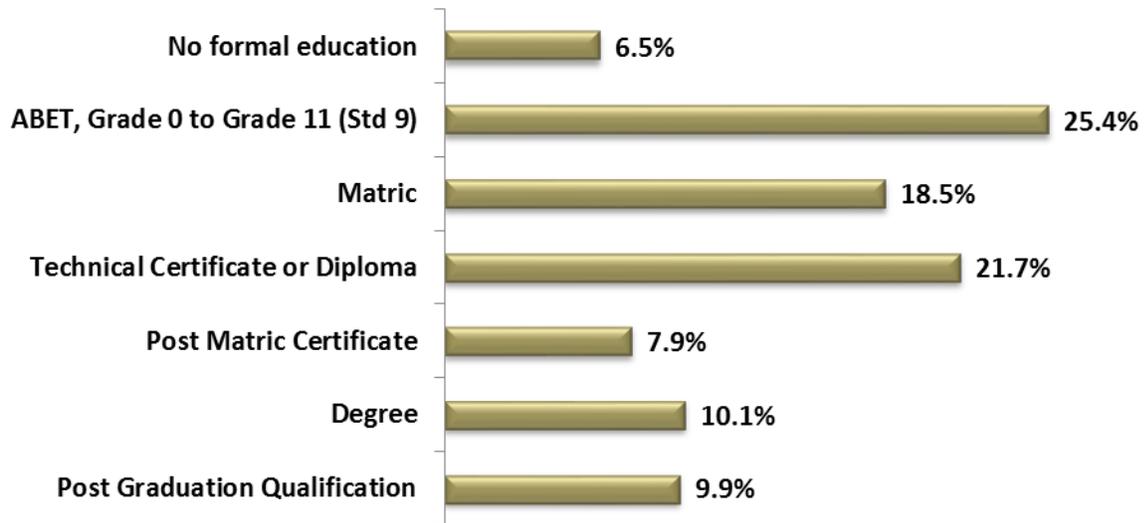


Figure 6.4 below indicates that top/senior managers made up 7.6% of the sample, while the majority of the sample (50.3%) was made up of middle managers, supervisors, professionals, specialists and skilled employees.

Figure 6.4: Frequency Distribution of Occupational Level of Respondents

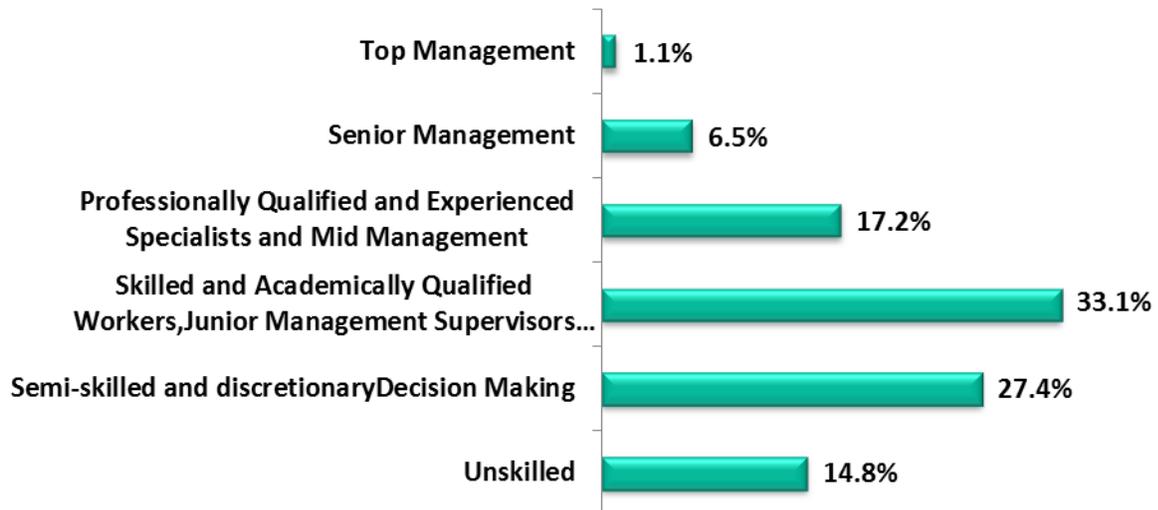


Figure 6.5 below indicates that 81.9% of the respondents in the sample speak an African language. This supports the national statistics for

municipalities in South Africa which indicate that an African language is spoken by the majority of local government employees (DCOGTA, 2009).

Figure 6.5: Frequency Distribution of Home Language of Respondents

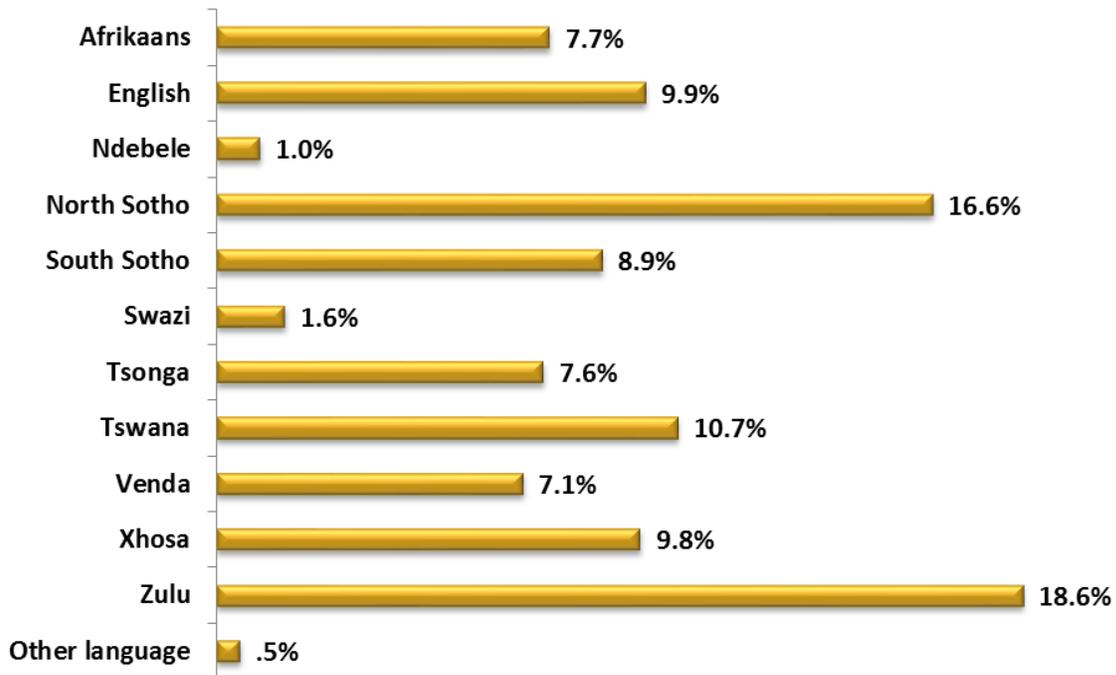


Figure 6.6 below indicates that the majority of the sample (82.1%) is Africans. This is in line with South African government legislation which compels the employment of previously disadvantaged groups in municipalities [Employment Equity Act, 1998 (Act No 55 of 1998)].

Figure 6.6: Frequency Distribution of Employment Equity Group (Race) of Respondents

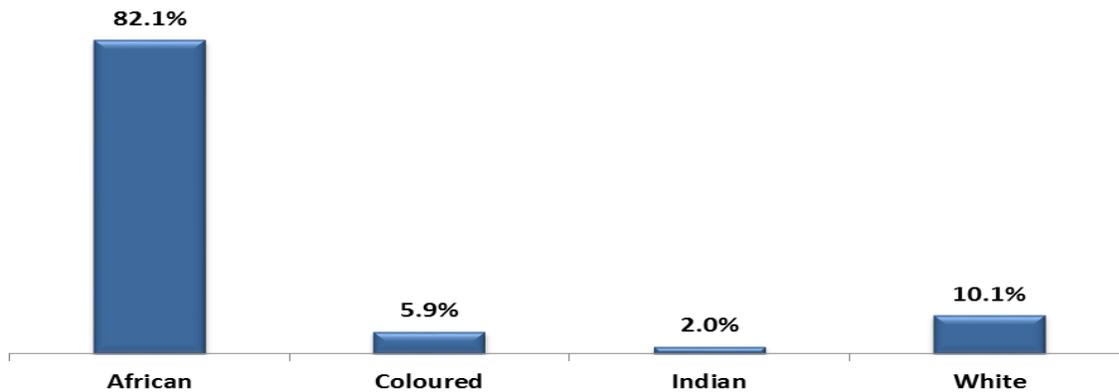
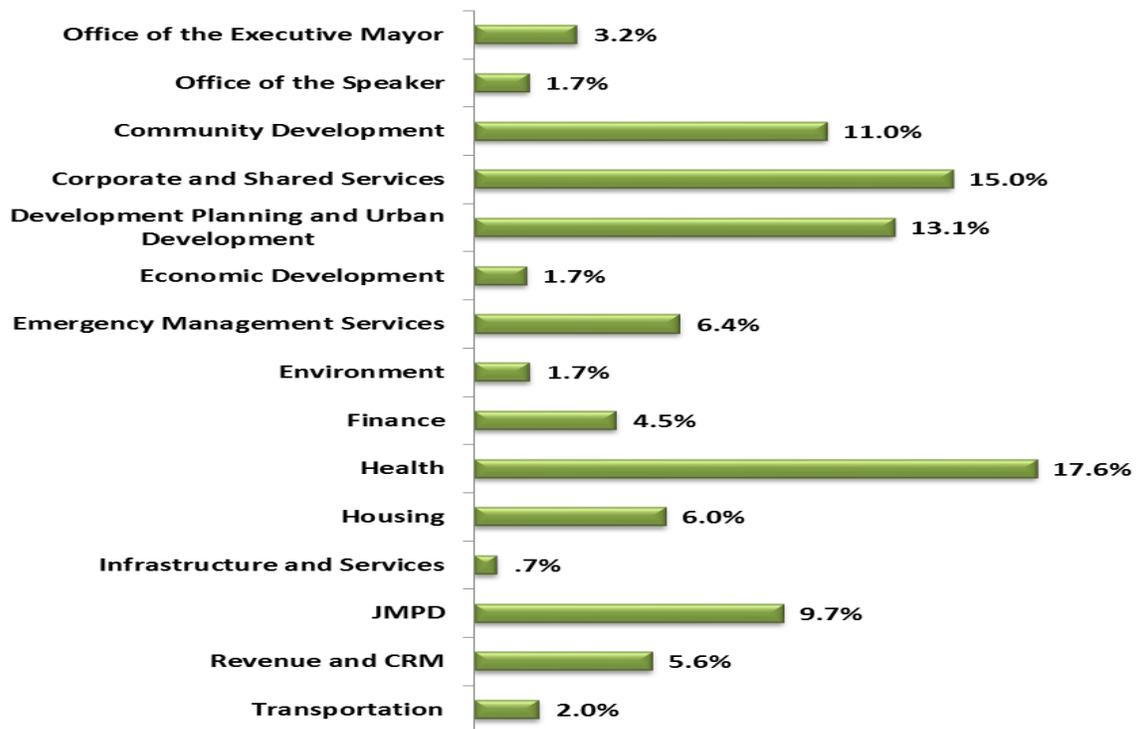


Figure 6.7 below indicates that the sample consisted of employees from all the work areas in the metropolitan municipality in which the survey was conducted, ranging from a low representation of 0.7% for Infrastructure and Services to a high representation of 17.6% for Health.

Figure 6.7: Frequency Distribution of Department of Respondents



6.2.2 Descriptive statistical analysis: Effectiveness Survey dimensions

Means were used in this study as a measure of central tendency to present the scores generated for each of the 13 dimensions of the ES. Standard deviations were used in this study to estimate the degree to which the scores obtained for the 13 dimensions of the ES differed from the mean of the set of factor scores. Table 6.1 below shows the mean and standard deviation for each of the 13 dimensions of the ES.

Table 6.1:

Means and Standard Deviations for the 13 Dimensions of the ES (Average n = 6514 after Listwise Deletion for Missing Data)

ES Dimension	Minimum	Maximum	Mean	Standard deviation
1. Vision and Mission	1	5	3.66	1.30
2. Values	1	5	3.96	1.11
3. Diversity	1	5	3.18	1.36
4. Employee Relations	1	5	2.86	1.39
5. Teamwork	1	5	3.46	1.33
6. Management	1	5	3.20	1.37
7. Trust	1	5	3.27	1.30
8. Communication	1	5	3.08	1.38
9. Training and Development	1	5	3.06	1.05
10. Work Environment	1	5	3.26	1.40
11. Rewards and Recognition	1	5	2.55	1.31
12. Change Management	1	5	2.87	1.33
13. Employee Engagement	1	5	3.34	1.33
TOTAL for the ES	-	-	3.21	1.30

Table 6.1 above indicates that the average sample size for respondents was 6514 after listwise deletion for missing data. According to Roth (1994), listwise deletion is the preferable method for handling missing data. When missing values are excluded in a listwise fashion it means that if there is a case that has a missing value for at least one of the variables, then that case is excluded from the analysis (Allison, 2001). In this respect, Peng, Harwell, Liou and Ehman (2006) suggest that when more than 20% of data is

missing, statistical analyses are likely to be biased. In the current study, owing to the large sample size (average $n = 6514$) and the fact that the largest percentage of missing data was 7% for Question 44 of Dimension 1, namely Vision & Mission (See **Appendix A**), the researcher is of the opinion that the missing data had no effect on the statistical power of the analyses conducted (Peng et al., 2006). For more detail regarding the missing data for the 13 dimensions of the ES, see **Appendix A**.

For the purposes of this study, the recommended mean cut-off score of 3.2 on a scale of 1–5 was used to differentiate between potential positive and negative responses, with scores above 3.2 indicating a positive perception and scores below 3.2 indicating a negative perception of that dimension. Research by the HSRC indicates that an average of 3.2 is a good guideline to distinguish between positive and potential negative perceptions (Castro & Martins, 2010; Ledimo, 2012). From Table 6.1 above, the total ES mean of 3.21 indicates that the respondents were mostly satisfied with the various aspects of the organisation measured by the 13 ES dimensions. Also, respondents tended more towards agreeing rather than not agreeing on seven of the 13 dimensions. The six dimensions on which respondents tended more towards disagreeing rather than agreeing could be considered as future areas of development for the organisation. The largest standard deviation obtained from the data was 1.40, so all data were within 2 standard deviations of the mean, an acceptable range variance for such studies (Green & Salkind, 2014).

6.3 RELIABILITY OF DIMENSIONS

Using the 13 pre-determined dimensions of the ES, an *item analysis* was conducted. This was to determine whether each of the items included in a composite measure makes an independent contribution or merely duplicates

the contribution of other items in the measure (Babbie, 2010). Green and Salkind (2014) refer to this as *internal consistency*, which they define as the degree to which responses are consistent across the items within a measure. Table 6.2 below sets out the internal consistency of each of the 13 dimensions of the ES as well as the overall reliability (Cronbach's Alpha). It can be seen that all of the dimensions demonstrate high internal consistency, ranging from a low of 0.79 to a high of 0.95, with an overall reliability of 0.86. According to Hair et al. (1995, p. 641), "a commonly used threshold value for acceptable reliability is 0.70". Using this guideline all the Cronbach's Alpha values obtained from the item analysis are deemed acceptable for this study. Table 6.2 also indicates that three of the dimensions would have had an even higher internal consistency if certain items (survey questions) were eliminated from the dimensions, indicated in brackets. However, due to the fact that the differences in Cronbach's Alpha values obtained by eliminating certain items were small and insignificant, and that there was no difference in the total Cronbach's alpha value obtained for the total ES, the items were retained.

Table 6.2:

The Internal Consistency of the 13 Pre-defined Dimensions of the ES

Dimension No.	Description	Items	Cronbach's alpha	No of items
1	Vision and Mission	43-45	0.84 (drop 45, 0.89)	3 (2)
2	Values	46-51	0.88	6
3	Diversity	52-61	0.83	10
4	Employee Relations	62-66	0.91	5
5	Teamwork	67-69	0.83 (drop 69, 0.86)	3 (2)
6	Management	70-78	0.95	9
7	Trust	79-83	0.82	5
8	Communication	84-87	0.80	4
9	Training and Development	88-93	0.87	6
10	Work Environment	94-97	0.79 (drop 97, 0.80)	4 (3)
11	Rewards and Recognition	98-102	0.81	5
12	Change Management	103-110	0.92	8
13	Employee engagement	111-120	0.88	10
Total for the ES			0.86 (0.86)	78 (75)

6.4 EXPLORATORY FACTOR ANALYSIS

Exploratory factor analysis (EFA) was used to identify the underlying relationships between the measured variables in order to identify a set of latent variables (Fabrigar, Wegener, MacCallum & Strahan, 1999). In order to do this, the questions of the ES used to measure respondents' perceptions regarding the organisational effectiveness of their metropolitan municipality were subjected to Principal Component Analysis (PCA) (Kline, 2011), using SPSS Version 22 (SPSS, 2006). The measured variables were the 78 questions of the ES which represented different aspects that could have an influence on the effective functioning of the metropolitan municipality.

Prior to performing PCA, the suitability of the data for factor analysis was assessed. To do this the relationships among the 78 variables that were measured, were investigated using Pearson's Product-Moment Correlation Coefficient, as the respondents used an interval scale of 1 to 5 to indicate their preferences (Babbie, 2010). The resultant correlation matrix confirmed the presence of a number of coefficients of 0.3 and above. Additionally, the Kaiser-Meyer-Olkin value was 0.982, exceeding the recommended minimum value of 0.6 as suggested by Kaiser (1974). The Bartlett's Test of Sphericity (Bartlett, 1954) also reached statistical significance at the $p < 0.001$ level, supporting the factorability of the correlation matrix. For more detail regarding these correlations, see *Appendix B*.

The next step that the researcher followed was to select the appropriate number of factors to include in the model. According to Fabrigar and Wegener (1999), when selecting the number of factors to include in a model, researchers must try to balance parsimony (a model with relatively few factors) and plausibility (that there are enough factors to account for

correlations among measured variables). Fabrigar and Wegener (1999) argue that it is better to include too many factors (overfactoring) than too few factors (underfactoring).

There are a number of procedures designed to determine the optimal number of factors to retain in EFA (Fabrigar et al., 1999; Hair et al., 2010; Ruscio & Roche, 2012). According to Hair et al. (2010), most researchers seldom use a single procedure to determine how many factors to extract. For this study the researcher decided to use two of the most common and widely used procedures for determining the factors to retain (Fabrigar et al., 1999; Hair et al., 2010; Ruscio & Roche, 2012):

- Kaiser's (1974) eigenvalue-greater-than-one rule (or K1 rule)

According to Fabrigar et al. (1999), the eigenvalue of a factor represents the amount of variance of the variables accounted for by the factor. The lower the eigenvalue, the less that factor contributes to the explanation of variance in the variable. Using Kaiser's (1974) K1 rule, the eigenvalues for the correlation matrix were computed to determine how many of these eigenvalues were greater than 1. This number would then be the number of factors to include in the model.

PCA using the 78 original items revealed the presence of 12 factors with eigenvalues exceeding 1 but the solution was not acceptable. Allowing the solution to consider only 11 factors resulted in a more interpretable solution. Two of the items, namely Q106 and Q119, were excluded in the final analysis because they did not load sufficiently on any of the components and their deletion resulted in more variance in the data being explained by the solution.

Table 6.3 shows that PCA using the remaining 76 items indeed revealed the presence of only 11 components with eigenvalues exceeding 1, cumulatively explaining 63.35% of the variance in the data. The researcher thus decided to retain these 11 components (factors), as Hair et al. (2010) argue that in the social sciences, where information is often less precise, factors that account for 60% or more of the total variance are satisfactory. For more detail regarding the eigenvalues for and the common variances explained by the total component solution, see **Appendix C**.

Table 6.3:

Total Variance Explained by 11 Components Obtained from the Exploratory Factor Analysis with the Remaining 76 Items

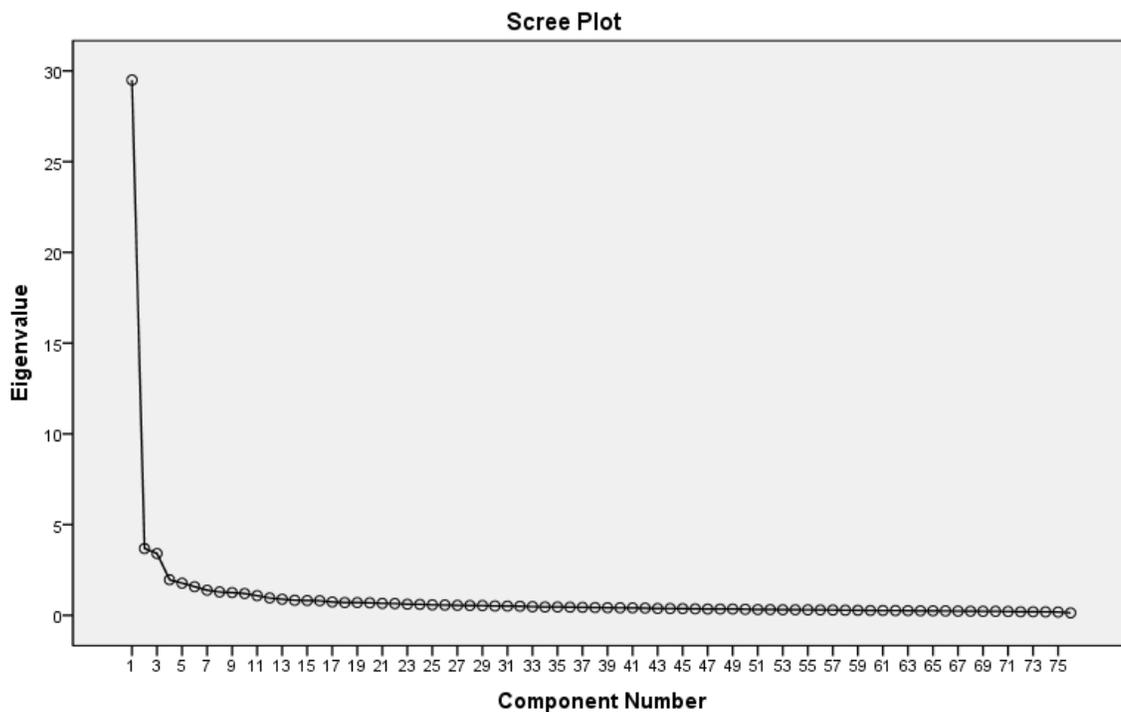
Component	Rotation sums of squared loadings		
	Eigenvalues	% of variance	Cumulative %
1	12.53	16.49	16.49
2	9.10	11.98	28.47
3	5.32	7.01	35.47
4	4.78	6.29	41.76
5	3.11	4.09	45.85
6	2.47	3.25	49.09
7	2.41	3.17	52.27
8	2.36	3.11	55.37
9	2.22	2.93	58.30
10	1.92	2.52	60.82
11	1.92	2.52	63.35

- Cattell's (1966) scree plot

Cattell (1966) suggests computing the eigenvalues for the correlation matrix and then placing these values on a scree plot from largest to smallest. The graph is then examined to determine the last substantial drop in the magnitude of eigenvalues. The number of plotted points before the last drop is the number of factors to include in the model. The researcher subsequently compiled a scree plot according to Cattell (1966) and this is

shown in Figure 6.8 below. The scree plot indicates an inflection point at the eleventh factor, confirming the results obtained from Kaiser's (1974) K1 rule. For this reason the researcher decided to retain these 11 components for further investigation.

Figure 6.8: Scree Plot of Eigenvalues



According to Fabrigar et al. (1999), when two or more factors are present in any solution, there exist an infinite number of orientations of the factors that will explain the data equally well. As there is no unique solution, a single solution must be selected from the infinite possibilities. Thurstone (1947) suggests using a simple structure criterion for selecting among solutions. This is achieved by rotating the factors in multidimensional space to arrive at a solution with the best simple structure (Fabrigar et al., 1999). The researcher decided to use the Varimax orthogonal rotation method, as it is the most widely used and is simple and conceptually clear (Fabrigar et al., 1999).

As indicated in Table 6.4 below, the rotated solution revealed the presence of a simple structure (Thurstone, 1947), with each of the 11 components showing a number of significant loadings, with loadings of less than 0.4 being excluded from the solution (Hair et al., 2010).

Table 6.4

Rotated Component Matrix: Principal Component Analysis with Varimax Orthogonal Rotation

Question No.	Question Content	Component 1 Loadings
73	My immediate supervisor/manager listens to our suggestions and concerns.	0.795
74	My immediate supervisor/manager responds to our suggestions and concerns.	0.787
78	My immediate supervisor/manager gives me clear instructions.	0.782
72	My immediate supervisor/manager supplies me with sufficient information needed for my job.	0.756
80	I trust my immediate supervisor/manager.	0.747
70	My immediate supervisor/manager plans properly for operational needs.	0.747
77	My immediate supervisor/manager knows what is happening with my work.	0.731
76	My immediate supervisor/manager sets achievable goals for his/her subordinates.	0.730
116	My immediate supervisor/manager seems to care about me as a person.	0.717
75	My immediate supervisor/manager gives available resources to the staff who need it most for their work.	0.693
79	My immediate supervisor/manager trusts me.	0.682
101	My immediate supervisor/manager recognises and/or compliments me for work well done.	0.667
112	My immediate supervisor/manager encourages me to develop myself further.	0.636
93	My immediate supervisor/manager is properly trained for his/her job role.	0.620
111	In the last seven days my immediate supervisor/manager recognised or praised me for doing good work.	0.596
85	My immediate supervisor/manager explains notices displayed in my workplace to me.	0.572
117	I am motivated to do better by the example set by my management.	0.532
118	In my department our supervisors/managers regularly visit us at our workplace.	0.528

84	In my work situation, communication flows freely between colleagues and supervisors/managers.	0.489
86	We have regular staff meetings in my department.	0.411

Question No.	Question Content	Component 2 Loadings
107	In my organisation we are timeously consulted on any proposed workplace changes.	0.734
108	At my workplace we are encouraged to participate in change.	0.699
103	In my organisation management is honest and open about change.	0.690
109	At my workplace we are properly prepared for new changes (i.e. technology, work processes, etc).	0.676
110	My organisation helps us to adapt/adjust to our new job roles and responsibilities.	0.663
105	Changes made in my organisation have had a positive impact on our service delivery.	0.644
104	My department attempts to constantly make use of new and better work methods.	0.589
82	I trust senior leadership in my organisation.	0.588
64	My organisation encourages its employees to be involved in decision-making.	0.560
83	I trust the official communications from my organisation.	0.530
63	My organisation treats its employees with dignity and respect.	0.529
71	Senior management in my organisation plan properly for the future.	0.529
66	In my experience terms and conditions of service are applied fairly in my organisation.	0.489
62	In my organisation employees are allowed to have and share their point of view..	0.484
65	My department is constantly trying to improve working conditions.	0.470
87	My organisation communicates its policies and rules to me.	0.469
102	In my organisation the performance management system is fair.	0.437
120	I would encourage my friends and family to work for my organisation.	0.426

Question No.	Question Content	Component 3 Loadings
48	In my team we make our Metro great by excelling in all we do.	0.810
51	In my team we make our Metro great by being solution and results driven in order to exceed our customers' expectations.	0.786
49	In my team we make our Metro great by displaying effective and efficient use of our skills, experience and qualifications.	0.770
50	In my team we make our Metro great by introducing better ways of doing things.	0.719
47	We are concerned about the quality of services and products we provide to our communities.	0.666
46	We are striving to make our Metro an African World Class City.	0.620

114	In my team we go to great lengths to please our customers.	0.503
-----	--	-------

Question No.	Question Content	Component 4 Loadings
61	Preference is given to people from designated groups (Black people, i.e. Africans, Coloureds and Indians; women, and people with disabilities) when recruiting in my organisation.	0.626
54	In my team/function all races are represented.	0.610
53	I think my organisation strives to accommodate the different ethnic cultures and beliefs of all employees in the workplace.	0.610
52	In my experience job responsibilities are allocated fairly across all race groups.	0.606
55	My organisation has a reputation for advancing previously disadvantaged employees.	0.580
60	I know that Employment Equity is taken seriously by senior leadership in my organisation.	0.571
59	Women have the same opportunities for advancement as their male counterparts in my organisation.	0.508

Question No.	Question Content	Component 5 Loadings
88	I have received the training I need to do my job.	0.723
92	I have received training in terms of my individual learning plan.	0.692
90	My organisation provides training programmes and assistance that meet my job-related needs.	0.681
91	I have an individual learning plan which I agreed with my supervisor/manager.	0.568
89	My supervisor/manager allows me to apply what I have learnt in the workplace.	0.513

Question No.	Question Content	Component 6 Loadings
43	I am aware of my organisation's vision and mission.	0.794
44	I am excited by my organisation's vision and mission.	0.750
45	I know how my role fits into the total picture of my organisation.	0.560

Question No.	Question Content	Component 7 Loadings
99	My salary package is fair in comparison to similar positions in the market.	0.813
98	My salary package is fair compared to my colleagues in similar jobs in my organisation.	0.799
100	When promoted in my organisation, an employee receives a reasonable reward.	0.568

Question No.	Question Content	Component 8 Loadings
95	The place where I work complies with the safety and health regulations which apply to my organisation.	0.690

94	I am provided with the tools/equipment/resources I need to do my work.	0.591
96	The conditions at the place where I normally work allow me to do my best work.	0.560
97	The change rooms/toilets where I work are normally kept in a clean and hygienic state.	0.556

Question No.	Question Content	Component 9 Loadings
81	I trust my colleagues.	0.586
68	In my department, we work together as a team.	0.570
67	Within my department we motivate and support each other.	0.551
69	There is good cooperation between people in my department and those in other departments I work with.	0.444

Question No.	Question Content	Component 10 Loadings
115	I consider some of my work colleagues amongst my best friends.	0.694
113	In my team we produce outstanding quality work	0.491

Question No.	Question Content	Component 11 Loadings
57	Discrimination against women seldom occurs in my organisation.	0.830
58	To my knowledge sexual harassment seldom occurs in my organisation.	0.812
56	Racism seldom occurs in my organisation.	0.542

In order to label the 11 identified factors, the factor pattern and factor loadings in Table 6.4 were studied to determine what the items had in common (Fabrigar et al., 1999). The researcher also revisited the dimensions of organisational effectiveness identified from the literature review and which were included in the proposed theoretical framework for measuring the organisational effectiveness of a metropolitan municipality in South Africa discussed in Chapter 4. In addition, the original 13 dimension names used in the ES were also considered. After considering all of the above, the researcher decided to name the 11 components as follows:

- Component 1: Management Practices (MP)
- Component 2: Internal Functioning (IF)
- Component 3: Customer Satisfaction (CS)
- Component 4: Diversity (D)
- Component 5: Training and Development (T & D)
- Component 6: Vision and Mission (V & M)
- Component 7: Rewards and Recognition (R & R)
- Component 8: Work Environment (WE)
- Component 9: Interpersonal Relations (IR)
- Component 10: Teamwork (T)
- Component 11: Workforce Equality (WEq)

The subscales for the extracted components were obtained by calculating the means of the items loading on each of the subscales. According to Hair et al. (2010), the generally agreed upon lower limit for Cronbach's Alpha is 0.7, although it may decrease to 0.6 in exploratory research. Using this guideline, each of the extracted 11 components thus demonstrated acceptable internal consistency as illustrated by the Cronbach's Alpha Coefficients listed in Table 6.5 below. Component 3 (Customer Satisfaction) had an internal consistency of 0.877, being measured by 7 items. However, when one item was left out of the calculations, the internal consistency increased to 0.882. Component 10 (Teamwork) had the lowest internal consistency, namely 0.555, being measured by three items. However, when one item was left out of the calculations, the internal consistency increased to 0.735. The overall internal consistency of 0.978 that was obtained after the above-mentioned two items had been left out can be considered to be very high for the ES (Green & Salkind, 2014; Hair et al., 2010). As a result, SEM was conducted using only the 76 items specified in Table 6.5 below.

The two items that were left out were Question 106 (Customer Satisfaction) and Question 116 (Teamwork). These items were excluded as they did not load sufficiently on any of the components and their deletion resulted in more variance in the data being explained by the solution, as illustrated in Table 6.5 above.

Table 6.5:
Reliability Statistics for the 11 Extracted Factors

Dimension No.	Description	No. of Items	Cronbach's Alpha
1	Management Practices (MP)	20	0.962
2	Internal Functioning (IF)	18	0.956
3	Customer Satisfaction (CS)	7 (6, left Q106 out)	0.877 (0.882)
4	Diversity (D)	7	0.836
5	Training and Development (T & D)	5	0.863
6	Vision and Mission (V & M)	3	0.843
7	Rewards and Recognition (R & R)	3	0.807
8	Work Environment (WE)	4	0.786
9	Interpersonal Relations (IR)	4	0.817
10	Teamwork (T)	3 (2, left Q116 out)	0.555 (0.735)
11	Workforce Equality (WEq)	3	0.662
All dimensions		78 (76)	0.978

Once exploratory factor analysis has been conducted and the extracted factors have been identified, the next step in the empirical process was to conduct a confirmatory factor analysis with the identified 11 factors as part of the SEM process to develop and specify a measurement model. This was the next step required to validate the previously proposed theoretical model of organisational effectiveness (Hair et al. 2010).

6.5 STRUCTURAL EQUATION MODELLING (SEM)

6.5.1 Introduction to the SEM process

As the aim of this research study is to develop and validate a model to measure organisational effectiveness, a model development strategy was followed in the application of SEM. This allowed for the researcher to start with a proposed theoretical model, empirically test it, and modify and improve it until it has acceptable fit for measuring the organisational effectiveness of a metropolitan municipality in South Africa (Hair et al., 1995). As such a confirmatory factor analysis was conducted as part of the SEM process (Hair et al., 2010).

6.5.2 Confirmatory factor analysis

6.5.2.1 Developing and specifying the 1st order measurement model

A confirmatory factor analysis (CFA) was conducted in order to develop and specify the measurement model (Hair et al., 2010) on the 1st order latent construct level. The AMOS (Analysis of Moment Structures), a module of the Statistical Package for the Social Sciences [SPSS] (2006), was used to conduct the CFA.

The CFA was conducted using the 11 factors identified during the EFA. The measurement model that was developed specifying the 1st order latent constructs is depicted in Figure 6.9 below.

Latent construct 10 (Teamwork) was completely removed from the model, as the two variables (Question 113 and Question 115) that loaded on it had a low squared multiple correlation (SMC). An additional 10 items were also

deleted (Questions 45, 56, 61, 62, 81, 86, 97, 100, 114 and 117) owing to their SMC also not being adequate (<0.3), and therefore not contributing adequately to the solution. Table 6.6 below indicates the standardised regression weights of the remaining 62 items and 10 latent variables. As can be seen from Table 6.6, all estimates were significant (the lowest was Question 4 on 0.578 while the highest was Question 44 on 0.931), making model trimming unnecessary and which, according to Hair et al. (2010), can possibly be attributed to the large sample size (average $n = 6514$ after listwise deletion). The significant estimates also indicate that the latent variables explain significant proportions of variance in the survey items (Patterson, West, Shackleton, Dawson, Lawthom, Maitlis, Robinson & Wallace, 2005).

Figure 6.9: The 1st order measurement model

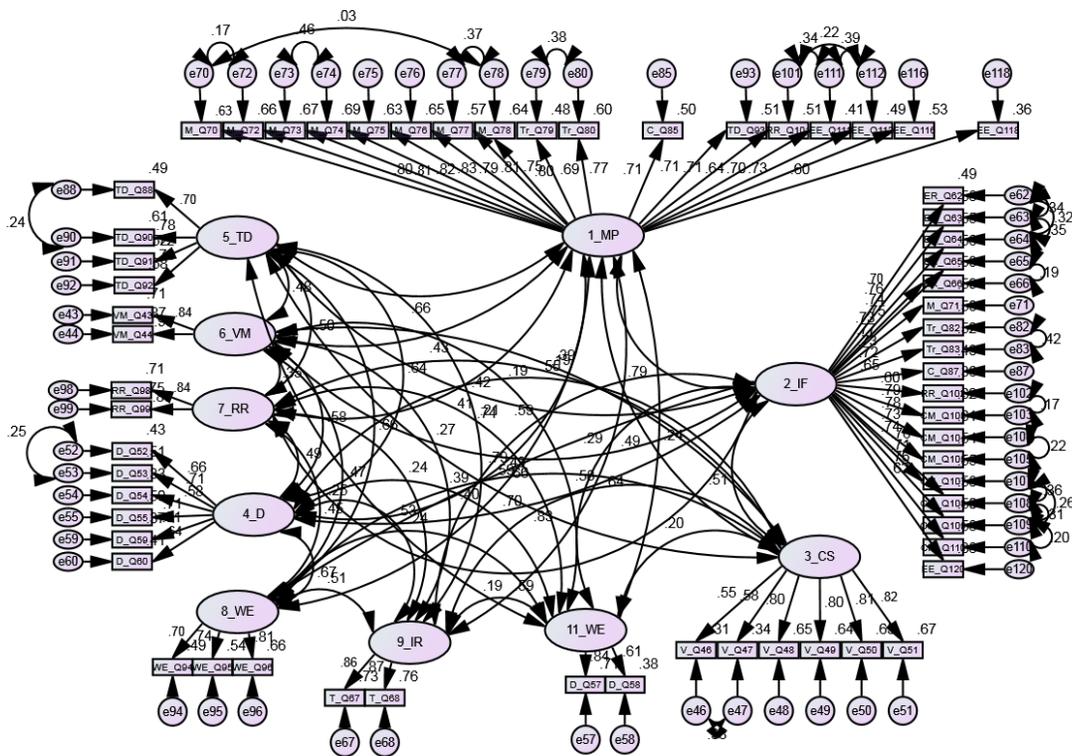


Table 6.6:

Standardised Maximum Likelihood Estimates of Regression Weights

Manifested Variable		Latent Variable	Estimate
Q70	←	1 Management Practices (MP)	0.796
Q72	←	1 Management Practices	0.810
Q73	←	1 Management Practices	0.820
Q74	←	1 Management Practices	0.830
Q75	←	1 Management Practices	0.793
Q76	←	1 Management Practices	0.809
Q77	←	1 Management Practices	0.755
Q78	←	1 Management Practices	0.797
Q79	←	1 Management Practices	0.691
Q80	←	1 Management Practices	0.772
Q85	←	1 Management Practices	0.706
Q93	←	1 Management Practices	0.712
Q101	←	1 Management Practices	0.714
Q111	←	1 Management Practices	0.642
Q112	←	1 Management Practices	0.701
Q116	←	1 Management Practices	0.728
Q118	←	1 Management Practices	0.603
Q62	←	2 Internal Functioning (IF)	0.702
Q63	←	2 Internal Functioning	0.761
Q64	←	2 Internal Functioning	0.741
Q65	←	2 Internal Functioning	0.745
Q66	←	2 Internal Functioning	0.727
Q71	←	2 Internal Functioning	0.767
Q82	←	2 Internal Functioning	0.728
Q83	←	2 Internal Functioning	0.721
Q87	←	2 Internal Functioning	0.654
Q102	←	2 Internal Functioning	0.601
Q103	←	2 Internal Functioning	0.787
Q104	←	2 Internal Functioning	0.780
Q105	←	2 Internal Functioning	0.732
Q107	←	2 Internal Functioning	0.740
Q108	←	2 Internal Functioning	0.761
Q109	←	2 Internal Functioning	0.708
Q110	←	2 Internal Functioning	0.759
Q120	←	2 Internal Functioning	0.615
Q51	←	3 Customer Satisfaction (CS)	0.820
Q50	←	3 Customer Satisfaction	0.807
Q49	←	3 Customer Satisfaction	0.798
Q48	←	3 Customer Satisfaction	0.805
Q47	←	3 Customer Satisfaction	0.583
Q46	←	3 Customer Satisfaction	0.554
Q60	←	4 Diversity (D)	0.640
Q59	←	4 Diversity	0.605
Q55	←	4 Diversity	0.707
Q54	←	4 Diversity	0.578
Q53	←	4 Diversity	0.715

Q52	←	4 Diversity	0.660
Q92	←	5 Training and Development (T & D)	0.759
Q91	←	5 Training and Development	0.720
Q90	←	5 Training and Development	0.783
Q88	←	5 Training and Development	0.698
Q44	←	6 Vision and Mission (V & M)	0.931
Q43	←	6 Vision and Mission	0.843
Q99	←	7 Rewards and Recognition (R & R)	0.867
Q98	←	7 Rewards and Recognition	0.840
Q58	←	11 Workforce Equality (WEq)	0.614
Q57	←	11 Workforce Equality	0.840
Q96	←	8 Work Environment (WE)	0.814
Q95	←	8 Work Environment	0.738
Q94	←	8 Work Environment	0.702
Q68	←	9 Interpersonal Relations (IR)	0.872
Q67	←	9 Interpersonal Relations	0.856

In Chapter 5 (Research Design), it was stated that a variance/covariance matrix (and not a correlation matrix) would be used as the input for SEM, as this was recommended by Hair et al. (1995) who argue that when a true test of theory is being performed, the variance/covariances satisfy the assumptions of the methodology and are the appropriate form of the data for validating causal relationships. Hair et al. (1995) also state that the most widely used means of computing the variances/covariances between manifest variables is the Pearson product-moment correlation.

The confirmatory factor analysis (CFA) conducted for the measurement model produced the covariances between the remaining 10 latent variables reported in Table 6.7 below. Covariances were obtained that varied between a low of 0.151 (between Customer Service and Workforce Equality) and a high of 0.838 (between Management Practices and Internal Functioning), with the p-values below 0.05 at the 0.0001 level (two-tailed). All covariances, even those with the lowest values, were thus significant, owing to the large sample size (average n = 6514 after listwise deletion).

Table 6.7:

Measurement Model: Estimated Covariances between the 10 Remaining Latent Variables

Latent Variables		Estimate	SE	CR	P
5 T and D	↔ 6 V and M	0.545	0.019	29.082	***
5 T and D	↔ 7 R and R	0.557	0.019	29.462	***
5 T and D	↔ 8 WE	0.660	0.019	34.092	***
5 T and D	↔ 9 IR	0.487	0.180	26.373	***
5 T and D	↔ 11 WEq	0.207	0.016	13.259	***
4 D	↔ 5 T and D	0.549	0.170	32.336	***
3 CS	↔ 5 T and D	0.373	0.015	25.387	***
2 IF	↔ 5 T and D	0.736	0.019	37.965	***
1 MP	↔ 5 T and D	0.739	0.020	37.559	***
6 V and M	↔ 7 R and R	0.425	0.019	22.597	***
6 V and M	↔ 8 WE	0.508	0.019	27.181	***
6 V and M	↔ 9 IR	0.334	0.018	18.202	***
6 V and M	↔ 11 WEq	0.174	0.015	11.301	***
4 D	↔ 6 V and M	0.544	0.018	30.416	***
3 CS	↔ 6 V and M	0.398	0.016	25.407	***
2 IF	↔ 6 V and M	0.633	0.019	32.836	***
1 MP	↔ 6 V and M	0.522	0.019	27.910	***
7 R and R	↔ 8 WE	0.484	0.019	26.136	***
7 R and R	↔ 9 IR	0.292	0.018	15.867	***
7 R and R	↔ 11 WEq	0.193	0.016	12.081	***
4 D	↔ 7 R and R	0.453	0.017	27.140	***
3 CS	↔ 7 R and R	0.193	0.015	13.285	***
2 IF	↔ 7 R and R	0.625	0.019	32.633	***
1 MP	↔ 7 R and R	0.492	0.019	26.530	***
8 WE	↔ 9 IR	0.558	0.019	28.841	***
11 WEq	↔ 8 WE	0.195	0.015	12.926	***
4 D	↔ 8 WE	0.551	0.018	31.228	***
3 CS	↔ 8 WE	0.437	0.015	28.341	***
2 IF	↔ 8 WE	0.749	0.021	36.063	***
1 MP	↔ 8 WE	0.752	0.021	35.921	***
11 Weq	↔ 9 IR	0.177	0.016	11.133	***
4 D	↔ 9 IR	0.505	0.017	29.121	***
3 CS	↔ 9 IR	0.601	0.018	34.260	***
2 IF	↔ 9 IR	0.643	0.019	33.452	***
1 MP	↔ 9 IR	0.791	0.021	36.957	***
4 D	↔ 11 WEq	0.271	0.016	16.982	***
3 CS	↔ 11 WEq	0.151	0.013	11.688	***
2 IF	↔ 11 WEq	0.230	0.015	15.170	***
1 MP	↔ 11 WEq	0.215	0.016	13.637	***
3 CS	↔ 4 D	0.425	0.014	29.948	***
2 IF	↔ 4 D	0.681	0.019	35.419	***
1 MP	↔ 4 D	0.606	0.018	33.511	***
2 IF	↔ 3 CS	0.459	0.015	31.011	***
1 MP	↔ 3 CS	0.496	0.016	31.323	***
1 MP	↔ 2 IF	0.838	0.021	39.195	***

Note: SE = Standard Error; CR = Critical Ratio; P = Probability Value

All covariances between pairs of error variance for items loading on the various latent constructs are suggested by modification indices (MIs) generated by the SEM AMOS software (SPSS, 2006). According to Kline (2011), MIs offer suggested remedies to discrepancies between the proposed model and estimated model. Hair et al. (2010) state that the two sets of MIs most useful in a CFA are for factor loadings and the error terms between items. For the above-mentioned results, only MIs that made theoretical sense were considered. No cross-loadings of items on latent constructs were considered and no covariances between the error variance of an item loading on a construct and the construct itself were considered. This was done in an attempt to keep the measurement model as close as possible to the original Effectiveness Survey (ES) scale structure.

6.5.2.2 Assessing 1st order measurement model validity

With the measurement model specified, its validity needs to be determined, which depends on establishing acceptable levels of goodness-of-fit. According to Hair et al. (2010), goodness-of-fit (GOF) indicates how well the specified model reproduces the observed covariance matrix among the indicator items.

The GOF indices obtained for the measurement model are given in Table 6.8 below and discussed thereafter.

Table 6.8:

Goodness-of-Fit Indices for the 1st Order Measurement Model

Indices	Value
Absolute Fit Indices	
Chi-square (CMIN)	17379.133
Chi-square degrees of freedom (d)	1763
P-value	0.000
Goodness-of-Fit Index (GFI)	0.914
Root Mean Square Error of Approximation (RMSEA)	0.036
Incremental Fit Indices	
Normed Fit Index (NFI)	0.937
Tucker Lewis Index (TLI)	0.939
Comparative Fit Index (CFI)	0.943

- Chi-square (CMIN)*. A chi-square of 17379.33 with 1763 degrees of freedom, $p=0$ level, was obtained. As the chi-square test assesses the difference between observed and expected covariance matrices, the smaller the difference, the better the model fit (Gatignon, 2010). However, as the sample size increases, so does the statistical power of the chi-square, even if the matrices are practically identical (Hair et al, 2010). The chi-square value obtained for the measurement model of 1st order latent variables thus does not indicate a good model fit, but the size of the sample (average $n = 6\ 514$ after listwise deletion) reduces the meaningfulness of this GOF index (Gatignon, 2010). For this reason numerous authors disregard the chi-square index for samples larger than 200, suggesting the use of other GOF indices to determine GOF (Gatignon, 2010; Hair et al., 2010; Hooper et al., 2008).
- Goodness-of-Fit Index (GFI)*. A GFI of 0.914 was obtained for the measurement model of 1st order latent variables. The GFI index is a measure of fit between the hypothesised model and

the observed covariance matrix (Baumgartner & Hombur, 1996). The possible range of GFI values is 0 to 1, with higher values indicating better fit, while values of 0.90 are considered good (Hair et al., 2010; Hu & Bentler, 1999). The obtained GFI value of 0.914 thus indicates a good model fit.

- *Root Mean Square Error of Approximation (RMSEA)*. A RMSEA of 0.036 was obtained. The RMSEA avoids issues of sample size by analyzing the discrepancy between the hypothesised model and the population covariance matrix (Hooper et al., 2008). The RMSEA ranges from 0 to 1, with smaller values indicating better model fit, while a value of 0.06 or less is indicative of an acceptable model fit (Hu & Bentler, 1999). The obtained RMSEA of 0.036 thus indicates a good model fit.
- *Normed Fit Index (NFI)*. An NFI of 0.937 was obtained. The NFI analyses the discrepancy between the chi-square value of the hypothesised model and the chi-square value of the null model (Bentler & Bonnet, 1980). According to Hu and Bentler (1999), values for the NFI should range between 0 and 1, while Hair et al. (1995) recommend a level of 0.90 or above as indicating a good model fit. The obtained NFI of 0.937 thus indicates a good model fit.
- *Tucker Lewis Index (TLI)*. A TLI of 0.939 was obtained. The TLI is similar to the NFI, but is not normed, and these values can fall below 0 or above 1 (Hair et al., 2010). Hair et al. (1995) recommend a level of 0.90 or above as indicating a good model fit. The obtained TLI of 0.939 thus indicates a good model fit.

- *Comparative Fit Index (CFI)*. A CFI of 0.943 was obtained. According to Hair et al. (2010), the CFI is an incremental fit index that is an improved version of the normed fit index. The CFI analyses the model fit by examining the discrepancy between the data and the hypothesised model, while adjusting for the issues of sample size inherent in the chi-square test of model fit and the normed fit index (Bentler, 1990; Gatignon, 2010). According to Hair et al. (2010) and Hu and Bentler (1999), the CFI is normed so that values range from 0 to 1, with larger values indicating better fit, and a value of 0.90 or larger is generally considered as indicating acceptable model fit. The obtained CFI of 0.943 thus indicates a good model fit.
- *Summary discussion*. Except for the chi-square index, all the other GOF indices were at a level recommended by various authors (Hair et al., 1995; Hair et al., 2010; Hu & Bentler, 1999). The researcher thus accepted the obtained measurement model as valid for the 1st order latent constructs for use in measuring the organisational effectiveness of a metropolitan municipality in South Africa.

6.5.2.3 *Developing and specifying the 2nd order measurement model*

The 1st order factor model specified and validated above means that the covariances between measured items (the items on the ES) are explained with a single latent factor layer (the final 10 latent constructs). The researcher employed higher-order factor analysis to test a 2nd order factor structure that contains two layers of latent constructs (Hair et al., 2010). This was done by introducing three 2nd order latent factors which were hypothesised as causing the ten 1st order latent factors, which in turn cause

the measured variables (items on the ES). According to Hair et al. (2010), the ten 1st order factors now act as indicators of the three 2nd order factors. The three 2nd order latent constructs that were hypothesised as causing the ten 1st order latent factors are:

(1) Healthy Systems

- 4 - Diversity (D)
- 5 - Training and Development (T & D)
- 7 - Rewards and Recognition (R & R)
- 1 - Management Practices (MP)
- 2 - Internal Functioning (IF)
- 8 - Work Environment (WE)
- 9 - Interpersonal Relations (IR)
- 11 - Workforce Equality (WEq)

(2) Service Delivery

- 3 - Customer Satisfaction (CS)

(3) Goal Achievement

- 6 - Vision and Mission (V & M)

The measurement model developed and specified for the 2nd order latent constructs from the CFA is depicted in Figure 6.10 below.

Figure 6.10: The 2nd order measurement model

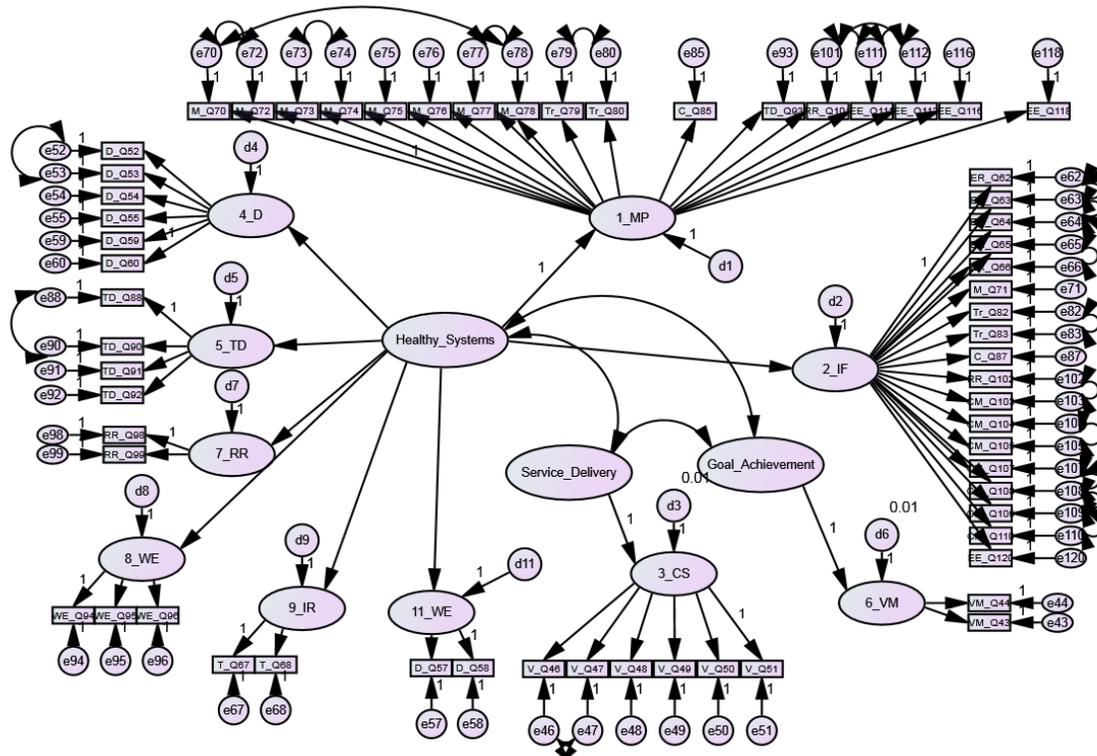


Table 6.9 below indicates the standardised regression weights of the ten 1st order latent constructs and three 2nd order latent constructs. As can be seen from Table 6.9, all estimates were significant, varying from a low of 0.321 to a high of 0.996. Internal Functioning (IF) was the most important contributor to Healthy Systems (0.962), while Workforce Equality (WEq) was the least important contributor to Healthy Systems (0.321). The significant estimates also indicate that the 2nd order latent variables explain significant proportions of variance in the 1st order latent variables (Patterson et al., 2005).

Table 6.9:

Standardised Maximum Likelihood Estimates of Regression Weights

1 st Order Latent Variables		2 nd Order Latent Variables	Estimate
4 Diversity	←————→	Healthy Systems	0.857
5 T and D	←————→	Healthy Systems	0.773
7 R and R	←————→	Healthy Systems	0.573
1 MP	←————→	Healthy Systems	0.825
2 IF	←————→	Healthy Systems	0.962
8 WE	←————→	Healthy Systems	0.820
9 IR	←————→	Healthy Systems	0.633
11 WEq	←————→	Healthy Systems	0.321
3 CS	←————→	Service Delivery	0.994
6 V and M	←————→	Goal Achievement	0.996

The CFA conducted for the 2nd order measurement model produced the covariances depicted in Figure 6.11 and reported in Table 6.10 below.

Table 6.10:

2nd Order Measurement Model: Covariances among pairs of the three Latent Variables

	2 nd Order Latent Variables		Estimate	SE	CR	P
Healthy Systems	←————→	Service Delivery	0.57	0.14	32.75	***
Healthy Systems	←————→	Goal Achievement	0.60	0.18	32.39	***
Service Delivery	←————→	Goal Achievement	0.39	0.06	25.26	***

Note: SE = Standard Error; CR = Critical Ratio; P = Probability Value

Covariances were obtained that varied between a low of 0.39 (Service Delivery and Goal Achievement) and a high of 0.60 (Healthy Systems and Goal Achievement). However, all covariances were significant, due to the large sample size (n = 6514 after listwise deletion).

indicate a good model fit, but once again the size of the sample (average $n = 6\,514$ after listwise deletion) most probably reduced the meaningfulness of this index (Gatignon, 2010). For this reason more weight was placed on the GOF indices discussed below.

Table 6.11:

Goodness-of-Fit Indices for the 2nd Order Measurement Model

Indices	Value
Absolute Fit Indices	
Chi-square (CMIN)	19633.78
Chi-square degrees of freedom (d)	1797
P-value	0.000
Goodness-of-Fit Index (GFI)	0.901
Root Mean Square Error of Approximation (RMSEA)	0.038
Incremental Fit Indices	
Normed Fit Index (NFI)	0.929
Tucker Lewis Index (TLI)	0.932
Comparative Fit Index (CFI)	0.935

- *Goodness-of-Fit Index (GFI)*. A GFI of 0.901 was obtained for the measurement model of 2nd order latent variables and indicates a good model fit (Hair et al., 2010; Hu & Bentler, 1999).
- *Root Mean Square Error of Approximation (RMSEA)*. An RMSEA of 0.038 was obtained, which indicates a good model fit (Hu & Bentler, 1999).
- *Normed Fit Index (NFI)*. An NFI of 0.929 was obtained, indicating a good model fit (Hair et al., 1995).
- *Tucker Lewis Index (TLI)*. A TLI of 0.932 was obtained, indicating a good model fit (Hair et al., 1995).

- *Comparative Fit Index (CFI)*. A CFI of 0.935 was obtained, which indicates a good model fit (Hair et al., 2010; Hu & Bentler, 1999).
- *Summary discussion*. Except for the chi-square index, all the other GOF indices were at a level recommended by various authors (Hair et al., 1995; Hair et al., 2010; Hu & Bentler, 1999). The researcher thus accepted the obtained measurement model as being valid for 2nd order latent constructs for use in measuring the organisational effectiveness of a metropolitan municipality in South Africa.

6.5.2.5 *Specifying the structural model*

According to Hair et al. (2010) and Tredoux et al. (2006), the next step in the SEM process is to specify the structural model. The structural model depicted in Figure 6.12 below was specified by hypothesising relationships among the 2nd order latent constructs, and these hypothesised relationships were based on the proposed theoretical model developed in Chapter 4. The following structural relationships were hypothesised among the three confirmed 2nd order latent constructs.

<i>H1:</i>	Healthy Systems has a positive effect on Service Delivery
<i>H2:</i>	Healthy Systems has a positive effect on Goal Achievement
<i>H3:</i>	Service Delivery has a positive effect on Goal Achievement
<i>H4:</i>	Goal Achievement has a positive effect on Service Delivery

These hypothesised structural relationships are depicted by single-headed, directional arrows showing the dependence relationships in Figure 6.12 below.

6.5.2.6 Assessing the structural model validity

Table 6.13 below indicates the GOF indices that were obtained for the structural model, which are mostly the same as the GOF indices obtained for the 2nd order measurement model (see Table 6.11 above).

Table 6.13:

Goodness-of-Fit Indices for the Structural Model

Indices	Value
Absolute Fit Indices	
Chi-square (CMIN)	19661.858
Chi-square degrees of freedom (d)	1798
P-value	0.000
Goodness-of-Fit Index (GFI)	0.901
Root Mean Square Error of Approximation (RMSEA)	0.038
Incremental Fit Indices	
Normed Fit Index (NFI)	0.929
Tucker Lewis Index (TLI)	0.932
Comparative Fit Index (CFI)	0.935

- *Chi-square (CMIN)*. A chi-square of 19661.858 with 1798 degrees of freedom, $p=0$, was obtained. Disregarded due to the large sample size.
- *Goodness-of-Fit Index (GFI)*. A GFI of 0.901 was obtained for the measurement model of 2nd order latent variables, and indicates a good model fit (Hair et al., 2010; Hu & Bentler, 1999).
- *Root Mean Square Error of Approximation (RMSEA)*. An RMSEA of 0.038 was obtained, which indicates a good model fit (Hu & Bentler, 1999).

- *Normed Fit Index (NFI)*. An NFI of 0.929 was obtained, indicating a good model fit (Hair et al., 1995).
- *Tucker Lewis Index (TLI)*. A TLI of 0.932 was obtained, indicating a good model fit (Hair et al., 1995).
- *Comparative Fit Index (CFI)*. A CFI of 0.935 was obtained, which indicates a good model fit (Hair et al., 2010; Hu & Bentler, 1999).
- *Summary discussion*. Except for the chi-square index which was unacceptably high due to a large sample size of over 6 500 (Hooper et al., 2008; Gatignon, 2010; Hair et al., 2010), all the other GOF indices were at a level recommended by various authors (Hair et al., 1995; Hair et al., 2010; Hu & Bentler, 1999). The researcher thus accepted the Structural Model as a valid model for measuring the organisational effectiveness of a metropolitan municipality in South Africa.

6.5.3 Adaptation of the original proposed theoretical assessment framework to conform to the structural model of organisational effectiveness obtained from the SEM process

The original proposed theoretical assessment framework to measure the organisational effectiveness of a metropolitan municipality in South Africa in Chapter 4 hypothesised that:

<i>H1:</i>	Healthy Systems has a positive effect on Service Delivery
<i>H2:</i>	Healthy Systems has a positive effect on Goal Achievement
<i>H3:</i>	Service Delivery has a positive effect on Goal Achievement
<i>H4:</i>	Goal Achievement has a positive effect on Service Delivery

However, the results of the SEM indicated the following:

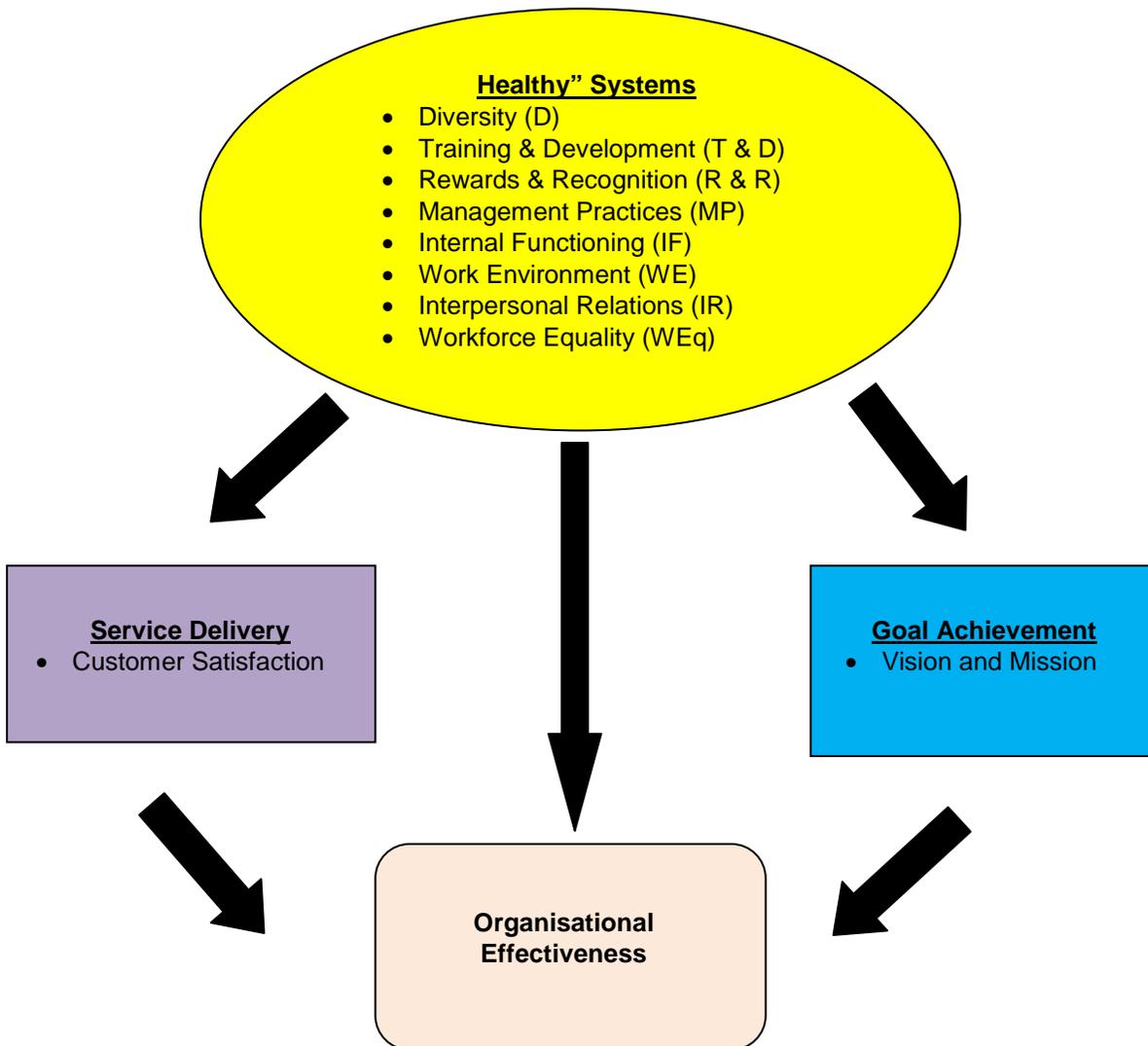
<i>H1:</i>	Healthy Systems has a positive effect on Service Delivery	Accepted
<i>H2:</i>	Healthy Systems has a positive effect on Goal Achievement	Accepted
<i>H3:</i>	Service Delivery has a positive effect on Goal Achievement	Rejected
<i>H4:</i>	Goal Achievement has a positive effect on Service Delivery	Rejected

The original proposed theoretical assessment framework will thus need to be adapted to indicate the following, which is depicted in Figure 6.14 below:

- If a metropolitan municipality has “healthy” systems in place, it will facilitate the achievement of its goals as stipulated in its vision and mission.
- If a metropolitan municipality has “healthy” systems in place, it will enable it to deliver the services that it must, ensuring customer satisfaction.
- If a metropolitan municipality has “healthy” systems in place, it will contribute towards the organisational effectiveness attributed to the metropolitan municipality.
- If a metropolitan municipality delivers the services that it must, ensuring customer satisfaction, it will not necessarily facilitate the achievement of its goals as stipulated in its vision and mission.

- If a metropolitan municipality achieves its goals as stipulated in its vision and mission, it will not necessarily facilitate the delivery of services, ensuring customer satisfaction.

Figure 6.14: Adapted Theoretical Framework to Measure the Organisational Effectiveness of a Metropolitan Municipality in South Africa



6.5.4 The implications of the new, adapted theoretical model

The fit of the 1st order measurement model and the 2nd order measurement model to the data, indicating the relationship of the observed variables to the latent variables, and the specification of the structural model, indicating the relationship among the 2nd order latent constructs, supports the hypothesised theoretical model that organisational effectiveness “is an interconnected web of relationships which may be reliably measured” (Marcoulides & Heck, 1993, p. 209). The SEM conducted on the survey data collected, indicates that all of the observed and latent variables included in the theoretical model have some direct or indirect effect on the level of organisational performance of a metropolitan municipality in South Africa. The researcher is of the opinion that all of the variables (manifested and/or latent) included in the theoretical model are directly under the control of management and employees, so a metropolitan municipality will be able to improve its organisational effectiveness by encouraging managers and employees to give attention to these variables.

6.6 CHAPTER SUMMARY

In this Chapter the results of the empirical study were discussed. The Chapter started with a discussion of descriptive statistics followed by a discussion of the item analysis that was conducted on the Effectiveness Survey (ES) to determine the reliability of the dimensions. Next the exploratory factor analysis that was conducted was explained. Thereafter the confirmatory factor analysis that was conducted as part of Structural Equation Modelling was discussed, and the Chapter was concluded with a comparison of the SEM structural model and original theoretical model developed in Chapter 4. In the next and final Chapter the conclusions, limitations and recommendations will be discussed.

CHAPTER 7: CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

7.1 INTRODUCTION

In this Chapter the conclusions, limitations and recommendations regarding the present study will be discussed. The Chapter will start with the conclusions reached regarding the general aim, the specific literature aims, the specific empirical aims as well as the research hypothesis of the study. Thereafter the limitations of the study will be discussed and suggestions for further research will be made. Recommendations for the organisation that participated in the study will also be made, and the Chapter will be concluded with recommendations for the field of Industrial and Organisational Psychology regarding organisational effectiveness.

7.2 CONCLUSIONS REGARDING THE AIMS OF THE STUDY

7.2.1 Conclusions regarding the specific theoretical aims of the study

The specific theoretical aims of the study were the following:

7.2.1.1 *Investigate the construct of organisational effectiveness in Private and Public Sector organisations, including local government*

This theoretical aim was achieved in Chapters 2 and 3 of this study. From this investigation, the following conclusions can be made:

- The literature makes a clear distinction between the domain of *business performance* (emphasis added), which uses simple

outcome-based financial indicators that are assumed to reflect the fulfilment of the economic goals of a firm, and organisational effectiveness, which is seen as the wider construct. As such, studies regarding business performance could not be used to investigate the construct of organisational effectiveness (Henri, 2004; Richard et al., 2009; Venkatraman & Ramanujam, 1986).

- There is a lack of consensus in the literature regarding the meaning and definition of the construct of organisational effectiveness, and the only consensus on organisational effectiveness is that there is no consensus on organisational effectiveness (Cameron, 1986; Cameron & Whetton, 1983; Connolly et al., 1980; Georgopoulos & Tannenbaum, 1957; Hannan & Freeman, 1977; Hrebiniak, 1978; Katz & Kahn, 1971; Lee & Brower, 2006; Quinn & Rohrbaugh, 1981; Richard et al., 2009; Rojas, 2000; Steers, 1975, 1978; Yuchtman & Seashore, 1967).
- The construct of organisational effectiveness forms such an integral part of and is so important to the study of organisational theory that, despite a lack of consensus on the meaning and definition thereof, it needs to be continually researched and studied (Cameron & Whetton, 1983; Goodman & Pennings, 1977; Hall, 1999; Henri, 2004; Higgins, 2005; Jones, 2013; Lee & Brower, 2006; Marcoulides & Heck, 1993; Mohr, 1982; Quinn & Rohrbaugh, 1981; Richard et al., 2009; Rojas, 2000; Steers, 1977; Waterman et al., 1980; Yuchtman & Seashore, 1987).

- There are six traditional approaches to organisational effectiveness that have developed over the years and still dominate the literature, namely:
 - The criteria approach, in which various and diverse criteria have been used to measure organisational effectiveness (Cameron, 1978; Cameron, 1981; Campbell et al., 1974; Georgopoulos & Tannenbaum, 1957; Harrison, 2005; Kahn & Morse, 1951; Kanter & Brinkerhoff, 1981; Lewin & Minton, 1986; Yuchtman & Seashore, 1967; Steers, 1977; Thorndike, 1949).
 - The goals approach, in which goal accomplishment is considered to be organisational effectiveness (Beulens et al., 2011; Cameron, 1986; Cunningham, 1977; Glunk & Wilderom, 1999; Hannan & Freeman, 1977; Martz, 2008; Price, 1972; Steers, 1977; Yuchtman & Seashore, 1967).
 - The systems resource approach, in which effectiveness is defined in terms of the ability of the organisation to exploit its environment in the acquisition of scarce and valued resources (Beulens et al., 2011; Cameron, 1986; Glunk & Wilderom, 1999; Price, 1972; Yuchtman & Seashore, 1967).
 - The internal processes (or “healthy systems”) approach, in which an organisation is defined as being effective if it functions smoothly internally (Beulens et al., 2011; Bluedorn, 1980; Cameron & Whetten, 1983; Daft, 1992; Glunk & Wilderom, 1999; Martz, 2008).

- The strategic constituencies approach, in which the satisfaction of key interested parties is considered to be the main criterion of organisational effectiveness (Beulens et al., 2011; Cameron & Whetten, 1983; Daft, 1992; Glunk & Wilderom, 1999; Martz, 2008; Tsui, 1984; Zammuto, 1984).
- The conflicting values approach, in which organisational effectiveness is considered to be a combination of - (1) multiple and conflicting criteria; and (2) the satisfaction of multiple constituencies according to their organisational perspective and the interests they represent (Cameron & Whetton, 1983; Faehrman & Quinn, 1985; Glunk & Wilderom, 1999; Martz, 2008; Quinn & Cameron, 1983; Quinn & Rohrbaugh, 1981).
- No approach on its own can be declared as the best or preferred approach, and a complementary stance should be adopted (Henri, 2004). Such a stance propagates that each approach on its own offers a unique contribution to understanding the construct of organisational effectiveness, and as such cannot be totally eliminated or ignored. As such, an attempt should be made to combine all the approaches into a composite model which could then be used to describe and assess the construct of organisational effectiveness. This model can then be empirically tested to determine whether it can be used as a framework for assessing organisational effectiveness.
- When discussing effectiveness in the Public Sector, the majority of authors tend to use the term *organisational performance* (emphasis added) when in fact they mean organisational effectiveness as conceptualised in Chapter 2 of this thesis. As

such, the term organisational effectiveness and organisational performance is used interchangeably when discussing organisational effectiveness in the Public Sector (Behn, 2003; Boyne, 2003; Boyne & Chen, 2006; Denhardt, 2008; Nyhan & Marlowe, 1995; Shafritz & Hyde, 2007; Soni, 2011; Stevens, 2005; Vaughan, 2010; Waheed et al., 2010).

- Organisational performance in the Public Sector is different from organisational effectiveness in the Private Sector, and thus Private Sector measures of organisational effectiveness cannot be used directly as Public Sector measures of organisational performance. (Behn, 2003; Boyne & Chen, 2006; Carter, 1981; Gawande & Wheeler, 1999; Immordino, 2010; Johnson, 1978; Parhizgari & Gilbert, 2004; Poister et al., 2013; Pollitt, 1986; Rainey & Steinbauer, 1999; Stevens, 2005; Van Thiel & Leeuw, 2002; Vaughan, 2010; Waheed et al., 2010).
- Metropolitan areas in the South African context require special consideration in any local governance system as they are generally viewed as engines of economic growth, have a high population density and multiple overlapping externalities (Reddy, 2008). Furthermore, the eight metros constitute a significant segment of the total local government sphere in South Africa, as they contain more than 20 million of the total 2013 estimated mid-year population of South Africa of 52.98 million within their boundaries, which represents 38% of the total South African population (Statistics South Africa, 2013).
- Much of local government in South Africa is in extreme distress, and this state of affairs has become deeply-rooted within the

South African local government system of governance (DCOGTA, 2009).

- Owing to the fact that local government plays a critical role in providing essential services to its citizens in all countries in the world, including South Africa (Barlow, 1991; Constitution of the Republic of South Africa, 1996; Mitlin, 2000; Mortimer, 2004; Steytler, 2005; Suzuki, 1998), its organisational performance will need to be measured as a first step in improving its performance (Beer & Spector, 1993; Brown, 2011; Cummings & Worley, 2009; Falletta, 2005; French & Bell, 1978; Ghorpade, 1971; Hall, 1999; Harrison, 2005; Immordino, 2010; Lee & Brower, 2006; Lusthaus et al., 2002; Steers, 1977; Wiley, 2010).

7.2.1.2 *Investigate the measurement of organisational effectiveness*

This theoretical aim was achieved in Chapter 4 of this study. From this investigation, the following conclusions can be made:

- In order to understand and improve the functioning of an organisation, it is necessary to firstly assess it, be it a private or public entity (Brown, 2011; Falletta, 2005; Ghorpade, 1971; Hall, 1999; Harrison, 2005; Immordino, 2010; Lusthaus et al., 2002; Martins & Coetzee, 2009; Steers, 1977).
- Several problems inherent in the existing models of organisational success make it difficult to assess organisational effectiveness, and these include construct validity problems, criterion stability problems, time perspective problems, multiple criteria problems, measurement precision problems,

generalisability problems, theoretical relevance problems, and level of analysis problems (Steers, 1975, 1977).

- All existing models used to measure organisational effectiveness contain three universal components, namely an objective, variables, and relationships between the variables (Harrison, 2005), while all existing models also differ on five aspects, namely the level of analysis, the nature of relationships among constructs and variables, the conceptions of organisational purpose, the level of specificity, and the nature of model specified boundaries (French et al., 1978).
- Various criteria exist that can be used to determine the effectiveness and usefulness of an assessment model, namely that it must be explicit, it must be theory research based, it must be operationally defined, it must be empirically validated, it must have face validity, and it must be generalisable (Borg & Mastrangelo, 2008; Harrison, 2005).
- Using a specific model in a diagnostic effort to measure the effectiveness of an organisation can provide many benefits, both theoretical and practical, as the model can effectively guide the entire process from planning through analysis (Borg & Mastrangelo, 2008; Falletta, 2005; Hausser, 1980; Immordino, 2010; Wiley, 2010).

7.2.1.3 *Evaluate existing organisational assessment frameworks/models which measure the organisational effectiveness of a total organisation to determine their applicability to metropolitan municipalities in South Africa*

This theoretical aim was also achieved in Chapter 4 of this study. From this investigation, the following conclusions can be made:

- All existing assessment frameworks can be grouped into three levels, namely individual-, group- and organisation levels. The first two categories focus on individual and group levels of functioning in organisations, while the latter category focuses on the functioning of the entire organisation (Brown, 2011; Cummings & Worley, 2009; French et al., 1978; Harrison, 2005; Hausser, 1980).
- Many frameworks and models exist for assessing the *total functioning* (emphasis added) of Private and Public Sector organisations, but not all organisation-level diagnostic frameworks or models assess the *organisational effectiveness* (emphasis added) of organisations (Burke & Litwin, 1992; Falletta, 2005; Kaplan & Norton, 1992; Lawrence & Lorsch, 1969; Nadler & Tushman, 1977; Porter et al., 1976; Tichy, 1983; Weisbord, 1976).
- There are nine major normative assessment models available *which assess the organisational effectiveness of a total organisation* (emphasis added), that is, which attempt to specify those things an organisation must do to become effective (Burke & Litwin, 1992; Higgins, 2005; Kaplan & Norton, 1992; Nadler &

Tushman, 1977; Nel & Haycock, 2005; Noolen, 2006; Porter et al., 1976; Tichy, 1983; Waterman et al., 1980; Weisbord, 1976; Wiley, 2010). As such only these nine models fulfil the requirements of this study as stated in Chapter 1, and could thus be investigated to determine their applicability to municipalities in South Africa.

- None of the nine assessment models reviewed fully incorporated all of the traditional approaches to organisational effectiveness previously discussed, and none of the nine models reviewed were specifically developed to measure a metropolitan municipality in South Africa.
- Each assessment model on its own offers a unique contribution to understanding the construct of organisational effectiveness, and as such cannot be totally eliminated or ignored. Each model highlights important elements that contribute to an organisation's effectiveness, either individually or in combination with others. However, no framework on its own can be declared as the best or preferred (Cameron & Whetton, 1983; Jackson, 1984; Seashore, 1983; Steers, 1975; Waheed et al., 2010).
- There cannot be one universal model of organisational effectiveness. This implies that a specific model must be developed for a specific organisation, given its specific circumstances and incorporating multiple dimensions specific to that organisation (Cameron & Whetton, 1983; Henri, 2004; Herman & Renz, 1999; Sowa et al., 2004; Venkatraman & Ramanujam, 1986).

- It is more worthwhile to develop models for assessing organisational effectiveness than trying to develop theories of organisational effectiveness (Henri, 2004; Richard et al., 2009; Rojas, 2000; Sowa et al., 2004).

7.2.1.4 Develop a new proposed theoretical assessment framework that can be utilised to measure the effectiveness of a metropolitan municipality in South Africa

This theoretical aim was also achieved in Chapter 4 of this study. From this investigation, the following conclusions can be made:

- In developing a theoretical framework for measuring the organisational effectiveness of a metropolitan municipality in South Africa, the following aspects must be covered:
 - All critical constituencies, such as communities, management, employees, unions and customers must be accommodated in the model (Cameron & Whetton, 1983; Connolly et al., 1980; Martz, 2008; Selden, 2000; Sowa et al., 2004; Wiley, 2010).
 - The model must include the following domains specified by South African legislation, namely the achievement of specific goals, service delivery and internal affairs/functioning (Constitution of the Republic of South Africa, 1996; Local Government: Municipal Systems Act, 2000 (Act No 32 of 2000)).
 - The model must enable organisational effectiveness to be assessed at the organisational level of functioning, and not at the individual or group levels (Constitution of the Republic of South

Africa, 1996; Local Government: Municipal Systems Act, 2000 (Act No 32 of 2000).

- The model should include three main approaches to organisational effectiveness, namely Healthy Systems, Service Delivery and Goal Achievement.
- The model should include the following aspects of the Healthy Systems approach to organisational effectiveness:
 - Internal Functioning
 - Management Practices
 - Teamwork
 - Work Environment
 - Rewards and Recognition
 - Training and Development
 - Interpersonal Relations
- The model should include Customer Satisfaction as part of Service Delivery.
- The model should include Vision and Mission as part of Goal Achievement.

7.2.2 Conclusions regarding the specific empirical aims of the study

The specific empirical aims of the study were the following:

7.2.2.1 Gather data from a metropolitan municipality in South Africa by means of a survey instrument which can be used to determine statistically the organisational and behavioural variables that influence organisational effectiveness at a metropolitan municipality in South Africa

This empirical aim was achieved in Chapter 5 of this study. A survey instrument, namely the Effectiveness Survey (ES), was completed by a 42% sample of 6715 employees at one of the largest metropolitan municipalities in South Africa. From this data gathering, the following conclusions can be made:

- The largest age group of the sample (40%) was 46 years or older, while the smallest portion of the sample was under 25 years of age. The majority of the sample (96.4%) was 25 years or older, indicating that very few young employees took part in the survey.
- The majority of the sample (62%) was female, while 50.4% of the sample had a Matric or lower qualification, while only 20% had a university degree as qualification.
- Top/senior managers constituted 7.6% of the sample, while the majority of the sample (50.3%) consisted of middle managers, supervisors, professionals, specialists and skilled employees.

- 81.9% of the respondents in the sample speak an African language. This supports the national statistics for municipalities in South Africa which indicate that an African language is spoken by the majority of local government employees (COGTA, 2009).
- The majority of the sample (82.1%) is Africans. This is in line with South African government legislation which compels the employment of previously disadvantaged groups in municipalities (Employment Equity Act, 1998 (Act No 55 of 1998)).
- The sample consisted of employees from all the work areas in the metropolitan municipality in which the survey was conducted, ranging from a low representation of 0.7% for Infrastructure and Services to a high representation of 17.6% for Health.
- Owing to the large sample size (average $n = 6514$) and the fact that the largest percentage of missing data was 7% for Question 44 of Dimension 1, namely Vision & Mission, the missing data had no effect on the statistical power of the analyses conducted (Peng et al., 2006).
- The total mean of the survey instrument (the ES) was 3.21, which indicates that the respondents were mostly satisfied with the various aspects of the organisation measured by the 13 ES dimensions. Also, respondents tended more towards agreeing rather than not agreeing on seven of the 13 dimensions. The six dimensions on which respondents tended more towards disagreeing rather than agreeing could be considered as future areas of development for the organisation. The largest standard

deviation obtained from the data was 1.40, so all data were within 2 standard deviations of the mean, an acceptable range variance for such studies (Green & Salkind, 2014).

- All of the 13 dimensions of the ES demonstrated high internal consistency, ranging from a Cronbach's Alpha of 0.79 to a high of 0.95, with an overall reliability of 0.86, which was deemed acceptable for this study (Hair et al., 1995).

- After two of the original 78 items of the ES were excluded owing to insufficient loadings on any components, a Principal Components Analysis (PCA) revealed the presence of 11 components with eigenvalues exceeding 1, cumulatively explaining 63.35% of the variance in the data. These 11 components (factors) were retained for further investigation (Hair et al., 2010).

- From the literature review, the 11 components were named as follows:
 - Component 1: Management Practices (MP)
 - Component 2: Internal Functioning (IF)
 - Component 3: Customer Satisfaction (CS)
 - Component 4: Diversity (D)
 - Component 5: Training and Development (T & D)
 - Component 6: Vision and Mission (V & M)
 - Component 7: Rewards and Recognition (R & R)
 - Component 8: Work Environment (WE)
 - Component 9: Interpersonal Relations (IR)
 - Component 10: Teamwork (T)

- Component 11: Workforce Equality (WEq)
- The extracted 11 components all demonstrated acceptable internal consistency, from a low Cronbach's Alpha of 0.66 to a high of 0.96, with an overall internal consistency of 0.97, which can be considered to be very high for the ES (Green & Salkind, 2014; Hair et al., 2010).

7.2.2.2 *Validate the proposed theoretical assessment framework for measuring the organisational effectiveness of metropolitan municipalities in South Africa by means of Structured Equation Modelling (SEM)*

This empirical aim was also achieved in Chapter 5 of this study. A Confirmatory Factor Analysis (CFA) was conducted as part of the SEM process using the 11 factors identified during the EFA, and the following conclusions can be made from this analysis:

- A 1st order measurement model was specified in which latent construct 10 (Teamwork – two items) was completely removed from the model. An additional 12 items were also deleted owing to their SMC also not being adequate (<0.3), and thus not contributing adequately to the solution. The standardised regression weights of the remaining 62 items and 10 latent variables were all significant (the lowest was Question 4 on 0.57 while the highest was Question 44 on 0.93), making model trimming unnecessary and which, according to Hair et al. (2010), can possibly be attributed to the large sample size (average n = 6514 after listwise deletion). The significant estimates also

indicate that the latent variables explain significant proportions of variance in the survey items (Patterson et al., 2005).

- Goodness-of-Fit indices indicated that the validity of the 1st order measurement model was acceptable, as, except for the chi-square index, all the other GOF indices were at an acceptable level (Hair et al., 1995; Hair et al., 2010; Hu & Bentler, 1999). The obtained measurement model was thus valid for the 1st order latent constructs for use in measuring the organisational effectiveness of a metropolitan municipality in South Africa.
- A 2nd order measurement model was specified in which three 2nd order latent constructs were hypothesised as causing the ten 1st order latent factors. These 2nd order latent factors with the ten 1st order latent constructs were the following:

(1) Healthy Systems

- 4 - Diversity (D)
- 5 - Training and Development (T & D)
- 7 - Rewards and Recognition (R & R)
- 1 - Management Practices (MP)
- 2 - Internal Functioning (IF)
- 8 - Work Environment (WE)
- 9 - Interpersonal Relations (IR)
- 11 - Workforce Equality (WEq)

(2) Service Delivery

- 3 - Customer Satisfaction (CS)

(3) Goal Achievement

➤ 6 - Vision and Mission (V & M)

- The standardised regression weights of the ten 1st order latent constructs and three 2nd order latent constructs were all significant, varying from a low of 0.32 to a high of 0.99. Internal Functioning (IF) was the most important contributor to Healthy Systems (0.96), while Workforce Equality (WEq) was the least important contributor to Healthy Systems (0.32). The significant estimates also indicate that the 2nd order latent variables explain significant proportions of variance in the 1st order latent variables (Patterson et al., 2005).
- The same Goodness-of-Fit indices used for the 1st order measurement model indicated that the validity of the 2nd order measurement model was acceptable, as, except for the chi-square index, all the other GOF indices were at an acceptable level (Hair et al., 1995; Hair et al., 2010; Hu & Bentler, 1999). The obtained measurement model was thus valid for the 2nd order latent constructs for use in measuring the organisational effectiveness of a metropolitan municipality in South Africa.
- A structural model was specified by hypothesising relationships among the 2nd order latent constructs, and these hypothesised relationships were based on the proposed theoretical model developed in Chapter 4. The following structural relationships were hypothesised among the three confirmed 2nd order latent constructs.

- H1: Healthy Systems has a positive effect on Service Delivery
 - H2: Healthy Systems has a positive effect on Goal Achievement
 - H3: Service Delivery has a positive effect on Goal Achievement
 - H4: Goal Achievement has a positive effect on Service Delivery
- The results indicated that there is a significant relationship between Healthy Systems and Service Delivery (0.57), and Healthy Systems and Goal Achievement (0.55). However, the relationship between Service Delivery and Goal Achievement (0.08) and between Goal Achievement and Service Delivery (0.08) is insignificant.
 - GOF indices were used to determine the validity of the structural model. Except for the chi-square index which was unacceptably high owing to a large sample size (average $n = 6514$ after listwise deletion), (Hooper et al., 2008; Gatignon, 2010; Hair et al., 2010), all the other GOF indices were acceptable (Hair et al., 1995; Hair et al., 2010; Hu & Bentler, 1999). The Structural Model could thus be accepted as a valid model for measuring the organisational effectiveness of a metropolitan municipality in South Africa.
 - In summary, the results of the SEM indicated the following:
 - H1: Healthy Systems has a positive effect on Service Delivery – Accepted.
 - H2: Healthy Systems has a positive effect on Goal Achievement – Accepted.

- H3: Service Delivery has a positive effect on Goal Achievement – Rejected.
- H4: Goal Achievement has a positive effect on Service Delivery – Rejected.
- The original proposed theoretical assessment framework was thus adapted to indicate the following:
 - If a metropolitan municipality has healthy systems in place, it will facilitate the achievement of its goals as stipulated in its vision and mission.
 - If a metropolitan municipality has healthy systems in place, it will enable it to deliver the services that it must, ensuring customer satisfaction.
 - If a metropolitan municipality has healthy systems in place, it will contribute towards the organisational effectiveness attributed to the metropolitan municipality.
 - If a metropolitan municipality delivers the services that it must, ensuring customer satisfaction, it will not necessarily facilitate the achievement of its goals as stipulated in its vision and mission.
 - If a metropolitan municipality achieves its goals as stipulated in its vision and mission, it will not necessarily facilitate the delivery of services, ensuring customer satisfaction.

7.2.2.3 *Formulate recommendations regarding which behavioural and organisational variables should be included in an assessment framework in order to measure the organisational effectiveness of metropolitan municipalities in South Africa*

This empirical aim was also achieved in Chapter 5 of this study and the following conclusions can be made:

- Any assessment framework that is used to measure the organisational effectiveness of a metropolitan municipality in South Africa should include at least the following three main variables, namely:
 - Healthy systems, that is, to what degree is the metropolitan municipality functioning smoothly with a minimum of internal strain?
 - Goal achievement, that is, to what degree is a metropolitan municipality achieving its stated goals?
 - Service delivery, that is, to what degree is the metropolitan municipality satisfying the needs of various relevant organisational constituencies?
- Any assessment framework that is used to measure the organisational effectiveness of a metropolitan municipality in South Africa should include at least the following aspects under the three main variables, as indicated in Table 7.1 below.

Table 7.1:

Aspects to be Included in any Assessment Framework to Measure the Organisational Effectiveness of a Metropolitan Municipality in South Africa

Main Variable	Aspects to be Included under the Variable	Description of Aspect
Healthy Systems	Diversity	The preference that is given to people from designated groups (Africans, Coloureds, Indians, women and people with disabilities) when recruiting in an organisation, and the degree to which an organisation accommodates the different ethnic cultures and beliefs of all employees in the workplace
	Training and Development	The systematic effort by organisations to facilitate the learning of job-related knowledge and behaviours (e.g., skills, rules, concepts or attitudes) that result in improved performance
	Rewards and Recognition	What is done to compensate employees for work delivered and to recognise superior performance by employees
	Management Practices	What managers and leaders do in the normal course of effects with the human and material resources at their disposal to carry out the organisation's strategy in order to achieve its goals
	Internal Functioning	The variety of processes taking place in an organisation, such as the treatment and involvement of employees, the flow of communications, the effectiveness of processes and procedures, and the implementation of changes for improvement
	Work Environment	The availability of the required resources for employees to do their work as well as the physical aspects of the actual work space
	Interpersonal Relations	How people relate to each other in the work place and include aspects such as how people feel about each other, how they support each other, how they work together and cooperate, to what degree they trust each other and how conflict is handled
	Workforce Equity	The lack of discrimination, racism and sexual harassment in an organisation.
Goal Achievement	Vision and Mission	The stated goals that have to be achieved at every level in an organisation

Service Delivery	Customer Satisfaction	The identification and satisfaction of the needs, expectations and perspectives of various relevant organisational constituencies.
------------------	-----------------------	--

7.2.3 Conclusions regarding the general aim of the study

The general explanatory aim of the research was to develop and validate an assessment framework for measuring the organisational effectiveness of a metropolitan municipality in South Africa. To achieve this aim, a two-phased research design was followed as depicted in Figure 1.3 in Chapter 1, consisting of a literature review phase, and an empirical study phase. This research design enabled the researcher to develop and validate a proposed assessment framework for measuring the organisational effectiveness of a metropolitan municipality in South Africa. The final proposed and validated model is depicted in Figure 6.14 in Chapter 6 of this study, and the conclusion can thus be made that the general aim of the research was achieved.

7.2.4 Conclusions regarding the research hypothesis

The research hypothesis for the study was the following:

Existing assessment frameworks used to measure the effectiveness of organisations do not include all relevant behavioural and organisational variables needed to measure the effectiveness of a metropolitan municipality in South Africa.

In Chapter 4 of the literature review, nine existing assessment frameworks used to measure the effectiveness of organisations were reviewed. The following conclusions were reached regarding this review (see Section 7.2.1.3 above):

- None of the nine existing assessment frameworks reviewed fully incorporated all of the traditional approaches to organisational effectiveness, and none were specifically developed to measure the effectiveness of a metropolitan municipality in South Africa.
- Each assessment framework on its own offered a unique contribution to understanding the construct of organisational effectiveness, and each model highlighted important elements that contribute to an organisation's effectiveness, either individually or in combination with others. However, no framework on its own can be declared as the best or preferred.
- There cannot be one universal model of organisational effectiveness. This implies that a specific model must be developed for a specific organisation, given its specific circumstances and incorporating multiple dimensions (organisational and behavioural variables) specific to that organization.

Furthermore, the empirical research of this study provided statistical evidence as to the behavioural and organisational variables that should be included in any assessment framework to measure the organisational effectiveness of a metropolitan municipality in South Africa (see Table 7.1 above). As such, none of the nine assessment frameworks which measure the organisational effectiveness of an organisation which were reviewed in the literature study, *contained all of the 10 statistical significant behavioural and organisational variables identified by the empirical study* (emphasis added) and reported in Table 7.1.

As such the research hypothesis for the study was accepted.

7.3 LIMITATIONS OF THE STUDY

7.3.1 Limitations related to the literature review

- There is a lack of consensus in the literature regarding the meaning and definition of organisational effectiveness. This made the conceptualisation of organisational effectiveness problematic, which also made the development of a theoretical framework to measure organisational effectiveness in metropolitan municipalities in South Africa challenging.
- There is a lack of current studies (post 2000) in the literature regarding organisational effectiveness. This made it difficult to refer to and learn from contemporary literature regarding the construct.
- There are limited studies in the literature regarding organisational effectiveness (performance) in the Public Sector, and specifically regarding local government. This made it difficult to refer to and learn from such research in order to develop a model to measure the organisational effectiveness of a municipality.
- Most models developed to assess the organisational effectiveness of a total organisation were developed before 1998 (Burke & Litwin, 1992; Kaplan & Norton, 1992; Nadler & Tushman, 1977; Nel & Haycock, 2005; Porter et al., 1976; Tichy, 1983; Waterman et al., 1980; Weisbord, 1976). Only two models that

complied with the criteria for this study could be found in the literature that were either developed or adapted post 2000 (Higgins, 2005; Wiley, 2010). This reduced the availability of contemporary models of organisational effectiveness which could be used as a benchmark when developing a customised model to measure the organisational effectiveness of a metropolitan municipality in South Africa.

- Except for the Burke and Litwin Causal Model of Organisational Performance (Martins & Coetzee, 2009), no other research could be found in which any of the nine normative organisational effectiveness models described in Chapter 4 had been validated in a South African organisation by means of a scientific study. This reduced the availability of South African researched validity information which could be used as input when developing a customised model to measure the organisational effectiveness of a metropolitan municipality in South Africa.

7.3.2 Limitations related to the empirical study

- An existing questionnaire (the Effectiveness Survey), which was not specifically developed for this purpose, was used to measure the organisational effectiveness of a metropolitan municipality in South Africa.
- The study was conducted in only one of the eight existing metropolitan municipalities in South Africa. For this reason generalisation to the other seven metropolitan municipalities in South Africa would have to be done with caution.

- The construct of organisational effectiveness was not measured directly, but assumed to be the average of all the scores for all the variables of the ES.
- The majority of respondents were African (82.1%) and the majority had a home language other than English (90.1%). As the ES was developed for an English audience, respondents may not have fully understood the questions, which could have affected the validity of their answers.

7.4 SUGGESTIONS FOR FURTHER RESEARCH

The following suggestions for further research are made based on the conclusions and limitations of this study:

- The construct of organisational effectiveness has important practical significance for practitioners (managers and consultants) and important academic significance for academics, as it forms an important component of organisational psychology. As such it should be studied further in order to fully clarify its meaning and definition from a behavioural perspective.
- The nine normative models of organisational effectiveness discussed in Chapter 4 should be validated in South African organisations, so that organisational development practitioners have a greater variety of models available to measure the organisational effectiveness of South African organisations.
- A customised organisational effectiveness questionnaire based on the validated model of organisational effectiveness for a

metropolitan municipality in South Africa proposed in this study, should be developed and used to measure the effectiveness of other metropolitan municipalities in South Africa besides the metropolitan municipality utilised for this study.

7.5 RECOMMENDATIONS FOR THE PARTICIPATING METROPOLITAN MUNICIPALITY

- From the results of the original survey using the ES questionnaire, the total mean of 3.21 indicates that the respondents of the participating metropolitan municipality were mostly satisfied with the various aspects of the organisation measured by the 13 original ES dimensions. Also, respondents tended more towards agreeing rather than not agreeing on seven of the 13 dimensions. However, respondents tended more to disagree than agree on six dimensions of the ES, and these dimensions should be considered to be areas of development. Appropriate interventions should be developed to address these six dimensions, which are:
 - Diversity
 - Employee Relations
 - Rewards and Recognition
 - Change Management
 - Communication
 - Training and Development
- After a period of one year has elapsed after the implementation of interventions to address the six dimensions of concern, the participating metropolitan municipality should conduct a follow-

up survey. This will enable it to determine whether there has been an improvement in the scores regarding the six dimensions of concern, and thus in the organisational effectiveness of the metropolitan municipality.

7.6 RECOMMENDATIONS FOR THE FIELD OF INDUSTRIAL AND ORGANISATIONAL PSYCHOLOGY REGARDING ORGANISATIONAL EFFECTIVENESS

The following recommendations, based on the conclusions reached from the literature review and empirical study, are made for the field of Industrial and Organisational Psychology (IOP) in general, and for Industrial and Organisational Psychologists, Organisational Development Practitioners, Organisational Behaviour Practitioners as well as managers, in particular:

- As Industrial and Organisational Psychologists (IOPs) play an important role in assisting organisations to improve their functioning, the validated assessment model proposed in this study can be used to diagnose metropolitan municipalities in South Africa. The results of this diagnosis can then be utilised to develop and implement appropriate interventions to improve their effectiveness.
- IOPs can use the literature review of organisational effectiveness contained in this study to improve their understanding of the construct of organisational effectiveness. This understanding can be used to assist organisations in general and metropolitan municipalities in particular to improve their organisational effectiveness in order to ensure their continued growth and survival.

- IOPs, Practitioners and Managers, when using an existing assessment framework to measure the effectiveness of an organisation, should choose one:
 - That measures the *effectiveness* (emphasis added) of an organisation and not the *functioning* (emphasis added) of an organisation.
 - That measures a total organisation and not individual or group functioning.
 - That incorporates as many of the traditional approaches to organisational effectiveness as possible.

- This study contains a comprehensive review of the nine existing normative assessment frameworks used to measure the organisational effectiveness of a total organisation, including each framework's strengths and weaknesses. IOPs, Practitioners and Managers can use this review to assist them in choosing the most appropriate model to be used for their specific circumstances when diagnosing the effectiveness of an organisation.

- This study clearly indicated that organisational performance in the Public Sector is different from organisational effectiveness in the Private Sector, and that Private Sector measures of organisational effectiveness cannot be used directly as Public Sector measures of organisational performance. This knowledge can assist IOPs, Practitioners and Managers working in the Public Sector to only use measures of organisational effectiveness that were specifically developed for the Public Sector when measuring the effectiveness of Public Sector entities.

- The most important contribution of this study to the field of IOP is the fact that there are now available validated organisational and behavioural variables that can be used to specifically assess the organisational effectiveness of a metropolitan municipality in South Africa. This implies that IOPs, Practitioners and Managers, when measuring the effectiveness of any metropolitan municipality in South Africa, should ensure that *at least* (emphasis added) the 10 organisational and behavioural variables reported in Table 7.1 are included in any assessment framework that they use for metropolitan municipalities. Furthermore, this model can also be applied in and validated for the Private Sector as well.

7.7 CHAPTER SUMMARY

In this Chapter the conclusions, limitations and recommendations regarding the present study were discussed. The Chapter started with the conclusions reached regarding the general aim, the specific literature aims, the specific empirical aims as well as the research hypothesis of the study. Thereafter the limitations of the study were discussed and suggestions for further research were made. Recommendations for the organisation that participated in the study were also made, and the Chapter was concluded with recommendations for the field of Industrial and Organisational Psychology regarding organisational effectiveness.

REFERENCE LIST

- Aamodt, M.G. (2007). *Industrial/organizational psychology: An applied approach* (5th ed.). Belmont, CA: Thomson Learning.
- Achua, C.F. & Lussier, R.N. (2010). *Effective leadership*. (4th ed.). Seattle, WA: South Western.
- Albertyn, L. & Bergh, Z. (2006). Cognitive theory: Personality through knowledge construction. In Z. Bergh & A. Theron (Eds), *Psychology in the work context* (3rd ed., pp. 372-386). Cape Town: Oxford University Press.
- Allison, P. D. (2001). *Missing Data*. Sage University Papers Series on Quantitative Applications in the Social Sciences. 07-136. Thousand Oaks, CA: Sage
- Andrews, M. & Shah, A. (2003). Assessing local government performance in developing countries. In Shah, A, (Ed.), *Handbook of public sector performance reviews*, Vol 2. Washington, DC: World Bank.
- Arbuckle, J.L. (2006). *Amos 7.0 Users Guide*. Chicago, IL: SPSS.
- Arthur, W.J., Bennet, W., Edens, P.S. & Bell, S.T. (2003). Effectiveness of training in organizations: A meta-analysis of design and evaluation features. *Journal of Applied Psychology*, 88(2), 234-245.
- Atkinson, D. (2007). Taking to the streets: Has developmental local government failed in South Africa? In S. Buhlungu, J. Daniel, R. Southall, J. Lutchman. (Eds). *State of the Nation: South Africa 2007*. Cape Town: Human Sciences Research Council.
- Babbie, E. (2010). *The practice of social research* (12th ed.). Belmont, CA: Cengage Learning.
- Baldrige National Quality Program (2007). *Criteria for performance excellence 2007*. National Institute of Standards and Technology, Department of Commerce, Gaithersburg, MD.
- Barlow, I.M. (1991). *Metropolitan government*. New York: Routledge.
- Barnett, W.P., Greve, H.R. & Park, D.Y. (1994). An evolutionary model of organizational performance. *Strategic Management Journal*, 15(Special Issue), 11-28.

- Bartlett, M.S. (1954). A note on the multiplying factors for various chi square approximations. *Journal of the Royal Statistical Society*, 16(Series B), 296-298.
- Bartol, K.M. & Locke, E.A. (2000). Incentives and motivation. In S.L. Rynes & B. Gerhart (Eds), *Compensation in organizations: Current research and practice* (p. 124). San Francisco, CA: Jossey-Bass.
- Baruch, Y. & Ramalho, N. (2006). Communalities and distinctions in the measurement of organizational performance and effectiveness across for-profit and nonprofit sectors. *Nonprofit and Voluntary Quarterly*, 35(1), 39-63.
- Bateman, T.S. & Zeithaml, C.P. (1993). *Management: Function and strategy* (2nd ed.). Boston, MA: Von Hoffmann Press.
- Baumgartner, H. & Hombur, C. (1996). Applications of structural equation modelling in marketing and consumer research: A review. *International Journal of Research in Marketing*, 13(2), 139-161.
- Beer, M. & Spector, B. (1993). Organizational diagnosis: Its role in organizational learning. *Journal of Counseling & Development*, 71(6), 642-650.
- Beer, M. & Walton, E. (1990). Developing the competitive organization: Interventions and strategies. *American Psychologist*, 45(2), 154-161.
- Behn, R.D. (2003). Why measure performance? Different purposes require different measures. *Public Sector Review*, 62(5), 586-606.
- Bentler, P.M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, 107(2), 238-246.
- Bentler, P.M. & Bonnet, D.G. (1980). Significance tests and goodness of fit analysis of covariance structures. *Psychological Bulletin*, 88(3), 588-606.
- Bergh, Z. (2006). Psychological and personality assessment. In Z. Bergh & A. Theron (Eds), *Psychology in the work context* (3rd ed., pp. 487-509). Cape Town: Oxford University Press.
- BESA (1998). *What is self-assessment?* Johannesburg: Business Excellence South Africa.

- Beulens, M., Sinding, K., Waldstrom, C., Kreitner, R. and Kinicki, A. (2011). *Organisational behaviour* (4th ed.). Berkshire, UK: McGraw-Hill.
- Bluedorn, A.C. (1980). Cutting the Gordian Knot: A critique of the effectiveness tradition in organizational research. *Sociology and Social Research*, 64, 477 – 496.
- Boote, D.N. & Beile, P. (2005). Scholars before researchers: On the centrality of the dissertation literature review in research preparation. *Educational Researcher*, 34(6), 3-15.
- Borg, I. & Mastrangelo, P. M. (2008). *Employee surveys in management: Theory, tools and practical applications*. Cambridge, MA: Hogrefe & Huber.
- Boyne, G.A. (2003). Sources of public service improvement: A critical review and research agenda. *Journal of Public Administration Research and Theory*, 13(3), 367-394.
- Boyne, G.A. & Chen, A.A. (2006). Performance targets and public service improvement. *Journal of Public Administration Research and Theory*, 17(3), 455-477.
- Boyne, G.A., James, O., John, P. & Petrovsky, N. (2009). Democracy and government performance: Holding incumbents accountable in English local governments. *The Journal of Politics*, 71 (4), 1273–1284.
- Brewer, G.A. & Selden, S.C. (2000). Why elephants gallop: Assessing and predicting organizational performance in federal agencies. *Journal of Public Administration Research and Theory*, 10(4), 685-711.
- Brown, D.R. (2011). *An experiential approach to organizational development*. (8th ed.). International Edition: Pearson.
- Buchanan, D. (2000). An eager and enduring embrace: The ongoing rediscovery of teamworking as a management idea. In S. Procter and F. Mueller (Eds), *Teamworking* (pp. 25-42). London: Macmillan.
- Burke, W.W. (2011). *Organization change: Theory and practice* (3rd ed.). Teller Road, CA: Sage Publications.
- Burke, W.W. & Litwin, G.H. (1992). A causal model of organizational performance and change. *Journal of Management*, 18(3), 523-545.

- Cameron, K.S. (1978). Measuring organizational effectiveness in institutions of higher education. *Administrative Science Quarterly*, 23(4) (Dec), 604-632.
- Cameron, K.S. (1981). The enigma of organizational effectiveness. *New Directions for Program Evaluation*, 11, 1-13.
- Cameron, K.S. (1986). Effectiveness as paradox: Consensus and conflict in conceptions of organizational effectiveness. *Management Science*, 32(5), 539 –553).
- Cameron, K.S. & Whetten, D.A. (1983). Organizational effectiveness: One model or several? In Cameron, K.S. & Whetten, D.A. (1983). (Eds). *Organizational effectiveness: A comparison of multiple models* (pp. 1-24). New York, NY: Academic Press.
- Cameron, R. (2005). Metropolitan restructuring (and more restructuring) in South Africa. *Public Administration and Development*, 25(4), 329-339.
- Campbell, J.P., John, P., Bownas, D. A., Peterson, N.G. & Dunnette, M. D. (1974). *The measurement of organizational effectiveness: A Review of relevant research and opinion*. Unpublished paper, Personnel decisions, Inc., Minneapolis, MN.
- Carper, W.B. & Snizek, W.E. (1980). The nature and types of organizational taxonomies: An overview. *Academy Management Review*, 5, 65-75.
- Carter, N. (1981). Learning to measure performance: The use of indicators in organizations. *Public Administration*, 69(1), 85-101.
- Castro, M.L. & Martins, N. (2010). The relationship between organisational climate and employee satisfaction in a South African information and technology organisation. *South African Journal of Industrial Psychology*, 36(1), 1-9.
- Cattell, R.B. (1966). The scree test for the number of factors. *Multivariate Behavioral Research*, 1(2), 245-276.
- Church, A.H. & Waclawski, J. (1998). *Designing and using organizational surveys*. Brookfield, VT: Gower.

- Clos, J. (2003, March). *Sustainable local government, sustainable development: Involving the Private Sector and NGOs*. Keynote address presented at the Commonwealth Local Government Forum Conference, Pretoria: South Africa.
- Cohen, M.D. & March, J.G. (1974). *Leadership and ambiguity: The American college president*. New York: McGraw-Hill.
- Colquitt, J.A., LePine, J.A. & Noe, R.A. (2000). Toward an integrative theory of training motivation: A meta-analysis path analysis of 20 years of research. *Journal of Applied Psychology, 85*(5), 678-707.
- Colquitt, J.A., LePine, J.A. & Wesson, M.J. (2011). *Organizational behavior: Improving performance and commitment in the workplace* (2nd ed.). New York: McGraw-Hill.
- Connolly, T., Conlon, E.J. & Deutsch, S.J. (1980). Organizational effectiveness: A multiple-constituency approach. *Academy of management, 5*(2), 211-217.
- Constitution of the Republic of South Africa, No 108 (1996). *Government Gazette, 378* (17678).
- Coolidge, F.L. (2012). *Statistics: A gentle introduction* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Craythorne, D.L. (2006). *Municipal Administration: The handbook*. (6th ed.). Cape Town: Juta.
- Creswell, J.W. (2009). *Research design: Qualitative, quantitative, and mixed methods* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Cummings, T.G. & Worley, C.G. (2009). *Organization development and change*. (9th ed.). Mason, OH: South-Western Cengage Learning.
- Cunningham, B. (1977). Approaches to the evaluation of organizational effectiveness. *Academy of Management Review, 2*(3), 463-474.
- Curry, J. & Gay, E. (1987). *Educational research: Competencies for analysis and application*. Columbus, OH: Merrill Publishing Company.
- Daft, R.L. (1992). *Organization theory and design*. New York: West Publishing Company.

- Denhardt, R.B. (2008). *Theories of public organization*. Belmont, CA: Thomson/Wadsworth.
- Department of Provincial Affairs and Constitutional Development (1998). *White Paper on Local Government*. Pretoria: Government Printers.
- Department of Cooperative Governance and Traditional Affairs [DCOGTA] (2009). *State of Local Government in South Africa Report*. Pretoria: Government Press.
- Dirks, K.T. (1999). The effects of interpersonal trust on work group performance. *Journal of Applied Psychology, 84*(3), 445-455.
- Dubin, R. (1976). Organizational effectiveness: Some dilemmas of perspective. In S.L. Spray (Ed.), *Organizational effectiveness: Theory-research-utilization* (pp. 7-13). Kent, OH: Kent State University Press.
- Dunphy, D. & Bryant, B. (1996). Teams: Panaceas or prescriptions for improving performance? *Human Relations, 49*(5), 677-699.
- Durrheim, K. (2006). Basic quantitative analysis. In M. Terre Blanche, K. Durrheim, & D. Painter (Eds), *Research in practice: Applied methods for the social sciences* (2nd ed., pp. 187-214). Cape Town: University of Cape Town Press.
- Durrheim, K. & Painter, D. (2006). Collecting quantitative data: Sampling and measurement. In M. Terre Blanche, K. Durrheim, & D. Painter (Eds), *Research in practice: Applied methods for the social sciences* (2nd ed., pp. 131-159). Cape Town: University of Cape Town Press.
- Employment Equity Act, No 55 (1998). *Government Gazette, 192* (20626).
- Eriksson-Zetterquist, U., Müllern, T. & Styhre, A. (2011). *Organization theory: A practice-based approach*. Oxford, NY: Oxford University Press.
- Etzioni, A. (1964). *Modern organisations*. Englewood Cliffs, N.J: Prentice-Hall.
- Evans, J.R. & Mathur, A. (2005). The value of online surveys. *Internet Research, 15*(2), 195–219.
- Fabrigar, L.R. & Wegener, D.T. (1999). *Exploratory factor analysis*. Oxford: Oxford University Press.

- Fabrigar, L.R., Wegener, D.T., MacCallum, R.C. & Strahan, E.J. (1999). Evaluating the use of exploratory factor analysis in psychological research. *Psychological Methods*, 4(3), 272-299.
- Faehrman, S.R. & Quinn, R.E. (1985). Effectiveness: The perspective from organizational theory. *Review of Higher Education*, 9, 83-100.
- Falletta, S.V. (2005). *Organizational diagnostic models: A review and synthesis*. Sunnyvale, CA: Leadersphere.
- Flannery, T.P., Hofrichter, D.A. & Platten, P.E. (1996). *People, performance and pay*. New York: The Free Press.
- French, W.L. & Bell, C.H. (1978). *Organization development: Behavioral science interventions for organizational improvement* (2nd ed.). Englewood, NJ: Prentice-Hall.
- French, W.L., Bell, C.H. & Zawacki, R.A. (Eds) (1978). *Organisation development: Theory, practice and research*. Dallas, TX: Business Publications.
- Friedlander, F. & Pickle, H. (1968). Components of effectiveness in small organizations. *Administrative Science Quarterly*, XIII (March), 289-304.
- Gatignon, H. (2010). *Statistical analysis of management data* (2nd ed.). New York, NY: Springer.
- Gawande, K. & Wheeler, T. (1999). Measures of effectiveness for governmental organizations. *Management Science*, 45(1), 42-58.
- Georgopoulos, B.S. & Tannenbaum, A.S. (1957). A study of organizational effectiveness. *American Sociological Review*, 22(5), 534-540.
- Ghorpade, J. (1971). *Assessment of organizational effectiveness: Issues, analysis, readings*. Pacific Palisades, CA: Goodyear.
- Glaser, M. (1991). Tailoring performance measurement to fit the organization: From generic to germane. *Public Productivity and Management Review*, 14(3), 303-319.
- Glunk, U. & Wilderom, C. (1999). Organizational effectiveness = corporate performance? Why and how two research traditions need to be merged. In M.P. Cunha & C.A. Marques (Eds). *Readings in Organization Science - Organizational Change in a Changing Context* (pp. 155-183). Lisbon: ISPA.

- Goldstein, J.L. & Ford, J.K. (2002). *Training in organizations* (4th ed.). Belmont, CA: Wadsworth.
- Goodman, P.S. & Pennings, J.M. (Eds) (1977). *New perspectives on organizational effectiveness*. San Francisco. CA: Jossey-Bass.
- Goodwin, C. J. (2013). *Research in psychology: Methods and design* (7th ed.). Hoboken, N.J: John Wiley & Sons.
- Green, S.B. & Salkind, N. (2014). *Using SPSS for Windows and Macintosh: Analyzing and understanding data* (6th ed.). Upper Saddle River, NJ: Prentice Hall.
- Greenberg, J. (1994). *Organizational behaviour: The state of the science*. Hillside, NY: Lawrence Erlbaum Associates.
- Grieves, J. (2010). *Organizational change: Themes and issues*. Oxford: Oxford University Press.
- Hair, J.F., Anderson, R.E., Tatham, R.L. & Black, W.C. (1995). *Multivariate data analysis* (3rd ed.). Englewood Cliffs, NJ: Prentice Hall.
- Hair, J.F., Black, W.C., Babin, B.J. & Anderson, R.E. (2010). *Multivariate data analysis* (7th ed.). Englewood Cliffs, NJ: Prentice Hall.
- Hall, R.H. (1999). *Organizations: Structures, processes and outcomes*. (7th ed.). Upper Saddle River, NJ: Prentice Hall.
- Hamel, G. (2000) *Leading the revolution*. Boston, MA: Harvard Business School Press.
- Hammer, M. & Champy, J. (1993). *Reengineering the corporation: A manifesto for business revolution*, New York: Harper Collins.
- Hannan, M.T. & Freeman, J.H (1977). Obstacles to comparative studies. In P.S. Goodman & J.M. Pennings (Eds). *New perspective in organizational effectiveness* (pp. 106-131). San Francisco, CA: Jossey-Bass.
- Harley, B. (1999). The myth of empowerment: Work organization, hierarchy and employee autonomy in contemporary Australia workplaces. *Work, Empowerment and Society*, 13(1), 41-66.
- Harrison, M.I. (2005). *Diagnosing organizations: Methods, models, and processes* (3rd ed.). Thousand Oaks, CA: Sage Publications.

- Hausser, D. (1980). *Comparison of different models for organizational analysis*. In E.E. Lawler, D.A. Nadler & C. Cammann (Eds), *Organizational assessment: Perspectives on the measurement of organizational behavior and the quality of work life* (pp. 132-161). New York: John Wiley.
- Henri, J.F. (2004). Performance measurement and organisational effectiveness: Bridging the gap. *Managerial Finance*, 30(6), 93-123.
- Herman, R.D. & Renz, D.O. (1999). Thesis on nonprofit organizational effectiveness. *Nonprofit and Voluntary Sector Quarterly*, 28(2), 107-126.
- Higgins, J.M. (2005). The eight "S" of successful strategy execution. *Journal of Change Management*, 5(1), 3-13.
- Hoe, S. L. (2008). Issues and procedures in adopting structural equation modelling technique. *Journal of Applied Quantitative Methods*, 3(1), 76–83.
- Hooper, D., Coughlan, J. & Mullen, M.R. (2008). Structural equation modelling: Guidelines for determining model fit. *Journal of Business Research Methods*, 6(1), 53-60.
- Howard, A. (1994). *Diagnosis for Organizational Change: Methods and Models*. New York: The Guilford Press.
- Hoyle, R.H. (1995). The structural equation modelling approach: Basic concepts and fundamental issues. In R.H. Hoyle (Ed.). *Structural Equation Modeling: Concepts, issues and applications* (pp. 1-36). Thousand Oaks, CA: Sage Publications.
- Hrebiniak, L.G. (1978). *Complex organizations*. New York, NY: West Publishing.
- Hu, L. & Bentler, P.M. (1999). Cutoff criteria for fit indices in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(1), 1-55.
- Hunter, J.E. & Gerbing, D.W. (1982). Unidimensional measurement, second order factor analysis, and causal models. *Research in Organizational Behavior*, 4, 267-320.
- Immordino, K.M. (2010). *Organizational assessment and improvement in the public sector*. Boca Raton, FL: CRC Press.

- Jackson, W.U. (1984). Assessing performance in local government. *Long Range Planning*, 17(3), 24 – 31.
- Johnson, S.S. (1978). *Comparative performance measures for municipal services*. Research Park: Research Triangle Institute.
- Jones, B.B. & Brazzel, M. (2006). *The NTL handbook of organizational development and change: Principles, practices and perspectives*. San Francisco, CA: Jossey-Bass.
- Jones, G.R. (2013). *Organizational theory, design and change*. (7th ed.). Harlow, England: Pearson Education Limited.
- Kahn, R.L. & Morse, N.C. (1951). The relationship of productivity to morale. *Journal of Social Issues*, 7(3), 8-17.
- Kaiser, H.F. (1974). An index of factorial simplicity. *Psychometrika*, 39(1), 31-36.
- Kanter, R.M. (1983). *The change masters: Innovations for productivity in the American corporation*. New York, NY: Simon & Schuster.
- Kanter, R.M. & Brinkerhoff, D. (1981). Organizational performance: Recent developments in measurement. *Annual Review of Sociology*, 7, 321-349.
- Kaplan, R.S. & Norton, D.P. (1992). The balanced scorecard – measures that drive performance. *Harvard Business Review*, 70(1), 71-79.
- Kaplan, R.S. & Norton, D.P. (1996). Using the balanced scorecard as a strategic management system. *Harvard Business Review*, 74(1), 75-85.
- Katz, D. & Kahn, R.L. (1971). Human organization and worker motivation. In Tripp, L.R. (Ed.). *Industrial productivity*. Madison, WI: Industrial Relations Research Association.
- Katz, D. & Kahn, R.L. (1966). *The social psychology of organizations*. New York, NY: Wiley & Son.
- Katz, D. & Kahn, R.L. (1978). *The social psychology of organizations* (2nd ed.). New York, NY: Wiley & Son.
- Katzenbach, J.R. & Douglas, K. (1993). The discipline of teams. *Harvard Business Review*, 71(2), 111-25.

- Kerlinger, F.N. (1986). *Foundations of behavioural research* (3rd ed.). New York, NY: CBS College Publishing.
- Khan, F. & Maharaj, B. (1997). Metropolitan government and local restructuring. In R.A. Naidu & P.S. Reddy (Eds). *Metropolitan government and development: Present and future challenges* (pp. 258-296). Durban: Konrad Adenauer Stiftung.
- Kilmann, R.H., Pondy, L.R. & Slevin, D.P. (Eds) (1976). *The management of organization design: Research and methodology*. New York, NY: Elsevier North-Holland.
- Kimbrough, A., Durley, J. & Munoz, C. (2005). TIP-TOPics for students. *The Industrial-Organizational Psychologist*, 42, 107-114.
- Kline, R.B. (2011). *Principles and practice of structural equation modelling*. (3rd ed.). New York, NY: The Guilford Press.
- Kushner, R.J. & Poole, P.P. (1996). Exploring structure-effectiveness relationships in nonprofit arts organizations. *Nonprofit Management & Leadership*, 7(2), 119-136.
- Lawrence, P.R. & Lorsch, J.W. (1969). *Developing organisations: diagnosis and action*. Reading, MA: Addison-Wesley.
- Ledimo, O.M. (2012). *Diagnostic model for employee satisfaction during organisational transformation*. Unpublished D.Litt et Phil dissertation. Pretoria: University of South Africa.
- Lee, D. & Brower, R.S. (2006). Pushing the envelope on organizational effectiveness: Combining an old framework and a sharp tool. *Public Performance and Management Review*, 30(2), 155-178.
- Lei, P. & Wu, Q. (2007). Introduction to structural equation modelling: Issues and practical considerations. *Educational Measures: Issues and Practice*, 26(3), pp.33-43.
- Leibbrandt, J.H. & Botha, C.J. (2014). Leadership and management as an enabler for strategy execution in municipalities in South Africa. *Mediterranean Journal of Social Sciences*, 5(20), 329-339.

- Lewin, A.Y. & Minton, J.W. (1986). Determining organizational effectiveness: Another look and an agenda for research. *Management Science*, 32(5), 514 – 538.
- Lewin, K. (1947). Frontiers of Group Dynamics. *Human Relations*, 1, 5-41.
- Likert, R. (1932). A technique for the measurement of attitudes. *Archives of Psychology*, 140, 152.
- Local Government: Municipal Systems Act, No 32 (2000). *Government Gazette*, 425 (21776).
- Local Government: Municipal Structures Act, No 117 (1998). *Government Gazette*, 402 (19614).
- Local Government: Municipal Demarcation Act, No 27 (1998). *Government Gazette*, 397 (19020).
- Local Government: Municipal Finance Management Act, No 56 (2003). *Government Gazette*, 176 (26019).
- Lusthaus, C., Adrien, M., Anderson, G., Carden, F. & Montalván, G.P. (2002). *Organizational assessment: A framework for improving performance*. Washington, D.C: Inter-American Development Bank.
- Marcoulides, G.A. & Heck, R.H. (1993). Organizational culture and performance: Proposing and testing a model. *Organization Science*, 4(2), 209-225.
- Martin, A.J. & Dawson, M. (2009). Interpersonal relations, motivation, engagement and achievement: Yields for theory, current issues and educational practice. *Review of Educational Research*, 79(1), 327-365.
- Martinez-Pons, M. (1997). *Research in the social sciences and education: Principles and process*. Boston Way Lanham, MD: University Press of America.
- Martins, E. C. (2010). Identifying the organisational and behavioural factors that influence knowledge retention. Unpublished doctoral thesis. Pretoria: University of South Africa.

- Martins, N. & Coetzee, M. (2007). Organisational culture, employee satisfaction, perceived leader emotional competency and personality type: An exploratory study in a South African engineering company. *South African Journal of Human Resource Management*, 5(2), 20-32.
- Martins, N. & Coetzee, M. (2009). Applying the Burke-Litwin model as a diagnostic framework for assessing organisational effectiveness. *South African Journal of Human Resource Management*, 7(1), 144-156.
- Martz, W.A. (2008). *Evaluating organizational effectiveness*. Unpublished PhD dissertation. Western Michigan University, Kalamazoo, MI.
- Meyer, M.W. (1975). Organizational domains. *American Sociological Review*, 40(5), 599-615.
- Mitlin, D. (2000). Towards more pro-poor local governments in urban areas. *Environment and Urbanization*, 12(1), 3-11.
- Mohr, L.B. (1982). *Explaining organizational behavior*. San Francisco, CA: Jossey-Bass.
- Mortimer, N.L. (2004). *The establishment and development of a performance management system in the local government sector in South Africa*. Unpublished Doctoral Dissertation, University of Kwa-Zulu Natal, Durban.
- Mullins, L.J. (2010). *Management and organizational behavior* (9th ed.). Essex, England: Pearson Education Limited.
- Municipal IQ Hotspots Monitor (2014). www.municipaliq.co.za/index.php?site_page=hotspots.php
- Municipal service capacity on the slippery slope (30 June 2013). *Sunday Times Business Times*, p. 4.
- Nadler, D.A. & Tushman, M.L. (1977). A diagnostic model for organization behavior. In Hackman, J.R., Lawler, E.E. & Porter, L.W. (1977). (Eds). *Perspectives on behaviour in organizations* (pp. 85 – 100). New York: McGraw Hill.
- Nel, W. (2010). Service excellence: Johannesburg city parks case study. University of South Africa, Department of Environmental Sciences. Pretoria: South Africa.

- Nel, W. & Haycock, E. (2005). Service excellence: Customer satisfaction measurement in local government green industries. *Journal of Public Administration*, 40(1), 247-268.
- Noolen, J.A.C. (2006). Organization diagnosis phase. In B.B. Jones & M. Brazzel (Eds). *The NTL Handbook of organization development and change: Principles, practices and perspectives* (pp. 192-211). San Francisco, CA: Pfeiffer.
- Nyhan, R.C. & Marlowe, H.A. (1995). Performance measurement in the public sector: Challenges and opportunities. *Public Productivity and Management Review*, 18(4), 333-348.
- Orton, J.D. & Weick, K.E. (1990). Loosely coupled systems: A reconceptualization. *Academy of Management Review*, 15, 203-223.
- Ouchi, W.G. (1981). *Theory Z*. Reading, MA: Addison-Wesley.
- Parhizgari, A.M. & Gilbert, G.R. (2004). Measures of organizational effectiveness: Private and public sector performance. *Omega*, 32(3), 221-229.
- Patterson, M.G, West, M.A., Shackleton, V.J., Dawson, J.F., Lawthom, R., Maitlis, S., Robinson, D.L. & Wallace, A.M. (2005). Validating the organizational climate measure: Links to managerial practices, productivity and innovation. *Journal of Organizational Behavior*, 26 (4), 379-408.
- Pearce, J.A. & Robinson, R.B. (2000). *Strategic management: Formulation, implementation, and control* (7th ed.). International Edition: McGraw-Hill.
- Pedhazur, E.J. & Schmelkin, L.P. (1991). *Measurement, design and analysis: An integrated approach*. New York, NY: Psychology Press.
- Peng, C.-Y. J., Harwell, M., Liou, S.-M., & Ehman, L. H. (2006). Advances in missing data methods and implications for educational research. In S. Sawilowsky (Ed.), *Real data analysis* (pp. 31–78). Greenwich, CT: Information Age.
- Peters, T.J. & Waterman, R.H. (1982). *In search of excellence*. New York, NY: Harper & Row.
- Poister, T.H. (2003). *Measuring performance in public and non-profit organizations*. San Francisco, CA: Jossey-Bass.

- Poister, T. H. & Streib, G.D. (1999). Performance measurement in municipal government: Assessing the state of the practice. *Public Administration Review*, 59(4), 325-35.
- Poister, T.H., Pasha, O.Q. & Edwards, L.H. (2013). Does performance management lead to better outcomes? Evidence from the U.S. Public Transit Industry. *Public Administration Review*, 73(4), 625–636.
- Pollitt, C. (1986). Beyond the managerial model: The case for broadening performance assessment in government and the public services. *Financial Accountability and Management*, 2(3), 155-170.
- Porter, L.W., & Lawler, E.E. & Hackman, J.R. (1975). *Behavior in organisations*. Tosko, Tokyo: Japan Printing Co.
- Preedy, V.R. & Watson, R.R. (2009). *Handbook of disease burdens and quality of life measures*. New York, NY: Springer.
- Price, J.L. (1972). The study of organizational effectiveness. *Sociological Quarterly*, 13, 3-15.
- Punch, K.F. (2005). *Introduction to social research: Quantitative and qualitative approaches* (2nd ed.). London: Sage Publications.
- Quinn, R.E. & Cameron, K.M. (1983). Organizational life cycles and shifting criteria of effectiveness. *Management Science*, 9, 33-51.
- Quinn, R.E. & Rohrbaugh, J. (1981). A competing values approach to organizational effectiveness. *Public Productivity Review*, 5(2), 122-140.
- Rainey, H.G and Steinbauer, P. (1999). Galloping elephants: Developing elements of a theory for effective government organizations. *Journal of Public Administration Research and Theory*, 9(1), 1-32.
- Rakodi, C. (1997). Global forces, urban challenges, and urban management in Africa. In C. Rakodi (Ed.). *The urban challenge in Africa: Growth and management of its largest cities* (pp. 17-73). New York: United Nations University Press.
- Reddy, P.S. (2008). Metropolises in Africa. In P.S. Reddy, M.S. Haque & M.S. de Vries (Eds). *Improving local government: Outcomes of comparative research* (pp. 45 + 52). New York: Palgrave Macmillan.

- Reddy, P.S., Haque, M.S. & De Vries, M.S. (Eds) (2008). *Improving local government: Outcomes of comparative research*. New York: Palgrave Macmillan.
- Rich, P. (1992). The organizational taxonomy: Definition and design. *The Academy of Management Review*, 17, 758-781.
- Richard, P.J., Devinney, T.M., Yip, G.S. & Johnston, G. (2009). Measuring organizational performance as a dependent variable: Towards methodological best practice. *Journal of Management*, 35(3), 718-804.
- Ridley, C.R. & Mendoza, D.W. (1993). Putting organizational effectiveness into practice: The preeminent consultation task. *Journal of Counseling & Development*, 72(2), 168-177.
- Risher, H. (2002). Pay-for-performance: The keys to making it work. *Public Personnel Management*, 31(3), 326-327.
- Robbins, S.P. (1987). *Organization theory: structure, design and applications*. Englewood Cliffs, NJ: Prentice-Hall.
- Robbins, S.P., Judge, T.A., Odendaal, A. & Roodt, G. (2009). *Organisational behaviour: Global and Southern African perspectives* (2nd ed.) Cape Town: Pearson Education South Africa.
- Robinson, A. & Perotin, V. (1997). Is profit sharing the answer? *New Economy*, 4(2), 112-116.
- Rojas, R.R. (2000). A review of models for measuring organizational effectiveness among for-profit and nonprofit organizations. *Nonprofit Management and Leadership*, 11(1), 97-104.
- Roth, P. L. (1994). Missing data: A conceptual review for applied psychologists. *Personnel Psychology*, 47(3), 537-559.
- Ruscio, J. & Roche, B. (2012). Determining the number of factors to retain in an exploratory factor analysis using comparison data of a known factorial structure. *Psychological Assessment*, 24(2), 282-292.
- Savage-Austin, A.R. & Honeycutt, A. (2011). Servant leadership: A phenomenological study of practices, experiences, organizational effectiveness, and barriers. *Journal of Business and Economics Research*, 9(1), 49-54.

- Sawhill, J.C. & Williamson, D. (2001). Mission impossible? Measuring success in nonprofit organizations. *Nonprofit Management and Leadership*, 11(3), 371-386.
- Schifo, R. (2004). OD in ten words or less: Adding lightness to the definitions of organizational development. *Organization Development Journal*, 22(3), 74 – 85.
- Seashore, S.E. (1983). A framework for an integrated model of organizational effectiveness. In Cameron, K.S. & Whetten, D.A. (Eds). *Organizational effectiveness: A comparison of multiple models* (pp. 55-70). New York, NY: Academic Press.
- Senior, B. & Swailes, S. (2010). *Organizational change* (4th ed.). Harlow, England: Pearson Education.
- Shafritz, J. M. & Hyde, A.C. (2007). *Classics of public administration* (6th ed.). Belmont, CA: Thomson/Wadsworth.
- Shaver, J.P. (2014). What statistical significance testing is, and what it is not. *Journal of Experimental Education*, 6(4), 293-316.
- Shuttleworth, (2008). Research variables. Retrieved Aug 19, 2014 from Explorable.com: <https://explorable.com/research-variables>
- Sirkin, R.M. (2005). *Statistics for the social sciences*. Salt Lake City, UT: Sage Publications
- Slaatte, H.A. (1968). *The pertinence of paradox*. New York, NY: Humanities Press.
- Smit, B.R. (1999). Using the South African excellence model to focus improvement strategies in South Africa. *South African Journal of Industrial Engineering*, 10(1), 63-72.
- Soni, V. (2011). A general framework for understanding the 21st century public sector organizations. *International Journal of Public Administration*, 34(1), 76-83.
- Sowa, J.E., Seldon, S.C. & Sandfort, J.R. (2004). No longer unmeasurable? A multidimensional integrated model of nonprofit organizational effectiveness. *Nonprofit and Voluntary Sector Quarterly*, 33(4), 711-728.

- Statistical Package for the Social Sciences [SPSS] (2006). Chicago: III. IBM Software.
- Statistics South Africa (2013). *Mid-year population estimates*. Statistical release P0302. Pretoria: STATSSA.
- Steers, R. (1975). Problems in the measurement of organizational effectiveness. *Administrative Science Quarterly*, 20(4), 546 – 558.
- Steers, R.M. (1977). *Organizational effectiveness: A behavioural view*. Santa Monica, CA: Goodyear Publishing Company.
- Stevens, P.A. (2005). Assessing the performance of local government. *National Institute of Economic and Social Research*, 193, 90-101.
- Steytler, N. (2005). Local government in South Africa: Entrenching decentralised government. In N. Steytler (Ed.). *The place and role of local government in federal systems* (p. 55). Johannesburg: Konrad Adenauer Stiftung.
- Stone-Romero, E.F., Weaver, A.E. & Glenar, J.L. (1995). Trends in research design and data analytical strategies in organizational research. *Journal of Management*, 21(1), 141-157.
- Suhr, D.D. (2006, March). *Exploratory or confirmatory factor analysis?* Paper presented at the SAS Users Group International conference, San Francisco, CA.
- Suzuki, I. (1998). Metropolitan governance: Strategies for capacity building. *Asian Review of Public Administration*, 10(1-2), 285-297.
- Terre Blanche, M. & Durrheim, K. (1999). *Research in practice: Applied methods for the social sciences*. Cape Town: University of Cape Town Press.
- Thompson, M.P., McGrath, M.R. & Whorton, J. (1981). The competing values approach: Its application and utility. *Public Productivity Review*, 5(2), 103-104.
- Thorndike, R.L. (1949). *Personnel selection: Test and measurement techniques*. New York, NY: Wiley.
- Thurstone, L.L. (1947). *Multiple factor analysis*. Chicago, IL: University of Chicago Press.

- Tichy, N.M. (1983). *Managing strategic change: Technical, political, and cultural dynamics*. New York: Wiley.
- Tredoux, C. & Durrheim, K. (Eds) (2002). *Numbers, hypotheses and conclusions: A course in statistics for the social sciences*. Cape Town, Juta.
- Tredoux, C., Pretorius, T. & Steel, H. (2006). Multivariate data analysis. In M. Terre Blanche, K. Durrheim, & D. Painter (Eds), *Research in practice: Applied methods for the social sciences* (2nd ed., pp. 241-267). Cape Town: University of Cape Town Press.
- Trochim, W. (2006). *The research methods knowledge base*. New York: Atomic Dog Publishing.
- Tsui, A.S. (1984). A role set analysis of managerial reputation. *Organizational Behavior and Human Performance*, 34(1), 64-94.
- Van Thiel, S. & Leeuw, F.L. (2002). The performance paradox in the public sector. *Public Performance and Management Review*, 25(3), 267-281.
- Vaughan, S.K. (2010). The importance of performance assessment in local government decisions to fund health and human services in non-profit organizations. *Journal of Health & Human Services Administration*, 32(4), 486-512.
- Venkatraman, N. & Ramanujam, V. (1986). Measurement of business performance in strategy research: A comparison of approaches. *Academy of Management Review*, 11(4), 801-814.
- Waheed, A., Mansor, N. & Ismail, N.A. (2010). Assessing performance of public sector organizations: A theoretical framework. *Interdisciplinary Journal of Contemporary Research in Business*, 2(8), 329-349.
- Waterman, R.H., Peters, T.J. & Phillips, J.R. (1980). Structure is not organization. *Business Horizons*, 23(3), 9-13.
- Weick, K.E. (2001). *Making sense of the organization*. Oxford, UK: Blackwell Publishing.
- Weisbord, M.R. (1976). Organizational diagnosis: Six places to look for trouble with or without a theory. *Group and Organization Studies*, 1(4), 430-447.

- Whitefield, G. & Landeros, R. (2006). Supplier diversity effectiveness: Does organizational culture really matter? *Journal of Supply Chain Management*, 42(4), 16-27.
- Wiley, J.W. (1996). Linking survey results to customer satisfaction and business performance. In A. Kraut (Ed.), *Organizational Surveys: Tools for assessment and change* (pp. 330-359). San Francisco, CA: Jossey-Bass.
- Wiley, J.W. (2010). *Strategic employee surveys*. San Francisco, CA: Jossey-Bass.
- Wilson, F.M. (2010). *Organizational behaviour and work* (3rd ed.). Oxford, NY: Oxford University Press.
- Womack, J.P., Jones, D.T. & Roos, D. (1990). *The machine that changed the world: The story of lean production – how Japan's secret weapon in the global auto wars will revolutionize industry*. New York: Rawson Associates.
- Yuchtman, E. & Seashore, S.E. (1967). A system resource approach to organizational effectiveness. *American Psychological Review*, 32(6), 891-903.
- Zammuto, R.F. (1984). A comparison of multiple constituency models of organizational effectiveness. *Academy of Management Review*, 9(4), 606-616.

APPENDIX A

DETAIL REGARDING MISSING DATA FOR THE 13 ES DIMENSIONS

Dimension 1: Vision & Mission

	n = 6715		
	Valid	Missing	% Missing
Q43: I am aware of my organisation's vision & mission	6394	321	4.8
Q44: I am excited by my organisation's vision & mission	6247	468	7.0
Q45: I know how my role fits into the total picture of my organisation	6456	259	4.0

Dimension 2: Values

	n = 6715		
	Valid	Missing	% Missing
Q46: We are striving to make XXX an African World Class City.	6495	220	3.3
Q47: We are concerned about the quality of services and products we provide to our communities	6472	243	3.6
Q48: In my team we make XXX great by excelling in all we do.	6510	205	3.1
Q49: In my team we make XXX great by displaying effective and efficient use of our skills, experience and qualifications.	6509	206	3.1
Q50: In my team we make XXX great by introducing better ways of doing things.	6490	225	3.4
Q51: In my team we make XXX great by being solution and results driven in order to exceed our customers' expectations.	6503	212	3.2

Dimension 3: Diversity

	n = 6715		
	Valid	Missing	% Missing
Q52: In my experience job responsibilities are allocated fairly across all race groups.	6497	218	3.3
Q53: I think my organisation strives to accommodate the different ethnic cultures and beliefs of all employees in the workplace.	6482	233	3.5
Q54: In my team/function all races are represented.	6385	330	5.0
Q55: My organisation has a reputation for advancing previously disadvantaged employees.	6466	249	3.7
Q56: Racism seldom occurs in my organisation.	6470	245	3.7
Q57: Discrimination against women seldom occurs in my organisation.	6467	248	3.7
Q58: To my knowledge sexual harassment seldom occurs in my organisation.	6501	214	3.2
Q59: Women have the same opportunities for advancement as their male counterparts in my organisation.	6520	195	3.0
Q60: I know that Employment Equity is taken seriously by senior leadership in my organisation.	6534	181	2.7
Q61: Preference is given to people from designated groups (Black people, i.e. Africans, Coloureds and Indians; women and people with disabilities) when recruiting in my organisation.	6586	129	1.9

Dimension 4: Employee relations

	n = 6715		
	Valid	Missing	% Missing
Q62: In my organisation employees are allowed to have and share their point of view	6566	149	2.2
Q63: My organisation treats its employees with dignity and respect.	6557	158	2.4
Q64: My organisation encourages its employees to be involved in decision making.	6580	135	2.0
Q65: My department is constantly trying to improve working conditions.	6576	139	2.1
Q66: In my experience terms and conditions of service are applied fairly in my organisation.	6565	150	2.2

Dimension 5: Teamwork

	n = 6715		
	Valid	Missing	% Missing
Q67: Within my department we motivate and support each other.	6592	123	1.8
Q68: In my department, we work together as a team	6563	152	2.3
Q69: There is good cooperation between people in my department and those in other departments I work with.	6601	114	1.7

Dimension 6: Management

	n = 6715		
	Valid	Missing	% Missing
Q70: My immediate supervisor/manager plans properly for operational needs.	6585	130	1.9
Q71: Senior management in my organisation plan properly for the future.	6589	126	1.9
Q72: My immediate supervisor/manager supplies me with sufficient information needed for my job.	6582	133	2.0
Q73: My immediate supervisor/manager listens to our suggestions and concerns.	6580	135	2.0
Q74: My immediate supervisor/manager responds to our suggestions and concerns.	6592	123	1.8
Q75: My immediate supervisor/manager gives available resources to the staff that need it most for their work.	6600	115	1.7
Q76: My immediate supervisor/manager sets achievable goals for his/her subordinates.	6605	110	1.6
Q77: My immediate supervisor/manager knows what is happening with my work.	6545	170	2.5
Q78: My immediate supervisor/manager gives me clear instructions	6511	204	3.0

Dimension 7: Trust

	n = 6715		
	Valid	Missing	% Missing
Q79: My immediate supervisor/manager trusts me.	6517	198	3.0
Q80: I trust my immediate supervisor/manager.	6497	218	3.2
Q81: I trust my colleagues.	6492	223	3.3
Q82: I trust senior leadership in my organisation.	6476	239	3.6
Q83: I trust the official communications from my organisation.	6505	210	3.1

Dimension 8: Communication

	n = 6715		
	Valid	Missing	% Missing
Q84: In my work situation, communication flows freely between colleagues and supervisors/managers.	6524	191	2.8
Q85: My immediate supervisor/manager explains notices displayed in my workplace to me.	6501	214	3.2
Q86: We have regular staff meetings in my department.	6498	217	3.2
Q87: My organisation communicates its policies and rules to me.	6505	210	3.1

Dimension 9: Training & Development

	n = 6715		
	Valid	Missing	% Missing
Q88: I have received the training I need to do my job.	6524	191	2.8
Q89: My supervisor/manager allows me to apply what I have learnt in the workplace.	6506	209	3.1
Q90: My organisation provides training programmes and assistance that meet my job-related needs.	6507	208	3.1
Q91: I have an individual learning plan which I agreed with my supervisor/manager.	6487	228	3.4
Q92: I have received training in terms of my individual learning plan.	6496	219	3.3
Q93: My immediate supervisor/manager is properly trained for his/her job role.	6585	130	1.9

Dimension 10: Work Environment

	n = 6715		
	Valid	Missing	% Missing
Q94: I am provided with the tools/equipment/resources I need to do my work.	6576	139	2.1
Q95: The place where I work complies with the safety and health regulations which apply to my organisation.	6567	148	2.2
Q96: The conditions at the place where I normally work allow me to do my best work.	6566	149	2.2
Q97: The change rooms/toilets where I work are normally kept in a clean and hygienic state.	6536	179	2.7

Dimension 11: Rewards & Recognition

	n = 6715		
	Valid	Missing	% Missing
Q98: My salary package is fair compared to my colleagues in similar jobs in my organisation.	6576	139	2.1
Q99: My salary package is fair in comparison to similar positions in the market.	6579	136	2.0
Q100: When promoted in my organisation, an employee receives a reasonable reward.	6535	180	2.7
Q101: My immediate supervisor/manager recognises and/or compliments me for work well done	6551	164	2.4
Q102: In my organisation the performance management system is fair	6555	160	2.4

Dimension 12: Change Management

	n = 6715		
	Valid	Missing	% Missing
Q103: In my organisation management is honest and open about change.	6572	146	2.1
Q104: My department attempts to constantly make use of new and better work methods.	6559	156	2.3
Q105: Changes made in my organisation have had a positive impact on our service delivery.	6568	147	2.2
Q106: I understand the need for change in my organisation	6548	167	2.5
Q107: In my organisation we are timeously consulted on any proposed workplace changes	6562	153	2.3
Q108: At my workplace we are encouraged to participate in change	6580	135	2.0
Q109: At my workplace we are properly prepared for new changes (i.e. technology, work processes, etc).	6575	140	2.1
Q110: My organisation helps us to adapt/adjust to our new job roles and responsibilities.	6463	252	3.8

Dimension 13: Employee Engagement

	n = 6715		
	Valid	Missing	% Missing
Q111: In the last seven days my immediate supervisor/manager recognised or praised me for doing good work.	6508	207	3.1
Q112: My immediate supervisor/manager encourages me to develop myself further.	6457	258	3.8
Q113: In my team we produce outstanding quality work	6484	231	3.4
Q114: In my team we go to great lengths to please our customers.	6492	223	3.3
Q115: I consider some of my work colleagues amongst my best friends.	6476	239	3.6
Q116: My immediate supervisor/manager seems to care about me as a person.	6495	220	3.3
Q117: I am motivated to do better by the example set by my management.	6459	256	3.8
Q118: In my department our supervisors/managers regularly visit us at our workplace.	6472	243	3.6
Q119: I am proud to work for my organisation	6507	208	3.1
Q120: I would encourage my friends and family to work for my organisation.	6494	221	3.3

APPENDIX B

PEARSON PRODUCT-MOMENT CORRELATION COEFFICIENTS OF THE ORIGINAL 78 ITEMS OF THE ES

	Tr - Q83	C - Q84	C - Q85	C - Q86	C - Q87	TD - Q88	TD - Q89	TD - Q90	TD - Q91	TD - Q92	TD - Q93	WE - Q94	WE - Q95	WE - Q96	WE - Q97	RR - Q98	RR - Q99	RR - Q100	RR - Q101
VM - Q43	.432**	.259**	.303**	.170**	.343**	.294**	.392**	.346**	.356**	.274**	.352**	.309**	.305**	.332**	.322**	.260**	.265**	.306**	.298**
VM - Q44	.471**	.302**	.348**	.195**	.369**	.317**	.413**	.372**	.381**	.319**	.372**	.319**	.329**	.376**	.314**	.288**	.293**	.337**	.326**
VM - Q45	.379**	.267**	.296**	.213**	.318**	.295**	.346**	.331**	.298**	.238**	.303**	.293**	.292**	.330**	.263**	.225**	.220**	.282**	.288**
V - Q46	.289**	.255**	.234**	.223**	.265**	.187**	.219**	.229**	.207**	.181**	.233**	.251**	.270**	.291**	.183**	.142**	.141**	.223**	.226**
V - Q47	.253**	.245**	.222**	.212**	.254**	.178**	.217**	.227**	.198**	.179**	.243**	.245**	.263**	.271**	.181**	.139**	.132**	.199**	.220**
V - Q48	.236**	.278**	.255**	.257**	.279**	.163**	.255**	.226**	.227**	.182**	.267**	.245**	.273**	.293**	.183**	.107**	.102**	.195**	.247**
V - Q49	.253**	.293**	.266**	.249**	.285**	.209**	.301**	.272**	.249**	.210**	.279**	.252**	.271**	.295**	.179**	.122**	.114**	.189**	.260**
V - Q50	.318**	.335**	.340**	.259**	.351**	.224**	.332**	.312**	.296**	.263**	.313**	.296**	.313**	.366**	.225**	.163**	.170**	.259**	.297**
V - Q51	.287**	.315**	.303**	.276**	.321**	.197**	.293**	.262**	.267**	.229**	.296**	.285**	.316**	.337**	.209**	.133**	.133**	.225**	.274**
D - Q52	.406**	.397**	.362**	.258**	.355**	.299**	.348**	.353**	.281**	.296**	.370**	.320**	.322**	.376**	.264**	.302**	.299**	.311**	.345**
D - Q53	.456**	.396**	.386**	.275**	.393**	.304**	.378**	.375**	.336**	.324**	.383**	.343**	.377**	.403**	.305**	.292**	.285**	.346**	.360**
D - Q54	.318**	.292**	.310**	.209**	.322**	.245**	.286**	.286**	.264**	.264**	.283**	.276**	.293**	.332**	.214**	.246**	.229**	.259**	.266**
D - Q55	.451**	.354**	.365**	.260**	.392**	.334**	.382**	.392**	.348**	.355**	.378**	.339**	.340**	.392**	.271**	.316**	.325**	.365**	.361**
D - Q56	.241**	.186**	.187**	.091**	.201**	.187**	.224**	.217**	.219**	.221**	.195**	.162**	.155**	.195**	.166**	.185**	.181**	.201**	.191**
D - Q57	.183**	.169**	.147**	.120**	.190**	.167**	.190**	.158**	.167**	.133**	.174**	.150**	.160**	.163**	.123**	.159**	.156**	.184**	.154**
D - Q58	.137**	.113**	.108**	.081**	.117**	.135**	.144**	.120**	.137**	.121**	.142**	.119**	.114**	.128**	.105**	.117**	.124**	.129**	.122**

D - Q59	.357"	.313"	.314"	.207"	.353"	.290"	.346"	.338"	.311"	.292"	.327"	.280"	.311"	.355"	.268"	.247"	.252"	.312"	.307"
D - Q60	.403"	.385"	.359"	.296"	.365"	.291"	.330"	.349"	.272"	.301"	.357"	.329"	.335"	.336"	.229"	.300"	.285"	.315"	.331"
D - Q61	.340"	.250"	.275"	.209"	.309"	.250"	.314"	.297"	.263"	.246"	.302"	.256"	.246"	.275"	.205"	.270"	.246"	.258"	.272"
ER - Q62	.510"	.470"	.448"	.353"	.459"	.336"	.447"	.415"	.386"	.356"	.431"	.386"	.397"	.449"	.303"	.341"	.336"	.370"	.428"
ER - Q63	.586"	.518"	.486"	.361"	.474"	.372"	.476"	.458"	.401"	.399"	.458"	.424"	.429"	.473"	.340"	.385"	.386"	.411"	.468"
ER - Q64	.555"	.502"	.484"	.354"	.465"	.345"	.443"	.439"	.391"	.400"	.431"	.402"	.383"	.443"	.310"	.378"	.388"	.417"	.446"
ER - Q65	.515"	.502"	.489"	.387"	.474"	.371"	.468"	.455"	.421"	.413"	.442"	.445"	.435"	.510"	.348"	.350"	.348"	.418"	.471"
ER - Q66	.539"	.482"	.458"	.334"	.499"	.345"	.436"	.430"	.392"	.388"	.429"	.410"	.406"	.465"	.328"	.359"	.363"	.424"	.423"
T - Q67	.335"	.468"	.394"	.370"	.355"	.240"	.357"	.313"	.299"	.279"	.365"	.305"	.327"	.372"	.200"	.188"	.188"	.266"	.397"
T - Q68	.327"	.458"	.402"	.388"	.355"	.211"	.351"	.302"	.288"	.263"	.364"	.301"	.319"	.377"	.201"	.164"	.176"	.269"	.383"
T - Q69	.442"	.456"	.430"	.337"	.440"	.286"	.407"	.370"	.362"	.328"	.407"	.372"	.395"	.456"	.321"	.251"	.266"	.343"	.399"
M - Q70	.422"	.547"	.569"	.434"	.439"	.319"	.493"	.408"	.415"	.360"	.583"	.405"	.387"	.445"	.285"	.264"	.252"	.326"	.558"
M - Q71	.595"	.545"	.529"	.379"	.505"	.374"	.490"	.467"	.434"	.426"	.500"	.446"	.428"	.499"	.352"	.365"	.368"	.434"	.481"
M - Q72	.426"	.546"	.579"	.437"	.446"	.348"	.514"	.400"	.405"	.363"	.578"	.416"	.395"	.451"	.286"	.259"	.261"	.319"	.560"
M - Q73	.431"	.537"	.552"	.429"	.418"	.339"	.536"	.406"	.422"	.359"	.578"	.371"	.375"	.439"	.273"	.285"	.278"	.344"	.579"
M - Q74	.445"	.550"	.580"	.434"	.431"	.329"	.520"	.410"	.423"	.369"	.574"	.395"	.387"	.458"	.290"	.292"	.284"	.364"	.578"
M - Q75	.452"	.539"	.562"	.408"	.451"	.359"	.510"	.438"	.420"	.375"	.543"	.528"	.423"	.483"	.313"	.289"	.284"	.362"	.559"

M - Q76	.468**	.527**	.566**	.411**	.452**	.347**	.515**	.435**	.449**	.388**	.566**	.416**	.403**	.474**	.299**	.287**	.288**	.362**	.574**
M - Q77	.395**	.499**	.531**	.412**	.419**	.304**	.487**	.380**	.374**	.324**	.546**	.388**	.382**	.445**	.272**	.225**	.217**	.303**	.531**
M - Q78	.406**	.541**	.564**	.422**	.426**	.319**	.506**	.392**	.393**	.335**	.572**	.405**	.399**	.472**	.286**	.245**	.240**	.324**	.555**
Tr - Q79	.387**	.478**	.475**	.374**	.382**	.310**	.478**	.364**	.356**	.311**	.497**	.336**	.342**	.422**	.239**	.220**	.215**	.287**	.508**
Tr - Q80	.460**	.525**	.536**	.402**	.411**	.322**	.504**	.392**	.391**	.344**	.574**	.378**	.376**	.453**	.273**	.270**	.260**	.323**	.555**
Tr - Q81	.378**	.375**	.325**	.246**	.292**	.210**	.301**	.252**	.279**	.237**	.302**	.268**	.304**	.342**	.250**	.193**	.183**	.260**	.292**
Tr - Q82	.730**	.517**	.497**	.339**	.484**	.359**	.446**	.443**	.403**	.413**	.425**	.408**	.403**	.464**	.338**	.373**	.385**	.432**	.427**
	Tr - Q83	C - Q84	C - Q85	C - Q86	C - Q87	TD - Q88	TD - Q89	TD - Q90	TD - Q91	TD - Q92	TD - Q93	WE - Q94	WE - Q95	WE - Q96	WE - Q97	RR - Q98	RR - Q99	RR - Q100	RR - Q101
VM - Q43	.432**	.259**	.303**	.170**	.343**	.294**	.392**	.346**	.356**	.274**	.352**	.309**	.305**	.332**	.322**	.260**	.265**	.306**	.298**
VM - Q44	.471**	.302**	.348**	.195**	.369**	.317**	.413**	.372**	.381**	.319**	.372**	.319**	.329**	.376**	.314**	.288**	.293**	.337**	.326**
VM - Q45	.379**	.267**	.296**	.213**	.318**	.295**	.346**	.331**	.298**	.238**	.303**	.293**	.292**	.330**	.263**	.225**	.220**	.282**	.288**
V - Q46	.289**	.255**	.234**	.223**	.265**	.187**	.219**	.229**	.207**	.181**	.233**	.251**	.270**	.291**	.183**	.142**	.141**	.223**	.226**
V - Q47	.253**	.245**	.222**	.212**	.254**	.178**	.217**	.227**	.198**	.179**	.243**	.245**	.263**	.271**	.181**	.139**	.132**	.199**	.220**
V - Q48	.236**	.278**	.255**	.257**	.279**	.163**	.255**	.226**	.227**	.182**	.267**	.245**	.273**	.293**	.183**	.107**	.102**	.195**	.247**
V - Q49	.253**	.293**	.266**	.249**	.285**	.209**	.301**	.272**	.249**	.210**	.279**	.252**	.271**	.295**	.179**	.122**	.114**	.189**	.260**
V - Q50	.318**	.335**	.340**	.259**	.351**	.224**	.332**	.312**	.296**	.263**	.313**	.296**	.313**	.366**	.225**	.163**	.170**	.259**	.297**
V - Q51	.287**	.315**	.303**	.276**	.321**	.197**	.293**	.262**	.267**	.229**	.296**	.285**	.316**	.337**	.209**	.133**	.133**	.225**	.274**

D - Q52	.406**	.397**	.362**	.258**	.355**	.299**	.348**	.353**	.281**	.296**	.370**	.320**	.322**	.376**	.264**	.302**	.299**	.311**	.345**
D - Q53	.456**	.396**	.386**	.275**	.393**	.304**	.378**	.375**	.336**	.324**	.383**	.343**	.377**	.403**	.305**	.292**	.285**	.346**	.360**
D - Q54	.318**	.292**	.310**	.209**	.322**	.245**	.286**	.286**	.264**	.264**	.283**	.276**	.293**	.332**	.214**	.246**	.229**	.259**	.266**
D - Q55	.451**	.354**	.365**	.260**	.392**	.334**	.382**	.392**	.348**	.355**	.378**	.339**	.340**	.392**	.271**	.316**	.325**	.365**	.361**
D - Q56	.241**	.186**	.187**	.091**	.201**	.187**	.224**	.217**	.219**	.221**	.195**	.162**	.155**	.195**	.166**	.185**	.181**	.201**	.191**
D - Q57	.183**	.169**	.147**	.120**	.190**	.167**	.190**	.158**	.167**	.133**	.174**	.150**	.160**	.163**	.123**	.159**	.156**	.184**	.154**
D - Q58	.137**	.113**	.108**	.081**	.117**	.135**	.144**	.120**	.137**	.121**	.142**	.119**	.114**	.128**	.105**	.117**	.124**	.129**	.122**
D - Q59	.357**	.313**	.314**	.207**	.353**	.290**	.346**	.338**	.311**	.292**	.327**	.280**	.311**	.355**	.268**	.247**	.252**	.312**	.307**
D - Q60	.403**	.385**	.359**	.296**	.365**	.291**	.330**	.349**	.272**	.301**	.357**	.329**	.335**	.336**	.229**	.300**	.285**	.315**	.331**
D - Q61	.340**	.250**	.275**	.209**	.309**	.250**	.314**	.297**	.263**	.246**	.302**	.256**	.246**	.275**	.205**	.270**	.246**	.258**	.272**
ER - Q62	.510**	.470**	.448**	.353**	.459**	.336**	.447**	.415**	.386**	.356**	.431**	.386**	.397**	.449**	.303**	.341**	.336**	.370**	.428**
ER - Q63	.586**	.518**	.486**	.361**	.474**	.372**	.476**	.458**	.401**	.399**	.458**	.424**	.429**	.473**	.340**	.385**	.386**	.411**	.468**
ER - Q64	.555**	.502**	.484**	.354**	.465**	.345**	.443**	.439**	.391**	.400**	.431**	.402**	.383**	.443**	.310**	.378**	.388**	.417**	.446**
ER - Q65	.515**	.502**	.489**	.387**	.474**	.371**	.468**	.455**	.421**	.413**	.442**	.445**	.435**	.510**	.348**	.350**	.348**	.418**	.471**
ER - Q66	.539**	.482**	.458**	.334**	.499**	.345**	.436**	.430**	.392**	.388**	.429**	.410**	.406**	.465**	.328**	.359**	.363**	.424**	.423**
T - Q67	.335**	.468**	.394**	.370**	.355**	.240**	.357**	.313**	.299**	.279**	.365**	.305**	.327**	.372**	.200**	.188**	.188**	.266**	.397**
T - Q68	.327**	.458**	.402**	.388**	.355**	.211**	.351**	.302**	.288**	.263**	.364**	.301**	.319**	.377**	.201**	.164**	.176**	.269**	.383**
T - Q69	.442**	.456**	.430**	.337**	.440**	.286**	.407**	.370**	.362**	.328**	.407**	.372**	.395**	.456**	.321**	.251**	.266**	.343**	.399**
M - Q70	.422**	.547**	.569**	.434**	.439**	.319**	.493**	.408**	.415**	.360**	.583**	.405**	.387**	.445**	.285**	.264**	.252**	.326**	.558**

M - Q71	.595**	.545**	.529**	.379**	.505**	.374**	.490**	.467**	.434**	.426**	.500**	.446**	.428**	.499**	.352**	.365**	.368**	.434**	.481**
M - Q72	.426**	.546**	.579**	.437**	.446**	.348**	.514**	.400**	.405**	.363**	.578**	.416**	.395**	.451**	.286**	.259**	.261**	.319**	.560**
M - Q73	.431**	.537**	.552**	.429**	.418**	.339**	.536**	.406**	.422**	.359**	.578**	.371**	.375**	.439**	.273**	.285**	.278**	.344**	.579**
M - Q74	.445**	.550**	.580**	.434**	.431**	.329**	.520**	.410**	.423**	.369**	.574**	.395**	.387**	.458**	.290**	.292**	.284**	.364**	.578**
M - Q75	.452**	.539**	.562**	.408**	.451**	.359**	.510**	.438**	.420**	.375**	.543**	.528**	.423**	.483**	.313**	.289**	.284**	.362**	.559**
M - Q76	.468**	.527**	.566**	.411**	.452**	.347**	.515**	.435**	.449**	.388**	.566**	.416**	.403**	.474**	.299**	.287**	.288**	.362**	.574**
M - Q77	.395**	.499**	.531**	.412**	.419**	.304**	.487**	.380**	.374**	.324**	.546**	.388**	.382**	.445**	.272**	.225**	.217**	.303**	.531**
M - Q78	.406**	.541**	.564**	.422**	.426**	.319**	.506**	.392**	.393**	.335**	.572**	.405**	.399**	.472**	.286**	.245**	.240**	.324**	.555**
Tr - Q79	.387**	.478**	.475**	.374**	.382**	.310**	.478**	.364**	.356**	.311**	.497**	.336**	.342**	.422**	.239**	.220**	.215**	.287**	.508**
Tr - Q80	.460**	.525**	.536**	.402**	.411**	.322**	.504**	.392**	.391**	.344**	.574**	.378**	.376**	.453**	.273**	.270**	.260**	.323**	.555**
Tr - Q81	.378**	.375**	.325**	.246**	.292**	.210**	.301**	.252**	.279**	.237**	.302**	.268**	.304**	.342**	.250**	.193**	.183**	.260**	.292**
Tr - Q82	.730**	.517**	.497**	.339**	.484**	.359**	.446**	.443**	.403**	.413**	.425**	.408**	.403**	.464**	.338**	.373**	.385**	.432**	.427**

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

APPENDIX C

**TOTAL VARIANCE EXPLAINED BY EXPLORATORY FACTOR ANALYSIS
WITH 76 ITEMS**

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	29.497	38.812	38.812	12.530	16.487	16.487
2	3.684	4.847	43.659	9.103	11.977	28.465
3	3.410	4.487	48.147	5.324	7.006	35.470
4	1.965	2.585	50.732	4.778	6.287	41.757
5	1.777	2.338	53.070	3.108	4.089	45.846
6	1.583	2.083	55.153	2.468	3.248	49.094
7	1.386	1.824	56.977	2.412	3.173	52.268
8	1.292	1.700	58.677	2.359	3.105	55.372
9	1.255	1.652	60.329	2.223	2.925	58.297
10	1.205	1.586	61.915	1.919	2.524	60.821
11	1.087	1.430	63.345	1.918	2.524	63.345
12	.958	1.260	64.605			
13	.893	1.175	65.780			
14	.834	1.097	66.877			
15	.817	1.075	67.952			
16	.805	1.059	69.011			
17	.738	.971	69.982			
18	.707	.930	70.912			
19	.704	.926	71.838			
20	.692	.910	72.748			
21	.661	.869	73.618			
22	.650	.855	74.473			
23	.614	.808	75.281			
24	.609	.801	76.082			
25	.579	.762	76.844			
26	.569	.749	77.593			
27	.553	.727	78.320			
28	.546	.718	79.038			
29	.539	.709	79.747			
30	.520	.684	80.432			
31	.512	.674	81.106			
32	.504	.664	81.770			
33	.479	.630	82.400			
34	.465	.612	83.012			
35	.462	.608	83.620			
36	.452	.594	84.214			
37	.443	.583	84.797			
38	.430	.565	85.362			
39	.425	.559	85.921			
40	.419	.551	86.472			
41	.411	.541	87.014			
42	.401	.528	87.542			

43	.382	.503	88.044		
44	.378	.497	88.542		
45	.372	.490	89.031		
46	.361	.475	89.507		
47	.354	.466	89.973		
48	.350	.460	90.433		
49	.348	.458	90.891		
50	.336	.443	91.333		
51	.324	.426	91.760		
52	.322	.424	92.183		
53	.310	.408	92.591		
54	.309	.406	92.997		
55	.306	.402	93.400		
56	.300	.394	93.794		
57	.295	.388	94.182		
58	.287	.377	94.559		
59	.283	.372	94.931		
60	.270	.355	95.286		
61	.267	.351	95.638		
62	.265	.349	95.987		
63	.261	.343	96.330		
64	.252	.332	96.662		
65	.248	.326	96.988		
66	.245	.322	97.310		
67	.234	.308	97.618		
68	.231	.304	97.922		
69	.224	.295	98.217		
70	.223	.293	98.510		
71	.213	.280	98.791		
72	.202	.265	99.056		
73	.200	.263	99.319		
74	.194	.256	99.575		
75	.182	.240	99.815		
76	.141	.185	100.000		