THE RELATIONSHIP BETWEEN CULTURE, COMMITMENT AND PERFORMANCE IN A SOUTH AFRICAN ELECTRICITY UTILITY

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ABSTRACT

The Electricity Distribution Industry (EDI) in South Africa is in the process of restructuring into six Regional Electricity Distributors (REDs). This would entail the merging of the national electricity utility, Eskom Distribution with municipalities to consolidate skills and to improve on efficiencies. This integration would involve the assimilation of not only physical assets but also various organisational cultures into a separate organisation responsible for supplying electricity services within its designated geographical area. A separate challenge facing Eskom is an intensive capital expansion program to increase generation capacity which will require a committed workforce to execute. Organisational culture has been regarded as leading to greater productivity and generating commitment to the values and philosophies of the organisation.

The purpose of the research was to determine whether there was a significant relationship between the organisational culture, organisational commitment and employee performance in Eskom Southern Region. In order to achieve this purpose a survey was undertaken (N=83) which measured perceptions regarding the existing organisational culture, preferred organisational culture as well as organisational commitment. Performance rating scores were linked to each respondent and were obtained from the performance management process of Eskom Southern Region.

The main findings of this research can be summarised as follows:
- The dominant existing organisational culture in Eskom Southern Region is the power culture, while the dominant preferred organisational culture is the achievement culture.
- There is a significant organisational culture gap between the existing and the preferred organisational culture in Eskom Southern Region.
- The dominant organisational commitment within Eskom Southern Region is affective commitment together with normative commitment.
- The findings related to the employee performance include:
  - A slight but significant negative relationship was measured between the existing achievement culture and employee performance.

- No significant relationships were measured between the preferred cultures and employee performance.
- No significant relationships were measured between the organisational commitment scales and employee performance.
- The findings pertaining to the relationship between organisational culture and organisational commitment can be stated as follows:
  - A significant positive linear relationship between the existing achievement culture and affective commitment was measured. A strong, significant negative linear relationship between the existing power culture and the affective commitment was also measured.
  - No significant relationships were measured between the preferred organisational cultures and organisational commitment.
  - The organisational culture gap has a significant effect on the organisational commitment of employees.
- The findings pertaining to the relationship between the biographical variables and the organisational culture, organisational commitment and employee performance can be stated as follows:
  - There exists a strong significant relationship between the years of service and the existing organisational culture scales.
  - No significant relationships exist between the preferred organisational culture scales and any of the biographical variables. There was a common agreement across all respondents on the preferred organisational culture.
  - A significant relationship was found between organisational commitment and the number of people supervised.
  - A slight but significant positive linear relationship between the age of respondents and employee performance ratings was measured.

It can therefore be concluded that the type of organisational culture has a significant impact on the level of affective commitment of the employees within Eskom Southern Region. No significant positive relationship was found between organisational commitment and organisational performance in Eskom Southern Region.

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TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

CHAPTER 1: INTRODUCTION

"Research is a process through which new knowledge is discovered" (Salkind, 2000:3).

1.1 Background and motivation for the research

Modern organisations face pressures from shareholders to maximise profits and to improve their productivity. It has been asserted that organisational performance and profitability can be increased through organisational culture and commitment (Angle and Perry, 1981; Deal and Kennedy, 1982; Kotter and Heskett, 1992). It has also been asserted that the performance of the whole organisation is very tightly coupled to each individual's performance (Cummings and Schwab, 1973; Fontannaz and Oosthuizen, 2007).

The Electricity Distribution Industry (EDI) in South Africa is in the process of restructuring into six Regional Electricity Distributors (REDs). This would entail the merging of the national electricity utility, Eskom Distribution with municipalities to consolidate skills and to improve on efficiencies (Department of Minerals and Energy, 2001). Eskom's Southern Region, is one of the players in the future establishment of REDs and comprises the geographical area of the Eastern Cape. It has been utilised as the focus for this research.

The integration of the EDI would involve the assimilation of not only physical assets but also various organisational cultures into a separate organisation responsible for supplying electricity services within its region. It would require strong leadership as well as the ability to ensure alignment of the distinct organisational cultures. It would also be crucial to maintain commitment levels during the time of transition.

In addition, Eskom is embarking on an intensive capital expansion program to increase capacity due to a large growing demand for electricity in the country as well as to cater for expansion of the electrification drive in terms of the government's universal access to electricity policy (Lünsche, 2006). This requires a committed workforce which is able to rise up to the challenge of addressing the national electricity supply shortfall. As Eskom

embarks on its capital expansion program and manages the shortages in energy, it is essential that the merging of organisational cultures and workforce commitment be well managed.

Organisational culture can lead to a greater productivity and profitability, generating commitment to the values and philosophies of the organisation (Kotter and Heskett, 1992; Martin and Siehl, 1983; Sørensen, 2002). An organisation's culture can also assist in projecting a positive image (Want, 2003).

It has been found that an increased organisational commitment has led to a reduced turnover of employees (Lee, Ashford, Walsh and Mowday, 1992; Porter, Steers, Mowday and Boulian, 1974; Steers, 1977; Wasti, 2003) and has resulted in an increase in organisational performance (Angle and Perry, 1981; Jaramillo, Mulki and Marshall, 2005; Meyer, Paunonen, Gellatly, Goffin and Jackson, 1989). Ensuring reduced turnover is crucial for Eskom Southern Region to maintain its key skills in this present state of skills shortage in South Africa (Cape Times, 2006). In addition, a high level of employee performance would improve the overall organisational effectiveness (Cummings and Schwab, 1973).

One can thus conclude that both organisational culture and organisational commitment together with their relationship to employee performance are important to Eskom as a whole within the context of the transformation process as determined by the Electricity Distribution Industry in South Africa.

1.2 Problem statement

It has been found that a positive correlation exists between organisational commitment and certain types of organisational cultures (Lahiry, 1994; Lok and Crawford, 2003; Rashid, Sambasivan and Johari, 2003). This would indicate that there are particular types of organisational commitment that are better suited to certain types of organisational culture.

In terms of the relationship between organisational culture and performance, a number of authors have focussed on the relationship between the financial performance and organisational culture of organisations (Denison, 1984; Kotter and Heskett, 1992; Rashid *et al*., 2003; Sørensen, 2002). Although research exists utilising performance variables such as stock losses and staff turnover (Schlechter, Tromp and Vos, 2000), no previous research was found in which the relationship between organisational culture and employee performance was assessed.

In contrast, the relationship between organisational commitment and employee performance has previously been researched and it was found that certain commitment components correlate well with employee performance (Meyer *et al*., 1989; Shaw, Delery and Abdulla, 2003; Suliman and Iles, 2000).

A study by Rashid *et al*. (2003) utilised financial results as a measure of performance and indicated positive correlations between organisational culture, organisational commitment and financial performance.

Consequently, the problem statement of this research is to establish whether a quantitative relationship exists between organisational culture, organisational commitment as well as employee performance in the context of an organisation, namely Eskom Southern Region.

1.3 Research objectives and hypotheses

The purpose of the research is to determine whether there is a significant relationship between the organisational culture, organisational commitment and employee performance in Eskom Southern Region. In order to achieve the purpose of the research, the following objectives have been stated:

1. To identify the dominant existing and preferred organisational culture within Eskom Southern Region.
2. To identify the gap between the existing and the preferred organisational culture within Eskom Southern Region.
3. To identify the organisational commitment profile within Eskom Southern Region.
4. To analyse the performance ratings of employees in Eskom Southern Region.

5. To measure the extent to which the existing and preferred organisational cultures influence employee performance within Eskom Southern Region.

6. To measure the extent to which the organisational commitment influences employee performance within Eskom Southern Region.

7. To measure the extent to which the existing and preferred organisational cultures influence organisational commitment within Eskom Southern Region.

8. To measure the extent to which the organisational culture gap influences organisational commitment within Eskom Southern Region.

9. To investigate the relationship between biographical variables and organisational culture, commitment and performance.

In order to give effect to the research objectives the following hypotheses were formulated:

The first set of hypotheses measure the difference between the existing and the preferred organisational culture.

$H_{0\,1}$ – The average gap scores between the existing organisational culture scales and the preferred organisational culture scales are not significantly different.

$H_{a\,1}$ – The average gap scores between the existing organisational culture scales and the preferred organisational culture scales have significant differences.

The second set of hypotheses measure the influence of organisational culture on employee performance. The intention is to gauge the extent to which both the existing as well as the preferred culture influences employee performance.

$H_{0\,2.1}$ – There is no significant relationship between the existing organisational culture and employee performance.

$H_{a\,2.1}$ – There is a significant relationship between the existing organisational culture and employee performance.

$H_{0\,2.2}$ – There is no significant relationship between the preferred organisational culture and employee performance.

$H_{a\,2.2}$ – There is a significant relationship between the preferred organisational culture and employee performance.

The third set of hypotheses measure the influence of organisational commitment on employee performance. It is the intention to measure the extent of this influence.

$H_{0\,3}$ – There is no significant relationship between the organisational commitment and employee performance.

$H_{a\,3}$ – There is a significant relationship between the organisational commitment and employee performance.

The fourth set of hypotheses measure the influence of organisational culture on organisational commitment. The relationship of organisational commitment between both existing and preferred organisational culture is explored.

$H_{0\,4.1}$ – There is no significant relationship between the existing organisational culture and organisational commitment.

$H_{a\,4.1}$ – There is a significant relationship between the existing organisational culture and organisational commitment.

$H_{0\,4.2}$ – There is no significant relationship between the preferred organisational culture and organisational commitment.

$H_{a\,4.2}$ – There is a significant relationship between the preferred organisational culture and organisational commitment.

$H_{0\,4.3}$ – There is no significant relationship between the organisational culture gap and organisational commitment.

$H_{a\,4.3}$ – There is a significant relationship between the organisational culture gap and organisational commitment.

The fifth set of hypotheses measure the influence of various biographical variables on the organisational culture, organisational commitment and employee performance.

$H_{0\,5}$ – There is no significant relationship between selected biographical variables of age, years service, number of staff supervised, gender, location and education and elements from:

$H_{0\ 5.1}$ – Existing organisational culture

$H_{0\ 5.2}$ – Preferred organisational culture

$H_{0\ 5.3}$ – Organisational commitment

$H_{0\ 5.4}$ – Employee performance

$H_{a\ 5}$ – There is a significant relationship between selected biographical variables of age, years service, number of staff supervised, gender, location, education and elements from:

$H_{a\ 5.1}$ – Existing organisational culture

$H_{a\ 5.2}$ – Preferred organisational culture

$H_{a\ 5.3}$ – Organisational commitment

$H_{a\ 5.4}$ – Employee performance

The relationships between the various hypotheses are shown in Figure 1.1.

Figure 1.1: Graphical representation of the various hypotheses
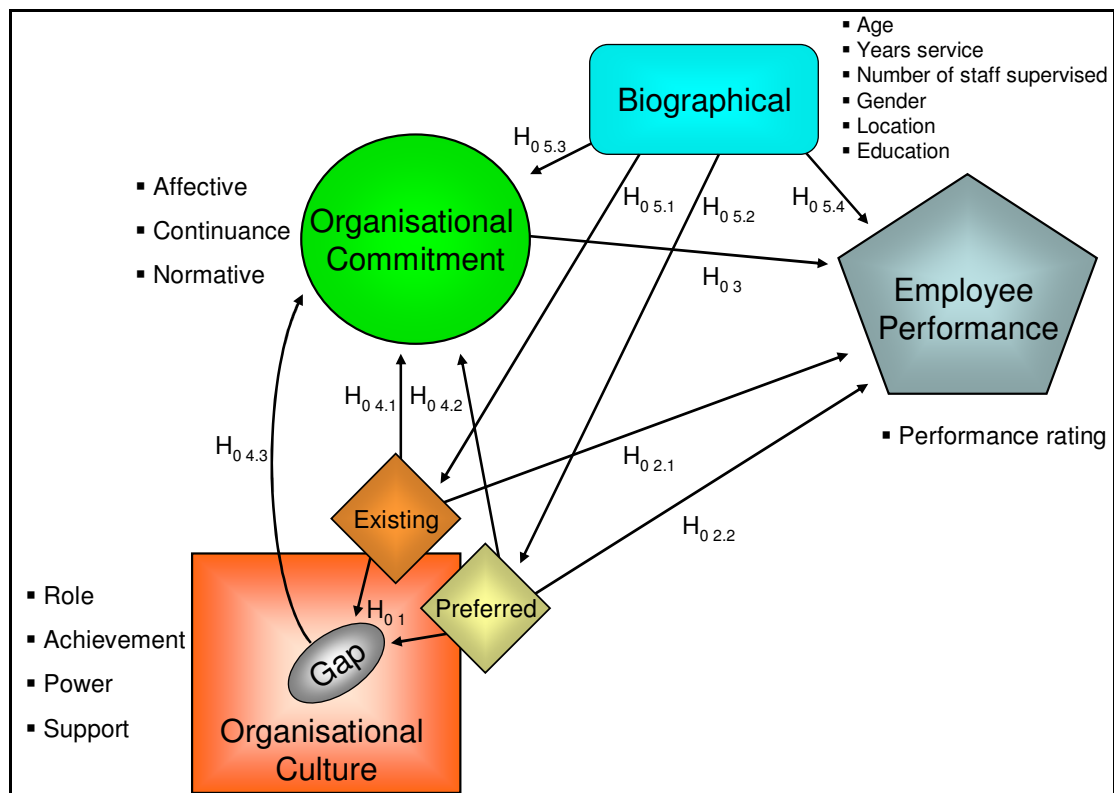
Source: Researcher's own construction based on Allen and Meyer (1990) and Harrison and Stokes (1992).

1.4 Research design and methodology

In order to achieve the research objectives, the research was conducted in a post positivist paradigm, with the ontology being critical realism (Guba and Lincoln, 1994). In terms of the chosen epistemology, the post positivist approach of modified dualist states that reality is able to be approximated but not "fully known" (Guba and Lincoln, 1994:111). This reflects the challenge for the researcher of remaining objective when studying one's own organisation.

A quantitative analysis together with a reductionist approach (Remenyi, 1996), was carried out in order to determine the relationship between the various variables (Mahoney and Goertz, 2006). According to Babbie and Mouton (2001), this involves the measuring and analysis of variables using statistical procedures to measure the properties of phenomena while controlling sources of error in the research process.

The population selected for this research included all management level, supervisory level as well as technical staff in Eskom Southern Region that have been in the organisation's employment for a period longer than one and a half years. Data was collected by means of a questionnaire which measured the organisational culture by means of the four cultural types of Harrison and Stokes (1992). Organisational commitment was measured using the instrument of Allen and Meyer (1990). The performance appraisal scores were used to measure individual employee performance. The confidentiality of the response data was upheld by utilising a third party to link the performance ratings to the commitment and culture questionnaire results, thereby avoiding any ethical concerns (Remenyi, 1998).

Reliability refers to achieving consistent results using the same technique (Hammersley, 1987). This has been achieved by utilising measurement instruments that have been utilised successfully by researchers in the past as well as by means of a Cronbach alpha reliability test (internal consistency) with a comparison to published values (Bohrnstedt, 1969). Validity refers to whether the measurement reflects the real meaning of the concept being considered accurately (Babbie and Mouton, 2001). Factor analysis is used to asses the construct validity (Goodwin, 1999).

The research method followed is shown in Figure 1.2. It shows that the research has been divided into two phases namely the literature review phase (secondary research) and the empirical research phase (primary research).

Figure 1.2: Flow diagram of the research method and chapter structure
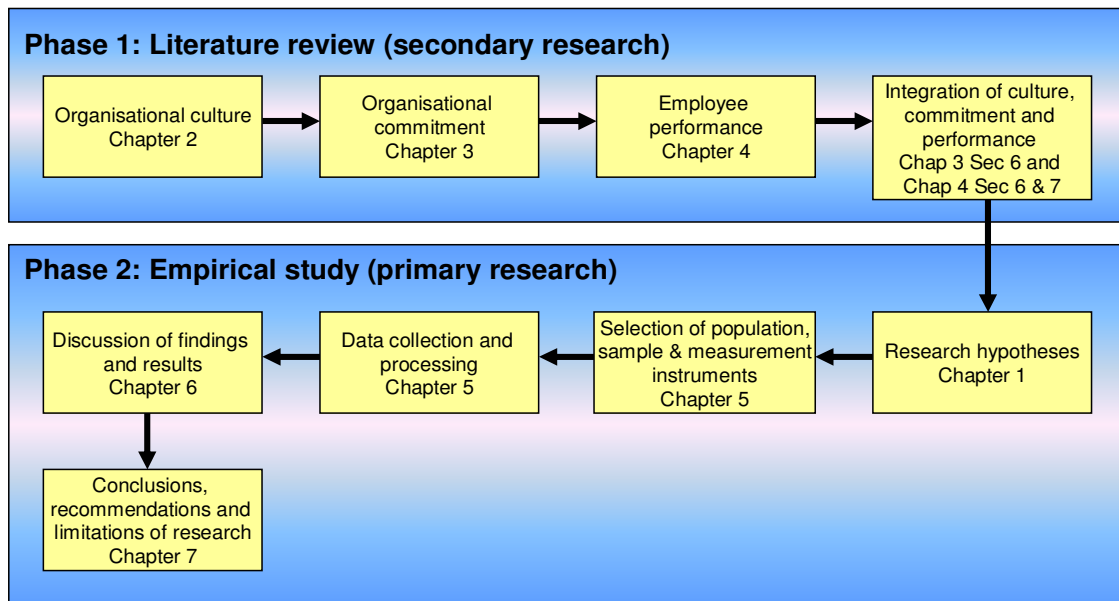
Source: Researcher's own construction (2008).

1.5 Structure of the thesis

As shown in Figure 1.2 this thesis is divided into seven chapters; Chapter 1 defined the background of the research together with the problem that was to be researched. The structure of the research, including the research objectives and hypotheses linking the secondary and primary research were discussed.

Chapter 2 described organisational culture and reviewed five different typologies for organisational culture. Focus was placed on the framework by Harrison and Stokes (1992) as it formed the basis of primary research pertaining to organisational culture. The function of culture in organisations as well as how organisational culture can be changed and managed was discussed.

The concept of organisational commitment is outlined in Chapter 3 by looking at three different typologies for organisational commitment. Specific focus is placed on Allen and Meyer's three component model (1990) as it formed the basis of the primary research pertaining to organisational commitment. The various antecedents of organisational commitment were discussed together with the impact or consequences of a highly committed workforce for an organisation.

Chapter 4 considered both organisational as well as employee performance with a focus on the latter as this has been utilised as the performance measure in this research.

An overview of research methodology utilised in this research is provided in Chapter 5. The research paradigm, research method, measurement instruments used, population and sample size, data collection as well as ethical considerations were discussed. The validity and reliability of the measurement instruments have also been explained.

In Chapter 6 the empirical findings of the research including the relationships between the various variables were presented. The findings pertaining to the stated hypotheses are tested in terms of the results of the empirical research.

Chapter 7 discussed the findings, conclusions and recommendations for this research. The limitations of the research as well as the key recommendations for Eskom Southern Region on how to manage their organisational culture and maximise the influence on employee performance and commitment were also discussed.

CHAPTER 2: ORGANISATIONAL CULTURE

"Man creates culture and culture creates man" (Pettigrew, 1979:577).

2.1 Introduction

Organisational culture can be seen as the "social glue that helps hold the organization together by providing appropriate standards for what employees should say and do" (Robbins, 1996:687). It can therefore be contested that organisational culture reduces an employee's uncertainty and anxiety concerning expected behaviour (Smith, 2003).

An organisation's culture also differentiates it from other organisations and may explain why employees are attracted to it and are less likely to leave (O'Reilly, Chatman and Caldwell, 1991; Smith, 2003). According to Sathe (1983:12) organisational culture provides "guiding principles" that can have an impact on employee behaviour in terms of communication, cooperation, commitment, decision making and implementation.

According to Lahiry (1994), various researchers' have found that organisational culture affects the commitment of employees. O'Reilly *et al*. (1991) have found that organisational culture can play a role in how well an employee fits into an organisation relating to their level of commitment and satisfaction. It has been asserted that the strength of organisational culture can impact on the performance of firms (Deal and Kennedy, 1982; Denison, 1984; Kotter and Heskett, 1992).

The purpose of this chapter was to discuss concept of organisational culture in order to achieve the objectives of the research as described in Chapter 1. This was done by addressing the key theoretical concepts related to organisational culture, its definition as well as models that are used to describe it. Furthermore, the role that organisational culture plays in organisations and how it can be measured was discussed. In terms of organisational culture measurement, a detailed discussion pertaining to the typology of Harrison and Stokes (1992) which was used in this research to measure organisational culture was given.

2.2 The concept of culture in society

The contemporary understanding of culture in society has evolved since the definition proposed by Edward B. Tylor in *Primitive culture* was first published in 1871: "Culture is that complex whole which includes knowledge, beliefs, art, morals, law, customs and any other capabilities and habits acquired by man as a member of society" (Tylor, 1920:1). Although there are various definitions of culture in the literature, Tylor's definition is compatible with most and has found some acceptance (Brinkman, 1999; Hofstede, Neuijen, Ohayv and Sanders, 1990).

Kessing (1974:76) expounds on the adaptive nature of culture that works towards maintaining "equilibrium within ecosystems" after changes occur in the environment, demographics or technology. Kessing (1974:94) is however critical of a very broad interpretation of culture; he proposes a more narrow "ideational subsystem" (systems of ideas or knowledge) within a complex biological, symbolic and social system. This is in line with the notions of Geertz (1973:4) of a specialised, narrower "theoretically more powerful concept" describing culture as semiotic which needs to be interpreted in the contextual social system.

Hofstede, Pedersen and Hofstede (2002:34) define culture as "that which distinguishes one group of people from another", they furthermore identify five dimensions of national culture: Identity (individualism or collectivism), Hierarchy (either a small or large power distance), Gender (masculinity or femininity – gender equality), Truth (weak or strong uncertainty avoidance) and Virtue (short term or long term orientation) based on the work of Hofstede (1983).

Baskerville (2003) has criticised Hofstede's approach as lacking a robust theoretical basis when equating a single culture to a nation. This may explain the lack of citations of his work in sociology and anthropology research (Baskerville, 2003). The statement: "Hofstede… might not have studied culture at all… he was measuring socio-economic factors" (Baskerville, 2003:2) illustrates the assertion that his research may have been flawed for measuring culture. Though criticising the limitations of Hofstede's approach to classifying national cultures there are no alternatives proposed by Baskerville.

Hofstede *et al.* (1990) described cultural differences on three levels: national level, occupational level as well as organisational level. The following section will focus on culture on the organisational level and some of the reasons for the interest in it.

2.3 Background to the interest in organisational culture

Pettigrew's (1979) publication is regarded as one of the seminal writings on the concept of "organisational culture" (Hofstede *et al.*, 1990; Parker, 2000:9). The history of organisational culture according to Pettigrew (1979) has its roots in terms and concepts developed in sociology and anthropology. These concepts include the study of myths, language, rituals, social structure as well as symbolic interactions within organisations (Ouchi and Wilkins, 1985; Smircich, 1983). Harrison (1972) though not specifying the term 'organisational culture' is clearly referring to it when discussing the organisation's character, ideology and values. Dandridge, Mitroff and Joyce (1980:77) also do not refer to 'culture' but identify "organisational symbolism" as expressing the underlying value system and character of an organisation.

Brinkman (1999:680) suggests that "corporate culture" gained rapid popularity in the early eighties after it was blamed as the "culprit" for the woes of the American economy at the time. This period is categorised by a number of books on the subject of organisational culture that stimulated a great deal of interest in the topic (Deal and Kennedy, 1982; Ouchi, 1981; Peters and Waterman, 1982). Research identified that there were both national as well as regional cultures that impacted on the behaviour of organisations (Hofstede, 1983; Hofstede *et al.*, 1990).

According to Ouchi and Wilkins (1985:458) various researchers have focussed on the differences in national cultures and their penetration into corporate firms to explain the "superior operating characteristics" of Japanese firms. Hofstede and Bond (1988) conclude that eastern culture represented by Confucianism has helped fuel the remarkable economic growth of countries such as Japan, Singapore and China. Deal and Kennedy

(1982:5) however do not propose mimicking the Japanese approach but to rather review historical lessons of successful American firms with "strong cultures".

With the link between organisational culture and a firm's performance proposed by authors such as Deal and Kennedy (1982) and later Kotter and Heskett (1992) organisational culture has risen in prominence in both the business and academic realms. When researching organisational culture it is important to understand what is encompassed by the term organisational culture, this will be addressed in the next section.

2.4 Definitions of organisational culture

"*Few concepts in organizational theory have as many different and competing definitions as 'organisational culture'*" (Barney, 1986:657).

Various definitions of organisational culture have been proposed by different authors over the years but no universally accepted definition currently exists (Brinkman, 1999; Newman and Chaharbaghi, 1998; Øgaard, Larsen and Marnburg, 2005; Sathe, 1983; Schein, 1990). There are however some similarities between the various perspectives on organisational culture found in the literature.

According to Pettigrew (1979:574) the unitary concept of culture "lacks analytical bite" and he prefers to rather regard culture as "the source of… symbol, language, ideology, belief, ritual and myth".

Deal and Kennedy (1982:4) propose a simplified definition of organisational culture as "the way we do things around here". This is similar to Quinn (1988:66-67) which defines organisational culture as the set of values and assumptions that support the statement "this is how we do things around here".

Schein (1990) maintains that very little consensus exists in terms of the definition, measurement and use of organisational culture. He proposes that organisational culture be defined as those developed "basic assumptions" that have been proven to be valid to

cope with the organisation's internal and external problems and are taught to new members as the only correct way to address those problems (Schein, 1990:111).

Kotter and Heskett (1992) describe organisational culture as having two levels, that differ in terms of their visibility as well as resistance to change. At the deeper level it refers to shared values that persist over time while on the more visible level it refers to behaviour patterns that new employees are encouraged to follow (Kotter and Heskett, 1992).

Newman and Chaharbaghi (1998) criticise the traditional definitions of culture as lacking in terms of their relationship to learning and technology, rather regarding culture as originating from the learning gained from a series of crises which required technology to resolve. They propose that culture be defined as "the by-product of a technology that has been developed in exploiting an opportunity" (Newman and Chaharbaghi, 1998:518).

Brinkman (1999:677) seems to build on this notion by putting forward a knowledge based definition of organisational culture as a substance that "evolves via the economic process" and is intertwined with corporate technology. He maintains that "corporate culture" can be viewed as storing the "corporate technology" and a change to corporate technology would result in a change to corporate culture (Brinkman, 1999:682).

Seel (2000:3) favours an emergent view of organisational culture and defines it as "the emergent result of continuing negotiations about values, meanings and proprieties between the members of that organisation and with its environment".

Figure 2.1: Summary of the organisational culture definitions reviewed
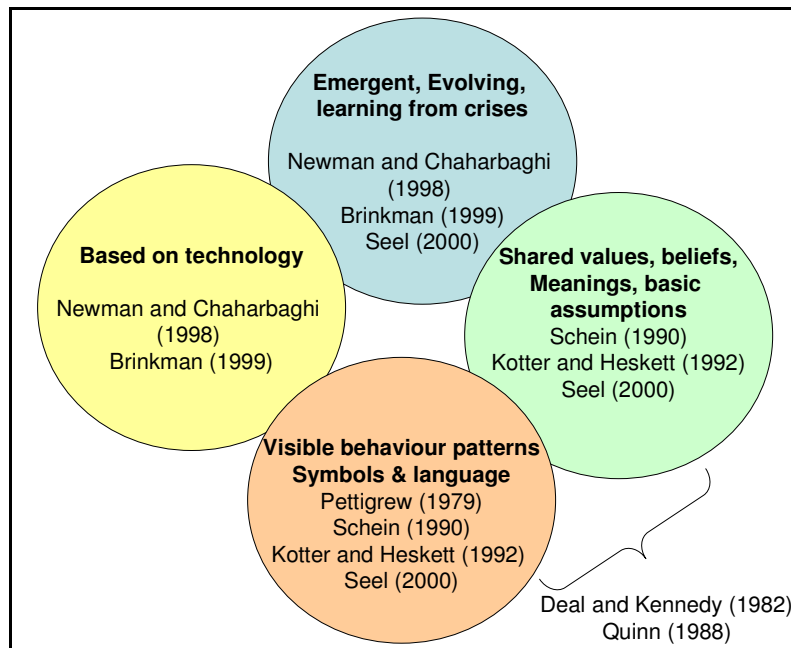
Source: Researcher's own construction based on reviewed authors (2008).

In terms of the various definitions reviewed in this research, four common themes were identified and have been summarised in Figure 2.1 namely that culture is (1) a set of shared values, beliefs and assumptions (2) visible behaviour patterns, symbols and language (3) based on technology (4) emergent, evolving with learning gained from crises. Some overlap does exist between the various author's perspectives and definitions.

For the purpose of this research organisational culture is regarded as being the shared values, beliefs and assumptions that have an impact on the visible manner in which things are done in the organisation through the symbols, rituals and language. There is also a notion that culture is not static but evolves over time as technology is utilised to adapt to a changing environment.

Some key concepts relating to organisational culture have been discussed in the next section.

2.5 Concepts of organisational culture

In this section the literature on some key concepts of organisational culture has been discussed namely the creation of culture in organisations, the strength of the organisational culture, the formation of subcultures as well as the function of organisational culture in organisations.

2.5.1 The creation and development of culture in organisations

According to Schein (1986) not all organisations have a culture as it requires a stable collection of people with a significant shared history to form. Schein (1990) acknowledges that culture is learned and that learning models are required to understand the creation of culture. Schein (1983) mentions that a requirement to develop a culture is for a group to overcome various crises which leads to the formation of assumptions on how to deal with problems. If these are validated over time, they are taught to new members as the correct way to deal with these problems (Schein, 1983). Culture can also develop from new members that join the organisation and bring with them "new beliefs, values and assumptions" (Schein, 1992:211).

The concept of paradigm was made popular by Kuhn (1970:23) in his description of scientific revolutions by describing them an "accepted model or pattern". A paradigm can also be described as a set of "basic beliefs and assumptions" that have been "taken for granted" and are treated as reality (Johnson, 1988:84; Schein, 1992:25). According to Johnson (1992) as a paradigm evolves over time it is impacted by the history of the organisation and helps to form the centre around which organisational culture develops.

The leader or founder of an organisation has a very important role to play in the establishment as well as the maintenance of the organisational culture. Pettigrew (1979:58) supports the concept that the leader or in his terminology the "entrepreneur" is the creator of the various aspects of culture in the organisation. Schein (1983) describes how organisations are initially formed around the assumptions and beliefs of their founders but as the group grows and learns from its own experience new assumptions begin to develop.

Hofstede *et al*. (1990) maintain that even though the leader has an important role to play in determining the values of an organisation, it is the manner in which those values are socialised to new members which can result in a variation of practices in people with the same values. According to Kotter and Heskett (1992) organisational culture though stable, may change over time due to turnover of key members, geographical expansion and the organisation facing crises.

2.5.2 The strength of culture

The concept of a 'strong culture' was made popular by authors such as Deal and Kennedy (1982), Kotter and Heskett (1992) as well as Peters and Waterman (1982) who linked a strong culture to a positive impact on performance. This notion is however not without its critics and there are opposing views on the concept of a strong culture.

A strong culture according to Deal and Kennedy (1982) exists when employees are aware of the goals of the organisation and cohesion exists in order to achieve them. Deal and Kennedy (1982:5) support the concept of a strong culture and believe that it has "almost always been the driving force behind continuing success of American business".

Kotter and Heskett (1992:16) relate strong culture to an organisation's performance in terms of three factors: (1) goal alignment that ensures employees work towards a common purpose, (2) a high motivation level due to rewarding shared values and practices and (3) providing structure and control without stifling innovation through bureaucracy.

Pascale (1985:28) believes that when mention is made that a strong culture needs to be created in an organisation it is a euphemism for employees that have to be "more comprehensively socialised". This socialisation according to him would include seven steps which would start with careful selection during recruitment, the introduction of experiences to promote the organisation's norms and values, the mastering of a core discipline, the introduction of rewards and controls to reinforce behaviour, the recognition of personal sacrifices, the reinforcing of folklore and the creation of consistent role models (Pascale, 1985:38).

Schein (1990:111) argues that not all organisations will have a prevalent culture while those with a "strong" culture would be as a result of a long shared history or an "intense experience". The strength of culture according to Schein (1990:111) is determined by the stability of the group, length of time it has existed, intensity of learning experiences and the assumptions held by the founders and leaders of the group. Schein (1986:32) opposes the viewpoint that a strong culture will necessarily lead to success, describing it as a "fallacy" citing many organisations with strong cultures that have failed.

Saffold (1988) maintains that the strong culture model is not sophisticated enough to explain the link between organisational culture and performance. Saffold (1988:547) identified 5 shortcomings and assumptions of the "strong" culture framework:

- *Unitary culture*: It assumes that the organisation can be generalised by a single culture with the impact of subcultures minimised.
- *The term 'strength'*: It assumes that one set of cultural values is superior to another.
- *Composite cultural profiles*: It assumes modal cultural profiles typical of high performance organisations which are too broad.
- *Insufficient culture-performance links*: It oversimplifies the relationship that developing a particular trait will increase overall performance.
- *Inadequate methodologies*: It is often based on too many assumptions and lack of cause and effect comparisons.

Newman and Chaharbaghi (1998) believe that the work by Deal and Kennedy (1982) that attributes performance to strong cultures oversimplifies the reason for high performance in organisations without developing a more complex solution.

In conclusion, it is therefore evident that merely measuring the "strength" of an organisational culture and relating it to performance may lead to incorrect conclusions, therefore a more complex model of organisational culture needs be explored.

2.5.3 Subcultures and countercultures

According to Schein (1990:111) any "definable group with a shared history" can have a culture which would therefore imply that there could be numerous subcultures in a large organisation. Martin and Siehl (1983:54) indicate that there could be at least three variations of subcultures that coexist with the dominant culture describing them as *'enhancing'*, *'orthogonal'* and *'counterculture'*. The *enhancing* subculture promotes adherence to the values of the organisation to a greater extent than in the rest of the organisation, the *orthogonal* subculture accepts the core values of the dominant culture together with their own distinctive values that are not in opposition, a *counterculture* has values in opposition with the dominant culture and exists in a state of "uneasy symbiosis" (Martin and Siehl, 1983:54).

According to Martin and Siehl (1983:55), a counterculture is most likely to arise in an organisation with a decentralised powerbase and most often would be limited to a structural boundary led a "charismatic leader". Smircich (1983:346) refers to countercultures as subcultures that are "competing to define the nature of situations" in organisations. Martin and Siehl (1983) argue that a counterculture can have a positive function by acting as a check against inappropriate behaviour and be a haven for innovation.

Parker (2000) opposes the use of the term subculture as it implies that it is always subordinate to another culture and prefers to rather address the various cultures separately by unique names. According to Kotter and Heskett (1992:6) all organisations have "multiple cultures" due to different functional groupings or geographic locations, however the term "corporate culture" refers to the shared values and practices across all groups in the organisation.

2.5.4 The function of culture in organisations

There are a number of functions described in the literature that culture can fulfil in an organisation:

- It offers an interpretation of the organisation's history in order to guide employees' future behaviour (Martin and Siehl, 1983).

- It generates commitment to the values and philosophies of the organisation (Martin and Siehl, 1983).

- It acts as a control mechanism encouraging or discouraging certain forms of behaviour (Martin and Siehl, 1983).

- It may lead to greater productivity and profitability (Martin and Siehl, 1983).

- It reduces anxiety levels caused by uncertainty as a common set of rules exist for relating with the environment (Schein, 1986).

- It can assist in projecting a positive image of the organisation. According to Want (2003) many companies make the mistake of believing their corporate culture is invisible to investors as well as the marketplace.

In the following section, five typologies of organisational culture found in the literature have been discussed.

2.6 Typologies of organisational culture

Due to a lack of consensus on a universal definition of organisational culture (Barney, 1986; Schein, 1990), various theoretical frameworks exist to analyse, classify and measure organisational culture (Deal and Kennedy, 1982; Harrison and Stokes, 1992; Hofstede *et al*., 1990; Johnson, 1992; Kotter and Heskett, 1992; Quinn, 1988; Saffold, 1988; Schein, 1990; Want, 2003). To gain a better understanding of organisational culture concepts, five typologies will be briefly discussed. The intention is to discuss both qualitative and quantitative frameworks. An emphasis has been placed on the typology by Harrison and Stokes (1992) as this is the framework used to classify the organisational culture in the primary research.

2.6.1 Schein's (1992) three level model

Schein (1992) identified three levels of culture developed from the perspective of the observer: observable artefacts, exposed norms and basic underlying assumptions. This has been depicted in Figure 2.2.

Figure 2.2: Schein's (1992) three level organisational culture model
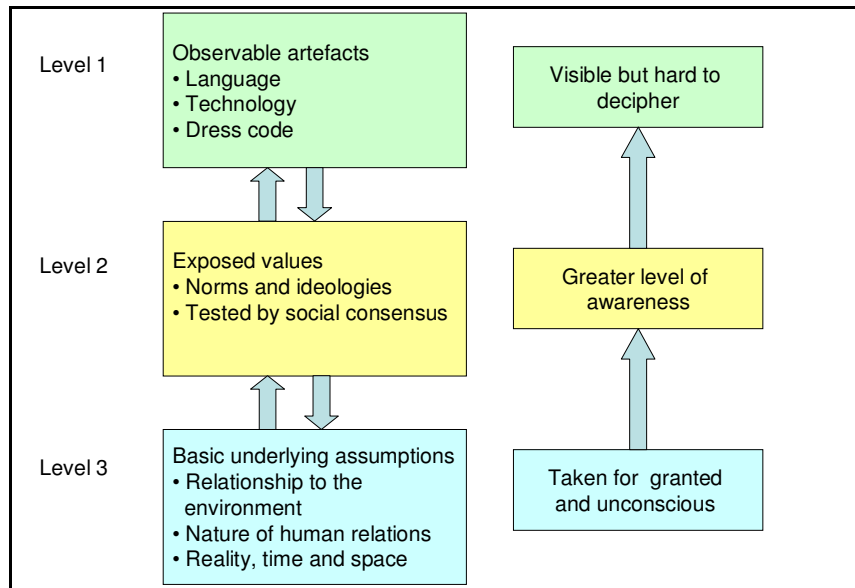
Source: Adapted from Schein (1992).

Level 1: Artefacts. This is the easiest level to notice as it relates to the observable aspects of the organisational culture such as the dress code, office environment as well as the written and spoken language (Schein, 1990). This would also include the verbal, action and material elements of organisational symbolism: myths, stories, language, rituals and logo's (Dandridge *et al*., 1980). It is however not that easy to decipher accurately the meaning ascribed to these artefacts by the members of the organisation (Schein, 1990).

Level 2: Exposed values. Values are generally determined by the leader and later become assimilated into the organisation (Schein, 1983). At this level it also refers to norms, ideologies, charters and philosophies that are found in the organisation (Schein, 1992). According to Schein (1990:112), values will become assumptions

over a period of time as they are perceived to lead to success. They are then taken for granted and no longer questioned.

Level 3: Basic underlying assumptions. Basic assumptions are found at the deepest level of the organisational culture and are the hardest for an outside observer to identify. They have been taken for granted as reality and are no longer challenged; they determine perceptions, behaviour and thought processes (Schein, 1990). Once these assumptions are understood it is much easier to decipher the meanings behind the observed artefacts and behaviours.

Martin and Siehl (1983:53) have proposed a fourth level of culture to this model, which they have termed "management practices". These include training programs, hiring of staff, allocation of rewards and making use of artefacts to instil values that are based on the underlying assumptions (Martin and Siehl, 1983).

2.6.2 Saffold's (1988) two general measures of culture

Saffold (1988:550) proposes measuring culture using two general groups: measures of "cultural dispersion" and measures of "cultural potency" to replace the notion of the "strength" of an organisation's culture. The intention of the first measure is to understand the extent of artifactual, sociological and psychological penetration of the various cultural aspects including the internalisation of values.

The second measure determines the extent to which the cultural paradigm influences behaviour and aligns strategically with the organisation's goals. It measures the symbolic potency, ability to change as well as elemental coherence.

2.6.3 Johnson's (1992) cultural web

Johnson (1992:31) developed a "cultural web" model of culture with the centre dominated by the organisation's paradigm (assumptions and core beliefs) and surrounded by six manifestations of the paradigm as shown in Figure 2.3. These various elements according to Johnson (1992) can overlap and include:

- *Stories and myths*: related to people and historical events which convey organisational values.
- *Symbols*: logos, designs and status objects/benefits.
- *Power Structures*: describes who makes decisions and the spread of power.
- *Organisational Structures*: hierarchies and work flow.
- *Control* systems: procedures and monitoring processes.
- *Rituals and routines*: meetings, traditions and monthly reports.

Figure 2.3: Johnson's (1992) cultural web
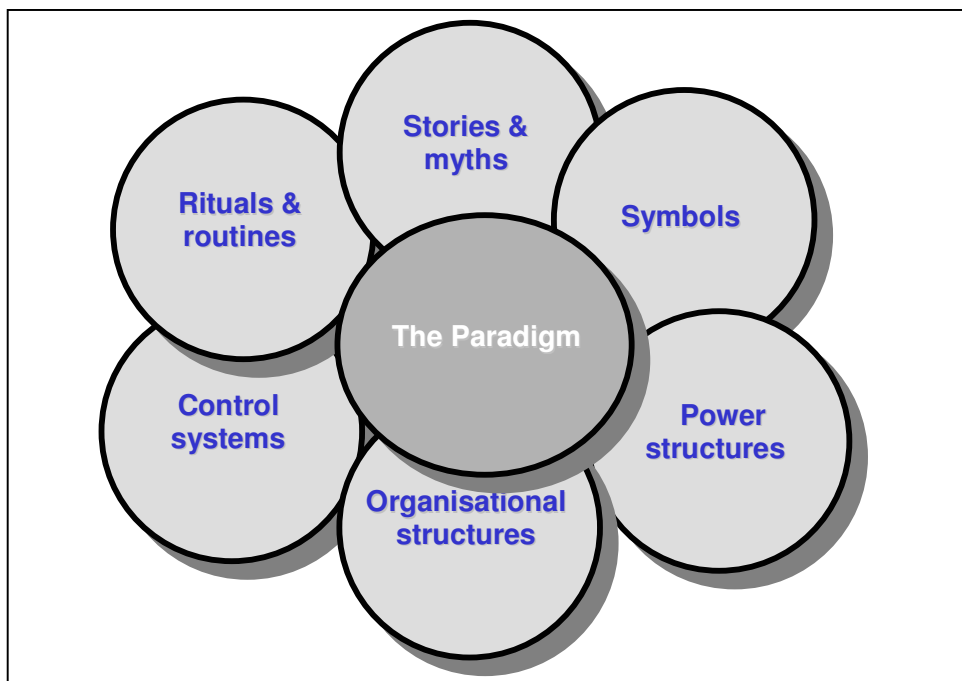
Source: Adapted from Johnson (1992:31).

2.6.4 Quinn's (1988) competing values framework

Quinn (1988) presents the competing values framework so named because initially the various elements seem to be in conflict with one another; however these elements according to the model are not mutually exclusive. The framework is based on the following criteria: whether an organisation has either an internal or external focus as well as whether it strives for flexibility or stability (Berrio, 2003). This classification creates four distinct quadrants namely Clan, Hierarchy, Adhocracy and Market (Quinn, 1988).

Clan: – It represents an organisation that focuses on internal maintenance with flexibility, having a concern for people and sensitive to customers (Berrio, 2003). According to Quinn (1988:37) this perspective is process oriented with a focus on "affiliation and harmony" amongst individuals. Managers are expected to be "mentors and facilitators" (Quinn, 1988:41).

Hierarchy: – It describes an organisation that concentrates on internal maintenance having a need for stability and control (Berrio, 2003). This culture can also be termed a bureaucratic culture (Denison and Mishra, 1995). According to Quinn (1988) this perspective is oriented to measurement, documentation, security and order with an emphasis on standardisation together with an analysis of the facts to determine the optimal solution. Managers are expected to "monitor and coordinate" (Quinn, 1988:39).

Adhocracy: – It represents an organisation that is focussed on external positioning with a high degree of flexibility and individuality (Berrio, 2003). This culture can also be termed an adaptive culture (Denison and Mishra, 1995). This perspective relies on internally generated ideas to make quick decisions but continuously gathers information from the environment in order to adapt (Quinn, 1988:36). Managers are expected to be "innovators and politically influential" (Quinn, 1988:40).

Market: – It describes an organisation that focuses on external maintenance with a need for stability and control (Berrio, 2003). This culture can also be termed a mission culture (Denison and Mishra, 1995). According to Quinn (1988:36) this perspective has a focus on the achievement of goals and the making of rapid decisions. Managers are expected to "direct and produce" (Quinn, 1988:39).

According to Quinn (1988:38) the four quadrants are not mutually exclusive and people operate in all four quadrants having "strong quadrants" and "weak quadrants". Figure 2.4 depicts an integration of the models described by Denison and Mishra, (1995), Øgaard *et*

al. (2005) as well as Quinn (1988). The quadrants are defined in terms of focus (either an internal or an external focus) as well as the need for stability and control or the degree of flexibility and individuality.

Figure 2.4: Quninn's (1988) competing values framework
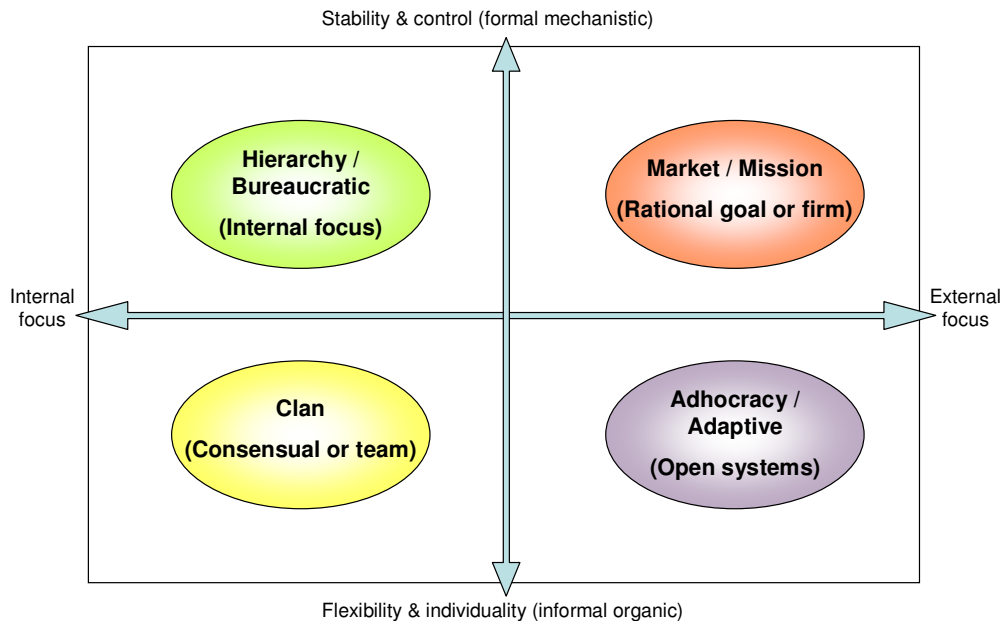
Source: Researcher's own construction based on Denison and Mishra, (1995); Øgaard *et al.* (2005) and Quinn (1988).

2.6.5 Harrison and Stokes' (1992) four cultural types

Harrison (1972:121) proposed four organisational ideologies namely power orientation, role orientation, task orientation and person orientation. Harrison's ideologies were developed further by Handy (1985) and later by Harrison and Stokes (1992) into power, role, achievement and support orientations.

> **Power orientation:** – This orientation can be regarded as autocratic and dominating, where power is concentrated by a few and not shared (Harrison, 1972). It is defined by Harrison and Stokes (1992:14) as "an organisational culture that is based on inequality of access to resources".

> Some features of this orientation include a strong and charismatic leader that rewards loyal followers, the leader acts unilaterally but in the best interests of the organisation (Harrison, 1993). It is represented by a web or a communications

structure as information represents power (Handy, 1985). An advantage of this orientation is that swift decisions can be made due to the few rules that exist (Handy, 1985). Some disadvantages of the power orientation include: that leaders are not questioned even when they may be seen to be wrong; people with power break the rules with impunity and at its worst power oriented organisations tend to rule by fear (Harrison, 1993; Harrison and Stokes, 1992).

Role orientation: – This orientation can be described as being bureaucratic, rational and orderly, with formalised procedures (Harrison, 1972). A definition given by Harrison and Stokes (1992:15) is that it is a "system of structures and procedures" which focuses on job description and specialisation.

Some features of a role culture include: individual performance is judged against written descriptions and the abuse of power is limited by rules and procedures (Harrison, 1993). Organisational life is dominated by the use of privileges, rights, legality and legitimacy, with people having clearly delegated authorities in a highly defined structure (Harrison and Stokes, 1992). It can be represented as a hierarchical pyramid structure where power is derived from a person's position in the organisation (Handy, 1985). A common feature of role and power cultures is their dependence on the use of rewards and punishments to motivate members (Harrison and Stokes, 1992).

Some advantages of this orientation include that clear lines of authority reduce conflict and clear policies prevent the abuse of power (Harrison, 1993). Some disadvantages include that work is clearly defined with little room for innovation; deviation from the norm is discouraged and it is difficult to get changes approved (Harrison, 1993).

Achievement orientation: – This orientation can be defined by excellence of work, performance for satisfaction, together with a personal commitment to the

task or goal (Harrison, 1993). It can be defined as "the aligned culture that lines people up behind a common vision or purpose" (Harrison and Stokes, 1992:17).

The mission is very well articulated within the organisation. It is used to direct the energy of employees, determine allocation of financial resources and to define systems and structures required to accomplish its achievement (Harrison and Stokes, 1992). The achievement orientation can be represented by a matrix or net structure due to the multiple reporting lines and open communication channels (Handy, 1985).

Some advantages of an achievement orientation include employee enthusiasm and energy (Harrison and Stokes, 1992). Further advantages include rapid learning, adaptation to change and problem solving (Harrison, 1993). A disadvantage is that employees may become disillusioned if results are not sustained or may experience burn out due to the high pressure (Harrison and Stokes, 1992).

Support orientation: – This orientation can be associated with the enjoyment of the activity as well as respect for the needs and values of other persons involved. Organisational life is guided by what would best satisfy the members' needs.

It can be defined as being "based on mutual trust between the individual and the organisation" (Harrison and Stokes, 1992:20). According to Harrison and Stokes (1992) there is minimal formal central power, rather being replaced with consensus decision making. The organisational structure is a cluster where there is little hierarchy and authority is assigned on task competence (Harrison, 1993).

An advantage of a support orientation is that there is a high degree of loyalty as members make sacrifices for one another (Harrison and Stokes, 1992). Some disadvantages of a support orientation include: (1) that people focus on relationships and neglect the work, (2) when consensus cannot be reached the

group may become indecisive and (3) decisions may take a long time as they would require everyone's approval (Harrison, 1993).

A summary of the four orientations is shown in Figure 2.5, the various orientations are characterised by their degree of formalisation as well as their degree of centralisation.

Figure 2.5: Harrison and Stokes' (1992) four cultural types
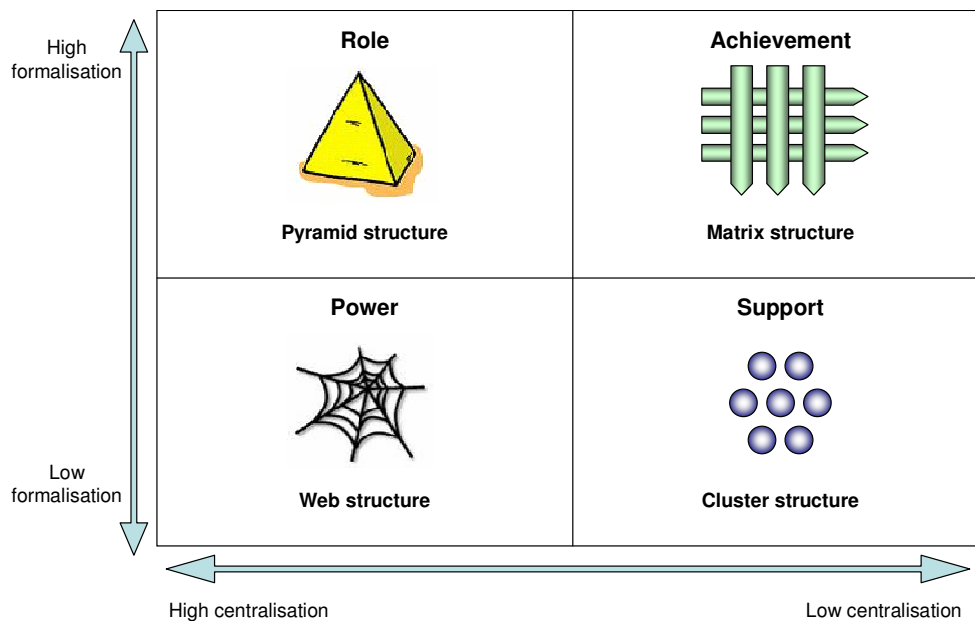
Source: Researcher's own construction based on Harrison (1993) and Harrison and Stokes (1992).

2.6.6 Summary of the various organisational culture frameworks

Figure 2.6 shows a summary of the various organisational culture models discussed in this chapter. The various models are summarised in terms of their qualitative or quantitative nature as well as in terms of the level of awareness, either highly visible (such as artefacts) or invisible (such as assumptions and paradigms).

Furthermore, Figure 2.6 indicates that there are key similarities between the various qualitative frameworks as well as similarities between the two quantitative frameworks analysed. Schein's (1990) observable artefacts correspond with Saffold's (1988) artifactual penetration and symbolic potency as well as a number of Johnson's (1992) cultural elements. The qualitative methods mainly measure Schein's (1990) exposed values as well as to some degree, the basic assumption. The two quantitative methods are not directly measuring the observable artefacts rather focusing on exposed values.

Figure 2.6: An integration of the reviewed cultural models

	Schein (1990)	Saffold (1988)	Johnson (1992)	Denison & Mishra (1995); Quinn (1988)	Harrison and Stokes (1992)

Cultural dispersion / **Cultural potency** (Saffold 1988): Artifactual penetration, Sociological penetration, Psychological penetration, Symbolic potency, Ability to change, Elemental coherence.

Schein (1990): Observable artefacts — *Organisational symbolism*: Myths, stories, rituals, logo's and language (Dandridge *et al.*, 1980); Exposed values — Norms, ideologies and charters; Basic assumptions — No longer challenged or questioned, accepted as reality.

Axis labels: Visible/Conscious — Level of awareness — Invisible/Unconscious.

Johnson (1992): Rituals & routines, Symbols, Stories & myths, Power structures, Org. structures, Control systems, The paradigm.

Denison & Mishra (1995); Quinn (1988): Hierarchy, Market, Clan, Adhocracy.

Harrison and Stokes (1992): Power, Role, Achievement, Support.

Bottom axis: Theoretical / qualitative ←→ Empirical / quantitative

Source: Researcher's own construction (2008).

The following two sections will address the changing and the management of organisational culture as well as the measurement of organisational culture utilising the proposed instrument.

2.7 Changing and managing culture in organisations

Martin and Siehl (1983) argue that cultures cannot be created or managed but simply exist and managers need to capitalise on the positive aspects while minimising the negative ones. A similar view is held by Parker (2000) however he concedes that management is able to influence the culture of an organisation to some extent.

Schein (1986:32) has a more conciliatory tone when he states that "one cannot change pieces of a stable culture without creating potentially massive anxiety". Schein (1986) proposes using Lewin's unfreezing and refreezing concept as a possible method to achieve culture change, together with strong leadership. Schein (1986) argues further that

culture plays a different role during the different stages of an organisation's life. During the early stages, the organisation is under the influence of its founders. It requires the creation of a strong and clear culture that forms a source of identity and strength to overcome competitors. Mid-life organisations have a developed a culture which would reflect functional or geographical organisational differences and needs to be managed by encouraging subcultures that reflect the organisations long term strategy (Schein, 1986). Declining organisations have to recognise that their basic assumptions need to be changed (which may require radical changes to their culture) to remain competitive (Schein, 1986). In this case the culture is playing an inhibiting factor which the organisation must overcome.

O'Reilly (1989) proposes linking the existing values and norms to the strategic objectives of the organisation by identifying norms that would aid and those that would hinder the organisation's objectives. The desired norms can then be rewarded and developed in the organisation.

A number of reasons exist why it is difficult to change organisational cultures and sustain that change, these include: poor communication in creating a compelling reason for change and a lack of senior management support (Kotter and Heskett, 1992; Smith, 2003).

Newman and Chaharbaghi (1998) hold the view that a change of culture without a change in the technology supporting the old culture will not be effective. They propose the term "culturing" for the culture change process which begins with a change in the old technology followed by learning process during the introduction of the new technology that would create a new culture (Newman and Chaharbaghi, 1998:519).

When two or more cultures are combined during a merger or acquisition the challenge exists to ensure that the two cultures can be integrated. Want (2003:15) states that "most mergers fail, and the principle reason is culture", he further claims that failing corporate culture has directly contributed to recent large organisational failures such as Enron.

2.8 Motivation for using the Harrison and Stokes culture model and a quantitative method to determine organisational culture

Various methods for measuring and analysing organisational culture have been proposed which include holistic studies (ethnographic analysis), semiotic studies (language and symbolism focus) as well as quantitative studies (questionnaire approach) (Ouchi and Wilkins, 1985). A number of studies to measure organisational culture have been successfully conducted, these include studies utilising qualitative, quantitative as well as a combination of both techniques (Hofstede *et al.*, 1990; Parker, 2000; Stevenson and Baker, 2005).

Ethnographic and semiotic studies can be used to measure culture however they have disadvantages of being time consuming, expensive and requiring a large number of cases to make generalisations (Schein, 1990). This is in contrast to quantitative studies which make use of a sample drawn from a larger population to make inferences of the population (Sekaran, 2000). Furthermore, an advantage of a survey technique is that the same method can be applied to several organisations (Denison, 1984). It was therefore decided to utilise a quantitative approach for the measurement of the organisational culture in Eskom Southern Region in order to achieve the research objectives and to be able to determine any statistical relationships between culture, commitment and employee performance.

For the purpose of this research the model by Harrison and Stokes (1992) was chosen to classify the organisational culture for the primary research. This framework was selected as it is similar to that used by other authors (Denison and Mishra, 1995; Quinn, 1988) that also propose four cultural types. Harrison and Stokes (1992) developed a research instrument that they subsequently tested and found to have a favourable reliability as well as construct validity (Harrison, 1993:26-27). The questionnaire developed by Harrison and Stokes (1992) has also been successfully tested in the South African environment by Manetje (2005), Louw and Boshoff (2006) and Van Stuyvesant-Meijen (2007).

2.9 Summary

This chapter described the concept of culture as being 'borrowed' from anthropology and sociology and applied in the organisational context to include myths, symbols, values as well as the implicit paradigms or 'underlying assumptions' on which the organisation is built. It also discussed that culture is not static but evolves over time as technology is utilised to adapt to a changing environment. Various contrasting thoughts on the value as well as the manner of measuring culture exist. Contrasting views also exist on the extent that organisational culture can be changed and managed. The functions of organisational culture as well as mechanisms for changing and managing culture have also been discussed.

Five organisational culture models were discussed in this chapter, which when summarised have shown a number of similarities. These models include both qualitative and quantitative models of organisational culture. The motivation for utilising a quantitative measurement technique was discussed together with the model by Harrison and Stokes (1992) of power, role, achievement and support orientations which was selected as the most appropriate model to be able to achieve the research objectives.

The concept of organisational commitment will be discussed in Chapter 3 as well as its relationship with organisational culture.

CHAPTER 3: ORGANISATIONAL COMMITMENT

"Ideally we would want one sentiment to be dominant in all employees from top to bottom, namely a complete loyalty to the organizational purpose" Lawrence (1958:208, in Randall, 1987:460).

3.1 Introduction

Organisational commitment has been conceptualised and measured in various ways over the years (Becker, 1960; Buchanan, 1974a; Kanter, 1968; Porter *et al*., 1974). Early studies on organisational commitment viewed the concept as consisting of a single dimension consisting of *loyalty*, willingness to exert effort to achieve organisational goals (*involvement*) and acceptance of organisational values (*identification*) (Porter *et al*., 1974).

The interest in organisational commitment can be attributed to amongst other things a relationship with employee turnover, in that employees who were strongly committed to an organisation were less likely to leave (Lee *et al*., 1992; Porter *et al*., 1974; Wasti, 2003). A relationship has also been postulated between affective commitment and job performance/organisational effectiveness in that a higher affective commitment corresponded with higher employee performance/effectiveness (Angle and Perry, 1981; Jaramillo *et al*., 2005; Meyer *et al*., 1989). According to Pettigrew (1979) it is the role of commitment mechanisms to disengage the person's existing attachments (in terms of beliefs and social relationships) and to redirect them to the organisation's needs and purposes.

Eskom's expansion program will place a great strain on its workforce (due to an increase in workload) which will require employee commitment to ensure its success and viability (Lee and Miller, 1999). An important consideration for Eskom Southern Region will be to ensure the retention of highly skilled staff (reduce staff turnover) as well as to improve efficiency through the enhancement of employee performance.

In this chapter the various definitions of organisational commitment will be reviewed in order to have an appreciation of the various perspectives in the literature on the topic. Typologies by Kanter (1968) as well as by Porter *et al.* (1974) have been presented and analysed. Allen and Meyer's multi-dimensional model of organisational commitment is discussed in detail as this is the instrument that was utilised to measure organisational commitment in the primary research. Antecedents and consequences of organisational commitment are also discussed within the framework of Allen and Meyer (1990).

3.2 Definitions of organisational commitment

According to Kanter (1968:499) a definition of commitment adapted for an organisational context would be: the willingness of employees to "give their energy and loyalty" to organisations. Kanter (1968:500) goes further to describe commitment as a process that results in an individual's interests being "tied to organised patterns of behaviour".

Buchanan (1974a) claims that there is little consensus on the definition of organisational commitment. Furthermore, Buchanan (1974a:533) defines organisational commitment as the "affective attachment to the goals and values of the organisation". It consists of three characteristics: (1) a sense of identification with the organisation's mission, (2) a sense of involvement in one's work role, and (3) a sense of loyalty and affection for the organisation (Buchanan, 1974b:340).

Porter *et al.* (1974:604) have proposed a similar definition to Buchanan (1974b) having defined organisational commitment as "the strength of an individual's identification with and involvement" in an organisation.

Crewson (1997:507) concurs with both Porter *et al.* (1974:604) and Buchanan (1974b) that commitment is "the strength of an individual's identification with and involvement in a particular organization" and that it is evident when there is a strong belief in the organisation's values and goals, eagerness to work hard and a desire to remain a member of the organisation. This is the definition that will be utilised for the purpose of this research.

3.2 Typologies of organisational commitment

This research will discuss models by Kanter (1968), Mowday, Steers and Porter (1979) as well as by Allen and Meyer (1990).

3.2.1 Kanter's (1968) three types of commitment

Kanter's (1968) research on organisational commitment led to the proposal of three distinct commitment types namely: cohesion, continuance and control. According to Kanter (1968) the three types of commitment proposed link the individual's personality system to the social system of an organisation and can thus represent an individual's willingness to follow prescribed behaviour. A summary of the three commitment types is shown in Figure 3.1.

Figure 3.1: A depiction of Kanter's (1968) three commitment types
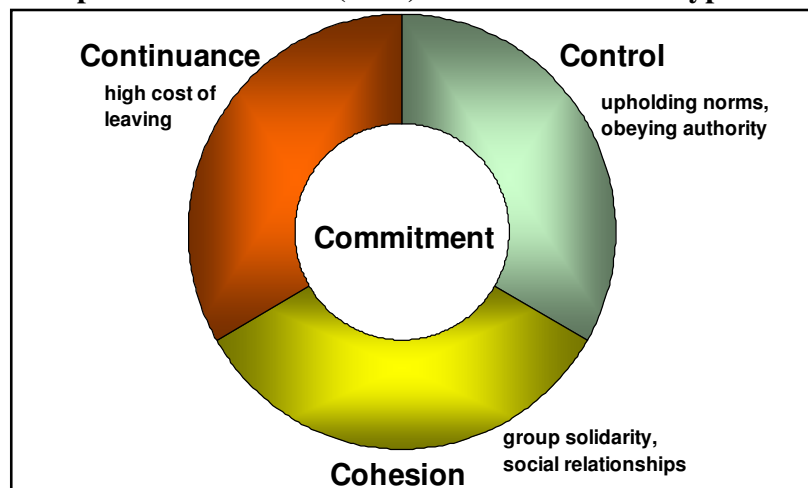
Source: Researcher's own construction based on Kanter (1968).

- **Cohesion commitment:** – This refers to the commitment of individuals to group solidarity. Social relationships due to the forming of "affective bonds" bring about a gratification of being involved with all the members of the group (Kanter, 1968:500).

- **Continuance commitment:** – This commitment is based on the high costs of leaving. When the "costs" associated with leaving outweigh the "profits", it compels continued participation of the individual (Kanter, 1968:500).

- **Control commitment:** – This commitment is based on upholding norms and obeying authority. Demands placed by the system are seen as morally right and therefore obedience is regarded as a "normative necessity" (Kanter, 1968:501).

3.2.2 Mowday, Steers and Porter (1979) typology

Porter *et al*. (1974) describe a one-dimensional concept of organisational culture based on an attitudinal perspective referring to the affective attachment formed by an employee and the organisation.

Three characteristics of organisational commitment were identified that are similar to that of Buchanan (1974b) namely: (1) strong belief in the goals and values of the organisation; (2) willingness to exert effort on behalf of the organisation; and (3) a desire to maintain organisational membership (Mowday *et al*., 1979:226; Porter *et al*., 1974:604).

Mowday, *et al*. (1979) built on the work of Porter *et al*. (1974). They utilised a similar 15 item Organisational Culture Questionnaire (OCQ) which they identified also measured continuance commitment to a limited extent (Mowday, 1998). Their primary focus though was on measuring attitudinal commitment as they expected that a high organisational commitment would lead to increased employee performance as well as reduced turnover and absenteeism (Mowday *et al.*, 1979).

3.2.3 Allen and Meyer's (1990) three component model

Allen and Meyer (1990:3) have proposed three components of organisational commitment: affective, continuance and normative components that align well with Kanter's (1968) three commitment types of cohesion, continuance and control. Meyer and Allen (1991) argue that common to all three approaches is the view that commitment is a psychological state that consists of: (1) attitudinal commitment characterised by the employee's relationship with the organization; and (2) behavioural commitment which has implications for decisions to continue membership in the organization. Employees can develop varying degrees of all three forms of commitment with each component developing from different experiences and having different implications in the work

environment (Meyer, Allen and Smith, 1993). Each of these three components will now be discussed in greater detail:

- **Affective commitment**: – This approach is similar to that of Kanter's (1968) cohesion commitment, which describes an individual's emotional attachment to the organisation. It is defined by Allen and Meyer (1990:2) as identifying with, being involved in and enjoying membership in the organisation. Affective commitment is also described by Porter *et al*. (1974:604) as having a "strong belief" in the organisation's values and goals thereby willing to devote a great deal of energy to attain them and be willing to remain in that organisation to see them fulfilled. It can therefore be concluded that employees that have a strong affective commitment remain with organisations because they "want to" (Meyer and Allen, 1991:67).

  Much of the research into organisational commitment has been based on measuring affective commitment (Meyer and Allen, 1991; Mowday, 1998). This can be ascribed to the work done by Porter *et al*. (1974) and Mowday *et al*. (1979) in developing and promoting the Organisational Culture Questionnaire (OCQ) as a measurement instrument for organisational culture. Though it assessed only one factor of commitment (affective commitment) it was found to be an accurate reflection thereof having been subjected to rigorous evaluations (Meyer and Allen, 1991; Mowday, 1998; Steers, 1977). Allen and Meyer (1990:6-8) later developed the 'Affective Commitment Scale' with a reliability of 0.87 that correlated very well with the OCQ (0.83).

- **Continuance commitment**: – This component refers to commitment based on the costs of leaving an organisation and can be associated with Kanter's (1968) continuance commitment as well as Becker's (1960) side bet theory. The side bet theory states that the longer the individual stays in the employment of an organisation the more they accumulate investments (e.g. specialised skills, status and pension plans) which become lost when an individual decides to leave, this may be exacerbated by a lack of alternatives to replace the lost investments (Becker, 1960;

Meyer and Allen, 1984). Therefore an employee with a large accumulated investment in an organisation, together with a lack of employment alternatives will have a high perceived cost of leaving the organisation and will have a strong continuance commitment (Allen and Meyer, 1990). It can therefore be asserted that employees with a strong continuance commitment remain in their organisations because they "need to" (Meyer and Allen, 1991:67).

Though various measures exist to measure continuance commitment, Meyer and Allen (1991) contend that they all have their limitations and inherent problems. Meyer and Allen (1991) developed a Continuance Commitment Scale (with a reliability of 0.75) that managed to overcome the limitations identified with other measures (Allen and Meyer, 1990; Meyer and Allen, 1984).

- **Normative commitment**: – This component measures the employees' feelings of obligation to remain with the organisation and can be associated with Kanter's (1968) control commitment. According to Allen and Meyer (1990:67) normative commitment is defined as "a feeling of obligation to continue employment". It develops as a result of socialisation experiences that emphasise the importance of being loyal to one's organisation (Wiener, 1982). According to Scholl (1981) it can also develop as a result of the receipt of benefits (such as skills training) and a feeling of reciprocation on the part of the employee would exist. O'Reilly and Chatman (1986) have conceptualised normative commitment in terms of value congruence between the individual and the organisation. Normative commitment is influenced both by the employee's experiences prior to (family values/cultural socialisation) and post (organisational socialisation) entry into the organisation (Allen and Meyer, 1990:4). It can therefore be noted that those employees that have a strong normative commitment remain in their organisations because they "ought to" (Meyer and Allen, 1991:67).

Allen and Meyer (1990) have proposed and utilised a Normative Commitment Scale (NCS) instrument to measure normative commitment with a reliability of 0.79.

- **The various commitment component relationships**: – Research by Meyer, Allen and Gellatly (1990) indicated that employees with a high affective commitment were less likely to perceive being tied to the organisation due to a lack of opportunities. Another finding was that employees who found it more costly to leave the organisation (employees with a high continuance commitment) also showed affective feelings towards the organisation (Meyer *et al*., 1990). Age and tenure have not been identified as reliable indicators for continuance commitment, however they were found to correlate with affective measures (Meyer and Allen, 1984).

The three dimensional model by Allen and Meyer is depicted in Figure 3.2. Organisational commitment can therefore be regarded as a combination of affective, continuance and normative commitment that can be found in varying degrees within an organisation.

Figure 3.2: A depiction of the three Allen and Meyer (1990) components of organisational commitment
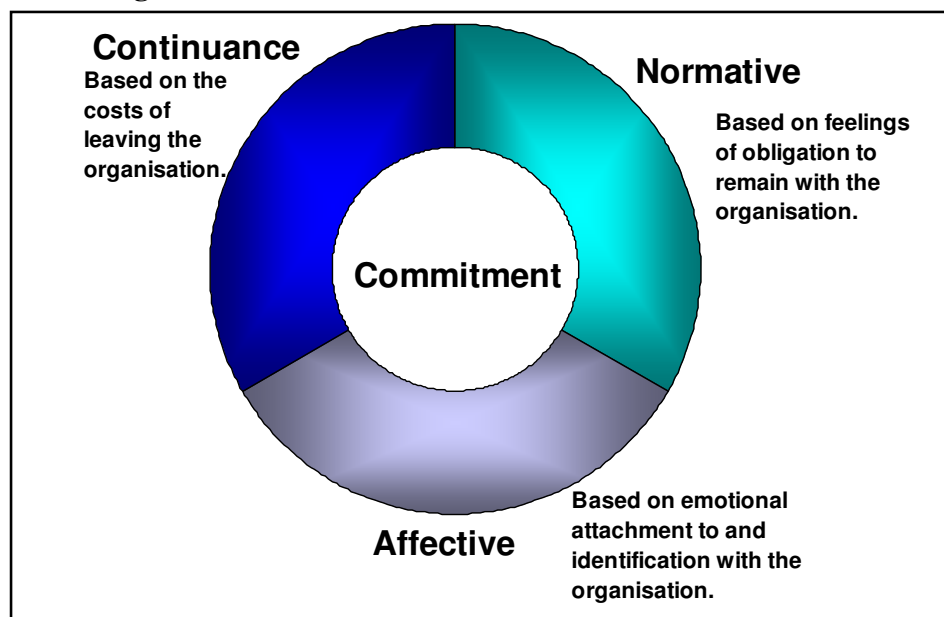
Source: Researcher's own construction based on Allen and Meyer (1990).

3.2.4 Summary of the various organisational commitment frameworks

The typologies of Becker (1960), Kanter (1968), Mowday *et al*. (1979) and Allen and Meyer (1990) have been compared to one another and have been summarised in Figure

3.3. Similarities were noted between the model of Kanter (1968) and that of Allen and Meyer (1990). They both described three similar types of organisational commitment. The side bet theory of Becker (1960) corresponded well with the continuance commitment of Kanter (1968) as well as Allen and Meyer (1990).

The model by Mowday *et al*. (1979) has been shown to measure affective commitment very well. The original model measured continuance commitment to some extent but not as a separate dimension Mowday (1998).

Figure 3.3: A summary of the discussed typologies of organisational culture

	Emotional attachments, group solidarity, social relationships	Behavioural, cost of leaving is high, investments make it hard to leave	Feelings of obligations to remain, upholding of norms
Becker (1960)		Side bet	
Kanter (1968)	Cohesion	Continuance	Control
Mowday, Steers and Porter (1979)	Attitudinal		
Allen and Meyer (1990)	Affective	Continuance	Normative

Source: Researcher's own construction based on Allen and Meyer (1990); Becker (1960); Kanter (1968) and Mowday *et al*. (1979).

The next section will discuss the various antecedents that have an impact on organisational culture.

3.3 Antecedents to organisational commitment

Various researchers have tried to determine the factors that contribute to developing and enhancing organisational commitment (Meyer and Allen, 1991; Steers, 1977). The various antecedent variables have been discussed in this section within the context of the Allen and Meyer (1990) framework for organisational commitment.

3.3.1 Antecedent variables associated with affective commitment

Meyer and Allen (1991:69) identified three categories as antecedents of affective commitment; these include personal characteristics, organisational structure as well as work experiences.

- **Personal characteristics**: – These characteristics can be defined as "those variables that define the individual" (Steers, 1977:47). It has been asserted that characteristics such as age, tenure and education can be linked to commitment (Angle and Perry, 1981; Steers, 1977). These relations have however been found to be neither strong nor consistent (Meyer and Allen, 1991). According to Mathieu and Zajac (1990), those employees that have a strong confidence in their abilities and achievement tended to have a higher affective commitment. Meyer and Allen (1991) concur that the need for achievement, affiliation and autonomy has been found to correlate with organisational commitment. Another approach is to consider the "person-environment fit" where a person is able to fulfil their needs and utilise their abilities in their environment (Meyer and Allen, 1991:70; Stumpf and Hartman, 1984:324). Hult (2005) maintains that if the fit between a new employee and their organisational environment is high, the employee will display high levels of commitment.

- **Organisational structure**: – Though few studies exist on the relationship of organisational structure, some evidence does exist according to Meyer and Allen (1991) that affective commitment is related to decentralisation. The argument is that a more decentralised decision making structure would impact on organisational commitment (Meyer and Allen, 1991). Mathieu and Zajac (1990) in their meta-analysis of organisational commitment antecedents did not find any evidence of a significant correlation between organisational structure and commitment.

- **Work experiences**: – According to Meyer and Allen (1991), this category includes both the subjective work experience and the objective job characteristics as described by Steers (1977). Work experience variables can be regarded as exerting a strong

socialising force on employees that will result in the formation of "psychological attachments" with the organisation (Steers, 1977:48).

According to Meyer and Allen (1991) commitment develops as a result of experiences that meet their needs according to Herzberg's (1968) hygiene-motivation theory. The work experience variables could be divided into two categories, the physical needs (job security, working conditions, salary) as well as the motivational factors such as recognition, advancement, achievement and responsibility (Herzberg, 1968). According to Mathieu and Zajac's (1990) meta-analysis, affective commitment had a positive correlation with the complexity of the job, skill variety and autonomy. These variables align with the motivational factors of Herzberg (1968).

3.3.2 Antecedent variables associated with continuance commitment

According to Meyer and Allen (1991) antecedents for continuance commitment would include anything that increased the perceived cost of leaving the organisation. The two predominant antecedents include investments or side bets and the availability of alternatives (Clugston, Howell and Dorfman, 2000). An important point made by Meyer and Allen (1991) is that neither investments nor available alternatives will have any influence on continuance commitment unless the employee is made aware of them.

- **Investments**: – Investments in the context of organisational commitment relate to actions that would result in a considerable perceived potential loss should the individual decide to leave the organisation (Allen and Meyer, 1990; Becker, 1960). These investments made in an organisation are specific to each individual and would not be easily translated to general categories (Allen and Meyer, 1990).

  Examples of such investments could include work related investments such as a specialised job skill, status, pension plans as well as non work related investments such as moving from a house that one has built or the disruption of a personal relationship (Becker, 1960; Meyer, Bobocel and Allen, 1991; Meyer and Allen, 1984).

As these investments are accumulated over time, age and tenure have been postulated to have an association with continuance commitment (Meyer and Allen, 1984).

- **Alternatives**: – According to Allen and Meyer (1990) the fewer perceived available employment alternatives exist for an individual the stronger the normative commitment to the organisation. There is thus a negative correlation between perceived available alternatives and normative commitment.

  According to findings by Rusbult and Farrell (1983) organisational commitment increased as the attractiveness of alternative employment opportunities decreased. Scholl (1981) mentions that while there may be a number of opportunities available to an individual, their attractiveness could be no better than the present situation which would produce the perception that there are no alternative opportunities.

3.3.3 Antecedent variables associated with normative commitment

Two variables identified by Meyer and Allen (1991) that impact on normative commitment include socialisation and organisational investment.

- **Socialisation**: – Wiener (1982) suggested that normative commitment is influenced as a result of socialisation before entry into the organisation (through family or cultural socialisation). This could be as a result of contingent reward and punishment, or role models as in the case of parents stressing values that enforce being loyal to one's organisation (Meyer and Allen, 1991). The notion of cultural socialisation as being an antecedent of organisational commitment was supported by Clugston *et al.* (2000).

  Socialisation can also take place post-entry into the organisation through the process that takes place after a new employee joins an organisation (Meyer and Allen, 1991). Meyer and Allen (1997) describe internalisation as the process of conditioning and modelling of others, during the early period of assuming employment. This process can help develop normative commitment.

- **Organisational investment**: – According to Scholl (1981) normative commitment can develop as a result of the receipt of benefits (such as skills training) that cause an imbalance in the employee/organisation relationship and create a need for reciprocation on the part of the employee. The nature of this reciprocity is one of "reciprocity by obligation" and it results in an obligation to do what is right (Meyer and Allen, 1991:78). After the debt has been repaid the individual may choose to leave or to cut back on their level of effort (Meyer and Allen, 1991). Rhoades and Eisenberger (2002) describe a mutually beneficial relationship between the employer and employee based on reciprocity.

Having discussed the various antecedents of organisational commitment, Section 3.4 discusses the consequences for organisations of having a high organisational commitment.

3.4 The consequences of commitment in organisations

Two of the consequences of organisational commitment that have received much attention in the literature include staff retention as well as organisational performance (Brooks and Wallace, 2006; Mathieu and Zajac, 1990; Meyer and Allen, 1991).

- **Retention**: – A consequence of high organisational commitment is on employee turnover. Various authors have indicated that employees who are strongly committed to an organisation are less likely to leave (Lee *et al*., 1992; Porter *et al*., 1974; Steers, 1977; Wasti, 2003). In terms of absenteeism both Angle and Perry (1981) and Mathieu and Zajac (1990) have not found any positive correlation with organisational commitment.

- **Performance**: – According to Buchanan (1974b:340) organisational commitment can be seen as "*linking human imagination to organizational ends*". Commitment promotes personal concern for the well being of the organisation while minimising the need for external surveillance and control (Buchanan, 1974b). Meyer *et al*. (1989) found a positive correlation between affective commitment and performance rating scores of staff while continuance commitment correlated negatively with the rating

scores. A meta-analysis by Jaramillo *et al.* (2005) indicates that there is a positive relationship between organisational commitment and performance. This is in contrast to Mathieu and Zajac (1990) who found that there was little direct influence between organisational commitment and performance in their meta-analysis.

According to Randall (1987), possible negative consequences of a very strong commitment to an organisation may be the loss of flexibility and a lack of innovation due to the acceptance of the status quo.

3.4.1 Summary of antecedents and consequences of organisational commitment

The antecedents of affective commitment include personal characteristics, organisational structure and work experiences. In terms of continuance commitment, antecedents were found to be investments and alternatives. The antecedents of normative commitment have been established to be socialisation as well as organisational investment. Two consequences of organisational commitment include employee retention and performance. A summary of the various relationships has been compiled in Figure 3.4.

Figure 3.4: Antecedents and consequences of organisational commitment
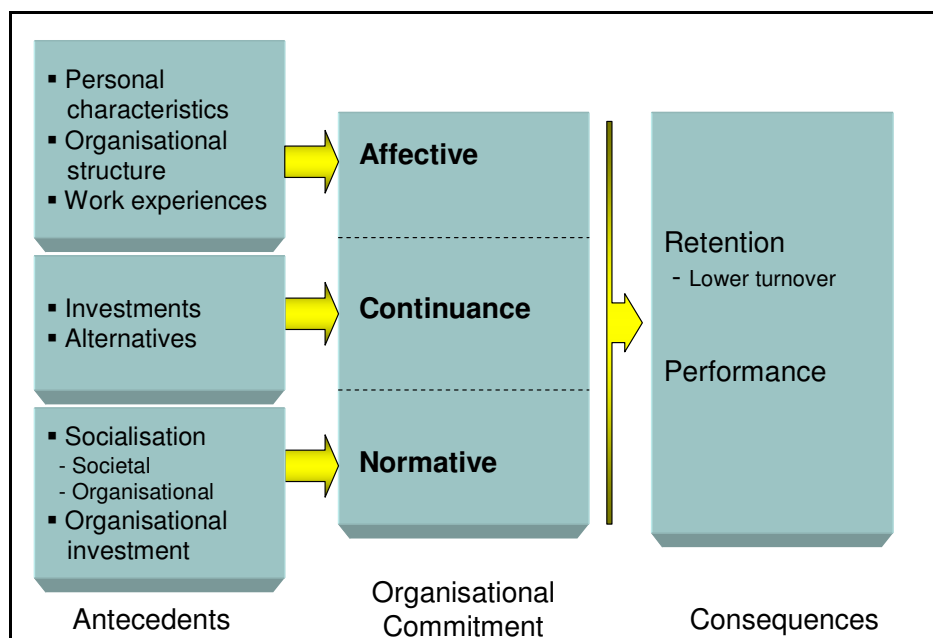
Source: Researcher's own construction based on Allen and Meyer (1990) and Meyer and Allen (1991).

3.5 Motivation for utilising the Allen and Meyer typology

For the purpose of this research organisational commitment was measured using the instrument developed by Allen and Meyer (1990).

An important consideration for this decision was the limitations associated with other instruments for the measurement of organisational commitment. The Organisational Culture Questionnaire (OCQ) developed by Porter *et al*. (1974), which has been widely used in the literature, has been found to have the limitation of only measuring affective commitment (Mowday, 1998).

Allen and Meyer's (1990) instrument is a multi-dimensional questionnaire and is able to measure three components of organisational commitment (affective, continuance and normative). This makes it a "more complete model" of organisational commitment (Meyer *et al*., 1993:540).

A further consideration is that this instrument has been well tested in various industries and in international studies (Clugston *et al*., 2000; Lee, Allen, Meyer and Rhee, 2001; Meyer and Allen, 1991; Rashid *et al*., 2003; Wasti, 2003). The instrument has also been successfully tested within the South African context by Manetje (2005), Louw and Boshoff (2006), Nyengane (2007) and Van Stuyvesant-Meijen (2007). It has been found to have good reliability values (coefficient alpha) for each scale that it measures (Allen and Meyer, 1990; Meyer *et al*., 1993).

3.6 The relationship between organisational commitment and organisational culture

Organisational culture is important in developing and sustaining employee commitment in organisations (O'Reilly, 1989). Research by Lahiry (1994) showed that a significant relationship exists between a passive/defensive culture and continuance commitment. Lahiry (1994) however could not confirm that employees who are working in cultures that provide work experiences that fulfil higher order needs and align with their values have a greater degree of affective commitment.

According to Lahiry (1994), no significant relationship was found between normative commitment and an organisation's culture. This is contrary to O'Reilly *et al.* (1991) who indicated that normative commitment is related to organisations with strong cultures. Rashid *et al.* (2003) found that a consensual culture was positively correlated to normative and affective commitment while competitive and entrepreneurial culture were both correlated with continuance commitment.

Lok and Crawford (2003) found a positive correlation between commitment and innovative and supportive cultures while no strong relationships were found with bureaucratic culture. According to Rashid *et al.* (2003), for the various types of organisational culture, there is an appropriate type of organisational commitment.

3.7 Summary

This chapter has described the various definitions for organisational commitment found in the literature. The definitions considered showed a number of similarities (Buchanan, 1974b; Crewson, 1997; Porter *et al.*, 1974) and organisational commitment was defined as the strength of an individual's identification with and involvement in a particular organization.

The typologies of Becker (1960), Kanter (1968), Mowday *et al.* (1979) and Allen and Meyer (1990) have been compared to one another in order to understand how they relate to each other. Similarities were seen between the model of Kanter (1968) and that of Allen and Meyer (1990). The side bet theory of Becker (1960) corresponded well with the continuance commitment of Kanter (1968) as well as the continuance commitment of Allen and Meyer (1990). The model by Mowday *et al.* (1979) primarily measured affective commitment.

The three component framework by Allen and Meyer (1990) of affective, continuance and normative commitment has been described in detail as this is the model that was used to measure commitment in the primary research. Organisational commitment can therefore

be regarded as a combination of affective, continuance and normative commitment that can be found in varying degrees within an organisation.

The various antecedents for each of the three types of commitment as per the Meyer and Allen (1991) commitment typology have been discussed. Two consequences of organisational commitment include employee retention and performance.

The importance of organisational commitment in the Eskom Southern Region context is in terms of its consequences namely: reduced employee turnover and enhanced employee performance. A committed workforce will assist in the success of Eskom's capital expansion program by ensuring the retention of vital human resources and by ensuring maximum employee performance. The chapter ended with a discussion on the relationship between organisational culture and commitment.

Having addressed organisational commitment, Chapter 4 will discuss employee performance as well as the influence of both organisational culture and organisational commitment on performance.

CHAPTER 4: PERFORMANCE

"Performance is a fact of life" (Folan, Browne and Jagdev, 2007:605).

4.1 Introduction

The notion of performance and performance management is not new, as it has long been recognised that performance needs to be managed at both the individual as well as the organisational level (Williams, 1998).

According to Hayes and Helmes (1999) international utilities are increasingly under pressure to improve their effectiveness as deregulation forces them to change business practices to improve on efficiencies and performance.

The purpose of this chapter is twofold, firstly to address the concept of employee performance which was utilised in the primary research as the performance measure. In order to achieve this, concepts of performance and performance management are defined and discussed.

The second purpose is to identify the relationships between performance and organisational culture, as well as performance and organisational commitment. According to Hansen and Wernerfelt (1989) there are two streams of research on determinants of an organisation's performance, firstly external market factors and secondly behavioural and social aspects. Organisational commitment as well as organisational culture form part of the second stream as they have an influence on the employees of an organisation.

4.2 Concept of performance and its measurement in organisations

'Performance' is a term that has many meanings and currently there is no universal consensus on a definition (Folan *et al*., 2007). A reason for this may be that it can measure short or long term outcomes; it can focus on inputs, outputs, efficiency or service quality (Wholey, 1999). According to Neely, Gregory and Platts (1995) performance consists of both effectiveness and an efficiency component.

According to Kotter and Heskett (1992) organisational performance is defined in terms of average returns on invested capital, annual growth in net income and appreciation in the stock price. Tangen (2004) supports a much broader measurement that includes various strategic as well as stakeholder satisfaction measures. A concept that has gained much popularity in recent time is triple bottom line reporting, which includes reporting on financial, social as well as environmental indicators thereby more accurately measuring the sustainability of a business (Elkington, 2005).

Performance measurement for an organisation provides a means to assess how it is progressing in attaining its predetermined objectives as well as to identify strengths and weaknesses in order to initiate action that would constantly improve performance (Amaratunga and Baldry, 2002).

During the early 1990s, Kaplan and Norton (1992) developed the Balanced Scorecard to address some of the traditional limitations of performance measures by integrating the various perspectives of the business into a single report.

These four perspectives include:
•   Financial Perspective (incorporating past performance)
•   Customer Perspective
•   Internal Business process Perspective (incorporating future performance)
•   Human resources, innovation and learning Perspective

These perspectives ensure that companies select measures that not only focus on short term financial health but also on long term sustainable growth. The intention of the

Balanced Scorecard is to ensure that there is a balance between the financial and non-financial aspects of the business and that there is a link between these measures and the strategic objectives of the organisation (Kaplan and Norton, 1996).

A high level of performance is required to ensure the sustained health of organisations, it is therefore necessary to discuss the concept of managing this performance in the next section.

4.3 Performance management

Similarly to performance discussed in the previous section, performance management is not an easy term to define and currently there is no generally agreed definition for it (Andersen, Henriksen and Aarseth, 2006).

According to Corcoran (2006) it covers several independent internal processes that include the initial job definition (including its competencies), effective goal setting, measuring performance, ongoing feedback together with formal quarterly reviews, annual performance review and development programs.

Bititci, Carrie and McDevitt (1997:47) describe performance management as a "closed loop" process which deploys policy and strategy while obtaining feedback in order to manage the performance of the business.

Williams (1998:9) describes performance management as having three aspects: managing organisational performance, managing employee performance and integrating organisational and employee performance. It is therefore essential to review the role played by employee performance in the performance of the organisation.

4.4 Employee performance

According to Fontannaz and Oosthuizen (2007:11) "organisational performance is the synthesis of individual performance throughout the organisation". Cummings and Schwab

(1973:1) concur with this notion and describe performance as ultimately being an "individual phenomenon". The concept of the performance of the whole organisation is thus very tightly coupled to each individual's performance.

According to Cummings and Schwab (1973) performance is determined by the degree of both ability and motivation of the individual. A person who has the ability but no motivation is unlikely to succeed; likewise a person with motivation needs a minimum level of ability to carry out a task (Cummings and Schwab, 1973). There are also a number of environmental factors such as job design, supervision, fellow workers, compensation, working conditions, training and evaluation (see Figure 4.1) that also impact on the individual's work performance (Cummings and Schwab, 1973:2).

Figure 4.1: Work performance determinants
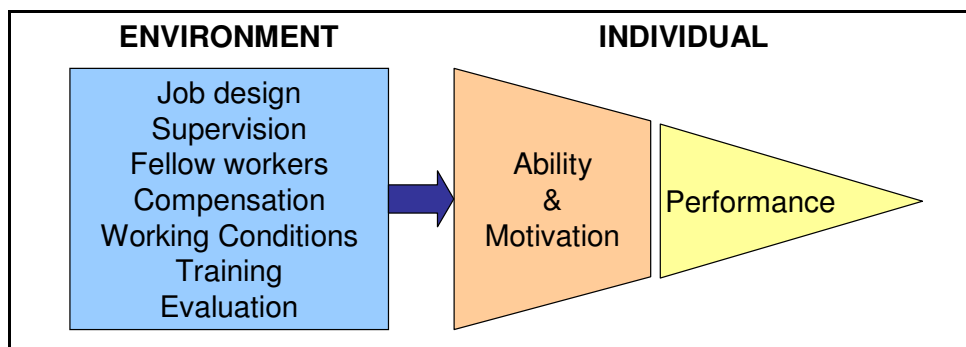
Source: Adapted from Cummings and Schwab (1973:2).

Hansen and Wernervelt (1989) have described a more complex model where individual performance is determined by the organisational climate which is influenced by external environmental factors, as well as internal organisational and behavioural factors.

Waldman and Spangler (1989:45) describe "opportunity determinants" that are external to the individual that also impact on job performance; these include a leader's behaviour and group processes. Group processes include group values, norms, rewards and punishment (Waldman and Spangler, 1989). These group processes align well with many of the definitions of organisational culture described in Chapter 2.

In order to raise employee performance levels it is necessary to be able to measure individual performance as discussed in the following section.

4.5 The measurement of employee performance

Being able to accurately measure and manage performance becomes a critical success factor in order to improve performance (Eccles, 1991; Gomes, Yasin and Lisboa, 2004). According to Neely *et al*. (1995) performance measurement is defined as the process of quantifying the efficiency as well as the effectiveness of an action.

Much has been said about the failure of traditional performance appraisal techniques (Brumback, 2003; Heathfield, 2007; Spangenberg, 1994). Some of these criticisms include that they treat employees as possessions of the organisation, they fail to create dialogue and that they are subjective in nature turning out to be "dishonest because it is so easy to fudge them up or down" (Brumback, 2003:170).

McAfee and Champagne (1993) highlight the importance of defining specific outputs that an individual must achieve as well as how they are to achieve them. Modern measurement techniques ensure that employees have job descriptions and are assigned specific, measurable, achievable, realistic and time-bound targets (Corcoran, 2006). Ongoing coaching and feedback together with formal quarterly reviews are an important part of the process (Corcoran, 2006; Heathfield, 2007).

Though many of the measures are designed to be objective some degree of subjectivity will still exist. Arvey and Murphy (1998) describe the concept of a 360-degree multi-rater measure that includes the perspectives of supervisor, peers, subordinates as well as customers. This 360 degree assessment is used to gain a holistic perspective of the employee's performance offsetting any bias (Latham, Almost, Mann and Moore, 2005). According to Arvey and Murphy (1998) there is a growing appreciation that subjective measures do not necessary transcend into rater error or bias but most likely reflect the true performance of employees.

For the purpose of this research, the employee performance rating obtained from the existing Performance Management process in Eskom Southern Region has been utilised as the measure of performance. This measure was selected as it is an existing measure, available at the individual level, which quantifies how well the goals that were agreed to at the beginning of the performance review period were achieved.

Having addressed employee performance measurement, it is necessary for the purpose of this research to review the relationship between organisational culture and performance as well as organisational commitment and performance. This has been discussed in Section 4.6 and Section 4.7 respectively.

4.6 Relationship between organisational culture and performance

"…it is likely that culture's link to performance is considerably less straightforward than many studies imply" (Saffold, 1988:553).

Organisational culture was discussed in detail in Chapter 2 with the purpose of this section being to discuss the relationship between organisational culture and performance.

According to Barney (1986:659) organisational culture will be a source of sustained competitive advantage if it is "valuable, rare and imperfectly imitable". This means that the culture of an organisation must be of such a nature that competitors will find it very hard to duplicate in order to maintain competitive advantage.

Denison (1984:20) conducted a study of 34 companies in 25 different industries and found that organisations with a participative culture perform better (in terms of return on sales, return on investment) than those without such a culture with this margin of difference widening over time. Denison (1984:12) found that two indices "organisation of work" and "decision making" to be significantly correlated with financial performance.

Sørensen's (2002) study into the effect of a 'strong corporate culture' on the financial performance of 123 organisations showed that in stable environments 'strong-culture'

organisations have a more reliable performance but in volatile conditions this advantage is lost.

Kotter and Heskett (1992) found that the mean performance of 207 organisations over 10 years related to the strength of their organisational culture found a positive correlation across various industries, thus concluding that organisations with a strong culture will have higher average financial indicators. Kotter and Heskett (1992) qualify this by stating that this holds true only for organisations where the culture fits the environment and is only sustainable in the long run if the organisation is able to adapt its culture to a changing environment.

Deshpandé and Farley (2004) found that the impact of organisational culture on performance was lacking in Asian countries that were surveyed as compared to industrialised Western countries. This could indicate a national bias in terms of the relationship between the two variables and hence the need to review literature compiled in the South African context.

According to van der Post, de Coning and Smit (1998:35) not all elements of culture they measured in 38 South African organisations could be correlated to an increase in performance. Those that did align include: 'strategic vision & values accepted by all', 'regular review of culture and core values for appropriateness', 'recruitment' and 'training aligned to core values'.

Schlechter *et al.* (2000) measured the organisational culture and performance of 60 business units in a South African retail organisation; their findings included a negative correlation with stock losses, a positive correlation with financial performance and a negative correlation with turnover.

Most of the studies reviewed in this Section primarily used financial performance as a measure for the organisation's performance. For the purpose of this research employee performance has been used as a measure of performance.

4.7 Relationship between organisational commitment and performance

Organisational commitment was discussed in detail in Chapter 3; the purpose of this section is to discuss the relationship between organisational commitment and performance.

Mixed findings exist on the relationship between organisational commitment and performance. Some researchers have found the relationship to be weak (Angle and Perry, 1981) while others found a positive relationship (Jaramillo *et al*., 2005; Rashid *et al*., 2003).

This variation could be attributed to the fact that the measures used for performance differ widely in the various studies, with Angle and Perry (1981) having selected measures such as absenteeism and turnover, while Jaramillo *et al*. (2005) as well as Rashid *et al*. (2003) relied on financial measures. Rashid *et al*. (2003) made use of Allen and Meyer's (1990) commitment types in their analysis of the impact of commitment on financial performance. Rashid *et al*. (2003) confirmed that both commitment and culture had an impact on organisational performance.

According to Lahiry (1994) as well as Meyer and Allen (1997), a high level of continuance commitment may well keep an employee with an organisation but the employee is unlikely to produce a high level of performance.

Shaw, *et al*. (2003) utilised a commitment model based on Mowday *et al*. (1979) which measured affective commitment to obtain a positive correlation with employee performance as rated by their supervisors. A stronger relationship between organisational commitment and employee performance was found for citizens of a country (who had many benefits) than for guest workers who had limited benefits and opportunities (Shaw *et al*., 2003).

Suliman and Iles (2000) made use of the three component model of organisational commitment by Allen and Meyer (1990) together with supervisor ratings of employee performance. They assert that in the Arabic context both affective and continuance organisational commitment correlate positively to employee performance (Suliman and Iles, 2000).

Meyer *et al*. (1989) made use of affective as well as continuance commitment to measure organisational commitment and related it to the performance ratings of employees conducted by their supervisors. It was found that affective commitment was positively correlated with employee performance while continuance commitment was negatively correlated with employee performance (Meyer *et al*., 1989).

4.8 Summary

This chapter described organisational performance as well as the concept of performance management. Attention was given to employee performance as it formed the basis for the primary research which was undertaken using employee performance rating scores.

It was found that performance is determined both by the degree of ability and the motivation of the individual, with a number of factors either external or internal to the organisation having an impact on the individual's work performance. Organisational commitment as well as organisational culture form part of the behavioural factors (Hansen and Wernerfelt, 1989) as they have an influence on the employees of an organisation.

In order to manage performance it is necessary to accurately measure the performance of individuals. Modern appraisal techniques are less subjective than historical ones with a focus on measurable and achievable goals but they still contain some measure of subjective component in terms of 360 degree multi-rater assessments.

The relationship between organisational culture and performance has been described by various authors as being strongly correlated to financial performance (Denison, 1984;

Kotter and Heskett, 1992; Schlechter *et al*., 2000; Sørensen, 2002; van der Post *et al*., 1998).

Various researchers have found a positive correlation between affective commitment and employee performance (Meyer *et al*., 1989; Shaw *et al*. 2003; Suliman and Iles, 2000). Continuance commitment has been found to be negatively correlated with employee performance (Lahiry, 1994; Meyer *et al*., 1989). Chapter 5 discusses the research methodology relevant to this research.

CHAPTER 5: RESEARCH METHODOLOGY

"The most important step an academic researcher takes is establishing a methodological framework in which to conduct the research" (Remenyi, 1996:22).

5.1 Introduction

The previous three chapters reviewed the literature pertaining to organisational culture, organisational commitment and employee performance as well as the relationships between these three concepts.

The purpose of this chapter is to describe the research methodology that was used in this study, to test the hypotheses that were stated in Chapter 1. According to Babbie and Mouton (2001:75) research methodology can be described as focussing on the "research process" as well as on the "tools and procedures" that are to be used. This is in order to expand scientific knowledge through systematic observation, in a controlled manner that can be replicated (Welman and Kruger, 2001).

According to Remenyi (1996: 22) there are three main philosophical questions that need to be addressed when commencing research namely "why research?", "what to research?" and "how to research?".

The last question "how to research?" is the primary focus of this chapter, with the "why research?" and the "what to research?" having already being covered in Chapter 1, Section 1.3. A further explanation of the importance of the research has however been given in Section 5.2. In addressing "how to research?", the instruments that were used to measure organisational culture and organisational commitment are described in Section 5.4. A brief description of the relevant statistical techniques used in the research is also provided in Section 5.7, together with the methods that were used.

Finally important ethical considerations pertaining to the research are discussed.

5.2 Purpose and importance of the research

This section addresses Remenyi's (1996:22) question "why research?" by addressing the importance of this research. The objective of the research as stated in Section 1.3 is to determine whether there is a relationship between the organisational culture, the organisational commitment and employee performance in a division of the electricity utility Eskom, namely Eskom Southern Region.

A positive relationship has been found between financial performance and organisational culture (Denison, 1984; Kotter and Heskett, 1992; Rashid *et al.*, 2003; Sørensen, 2002). Researchers have also found a positive relationship between organisational culture and commitment (Lahiry, 1994; Lok and Crawford, 2003; Manetje, 2005; Rashid *et al.*, 2003; Van Stuyvesant-Meijen, 2007). Some authors have measured the relationship between organisational commitment and employee performance and found that certain commitment components correlate well with employee performance (Meyer *et al.*, 1989; Shaw, *et al.*, 2003; Suliman and Iles, 2000). Strong organisational commitment has also been associated with the retention of staff (Lee *et al.*, 1992; Porter *et al.*, 1974; Steers, 1977; Wasti, 2003).

Organisational culture therefore impacts on organisational commitment which results in employees that are more likely to stay for longer periods with their employer. In the current energy crises facing South Africa such commitment and dedication is required to ensure a successful implementation of a massive capital expansion drive (Lünsche, 2006). Ensuring reduced turnover through higher levels of commitment is crucial for Eskom Southern Region to maintain its key skills in this present state of skills shortage in South Africa (Cape Times, 2006). A high degree of employee performance will help improve on the organisation's overall effectiveness. An important consideration for Eskom Southern Region is therefore to ensure the retention of highly skilled staff (reduce staff turnover) as well to improve efficiency through the enhancement of employee performance.

5.3 Research population and sampling

Sekaran (2000) considers a population to be any group of people, events, or things that are of interest to the researcher. According to Trochin (2000) a research population is a group that the researcher wants to generalise to.

Eskom Southern Region encompasses the Eskom Distribution operations in the Eastern Cape. The population selected for this research includes management level, supervisory level as well as key technical staff that have been with the organisation for a period longer than one and a half years. The size of the population is 203 employees.

According to Sekaran (2000) a sample is a subset of a population comprising of a selection of members of the particular population. This is in agreement with Trochin (2000) who defines a sample as a group of people that have been selected to be in the study.

For the purpose of this research quota sampling was used in order to identify the sample (Denscombe, 2003). According to Behr (1988) quota sampling is a non-probability equivalent of stratified sampling where proportions of subgroups are drawn to represent the population. The advantage of this technique is that the representation of the categories in the sample is in proportion with that of the population (Denscombe, 2003). The sample for the research consisted of 170 employees who were selected in the same gender ratio as the population namely 67.4% male and 32.6% female. Since this sample is not drawn at random, care must be taken in interpreting the findings (Behr, 1988).

5.4 Measurement instruments

The questionnaire utilised in this research has been attached as APPENDIX A. A cover letter was used to introduce the purpose of the questionnaire as well as to assure confidentiality. The questionnaire consisted of three separate sections; Section A included biographical data such as age, gender, length of service, level of supervision and level of education. Section B was aimed at measuring the organisational culture using the Harrison and Stokes (1992) Organisational Culture questionnaire. Section C focussed on

measuring organisational commitment by utilising the Allen and Meyer (1990) questionnaire. Employee performance ratings were utilised as the measure of performance in this research and were obtained from the Eskom Southern Region Remuneration and Organisational Development section.

The following sections will discuss the organisational culture and organisational commitment questionnaires utilised in more detail as well as the employee performance rating.

5.4.1 Harrison and Stokes organisational culture instrument

The research instrument developed by Harrison and Stokes (1992) is based on the work of Harrison (1972) and measures organisational culture in terms of four types namely power orientation, role orientation, achievement orientation and support orientation. This framework was selected as it is similar to that used by other authors (Denison and Mishra, 1995; Quinn, 1988) that also propose four cultural types. Further reasons for the selection of this instrument have been discussed in Section 2.8.

The instrument has 15 statements, each containing four sub-statements that reflect the organisational culture of the organisation. Respondents were requested to rank each question's sub statements from one to four utilising the following scale:

1 = Strongly Agree

2 = Agree

3 = Disagree

4 = Strongly Disagree

5.4.1.1 Reliability and validity of the Harrison and Stokes (1992) instrument

Reliability refers to achieving consistent results using the same technique (Hammersley, 1987; Straub, 1989). Thus reliability measures the agreement of two efforts that measure the same trait through similar methods (Hammersley, 1987).

The reliability scores of the Harrison and Stokes (1992) instrument as determined by Harrison (1993) are shown in Table 5.1 utilising the Spearman-Brown formula split half test.

Table 5.1: The reliability of the Harrison and Stokes (1992) questionnaire

Scale	Reliability
Power culture	0.90
Role culture	0.64
Achievement culture	0.86
Support culture	0.87

Source: Adapted from Harrison (1993:26).

Validity refers to whether the measurement accurately reflects the real meaning of the concept being considered (Babbie and Mouton, 2001; Hammersley, 1987). Validity can be understood to refer to the agreement of two attempts to measure the same trait through different methods (Hammersley, 1987).

Table 5.2: The validity of the Harrison and Stokes (1992) questionnaire

Harrison & Stokes	Janz Questionnaire		
	Values	Power	Rules
Power culture	-0.70	0.79	0.01
Role culture	0.19	-0.47	0.40
Achievement culture	0.69	-0.69	-0.38
Support culture	0.41	-0.68	-0.46

Source: Adapted from Harrison (1993:28).

The instrument by Harrison and Stokes (1992) has been successfully utilised in the South African context by Manetje (2005), Louw and Boshoff (2006) and Van Stuyvesant-Meijen (2007).

5.4.2 Allen and Meyer organisational commitment instrument

The organisational commitment instrument that was utilised is based on the one developed by Allen and Meyer (1990) with some of the questions modified slightly for the particular organisational context being researched. It measures organisational

commitment in terms of three dimensions namely (1) affective, (2) continuance and (3) normative commitment (Allen and Meyer, 1990; Meyer and Allen, 1991). Reasons for the selection of this instrument have been discussed in Section 3.5.

The questionnaire that was utilised consisted of 21 statements (7 questions per commitment dimension) that utilised a 5 point Likert scale. The 21 questions represented a reduction of the original 24 questions proposed by Allen and Meyer (1990:6-7) in that the question with the lowest factor analysis in each dimension was removed. This has helped to shorten the total length of the questionnaire without compromising on the accuracy of the measure. The questions included a number of negative keyed items as proposed in the original questionnaire design by Allen and Meyer (1990); these were reformulated positively in the data analysis.

The scale range utilised is from 1 to 5 as follows:
1 = Strongly Agree
2 = Agree
3 = Unsure
4 = Disagree
5 = Strongly Disagree

This scale was chosen as it was similar to the one used for the organisational culture questionnaire and was more intuitive for participants in the pilot questionnaire as addressed in Section 5.5.5. This resulted in the need for the data to be reformulated in order for it to be used for analysis purposes. This was done by translating answers scoring 1 (Strongly Agree) to score the highest possible score of 5, answers scoring 2 (Agree) were translated to score 4. Likewise, answers scoring 5 (Strongly Disagree) were translated to score 1 and answers scoring 4 (Disagree) were translated to score 2.

5.4.2.1 Reliability and validity of the Allen and Meyer (1990) instrument
The instrument by Allen and Meyer (1990) has been tested by various researchers in a variety of industry and international studies (Clugston *et al*., 2000; Lee *et al*., 2001;

Meyer and Allen, 1991; Rashid *et al*., 2003; Wasti, 2003). It has been found to have good reliability values (coefficient alpha) for each dimension as summarised in Table 5.3.

Table 5.3: The reliability of the Allen and Meyer (1990) questionnaire

Commitment Dimension	Allen & Meyer (1990)	Clugston *et al*. (2000)	Lee *et al*. (2001)	Rashid *et al*. (2003)
Affective	0.87	0.85	0.86	0.92
Continuance	0.75	0.88	0.61	0.93
Normative	0.79	0.80	0.74	0.72

Source: Adapted from Allen & Meyer (1990:6); Clugston *et al*. (2000:13); Lee *et al*. (2001:600) and Rashid *et al*. (2003:718).

The instrument has also been shown to have validity across various cultural contexts and has been regarded as a measure of turnover intention. Wasti (2003) analysed the Allen and Meyer (1990) instrument in a Turkish context and concluded that the results supported the cross cultural validity of the instrument. This was confirmed by Lee *et al*. (2001) in a South Korean environment. Their findings show that there is a good factorial validity in the instrument together with validity with respect to turnover intention (Lee *et al*., 2001). This instrument has been successfully tested within the South African context by Manetje (2005), Louw and Boshoff (2006), Nyengane (2007) and Van Stuyvesant-Meijen (2007).

5.4.3 Employee performance instrument

The employee performance measurement was captured and recorded using the organisation's performance appraisal process. This appraisal process forms part of the larger performance management system of the organisation. Performance management encompasses Eskom's stated values and strives to ensure fairness, objectivity and consistency, while allowing sufficient flexibility to create the appropriate climate for positive interaction, communication and feedback regarding individual performance (Eskom, 2007).

Eskom Southern Region has implemented a performance management cycle that consists of planning, compacting, managing and appraising performance together with a

developmental component as shown in Figure 5.1 (Eskom, 2007). This process will now be discussed in more detail.

Figure 5.1: The Eskom performance management process
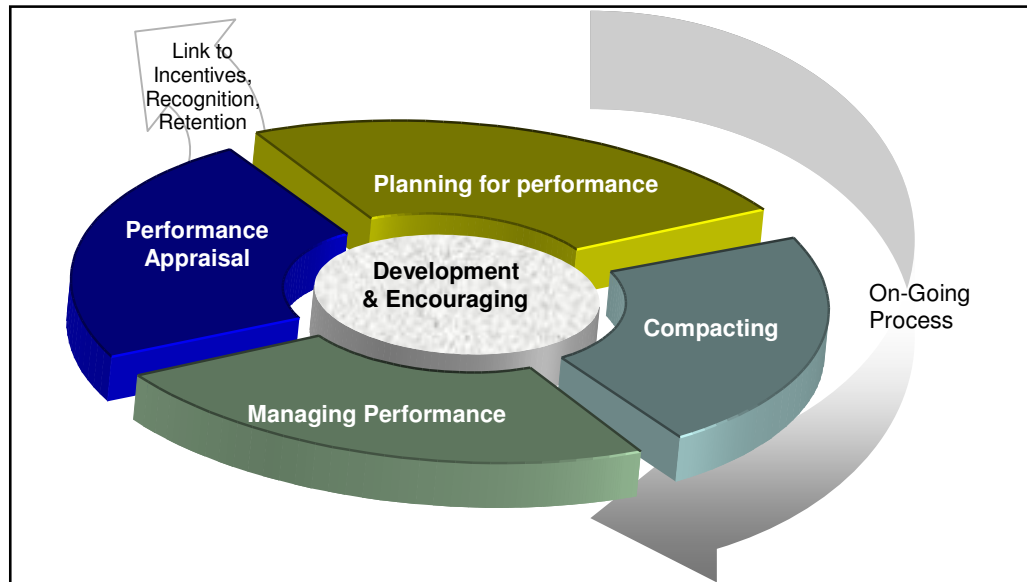
Source: Adapted from Eskom (2007).

Planning for performance: – Supervisors and employees setup performance goals and objectives jointly. These objectives are based on an employee's specific job profile as well as on the regional or national business drivers (Eskom, 2007). A principle for setting KPIs is that there must be a degree of "line of sight" in terms of the individual and the supervisor's KPIs (Eskom, 2007). This may mean that the employee could contribute to the KPI but may not be fully responsible for it. Values are then set for the floor (based on a 95% probability of attainment), kick-in (80% probability), target (50% probability), stretch (20% probability) and ceiling (5% probability of attainment) as shown in Figure 5.2.

Figure 5.2: Typical sample of a performance compact

Key Performance Area 1:									Weight:		25
Manage Database				Floor	Kick-In	Target	Stretch	Ceiling			
Performance Indicators	**Measurement**	**Source of Evidence**	**Weight**	**1**	**2**	**3**	**4**	**5**	**Actual Perf.**	**Score**	**Weighted Score**
1 KPI 1	Number	Database	25	3	6	10	14	18			
2 KPI 2	% Score	Report	25	80%	90%	100%	110%	120%			
3 KPI 3	12MMI Figure	Database	25	90%	93.50%	95%	97%	99%			
4 KPI 4	% Score	Database	25	60%	70%	80%	90%	100%			

Source: Adapted from Eskom (2007).

Compacting for performance: – The compact is an agreement which defines the individual's or team's performance objectives for a period of time. The performance compact contains Key Performance Areas (KPAs) with KPIs assigned to them as illustrated in Figure 5.2. In total a compact should contain no more than 20 KPIs, each with a weighting of no less than 4% (Eskom, 2007). Compacts are negotiated at the beginning of each new financial year. The process involves agreeing on the measures to be used as well as the targets, weightings and sources of evidence to support the various measures. Once these have been agreed upon, the performance compact is signed by the employee as well as the supervisor and becomes a binding agreement for a period of a year.

Managing performance: – There is one compulsory mid year performance review but supervisors are encouraged to meet with employees on a regular basis to discus progress and address any developmental needs required to achieve the desired level of performance.

Appraising performance: – Final appraisals are conducted in April after the end of each financial year. Appraisals are conducted in private and the parties need to be prepared for the session in terms of the level of performance that was achieved as well as being able to provide supporting sources of evidence. Multi-rater 360 degree feedback forms a part of the appraisal (Arvey and Murphy, 1998; Latham *et al*., 2005). This method according to Arvey and Murphy (1998) most likely gives a good refection of the true performance of employees.

During the appraisal process the performance is discussed and developmental plans are reviewed. The final rating is then signed by employee and supervisor. The final rating score is a value between one and five, with one being considered poor performance, three representing the meeting of all performance targets and five being exceptional performance. The performance appraisal ratings for the period April 2007 until March 2008 were utilised for the purpose of this research.

5.5 Data gathering and capturing

5.5.1 Pilot questionnaire

The initial questionnaire was piloted with five respondents to check for three aspects namely (1) any grammar or spelling mistakes, (2) ease of completing the form electronically as well as (3) to ensure that all the questions were well understood.

This resulted in changes being made to a number of questions to make them more applicable to the organisational setting without detracting from the original question's intention. It was also decided to change the original scale on the culture questionnaire so that the ranking was done by allocating a one to the item that was most preferred and four to the item that was least preferred. Respondents in the initial group felt that it was more intuitive to answer the question in that manner.

It was also found that the method of forced ranking for the existing and preferred culture in the organisational culture section of the questionnaire could cause confusion. This led the researcher to add more detailed instructions and examples to assist in the completion of the culture section of the questionnaire.

5.5.2 Organisational culture and commitment questionnaire

The questionnaire was electronically delivered to each respondent with a description of the purpose of the research and that all answers would be treated as strictly confidential. A reminder email was later sent out together with an extension of the original submission date. The questionnaire utilised has been attached as APPENDIX A.

5.5.3 Data capturing

The data was captured from the electronic responses into Microsoft Excel. Data was also checked for completeness and accuracy of completion as per the instructions. Any partially completed or incorrectly completed questionnaires were discarded. The negative keyed items of the organisational culture questionnaire were reformulated positively as discussed in Section 5.4.2. The scoring of the organisational culture and organisational commitment questionnaires were also reformulated as described in Section 5.4.2.

In order to ensure confidentiality, the answers were then sent to the Southern Region Human Resources Department for them to correlate the performance appraisal scores to the unique number of each respondent. After this was completed, the unique numbers were deleted to maintain confidentiality before being sent back to the researcher. The data was then transferred to Statistica for the statistical analysis.

5.6 Research design

The research was conducted in a post positivist paradigm as alluded to in Section 1.4, with the ontology being critical realism (Guba and Lincoln, 1994). The post positivist approach of modified dualist states that reality is able to be "approximated but not fully known" (Guba and Lincoln, 1994:111).

A quantitative analysis together with a reductionist approach (Remenyi, 1996), was carried out in order to determine the relationship between the various variables (Mahoney and Goertz, 2006). According to Babbie and Mouton (2001) this involves the measuring and analysis of variables using statistical procedures to measure the properties of phenomena while controlling sources of error in the research process.

5.7 Statistical analysis

The data for this research was analysed utilising the Statistica 7 software tool (Statsoft, 2008). Descriptive statistics describe phenomena of interest by making use of bar charts and measures of central tendency to summarise the data (Behr, 1988; Sekaran, 2000). According to Salkind (2000) descriptive statistics allow the researcher to better understand the data by visualising patterns. In this research descriptive statistics have been utilised to summarise the biographical responses, to describe the existing and preferred organisational culture, as well as to describe the organisational commitment and employee performance.

Frequencies refer to the number of occurrences of various subcategories relating to a particular phenomenon (Sekaran, 1992). Frequencies can be presented in the form of a histogram or a bar chart (Salkind, 2000; Sekaran, 1992). Bar charts have been utilised in

this research to describe the various biographical variables, while a histogram has been utilised to analyse the employee performance scores.

The mean is a measure of central tendency and is defined by Salkind (2000) as the sum of a set of scores divided by the number of scores. According to Sekaran (1992) the mean can offer a general picture of the data without having to view each observation in a dataset. The standard deviation is a measure of dispersion or variability of data. It is defined as the average amount that each individual score differs from the mean of the set of scores (Salkind, 2000). The range is the difference between the highest and lowest scores in a distribution (Salkind, 2000).

Reliability and validity are two important criteria for evaluating the quality of measurement instruments (Babbie and Mouton, 2001). According to Denscombe (2003), a reliable measurement instrument will produce the same results each time it is used. The Cronbach's alpha reliability coefficient measures the internal consistency of a measurement instrument by measuring the underlying constructs (Bohrnstedt, 1969). The range of alpha values is between 1 (perfect internal consistency) and 0 (no internal consistency), values above 0.80 are regarded as being good, those between 0.60 and 0.80 are regarded as acceptable and those below 0.60 are regarded as poor (Sekaran, 1992:287). The Cronbach's alpha reliability coefficient has been utilised in this research to measure the reliability of both the organisational culture and the organisational commitment instruments.

Validity refers to the extent to which a measure reflects the construct under consideration (Babbie and Mouton, 2001). According to Babbie and Mouton (2001) a trade-off exists between reliability and validity namely that measuring in a qualitative manner may increase validity but may decrease reliability. Similarly one can conclude that measuring in a quantitative manner could increase reliability but decrease validity. Factor analysis can be utilised to assess the validity of a measurement instrument as it measures the variations in the values of several variables to generate artificial factors (Babbie and Mouton, 2001). These can be correlated to the real dimensions of the instrument. In terms

of the current research, a factor analysis was conducted on both the organisational culture and organisational commitment instruments but the results did not separate the scales into the measurable factors. This corresponded with research conducted by Van Stuyvesant-Meijen (2007) which could also not separate the scales into measurable factors. The instruments utilised in this research therefore have a low validity but this is something that should not be problematic as the research is based on a positivistic paradigm which is more focussed on the reliability/repeatability of the measure (Babbie and Mouton, 2001:472).

The significance level is the risk associated with not being 100% certain with the results of a statistical test due to possible sampling error (Salkind, 2000). It is represented in terms of probabilities, with a p-value of 0.05 referring to the chance of obtaining the association due to a sampling error being 5/100 (Babbie and Mouton, 2001).

Correlation analysis is used to describe the linear relationship between two or more variables without attributing the effect of one variable on another (Salkind, 2000, Denscombe, 2003). The purpose of determining a correlation coefficient is to ascertain whether a relationship between two or more variables exists and if so, to establish the magnitude and direction thereof (Behr, 1988). The strength of the relationship is indicated by the correlation coefficient (r), which varies in magnitude between +1 and -1 (Behr, 1988:46). The larger the absolute value of the correlation coefficient, the stronger the relationship (Salkind, 2000) as can be seen in Table 5.4. A positive relationship is indicated by a positive correlation coefficient while a negative relationship is indicated by a negative correlation coefficient (Denscombe, 2003).

Table 5.4: Description of the strength of the correlation coefficient (r)

Absolute value of r	Description of relationship
Less than 0.20	Indifferent, almost negligible
0.20 – 0.40	Definite but slight relationship
0.40 – 0.70	Moderate relationship
0.70 – 0.90	Strong relationship
0.90 – 1.00	Very strong relationship

Source: Adapted from Behr (1988:46).

A Pearson product moment correlation was used in this research to determine a linear relationship between the various variables (Salkind, 2000). Significant relationships have been identified where the p-value < 0.05 while strong significant relationships where the p-value < 0.01 have also been highlighted. Scatter plots have been utilised where necessary to indicate the relationships between two variables (Salkind, 2000:205).

The t-test is utilised to determine whether there are significant differences between two groups on a particular variable of interest (Sekaran, 1992). In this research the t-test was utilised to determine whether there were significant differences between gender and (1) the various organisational culture scales, (2) organisation commitment scales and (3) employee performance. It was also utilised to determine any significant differences between location of respondents and (1) the various organisational culture scales, (2) organisation commitment scales and (3) employee performance.

Pearson's chi-squared (χ^2) has been utilised to assess the biographical variables with organisational culture and organisational commitment scales. It makes the assumption that there is no relationship between the variables and then determines the expected frequencies for the cells in the contingency table, these are then compared to the actual frequencies (Babbie and Mouton, 2001:481). This allowed the researcher to identify any significant differences in the responses of each category of biographical variable.

The analysis of variance (ANOVA) is utilised to test for a significant mean difference among more than two groups on a particular variable of interest (Sekaran, 1992). The level of significance of the mean difference amongst the groups is determined by the F statistic however it is not possible to state where the differences lie (Sekaran, 2000). In this research the one way ANOVA has been utilised to measure significant differences in the biographical variables with more than one group and employee performance.

The Multivariate Analysis of Variance (MANOVA) method examines whether group differences occur on more than one dependent variable (Salkind, 2000). This method has

been applied in this research by means of the within subjects Wilks' Lambda Effects test on the three organisational culture scales and the organisational culture gap scores. The Wilks' Lambda has a range of 0 (perfect relationship of predicators to responses) to 1 indicating no relationship of predicators to responses (StatSoft, 2008).

5.8 Ethical considerations

Remenyi (1998:10) highlighted some key considerations that need to be addressed by the researcher in order to ensure the integrity of the research, these include: how the research is to be conducted, how the data is to be processed and what is be done with the findings.

In terms of how the research was conducted, the researcher held discussions with the HR Manager as well as the Remuneration and Benefits Manager to discuss the overall aims of the research as well as what would be measured. Anonymity is when records cannot be linked to names while confidentiality refers to ensuring that data is kept in a controlled manner and minimising the number of people who see or handle the data (Salkind, 2000). Due to the requirement of linking the performance to the culture and commitment questionnaires complete anonymity was not possible and therefore the research had to be conducted strictly confidential. Respondents were provided with the purpose of the research while also being assured that their responses would be treated as strictly confidential and that their names would not be revealed in the research.

During the processing of the data, confidentiality of the response data was upheld by utilising a third party in the organisation (who works with the Performance Management System) to link the performance ratings to the commitment and culture questionnaire results and to delete the respondents' unique numbers. When the data was captured on spreadsheet it was analysed for completeness without any "personal bias" or misrepresentation (Remenyi, 1998:111).

Regarding the utilisation of the findings, the research has been undertaken for academic purposes and the organisation will be provided a copy of the final report.

5.9 Summary

This chapter presented the importance of the research being carried out in Eskom Southern Region and discussed the methodology of the research. Reference was made to the research objectives and hypotheses described in Chapter 1 Section 1.3. The research population and the method of sampling were also stated.

The reliability and validity of the organisational culture and organisational commitment questionnaires has been discussed and they have both been shown to have good reliability. The employee performance measure that was utilised in the research has also been described. The statistical methods utilised in the research have been described together with the ethical considerations for the research.

Chapter 6 will discuss the findings and results of the statistical analysis that was undertaken.

CHAPTER 6: EMPIRICAL FINDINGS AND DISCUSSION

"Unfortunately, the focus has been on a few trees, and there has been little or no attempt

to show how these trees form the interrelated patterns that are the forest"

(Blumberg and Pringle, 1982: 561).

6.1 Introduction

Chapter 5 discussed the research methodology followed in the primary research while the research design and method was established in Chapter 1, Section 1.4. The purpose of this chapter is to determine whether a quantitative relationship exists between organisational culture, organisational commitment as well as employee performance as well as to present the findings of the research.

The population, sample and response rate for the research is presented in this chapter. Descriptive statistics have been used to summarise the quantitative data in order to analyse patterns that are not visible in the raw data (Salkind, 2000). The reliability of the two measurement instruments, namely the organisational culture questionnaire (Harrison and Stokes, 1992) and the organisational commitment questionnaire (Allen and Meyer, 1990), has been established by means of Cronbach's alpha coefficient tests. The relationships between the existing and preferred organisational culture and organisational commitment have been evaluated using Pearson's correlation coefficient. The Pearson's correlation coefficient has also been utilised to test for a relationship between organisational culture and employee performance as well as between organisational commitment and employee performance. The influence of the organisational culture gap on organisational commitment has also been analysed. The various biographical variables have been tested for a relationship between the existing and preferred organisational culture as well as the organisational commitment and employee performance. This has been done to identify differences in the responses that could be attributed to any of the biographical variables.

6.2 Population and sample

The population of 203 employees utilised in this research includes management, supervisory as well as professional staff that have been with the organisation for at least 1.5 years. For the purpose of this research a sample of 170 employees was determined by assuming a response rate of 40% as well as a 5% error and utilising the method described by Bartlett, Kotrlik and Higgins (2001). Additional details are provided in APPENDIX I.

Table 6.1 shows the response rate that was achieved in this research. A total response rate of 54% was achieved however the usable response rate was 49% due to errors in the filling in of the questionnaire. Of the responses received, 9% could not be utilised, this shows a marked improvement from previous research conducted using the same instrument by Van Stuyvesant-Meijen (2007) who had approximately 22% of responses received that could not be utilised. The improvement could be attributed to the use of a pilot study in this research (Babbie and Mouton, 2001) which highlighted some of the possible pitfalls in the filling in of the questionnaire. The questionnaire was then adapted to ensure that a clear explanation was given to respondents as described in Section 5.5.1.

Table 6.1: Population, sample and response rate

	Number	Percentage
Population	203	
Sample	170	84% of population
Responses received	91	54% of the sample
Usable responses	83	49% of the sample
Could not be utilised	8	9% of the responses

6.3 Analysis of biographical data of respondents

The biographical data has been analysed in this section by means of descriptive statistics, utilising bar charts in order to understand the sample under consideration. Figure 6.1 illustrates the gender of the respondents indicating that 67.5% (56) of the respondents were male and 32.5% (27) of the respondents were female. This corresponded very well with the gender ratio of the population namely 67.4% male and 32.6% female.

Figure 6.1: Gender of respondents
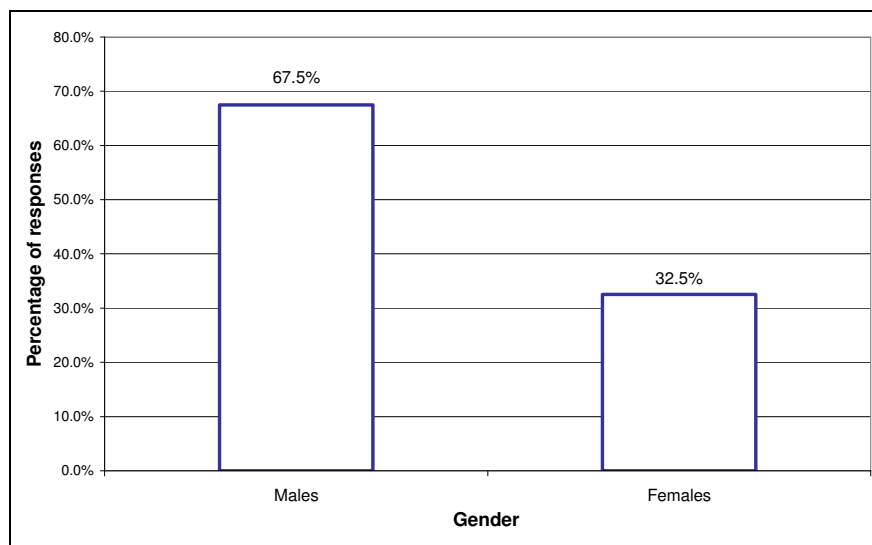
In terms of the number of years of service as illustrated in Figure 6.2 there were zero respondents that were in service for less than one year, this aligns with the selection of the population which had to have at least 1.5 years service. There were 10.8% (9) respondents with 1 to 2 years of service, 2.4% (2) respondents with 3 to 5 years of service, 20.5% (17) respondents with 5 to 8 years of service and the majority of respondents 66.3% (55) with more than 8 years of service.

Figure 6.2: Years of service of respondents
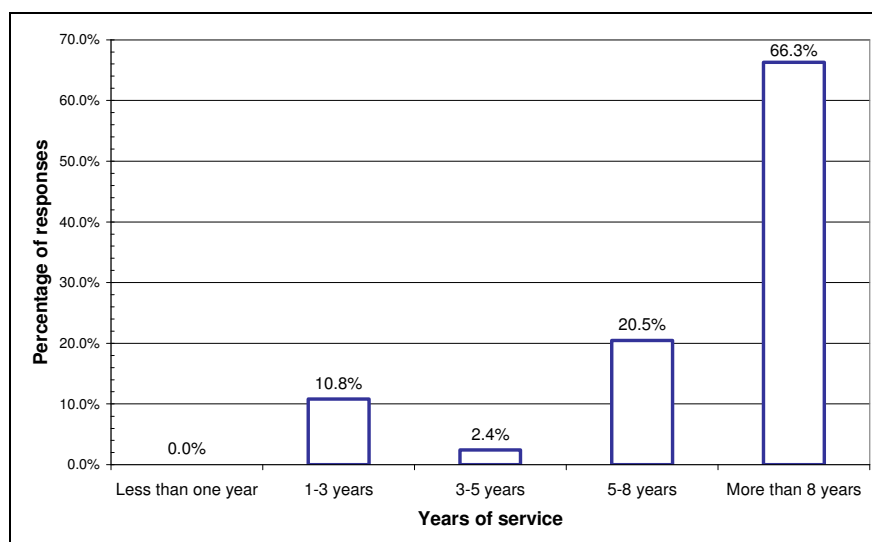
Figure 6.3 shows the number of staff supervised by the respondents. There are 36.1% (30) respondents that do not have direct reports; these respondents would typically be professional technical staff. There were 20.5% (17) respondents that had 1 to 2 staff

members, 14.5% (12) that had 3 to 5 staff and 28.9% (24) that had more than 5 staff members.

Figure 6.3: Staff supervised by respondents
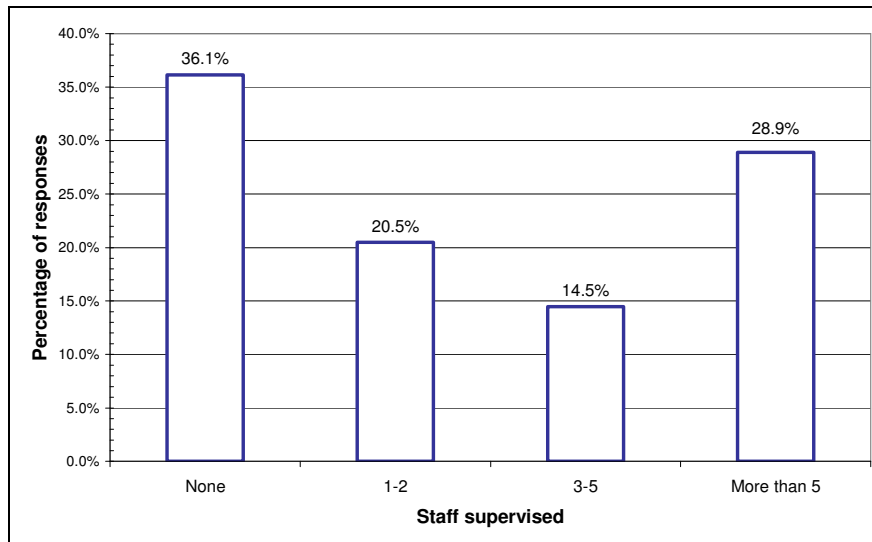
The age of the respondents is illustrated in Figure 6.4 and indicated that there were zero respondents less than 20 years of age, there were 14.5% (12) respondents in the 20 to 29 year bracket, 28.9% (24) in the 30 to 39 (24) year bracket, 32.5% (27) in the 40 to 49 year bracket and 24.1% (20) respondents 50 years and above.

Figure 6.4: Age of respondents
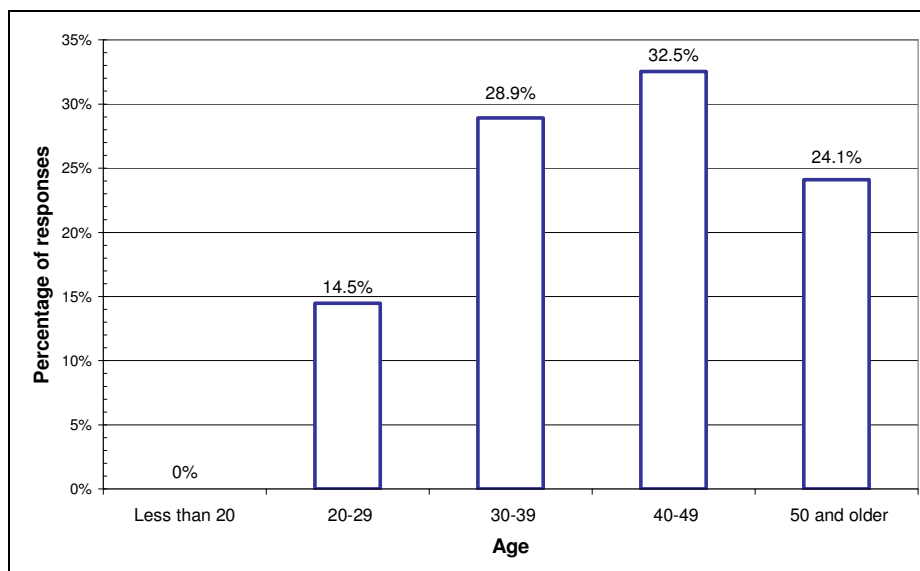
The level of education of the respondents is shown in Figure 6.5. There was 1.2%, 1 respondent, with less than a grade 12 qualification. There were 9.6% (8) respondents with a grade 12 qualification. Figure 6.5 indicted that the majority of respondents, (53%, 44 respondents) had a diploma as highest qualification. There were 18.1% (15) respondents that had a bachelor's degree and a similar number with a post graduate degree. This indicated that the respondents in general are well educated.

Figure 6.5: Education level of respondents
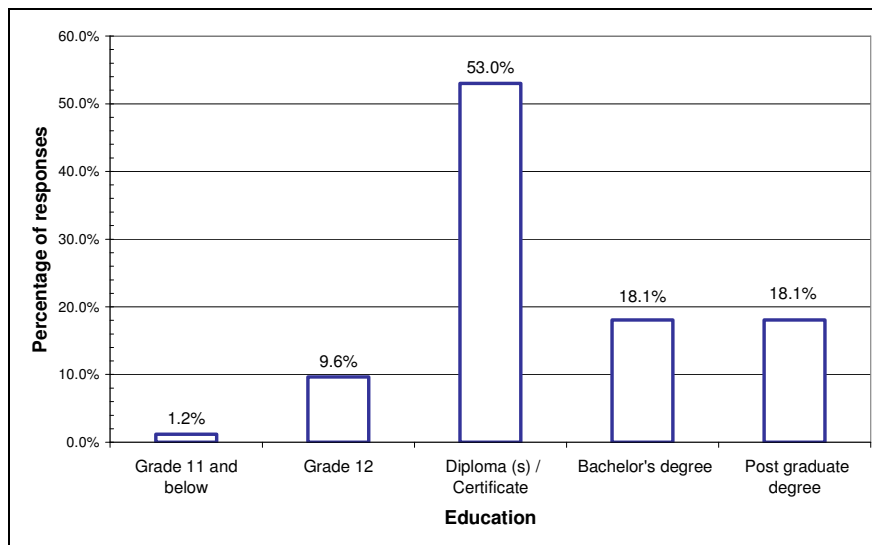
In terms of the location of respondents as shown in Figure 6.6, 65.1% (54) are located at the head office while 34.9% (29) are located at the various area offices.

Figure 6.6: Location of respondents
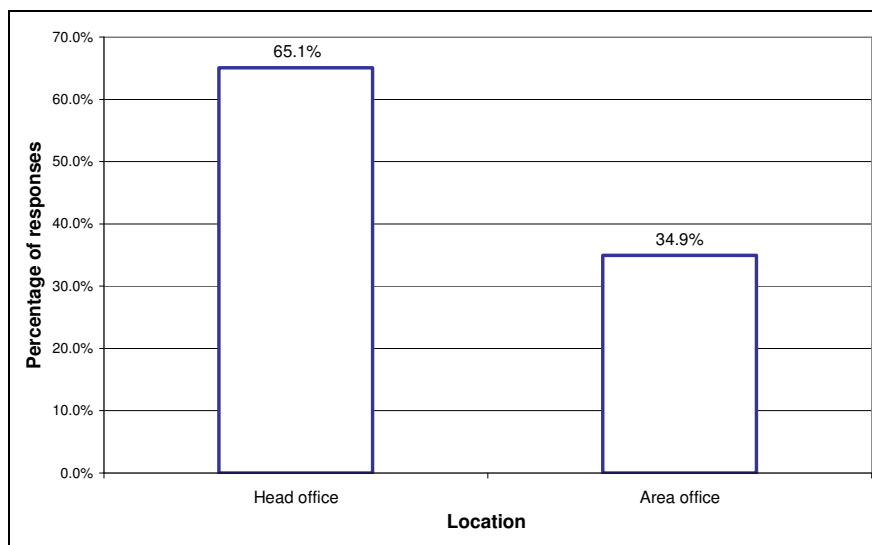
6.4 Internal reliability of the measurement instruments

The intention of this section is to analyse the reliability of the two measurement instruments utilised in this research, namely the organisational culture questionnaire (Harrison and Stokes, 1992) and the organisational commitment questionnaire (Allen and Meyer, 1990). The results obtained are compared to the reliability results of other studies conducted with the same instruments.

6.4.1 Cronbach's alpha reliability coefficient scores for organisational culture instrument

The reliability of the organisational culture instrument was determined by means of the Cronbach's alpha reliability coefficient (Bohrnstedt, 1969). According to Sekaran (1992:287) reliability values above 0.80 are regarded as being good, those between 0.60 and 0.80 are regarded as acceptable and those below 0.60 are regarded as poor. Table 6.2 shows the Cronbach's alpha coefficients for the various organisational culture scales.

Table 6.2: Cronbach's alpha coefficient scores for organisational culture scales

Organisational culture scales	Mean	Standard deviation	Cronbach's alpha	Evaluation based on Sekaran (2000)
Existing Power culture	45.69	8.17	0.79	Acceptable
Existing Role culture	43.70	4.49	0.34	Poor
Existing Achievement culture	31.04	6.38	0.75	Acceptable
Existing Support culture	29.53	5.53	0.60	Acceptable
Preferred Power culture	22.80	4.64	0.69	Acceptable
Preferred Role culture	36.69	5.28	0.70	Acceptable
Preferred Achievement culture	50.45	4.70	0.69	Acceptable
Preferred Support culture	40.23	5.64	0.74	Acceptable

All values rounded to 2 decimal places

Both the existing power culture and the existing achievement culture have acceptable Cronbach's alpha values (0.79 and 0.75 respectively) which indicate that these scales yield consistent results. This corresponds very well with the Cronbach's alpha values of Harrison and Stokes (1992) summarised in Table 5.1 which indicated a 0.90 value for the power culture and a 0.86 value for achievement culture. Existing support culture has an acceptable reliability value of 0.60 which is lower than the value of 0.87 determined by

Harrison and Stokes (1992). The lowest reliability score was for the existing role culture with a value of 0.34, which is significantly lower than the 0.64 determined by Harrison and Stokes (1992) but in line with the value of 0.45 determined by Van Stuyvesant-Meijen (2007). In terms of all the preferred organisational culture scales they all yielded acceptable Cronbach's alpha scores. Additional data has been attached as APPENDIX B.

6.4.2 Cronbach's alpha reliability coefficient scores for organisational commitment instrument

Cronbach's alpha coefficient was utilised to determine the reliability of the organisational commitment questionnaire by Allen and Meyer (1990). Table 6.3 illustrates the Cronbach's alpha coefficients for the various organisational commitment scales.

Table 6.3: Cronbach's alpha coefficient scores for organisational commitment scales

Organisational commitment scales	Mean	Standard deviation	Cronbach's alpha coefficient	Evaluation based on Sekaran (2000)
Affective commitment	21.84	5.80	0.83	Good
Continuance commitment	21.22	5.18	0.68	Acceptable
Normative commitment	22.48	4.33	0.60	Acceptable

All values rounded to 2 decimal places

Table 6.3 indicates that the affective commitment scale has a good reliability of 0.83 which compared favourably with the value of 0.87 determined by Allen and Meyer (1990) and summarised in Table 5.3. The continuance commitment reliability value of 0.68 is acceptable and is between the value of 0.75 determined by Allen and Meyer (1990) and the value of 0.61 determined by Lee *et al*. (2001). The normative commitment reliability value of 0.60 is lower than the lowest reliability value of 0.72 that is documented in Table 5.3 which was determined by Rashid *et al*. (2003) but is higher than the value of 0.30 obtained by Van Stuyvesant-Meijen (2007). Additional analysis data has been attached as APPENDIX C.

The item-total scores were determined for the normative commitment scale as it had the lowest reliability score of the three commitment scales. These scores have been summarised in Table 6.4. Commitment questions 12 and 6 had the greatest impact on the reliability score if deleted. The range of Cronbach's alpha scores are shown in Table 6.4

and vary between 0.63 and 0.49 (range of 0.19), which is less than that found by previous research by Van Stuyvesant-Meijen (2007) who had a range of 0.23. As a result of this relatively large variation the scale cannot be seen as having a high level of internal consistency, which is in line with the conclusion reached by Van Stuyvesant-Meijen (2007).

Table 6.4: Item-total Cronbach's alpha coefficient scores for the normative commitment scale

Normative commitment	Mean if deleted	St Dev if deleted	Cronbach's alpha coefficient
Question 3	18.14	4.01	0.59
Question 6	18.99	3.59	0.50
Question 9	19.55	3.92	0.61
Question 12	19.40	3.52	0.49
Question 15	20.19	3.79	0.52
Question 17	19.17	4.09	0.63
Question 21	19.45	3.88	0.58

All values rounded to 2 decimal places

It can be concluded that the instrument utilised to measure organisational commitment is an overall reliable measure of organisational commitment, despite not having a high level of internal consistency for the normative scale. Additional Cronbach's alpha analysis data has been attached as APPENDIX C.

6.5 Analysis of the organisational culture of respondents

The intention of this section is to identify the existing as well as the preferred organisational cultures in Eskom Southern Region. The gap between the existing and the preferred culture is also quantified and discussed.

6.5.1 Organisational culture profile

This section gives effect to the first research objective, namely to identify the dominant existing and preferred organisational culture within Eskom Southern Region as stated in Chapter1, Section 1.3. The organisational culture profile of the population which represents the management, supervisors and senior technical staff in Eskom Southern Region has been determined by using descriptive statistics to summarise the mean scores of each organisational culture scale as illustrated in Table 6.5 (existing culture) and Table 6.6 (preferred culture). The dominant culture is the culture with the highest overall mean score together as well as being the one highest ranked by the majority of respondents.

From Table 6.5 the highest mean score for the existing culture was the power culture (45.69). This indicated that the majority of respondents regarded the power culture to be a strong prevailing culture in Eskom Southern Region. The second highest mean score was for the role culture (43.7).

Table 6.5: Mean scores of existing organisational culture scales

Organisational culture scales	Mean
Existing Power culture	45.69
Existing Role culture	43.70
Existing Achievement culture	31.04
Existing Support culture	29.53

All values rounded to 2 decimal places

The highest organisational culture score per respondent was obtained for the existing organisational culture scale. This was regarded as the dominant scale per respondent and the results have been depicted in Figure 6.7. The results from Figure 6.7 where the predominant existing culture is the power culture selected by 62.7% of respondents corresponds with the highest mean score of 45.69 for the existing power culture presented in Table 6.5.

Figure 6.7: Dominant existing organisational culture per respondent
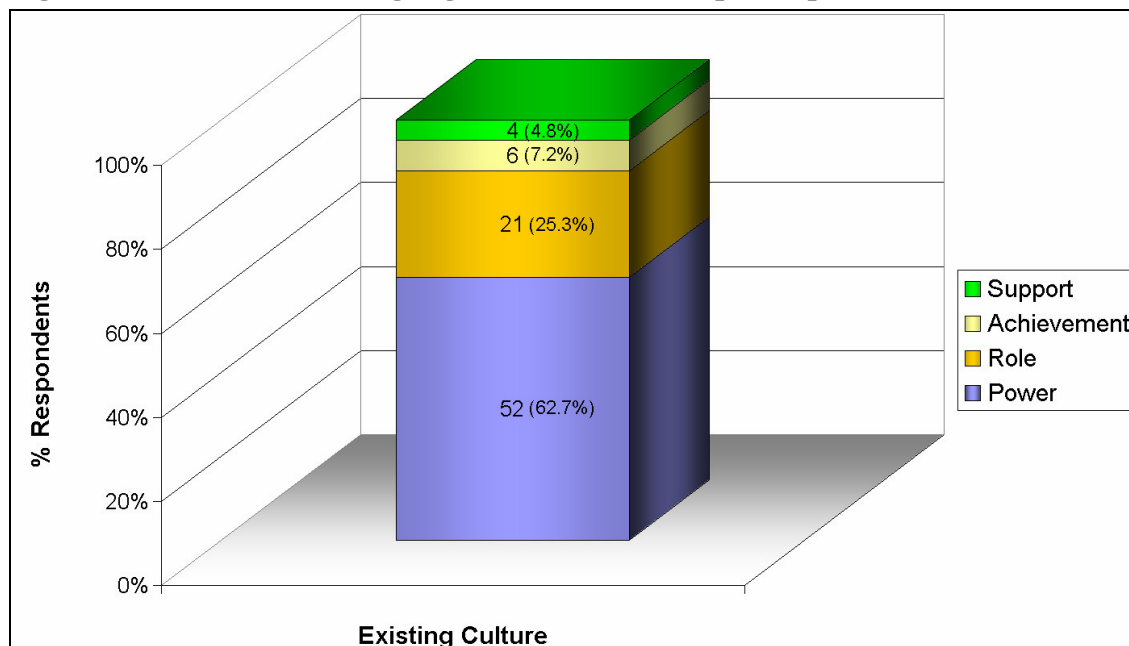
From Table 6.6 the highest mean score for the preferred organisational culture was for the achievement culture (50.45), followed by the support culture (40.23). This indicated that the majority of respondents regarded the achievement culture to be the most preferred culture in Eskom Southern Region.

Table 6.6: Mean scores of preferred organisational culture scales

Organisational culture scales	Mean
Preferred Achievement culture	50.45
Preferred Support culture	40.23
Preferred Role culture	36.69
Preferred Power culture	22.80

All values rounded to 2 decimal places

The highest preferred organisational culture score per respondent was obtained and this was regarded as the dominant scale per respondent. These results have been depicted in Figure 6.8, with the achievement culture being identified as the dominant preferred organisational culture as it was selected by 86.8% of respondents as highest ranked culture. From Table 6.6 it is also the preferred culture with the highest mean score of 50.45.

Figure 6.8: Dominant preferred organisational culture per respondent
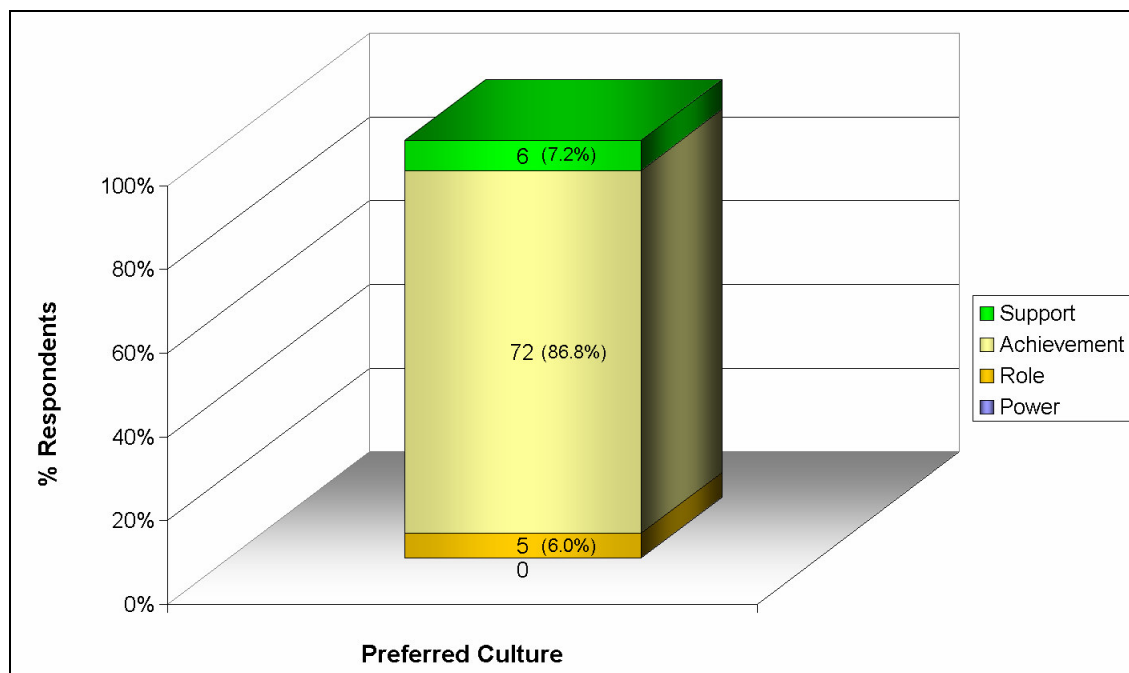
6.5.2 Testing the first set of hypotheses: the determination of the organisational culture gap

This section gives effect to the second research objective, namely to identify the gap between the existing and the preferred organisational culture within Eskom Southern Region as stated in Chapter1, Section 1.3.

It also addresses the first set of hypotheses to determine the gap between the existing and the preferred culture in Eskom Southern Region:

$H_{0\,1}$ – The average gap scores between the existing organisational culture scales and the preferred organisational culture scales are not significantly different.

$H_{a\,1}$ – The average gap scores between the existing organisational culture scales and the preferred organisational culture scales have significant differences.

In order to test the hypotheses a within subjects Multivariate Analysis of Variance (MANOVA) method was utilised. This method was utilised to analyse differences between the gap scores of each subject for the four organisational culture scales. The results of the within subjects MANOVA (Wilks' Lambda Effect test) on the four organisational culture scales are shown in Table 6.7. It indicates that the test is significant ($p<0.01$) and therefore there are strong significant differences in the gap scores for some of the organisational culture scales (the Wilks' Lambda is close to zero).

Table 6.7: MANOVA test on organisational culture gap scores

	Test	Value	F	Effect	Error	p
Organisational culture scales	Wilks	0.16**	144.67	3	80	<0.01

** = p < 0.01, values rounded to 2 decimal places however where result would be 0.00 p<0.01 is used

Significant differences exist between the existing and the preferred organisational culture in Eskom Southern Region indicating that a culture gap does exist. The null hypothesis ($H_{0\,1}$) is therefore rejected and it is concluded that there is sufficient evidence at the 1% level of significant differences between the existing and preferred organisational culture scales.

6.6 Analysis of the organisational commitment of respondents

The intention of this section is to addresses the third research objective of determining the commitment profile for Eskom Southern Region as stated in Chapter1, Section 1.3. Descriptive statistics was used to summarise the mean scores of each organisational commitment scale as illustrated in Table 6.8 in order to determine the organisational culture profile of Eskom Southern Region. Table 6.8 indicated that the mean scores of the three scales are very similar in magnitude, with the normative scale being the highest (22.48), followed by the affective scale (21.84) and the continuance scale (21.22). Normative commitment relates to a feeling of obligation to remain with an organisation.

Table 6.8: Mean scores of organisational commitment scales

Organisational commitment scales	Mean
Normative commitment	22.48
Affective commitment	21.84
Continuance commitment	21.22

All values rounded to 2 decimal places

The highest organisational commitment scale score per respondent was derived and this was regarded as the dominant commitment scale per respondent. The results have been depicted in Figure 6.9 and show that the majority of respondents have a dominant scale of affective commitment (34.9%) followed by those with normative commitment (33.7%) and finally continuance commitment (31.3%).

Figure 6.9: Dominant organisational commitment per respondent
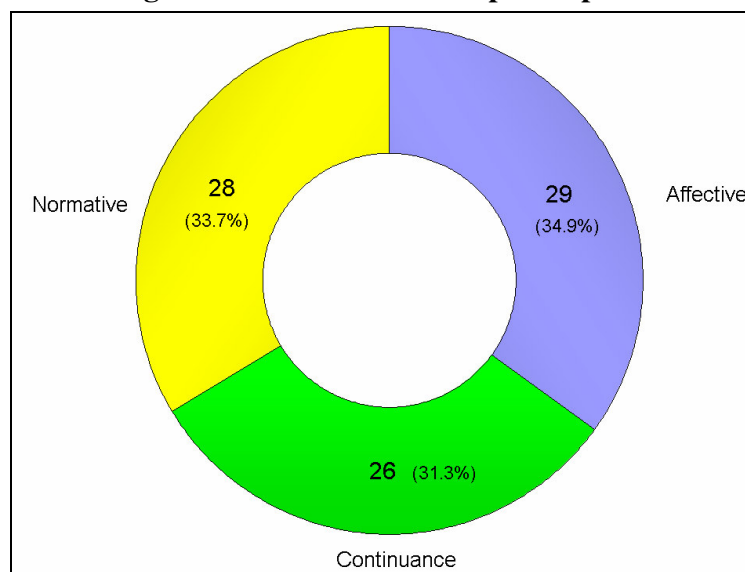
Comparing the results of Table 6.8 and Figure 6.9 it can be noted that the majority of respondents chose an affective organisational commitment scale but the highest mean score was obtained for the normative organisational commitment scale. This can be attributed to those respondents that had a dominant normative commitment scale choosing higher ranking scores for their responses than those respondents who had an affective commitment as their dominant scale. It can be concluded that the organisational commitment in Eskom Southern Region is one that comprises of both the normative as well as the affective commitment scales.

6.7 Analysis of the individual performance of respondents

The intention of this section is to addresses the fourth research objective of analysing the employee performance ratings respondents in Eskom Southern Region as stated in Chapter1, Section 1.3.

Descriptive statistics has been used to analyse the employee performance ratings by calculating the mean, standard deviation and median as illustrated in Table 6.9. The said table indicates that the mean performance score was 3.73, the standard deviation was 0.38, the median was 3.79 and the range of scores varied between 2.56 and 4.49.

Table 6.9: Descriptive statistics for employee performance scores

	Mean	Standard deviation	Median	Minimum score	Maximum score
Employee performance rating	3.73	0.38	3.79	2.56	4.49

All values rounded to 2 decimal places

An overview of the distribution of the data is illustrated in Figure 6.10 with the inter-quartile range being 0.5 and 50% of the scores varying between 3.51 and 4.01.

Figure 6.10: Box plot of the employee performance scores
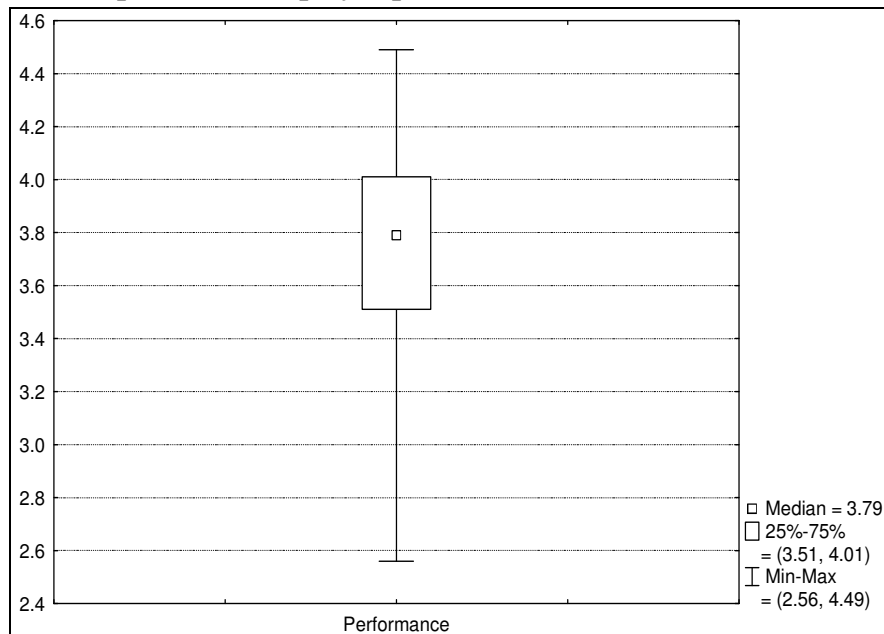
The distribution of the employee performance scores has also been analysed by means of a histogram as shown in Figure 6.11. The bin size utilised for the analysis was 0.25 and the majority of scores (31.3%) are between 3.75 and 4.0. It can be noted that the distribution is negatively skewed meaning that it is not distributed symmetrically around the mean.

Figure 6.11: Distribution of the employee performance scores
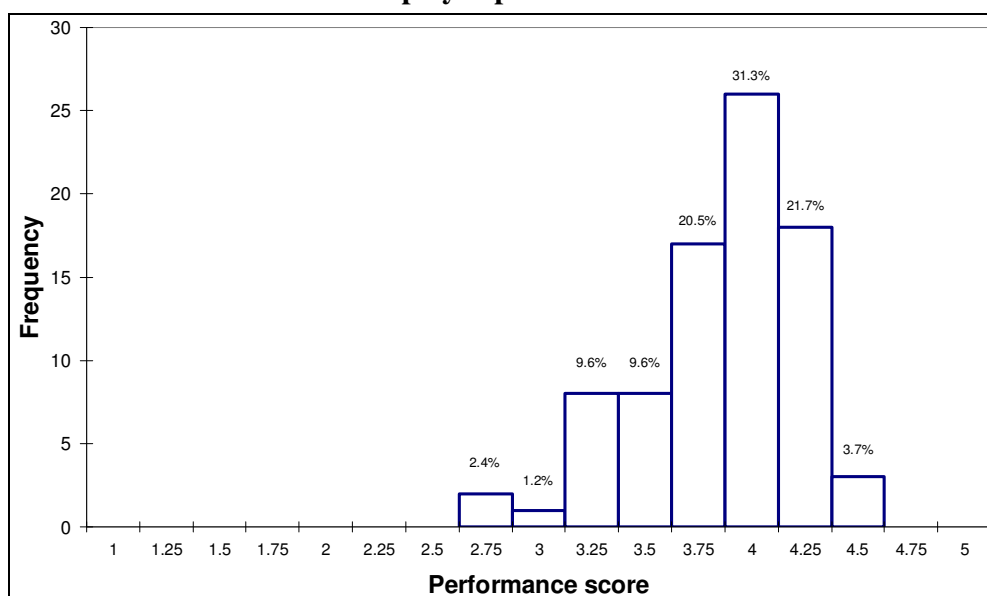
6.8 Relationship between the organisational culture and employee performance

The intention of this section is to evaluate the relationship between organisational culture and employee performance. The relationship between organisational culture and employee performance is assessed in order to give effect to the fifth objective and the second set of hypotheses stated in Chapter1, Section 1.3. The hypotheses have been summarised with the results subsequently discussed.

The second set of hypotheses was defined as:

$H_{0\,2.1}$ – There is no significant relationship between the existing organisational culture and employee performance.

$H_{a\,2.1}$ – There is a significant relationship between the existing organisational culture and employee performance.

$H_{0\,2.2}$ – There is no significant relationship between the preferred organisational culture and employee performance.

$H_{a\,2.2}$ – There is a significant relationship between the preferred organisational culture and employee performance.

The existence of a linear relationship between the organisational culture scales and employee performance was assessed by means of the Pearson's correlation coefficient (r). The strength of the relationship is indicated by absolute value of r, the closer to 1 the stronger the relationship. A positive relationship is indicated by a positive r-value while a negative relationship is indicated by a negative r-value. In terms of Pearson's correlation values are considered significant where $r \leq -0.20$ or where $r \geq 0.20$ (Behr, 1988).

The results of the Pearson's correlation between the existing organisational culture scales and employee performance are shown in Table 6.10. The results of the correlation between the preferred organisational culture scales and employee performance are shown in Table 6.11. Significant relationships where $p<0.05$ have been indicated by an asterix (*), while strong significant relationships where $p<0.01$ have been indicated by a double asterix (**).

Table 6.10: Pearson's correlation between existing organisational culture scales and employee performance

	Existing Power	Existing Role	Existing Achievement	Existing Support
Performance	0.14	0.01	-0.31**	0.15
	p=0.22	p=0.91	p<0.01	p=0.19

** = p < 0.01, values rounded to 2 decimal places however where result would be 0.00 p<0.01 is used

Table 6.11: Pearson's correlation between preferred organisational culture scales and employee performance

	Preferred Power	Preferred Role	Preferred Achievement	Preferred Support
Performance	-0.09	-0.13	0.14	0.09
	p=0.40	p=0.24	p=0.20	p=0.44

* = p < 0.05, values rounded to 2 decimal places

From in Table 6.10 it is clear that there is a relatively slight, but significant, negative relationship between the existing achievement culture and employee performance (r = -0.31, p < 0.01). There are insignificant relationships between employee performance and existing power, role and support organisational culture scales. The null hypothesis ($H_{0\ 2.1}$) is therefore rejected and it is concluded that there is sufficient evidence at the 1% level of significance that there is a negative linear relationship between the existing achievement culture and employee performance.

From Table 6.11 it is evident that there are no significant relationships between employee performance and the four preferred organisational culture scales. The null hypothesis ($H_{0\ 2.2}$) can thus not be rejected. There is therefore insufficient evidence at the 5% level of significance of a relationship between employee performance and the preferred culture scales.

6.9 Relationship between the organisational commitment and employee performance

The intention of this section is to evaluate the relationship between organisational commitment and employee performance. The significant relationship between

organisational commitment and employee performance is assessed in order to give effect to the sixth objective and the third set of hypotheses stated in Chapter1, Section 1.3.

The third set of hypotheses was defined as:

$H_{0\,3}$ – There is no significant relationship between the organisational commitment and employee performance.

$H_{a\,3}$ – There is a significant relationship between the organisational commitment and employee performance.

Pearson's correlation coefficient has been used to assess the existence of a significant linear relationship between the organisational commitment scales and employee performance.

The results of the Pearson's correlation analysis are shown in Table 6.12. It can be noted that that there are no significant relationships between the organisational commitment scales employee performance and therefore the null hypothesis ($H_{0\,3}$) cannot be rejected. There is thus insufficient evidence at the 5% level of significance of a relationship between the organisational commitment scales and employee performance.

Table 6.12: Pearson's correlation between the organisational commitment scales and employee performance

	Affective commitment	Continuance commitment	Normative commitment
Performance	-0.01 (p=0.94)	0.09 (p=0.41)	0.04 (p=0.75)

* = $p < 0.05$, values rounded to 2 decimal places

6.10 Relationship between the organisational culture and commitment

The intention of this section is to evaluate the relationship between organisational culture and organisational commitment. The significant relationship between organisational culture and organisational commitment is assessed in order to give effect to the seventh and eighth objectives as well as the fourth set of hypotheses stated in Chapter1, Section 1.3.

6.10.1 Hypotheses 4.1: relationship between existing organisational culture and organisational commitment

The Pearson's correlation coefficient has been used to assess the existence of a significant, linear relationship between the existing organisational culture scales and the organisational commitment scales.

Hypothesis 4.1 was defined as:

$H_{0\,4.1}$ – There is no significant relationship between the existing organisational culture and organisational commitment.

$H_{a\,4.1}$ – There is a significant relationship between the existing organisational culture and organisational commitment.

Table 6.13 indicates the correlations between the eight organisational culture scales and the three organisational commitment scales. In Section 6.5.1 the dominant culture in Eskom Southern Region was identified as being the power culture. From Table 6.13 it can be noted that the existing power culture correlates negatively with all three organisational culture scales which indicates that an increase in power culture would result in decreased commitment levels. There was a strong, significant negative linear relationship between the power culture and the affective commitment ($r = -0.79$, $p < 0.01$). This indicates that the affective commitment would be significantly negatively affected by an increase in power culture. Affective commitment was established to be an important component of the dominant organisational commitment in Eskom Southern Region as described in Section 6.6. A decrease in affective commitment will therefore have a significant impact on the overall commitment in Eskom Southern Region.

In terms of the existing role and support cultures no significant relationships to the organisational commitment scales were obtained as indicated in Table 6.13. There was however a significant positive linear relationship between the existing achievement culture and affective commitment ($r = 0.30$, $p < 0.01$). This would indicate than an increase in the achievement culture would result in an increase in affective commitment.

Table 6.13: Pearson's correlation matrix between organisational culture and organisational commitment scales

Correlations (InputCultComGap.sta) Marked correlations are significant at p < .05000 N=83 (Casewise deletion of missing data)										
	EP	**ER**	**EA**	**ES**	**PP**	**PR**	**PA**	**PS**	**AC**	**CC**	**NC**
Existing Power	1.00										
Existing Role	0.03	1.00									
Existing Achievement	-0.79**	-0.30**	1.00								
Existing Support	-0.60**	-0.50**	0.25*	1.00							
Preferred Power	-0.23*	-0.10	0.19	0.21	1.00						
Preferred Role	-0.15	-0.05	0.15	0.05	0.40**	1.00					
Preferred Achievement	0.34**	0.17	-0.34**	-0.26*	-0.62**	-0.64**	1.00				
Preferred Support	0.05	-0.02	-0.03	-0.00	-0.70**	-0.70**	0.27*	1.00			
Affective Commitment	-0.32**	-0.06	0.30**	0.18	0.13	0.01	-0.07	-0.06	1.00		
Continuance Commitment	-0.12	-0.03	0.12	0.06	0.01	-0.12	-0.09	0.17	0.21	1.00	
Normative Commitment	-0.05	0.09	-0.07	0.10	0.04	-0.09	-0.01	0.06	0.43**	0.35**	1.00

$* = p < 0.05$, $** = p < 0.01$, values rounded to 2 decimal places

From the research, there were two significant linear relationships between the existing organisational culture and the organisational commitment scales. The null hypothesis ($H_{0\,4.1}$) is therefore rejected and it is concluded that (a) there is sufficient evidence at the 1% level of significance that there is a negative linear relationship between the existing power culture and affective commitment and (b) there is sufficient evidence at the 1% level of significance that there is a positive linear relationship between the existing achievement culture and affective commitment.

6.10.2 Hypotheses 4.2: relationship between preferred organisational culture and organisational commitment

The Pearson's correlation coefficient has been used to assess the existence of a significant, linear relationship between the preferred organisational culture scales and the organisational commitment scales.

Hypothesis 4.2 was defined as:

$H_{0\,4.2}$ – There is no significant relationship between the preferred organisational culture and organisational commitment.

$H_{a\,4.2}$ –   There is a significant relationship between the preferred organisational culture and organisational commitment.

From Table 6.13 it is evident that there is no significant linear relationship between any of the preferred organisational culture scales and the organisational commitment scales. The null hypothesis ($H_{0\,4.2}$) can thus not be rejected. It is therefore concluded that there is insufficient evidence at the 5% level of significance of a relationship between the preferred organisational culture and the organisational commitment.

The majority of respondents (86.8%) selected the achievement culture as their preferred culture as shown in Section 6.5.1. The results of this research indicate that there were no significant differences between the commitment levels of those respondents that selected achievement culture as their preferred culture and those that did not. The respondents' current commitment levels could be influenced by the existing power culture in Eskom Southern Region as established in Section 6.10.1.

6.10.3 Hypothesis 4.3: relationship between organisational culture gap and organisational commitment

The Pearson's correlation coefficient has been used to assess the existence of a significant, linear relationship between the organisational culture gap and the organisational commitment scales.

Hypothesis 4.3 was defined as:

$H_{0\,4.3}$ –   There is no significant relationship between the organisational culture gap and organisational commitment.

$H_{a\,4.3}$ –   There is a significant relationship between the organisational culture gap and organisational commitment.

The Pearson's correlation coefficients between the organisational culture gaps and the organisational commitment scales are summarised in Table 6.14.

Table 6.14: Pearson's correlations between organisational culture gaps and organisational commitment scales

Organisational commitment scale	Power gap	Role gap	Achievement gap	Support gap
Affective commitment	-0.31** (p<0.01)	-0.04 (p=0.69)	0.25* (p=0.02)	0.17 (p=0.13)
Continuance commitment	-0.10 (p=0.37)	0.07 (p=0.55)	0.13 (p=0.23)	-0.07 (p=0.51)
Normative commitment	-0.06 (p=0.59)	0.12 (p=0.26)	-0.05 (p=0.68)	0.03 (p=0.80)

$* = p < 0.05$, $** = p < 0.01$, values rounded to 2 decimal places however where result is 0.00 p<0.01 is used

There was a significant negative linear relationship between the power culture gap and the affective commitment ($r = -0.31$, $p < 0.01$). This indicates that as focus is placed on closing the gap between existing and preferred power culture (decreasing the degree of the power culture in the case of Eskom Southern Region), the level of affective commitment will increase. From Table 6.14 there was also a significant positive linear relationship between the achievement culture gap and affective commitment. This means that as Eskom Southern Region strives to constantly increase the gap between the existing and preferred achievement culture, the level of affective commitment will likewise increase.

From the research as stated in this Section, there were two significant linear relationships between the organisational culture gaps and the organisational commitment scales. The null hypothesis ($H_{0\ 4.3}$) is therefore rejected and it is concluded that (a) there is sufficient evidence at the 1% level of significance that there is a negative linear relationship between the power culture gap and the affective commitment and (b) there is sufficient evidence at the 5% level of significance that there is a positive linear relationship between the achievement culture gap and the affective commitment.

The final set of hypotheses pertain to the biographical variables and these are addressed in the next section.

6.11 Relationship between the biographical variables and organisational culture, organisational commitment and employee performance

The intention of this section is to evaluate the relationship between the biographical variables and organisational culture, organisational commitment and employee performance. The significant relationships have been assessed in order to give effect to the final objective of the research and the fifth set of hypotheses as stated in Chapter1, Section 1.3. The selected biographical variables used in this research include: age, years of service, number of staff supervised, gender, location and education.

6.11.1 Hypothesis 5.1: relationship between biographical variables and existing organisational culture

The Pearson's chi-square test was utilised to assess whether there were significant relationships between the existing organisational culture and the selected biographical variables.

Hypothesis 5.1 was defined as:

$H_{0\,5.1}$ – There is no significant relationship between the selected biographical variables and the existing organisational culture.

$H_{a\,5.1}$ – There is a significant relationship between the selected biographical variables and the existing organisational culture.

The results of the Pearson's Chi-square test have been illustrated in Table 6.15 together with the relevant p-values. It is evident that there is a strong significant relationship between years of service and the existing organisational culture scales.

Table 6.15: Pearson's Chi-square test for biographical variables and existing organisational culture scales

Biographical variable	Pearson's Chi-square	df	p-value
Years of service	31.94**	df=9	p<0.01
No of people supervised	12.76	df=9	p=0.17
Gender	0.36	df=3	p=0.95
Age	8.57	df=9	p=0.48
Education	10.14	df=12	p=0.60
Location	0.26	df=3	p=0.97

** = p < 0.01, values rounded to 2 decimal places however where result would be 0.00 p<0.01 is used

The null hypothesis ($H_{0\ 5.1}$) is therefore rejected and it is concluded that there is sufficient evidence at the 1% level of significance that there is a significant relationship between the years of service and the existing organisational culture scales.

The relationship between existing organisational culture and years of service has been further explored in Figure 6.12. It can be noticed that with an increase in the years of service of respondents the variation in terms of selecting the dominant culture decreases. Respondents with less years of service showed a large variance in scores and scored the achievement existing culture a lot higher than respondents with more years of service.

Figure 6.12: Least square means of dominant existing culture and years of service

YearsSer; LS Means
Current effect: F(3, 79)=3.3238, p=.02388
Effective hypothesis decomposition
Vertical bars denote 0.95 confidence intervals
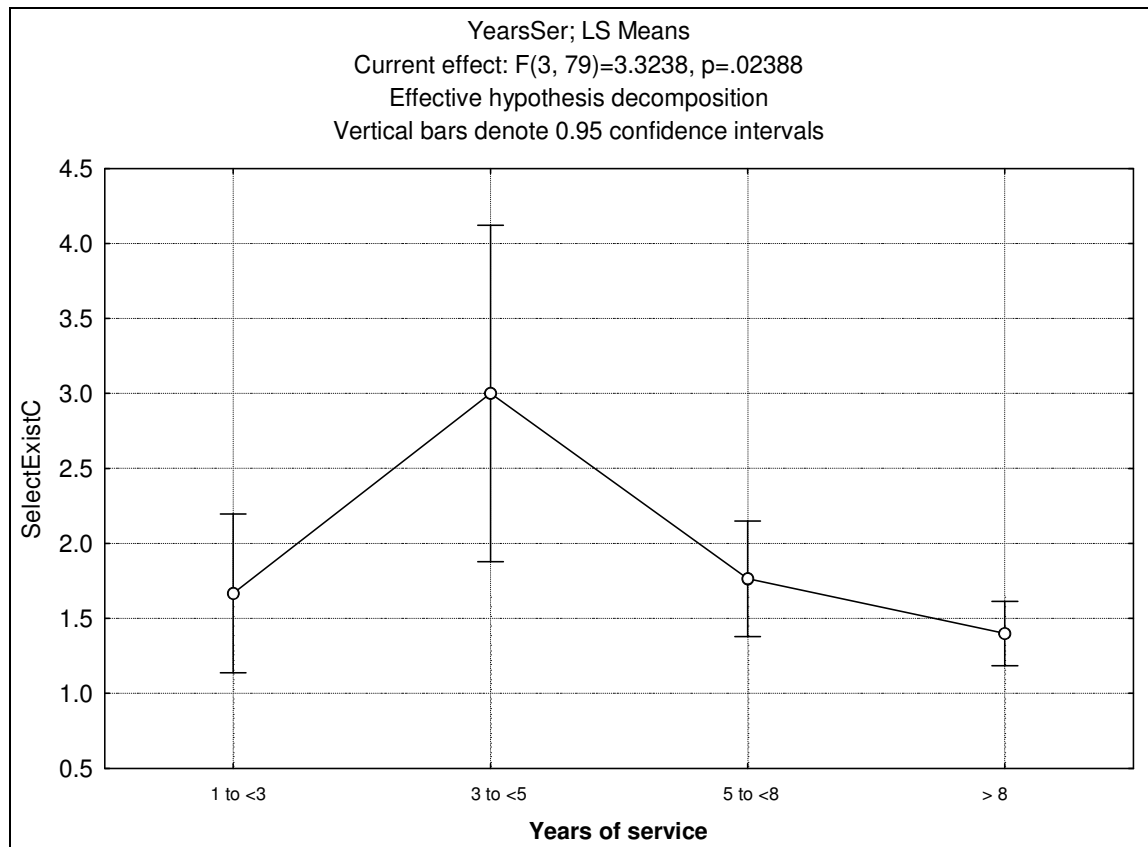
Selected existing culture on Y axis: 1=Power, 2=Role, 3=Achievement and 4=Support

The summarised frequency tables for all the selected biographical variables and the existing organisational culture have been attached as APPENDIX D.

6.11.2 Hypothesis 5.2: relationship between biographical variables and preferred organisational culture

The Pearson's chi-square test was utilised to assess whether there were significant relationships between the preferred organisational culture and the selected biographical variables.

Hypothesis 5.2 was defined as:

$H_{0\,5.2}$ – There is no significant relationship between the selected biographical variables and the preferred organisational culture.

$H_{a\,5.2}$ – There is a significant relationship between the selected biographical variables and the preferred organisational culture.

The results of the Pearson's Chi-square test have been illustrated in Table 6.16 together with the relevant p-values. No significant relationships between the preferred organisational culture scales and any of the biographical variables were observed. The null hypothesis ($H_{0\,5.2}$) can thus not be rejected. It is therefore concluded that there is insufficient evidence at the 5% level of significance of a relationship between the preferred organisational culture and any of the selected biographical variables.

Table 6.16: Pearson's Chi-square test for biographical variables and preferred organisational culture scales

Biographical variable	Pearson's Chi-square	df	p-value
Years of service	10.09	df=6	p=0.12
No of people supervised	9.66	df=6	p=0.14
Gender	0.14	df=2	p=0.93
Age	2.90	df=6	p=0.82
Education	8.14	df=8	p=0.42
Location	1.58	df=2	p=0.45

* = p < 0.05, values rounded to 2 decimal places

The summarised frequency tables for all the selected biographical variables and the preferred organisational culture have been attached as APPENDIX E.

6.11.3 Hypothesis 5.3: relationship between biographical variables and organisational commitment

The Pearson's chi-square test was utilised to assess whether there were significant relationships between the organisational commitment scales and the selected biographical variables.

Hypothesis 5.3 was defined as:

$H_{0\,5.3}$ – There is no significant relationship between the selected biographical variables and the organisational commitment.

$H_{a\,5.3}$ – There is a significant relationship between the selected biographical variables and the organisational commitment.

The results of the Pearson's Chi-square test have been illustrated in Table 6.17 together with the relevant p-values. A significant relationship has been found between organisational commitment and the number of people supervised at a 1% level of significance. The null hypothesis ($H_{0\,5.3}$) is therefore rejected and it is concluded that there is sufficient evidence at the 1% level of significance that there is a significant relationship between the number of people supervised and organisational commitment.

Table 6.17: Pearson's Chi-square test for biographical variables and organisational commitment scales

Biographical variable	Pearson's Chi-square	df	p-value
Years of service	1.92	df=6	p=0.93
No of people supervised	18.69**	df=6	p<0.01
Gender	2.06	df=2	p=0.36
Age	4.86	df=6	p=0.56
Education	5.77	df=8	p=0.67
Location	0.43	df=2	p=0.80

** = p < 0.01, values rounded to 2 decimal places however where result would be 0.00 p<0.01 is used

In a t-test between gender and organisational commitment (APPENDIX H), a significant difference in the affective commitment (p<0.05) and in the normative commitment (p<0.01) was measured between male and female respondents. In both cases male

respondents had higher mean scores in the respective commitment scales. The summarised frequency tables for all the selected biographical variables and the organisational commitment have been attached as APPENDIX F.

The relationship between organisational commitment and the number of staff supervised has been explored in Figure 6.13 by means of a frequency plot. It can be noted that there is a significant difference in the commitment scales of respondents that have no staff to supervise and those that have three or more. From Figure 6.13 the majority of respondents with no staff to supervise have a high continuance commitment while those with three or more staff have a high affective commitment with a relatively lower continuance commitment. A possible explanation for this relationship could be that respondents with more staff reporting to them enjoy having authority and making a difference in people's lives, they would also feel they have more options available to them. People without staff could feel trapped by having limited opportunities as they may be judged as not being good at managing staff, they may also be well paid (limiting other options) but may not enjoy their current work.

Figure 6.13: Frequency plot of the dominant organisational commitment scales and the number of staff supervised
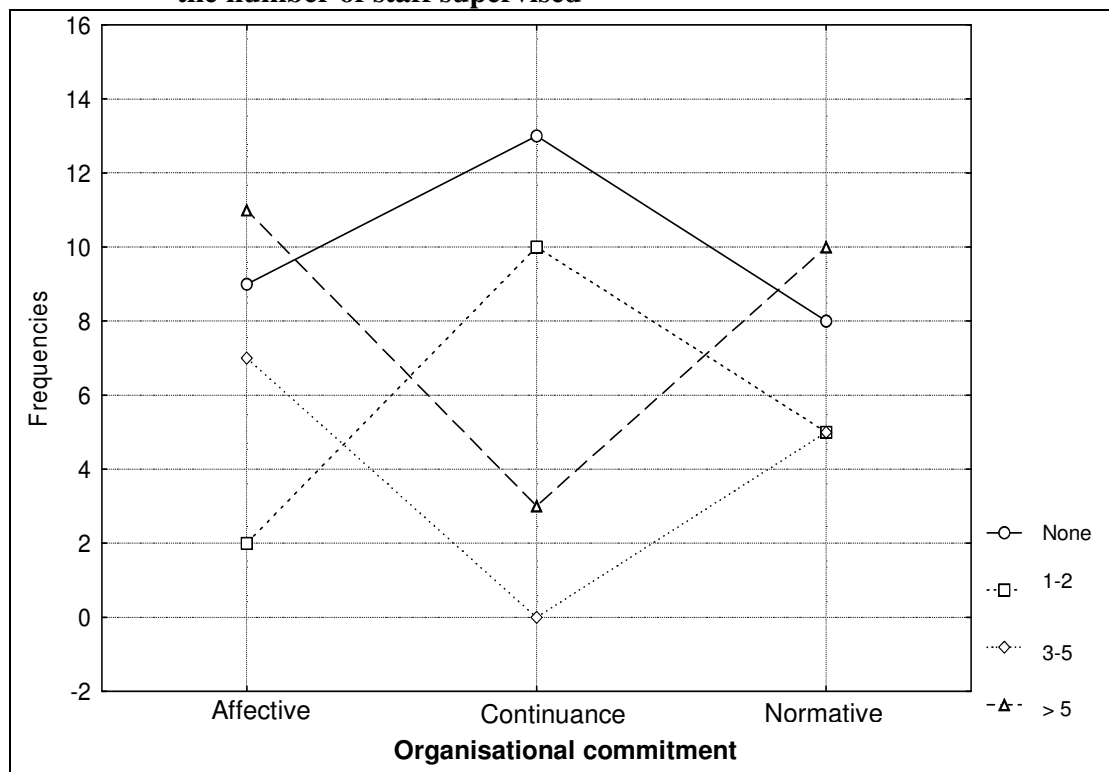
6.11.4 Hypothesis 5.4: relationship between biographical variables and employee performance

The Pearson's correlation coefficient has been used to assess the existence of a significant, linear relationship between the employee performance and the selected biographical variables.

Hypothesis 5.4 was defined as:

$H_{0\,5.4}$ –   There is no significant relationship between the selected biographical variables and the employee performance.

$H_{a\,5.4}$ –   There is a significant relationship between the selected biographical variables and the employee performance.

The correlation results have been illustrated in Table 6.18 and indicates a slight but significant positive linear relationship between the age of respondents and employee performance ratings ($r = 0.32$, $p < 0.01$) at the 1% level. The null hypothesis ($H_{0\,5.4}$) is therefore rejected and it is concluded that there is sufficient evidence at the 1% level of significance that there is a significant positive linear relationship between the age of respondents and their performance rating scores.

Table 6.18: Pearson's correlation for biographical variables and employee performance scores

Biographical variable	Pearson's correlation	p-value
Years of service	0.13	p=0.25
No of people supervised	-0.02	p=0.84
Gender	-0.10	p=0.39
Age	0.32**	p<0.01
Education	-0.20	p=0.08
Location	-0.04	p=0.70

** = p<0.01 values rounded to 2 decimal places however where result would be 0.00 p<0.01 is used

A negative correlation was observed between employee performance and education, though it was not significant it has been further analysed as indicated in APPENDIX G. A possible reason for this relationship is that many of the younger employees have higher qualifications than some of the older employees who have higher performance ratings.

In order to better understand the relationship between age and employee performance a scatter plot of age and employee performance rating was produced as shown in Figure 6.14 The linear relationship between the two variables can clearly be seen. A possible reason for this relationship is that an older employee would have a broader working experience and knowledge that may influence his/her ability to perform more successfully in their job than a younger employee.

Figure 6.14: Scatter plot of employee performance rating versus age
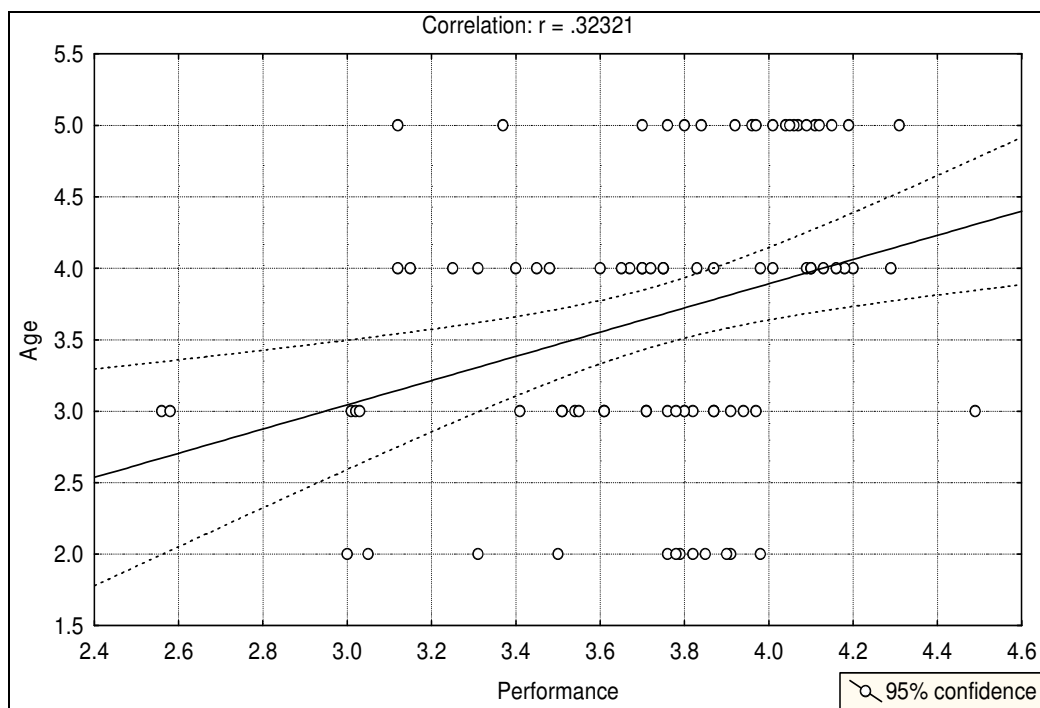
The least mean squares graph of employee performance versus age is shown in Figure 6.15. This graph indicates that the younger employees (between 20-29 years of age) perform slightly better than those that are between 30 and 39 years of age. A possible reason for this is that when employees join the organisation they may have slacker measures than those that have been there for some time. There is also a larger variation of performance scores in younger employees than in the other age groups. This could also be the result of measures that have not been determined correctly. A linear relationship is observed between the age group 30-39 and > 50 years. This relationship correlates with Figure 6.14 as described in this Section and the same explanation would apply.

Figure 6.15: Least square means of age versus employee performance
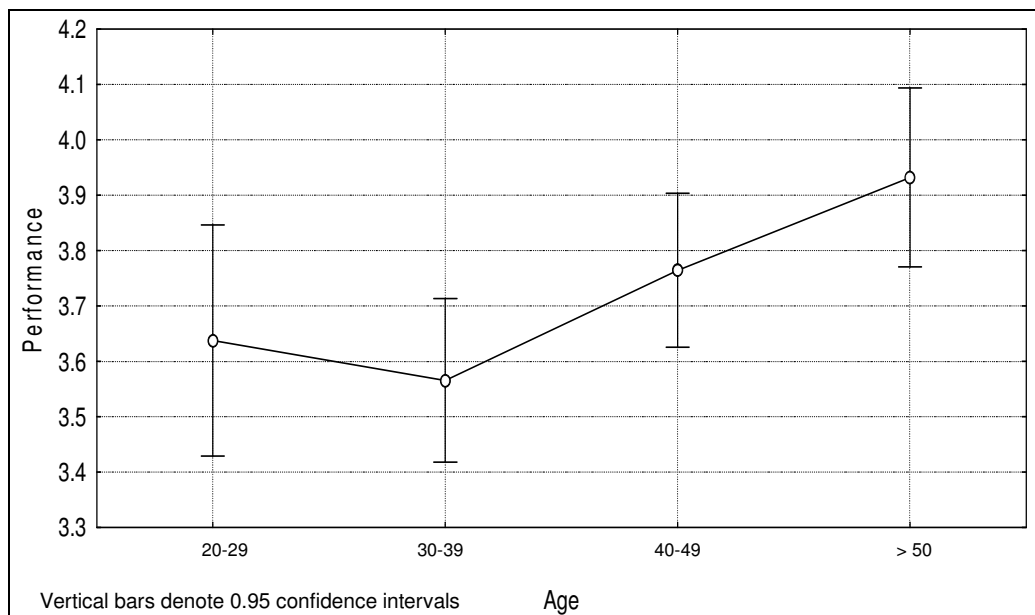
6.12 Summary

The empirical results of the research were presented in this chapter. The response rates and sample was discussed. Descriptive statistics was utilised to gain a better understanding of the data and to visualise any patterns by means of frequency charts. The reliability of the two instruments utilised was tested by means of the Cronbach's alpha coefficient and found to be acceptable.

The results of the first hypothesis indicated significant differences between the existing and preferred organisational culture scales thereby confirming the existence of a culture gap.

The second set of hypotheses found a significant relationship between the existing organisational culture and employee performance. No significant relationship between the preferred organisational culture and employee performance was measured.

The third hypothesis indicated no significant relationship between the organisational commitment and employee performance.

The fourth set of hypotheses measured significant linear relationships between the existing organisational culture and the organisational commitment scales. No significant relationship was measured between the preferred organisational culture and organisational commitment. There were two significant linear relationships measured between the organisational culture gaps and the organisational commitment scales.

The fifth set of hypotheses measured the influence of the selected biographical variables on organisational culture, organisational commitment and employee performance. Some significant relationships between certain biographical variables were found.

The following chapter concludes the research by providing an overview of the findings together with the relationship to previous research. Recommendations and limitations relevant to the research are also presented.

CHAPTER 7: SUMMARY, RECOMMENDATIONS AND CONCLUSIONS

"What is most effective for a given company will depend on its history, culture, and management style. Some past practices may still be useful, but everything should be strenuously challenged" (Eccles, 1991:137).

7.1 Introduction

Having presented the results of the primary research in the previous chapter, the implications of these results are discussed as well as their relation to previous research. An overview of the research has been presented in this chapter together with recommendations and the limitations of this research.

7.2 Overview of the research

The Electricity Distribution Industry (EDI) in South Africa is in the process of restructuring into six Regional Electricity Distributors (REDs). This will entail the merging of the national electricity utility, Eskom Distribution with municipalities to consolidate skills and to improve on efficiencies. This integration would involve the assimilation of not only physical assets but also various organisational cultures into a separate organisation responsible for supplying electricity services within its region. A separate challenge facing Eskom is an intensive capital expansion program to increase generation capacity which will require a committed workforce to execute. Organisational culture has been regarded as leading to greater productivity as well as generating commitment to the values and philosophies of the organisation (Denison, 1984; Kotter and Heskett, 1992; Lahiry, 1994; Lok and Crawford, 2003).

The purpose of the research as stated in Chapter 1, Section 1.3 was to determine whether there was a significant relationship between the organisational culture, organisational commitment and employee performance in Eskom Southern Region. Various objectives and hypotheses as stated in Chapter 1, Section 1.3 were formulated in order to achieve this purpose.

This research was undertaken in two phases, namely the secondary research consisting of the literature review and the primary research consisting of the empirical study. The secondary research has been included in Chapters 2, 3 and 4 which addressed the theoretical concepts of organisational culture, organisational commitment as well as employee performance. The various inter-relationships between these concepts were also discussed. A number of organisational culture typologies were analysed and compared to one another. The framework by Harrison and Stokes (1992) was selected as the organisational culture instrument for this research and the motivation for utilising it was provided. Similarly, various organisational commitment typologies were addressed and compared with each other. The typology of Allen and Meyer (1990) was selected for the organisational commitment instrument and the motivation for utilising it was discussed. The employee performance was measured using Eskom Southern Region's performance management process and consisted of a final rating score assessed once a year.

The primary research has been included in Chapters 1, 5 and 6 which addressed the reliability of the measurement instruments, the data collection and the testing of the research hypotheses.

The reliability of the organisational culture and commitment instruments was determined by means of the Cronbach's alpha reliability coefficient. In terms of the organisational culture instrument only one scale (existing role culture) had a poor reliability score of 0.34 while the remaining scales ranged between 0.6 and 0.79 which regarded as being acceptable scores. These results are inconsistent with that obtained by Harrison and Stokes (1992) but correspond with research done by Van Stuyvesant-Meijen (2007) in the South African context. The reliability of the organisational commitment questionnaire was determined as being good for the affective commitment scale (0.83) and acceptable for both the continuance (0.68) as well as the normative (0.60) scales. This was generally in line with results obtained by Allen and Meyer (1990) and Rashid *et al.* (2003) except that some reliabilities were slightly lower than those documented by previous research.

The results and findings of the research will be discussed in the next section.

7.3 Discussion of the findings

The findings of the research have been presented in this section together with a discussion on their implications as well as their relation to previous research.

7.3.1 The organisational culture profile

The organisational culture at Eskom Southern Region was analysed by means of the Harrison and Stokes (1992) organisational culture questionnaire. The organisational culture was diagnosed in terms of how the respondents perceived the existing culture to be and what type of culture they would prefer to have in Eskom Southern Region.

The dominant existing organisational culture was assessed to be the power culture (mean of 45.69 and selected by 62.7% of respondents). The second highest existing culture is the role culture with a mean of 43.70 and selected by 25.3% of respondents as their dominant existing organisational culture. This would mean that the organisational culture is regarded as being autocratic and dominating, where power is concentrated in a few; as well as being regarded as formalised and orderly with a system of structures and procedures (Harrison, 1972; Harrison and Stokes, 1992). It can therefore be inferred that some of the disadvantages of a power culture such as unilateral action and abuse of power by the leader has been tempered with some advantages of the role culture such as clear policies and procedures (Harrison and Stokes, 1992). A common feature of both the role and power cultures is their dependence on the use of rewards and punishments to motivate members (Harrison and Stokes, 1992).

In terms of the preferred organisational culture, the vast majority of respondents (86.8%) agreed on the achievement culture as being the most preferred organisational culture. This culture is defined by excellence of work, performance for satisfaction, together with a personal commitment to the task (Harrison, 1993). A disadvantage is that employees may become disillusioned if results are not sustained or experience burn out due to the high pressure (Harrison and Stokes, 1992).

The achievement culture is best suited to aligning the organisation behind a common purpose (Harrison and Stokes, 1992) and is therefore appropriate for the current environment that Eskom Southern Region is facing. Most culture changes take place from power and role orientations to a culture based on achievement (Harrison, 1993).

7.3.2 The organisational culture gap between existing and preferred culture

The first hypothesis tested for the existence of a culture gap by means of a MANOVA (Wilks' Lambda Effect test) and significant differences between the existing and preferred organisational culture gap scores were measured. This result can be interpreted as there being a significant difference between the existing culture and the preferred culture in Eskom Southern Region. The first null hypothesis ($H_{0\ 1}$) was thus rejected. This result concurs with research conducted by Van Stuyvesant-Meijen (2007) who also statistically measured a culture gap in a South African organisation.

7.3.3 The relationship between organisational culture and employee performance

The second set of hypotheses tested the relationship between organisational culture and employee performance by means of the Pearson's correlation coefficient. A significant relationship between the existing organisational culture and employee performance was measured and therefore the null hypothesis ($H_{0\ 2.1}$) was rejected. A relatively slight, but significant, negative relationship between the existing achievement culture and employee performance was measured ($r = -0.31$, $p < 0.01$). This result can be interpreted by considering that those respondents with high performance rating scores would know what is required to achieve high performance results and therefore rated the existing culture low in terms of the achievement scale. Similarly, those respondents with low performance scores may not understand the implications of an achievement culture and rated the existing culture as high in terms of the achievement scale. No research was found between organisational culture and employee performance to relate these findings to.

No significant relationship between the preferred organisational culture and employee performance was measured and therefore the null hypothesis ($H_{0\ 2.2}$) was not rejected.

7.3.4 The organisational commitment profile

The organisational commitment at Eskom Southern Region was analysed by means of the Allen and Meyer (1990) organisational commitment questionnaire. The results of the diagnosis identified that the affective and normative commitment scales were the dominant organisational commitment scales in Eskom Southern Region. This means that there are staff members that have an emotional attachment to the organisation as well as feelings of obligation to remain with the organisation.

The findings of this research are supported by findings from Rashid *et al*. (2003) but differ from findings by Van Stuyvesant-Meijen (2007) who identified only the normative commitment as being dominant in a South African organisation.

7.3.5 The relationship between organisational commitment and employee performance

The third hypothesis tested the relationship between organisational commitment and employee performance by means of the Pearson's correlation coefficient. No significant relationship between the organisational commitment and employee performance was found and therefore the null hypothesis ($H_{0\,3}$) was not rejected.

This finding differs from results by Meyer *et al*. (1989) who found that affective commitment was positively correlated with employee performance while continuance commitment was negatively correlated with employee performance. A possible reason for this variation in results could be that Meyer *et al*. (1989) utilised a common employee performance assessment tool while the employee performance scores for this research were based on supervisor ratings of job specific outputs which differed between individuals.

7.3.6 The relationship between organisational culture and organisational commitment

The fourth set of hypotheses tested the relationship between organisational culture and organisational commitment by means of the Pearson's correlation coefficient. Two

significant linear relationships between the existing organisational culture and the organisational commitment scales were measured and the null hypothesis ($H_{0\ 4.1}$) was rejected. A slight but significant positive linear relationship between the existing achievement culture and affective commitment ($r = 0.30$, $p < 0.01$) was measured. This would indicate than an increase in the achievement culture would result in an increase in affective commitment (the dominant organisational commitment scale in Eskom Southern Region). This finding is supported by previous research in that a high affective commitment would result higher employee performance/organisational effectiveness (Angle and Perry, 1981; Jaramillo *et al*., 2005; Meyer *et al*., 1989).

A strong, significant negative linear relationship between the existing power culture and the affective commitment ($r = -0.79$, $p < 0.01$) was also measured. This indicates that the affective commitment would be significantly negatively affected by an increase in power culture in Eskom Southern Region. This finding is supported by a similar significant negative linear relationship between the existing role organisational culture and affective commitment obtained by Van Stuyvesant-Meijen (2007) in a South African organisation.

No significant relationship between the preferred organisational culture and organisational commitment was measured and therefore the null hypothesis ($H_{0\ 4.2}$) was not rejected. The results of this research therefore indicated that there were no significant differences between the commitment levels of those respondents that selected achievement culture as their preferred culture and those that did not. The respondents' current commitment levels could be influenced by the existing power culture in Eskom Southern Region as discussed in Section 7.3.1. One can therefore conclude that commitment levels could rise in future (in terms of the positive linear relationship between existing achievement culture and affective commitment described above) if the preferred achievement culture were to be increased. This result is supported by results obtained by Van Stuyvesant-Meijen (2007) who did not measure a significant relationship between the preferred organisational culture and organisational commitment.

There were two significant linear relationships measured between the organisational culture gaps and the organisational commitment scales and therefore the null hypothesis ($H_{0\ 4.3}$) was rejected. There was a slight but significant negative linear relationship between the power culture gap and the affective commitment (r = -0.31, p < 0.01). This indicates that as focus is placed on closing the gap between existing and preferred power culture (decreasing the degree of the power culture in the case of Eskom Southern Region), the level of affective commitment will increase. This finding is supported by previous research by Bourantas and Papalexandris (1992) which found a negative relationship between the organisational culture gap and organisational commitment.

A slight but significant positive linear relationship between the achievement culture gap and affective commitment was also measured (r = 0.25, p = 0.02). This means that as Eskom Southern Region strives to constantly increase the gap between the existing and preferred achievement culture (create the need to move more towards an achievement culture), the level of affective commitment will likewise increase. This result is not supported by the findings of Van Stuyvesant-Meijen (2007) who did not measure any significant relationship between the organisational culture gap and organisational commitment.

7.3.7 The relationship between the biographical variables and the organisational culture, organisational commitment and employee performance

The fifth set of hypotheses tested the relationships between the biographical variables and the organisational culture, organisational commitment and employee performance by means of the Pearson's chi-square test.

A strong significant relationship between the years of service and the existing organisational culture scales was obtained (χ^2 = 31.94, p < 0.01). The null hypothesis relating the biographical variables to the existing culture ($H_{0\ 5.1}$) was rejected. This relationship could be attributed to the longer an employee is with an organisation, the better they would understand its underlying assumptions as described by Schein (1992).

This would result in less variance amongst respondents that have been with the organisation for a longer period of time.

No significant relationships exist between the preferred organisational culture scales and any of the biographical variables. The null hypothesis ($H_{0\ 5.2}$) could thus not be rejected. The conclusion that can be reached based on this finding and the analysis of the preferred culture profile is that there was a common agreement across all respondents on the achievement culture being the most preferred organisational culture in Eskom Southern Region. This finding is not supported by research conducted by Van Stuyvesant-Meijen (2007) who found two significant relationships, namely between the department where respondents worked as well as education and preferred organisational culture.

A significant relationship was found between organisational commitment and the number of people supervised ($\chi^2 = 18.69$, $p < 0.01$). The null hypothesis relating the biographical variables to the organisational commitment ($H_{0\ 5.3}$) was thus rejected. It was noted that the majority of respondents with no staff to supervise have a continuance commitment while those with three or more staff have a strong affective commitment with a relatively lower continuance commitment. This would indicate that these employees have found satisfaction in their work and that they have received adequate leadership training.

A slight but significant positive linear relationship between the age of respondents and employee performance ratings ($r = 0.32$, $p < 0.01$) was measured. The null hypothesis relating the biographical variables to the employee performance ($H_{0\ 5.4}$) was thus rejected. This finding can be attributed to an older employee generally having a diverse working experience that may influence his/her ability to perform in the job according to the performance model by Cummings and Schwab (1973) described in Chapter 4, Section 4.4. This could explain why older individuals tended to have higher performance ratings than younger individuals that would usually still be undergoing training.

7.3.8 Summary of the various findings of the research

The results of the various hypotheses tests have been summarised in Table 7.1. For the hypotheses where the null hypothesis has been rejected, the alternative hypothesis has been accepted. In total there was sufficient evidence to reject seven null hypotheses while there was insufficient evidence found to reject four null hypotheses.

Table 7.1: Summary of the results of the hypotheses testing

Stated Hypotheses	H_0 rejected	H_0 not rejected
$H_{0\,1}$ – The average gap scores between the existing organisational culture scales and the preferred organisational culture scales are not significantly different.	✓	
$H_{0\,2.1}$ – There is no significant relationship between the existing organisational culture and employee performance.	✓	
$H_{0\,2.2}$ – There is no significant relationship between the preferred organisational culture and employee performance.		✓
$H_{0\,3}$ – There is no significant relationship between the organisational commitment and employee performance.		✓
$H_{0\,4.1}$ – There is no significant relationship between the existing organisational culture and organisational commitment.	✓	
$H_{0\,4.2}$ – There is no significant relationship between the preferred organisational culture and organisational commitment.		✓
$H_{0\,4.3}$ – There is no significant relationship between the organisational culture gap and organisational commitment.	✓	
$H_{0\,5.1}$ – There is no significant relationship between the selected biographical variables and the existing organisational culture.	✓	
$H_{0\,5.2}$ – There is no significant relationship between the selected biographical variables and the preferred organisational culture.		✓
$H_{0\,5.3}$ – There is no significant relationship between the selected biographical variables and the organisational commitment.	✓	
$H_{0\,5.4}$ – There is no significant relationship between the selected biographical variables and the employee performance.	✓	

The various significant relationships as described in this section have been illustrated in Figure 7.1 using the theoretical framework of the research first presented in Chapter 1, Section 1.3. The various variables and scales with significant relationships have been included together with either a positive (+) or negative (-) linear relationship indicator.

Figure 7.1: The theoretical framework showing the significant relationships
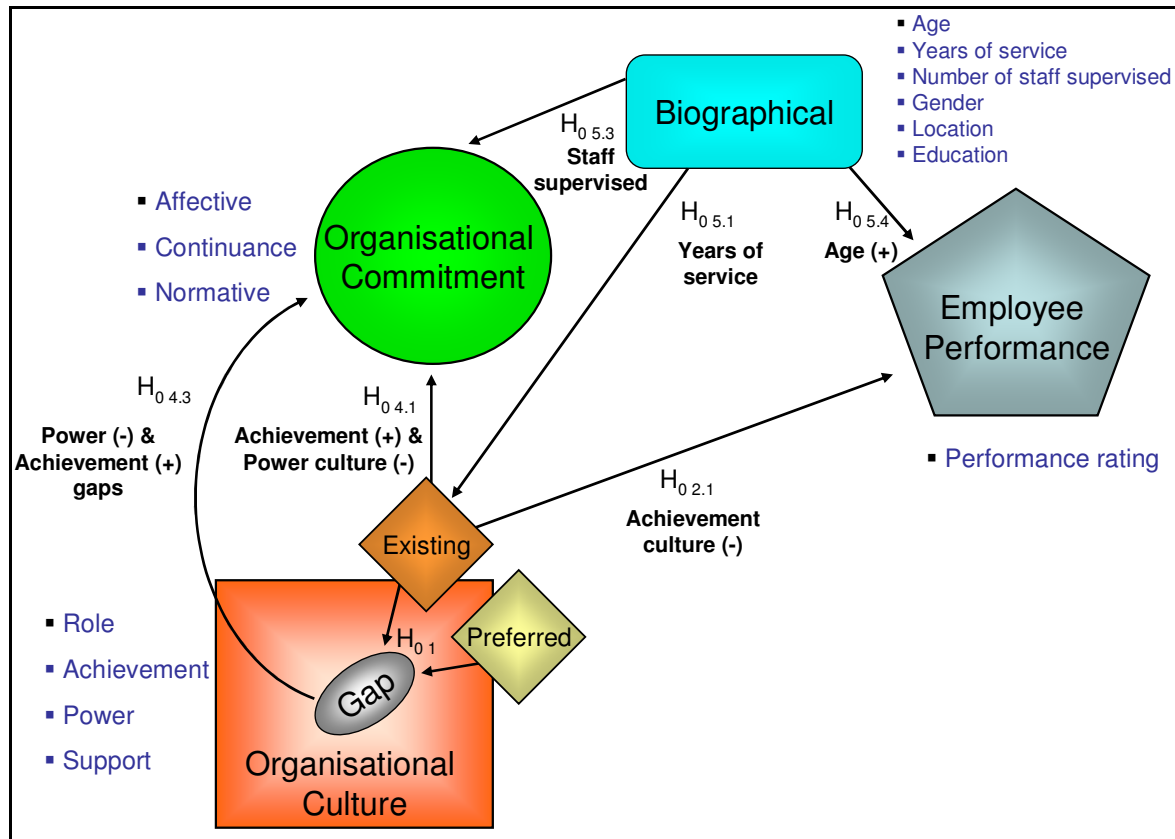
Source: Researcher's own construction based on Allen and Meyer (1990) and Harrison and Stokes (1992).

7.4 Recommendations

With regards to the research findings, several recommendations pertaining to Eskom Southern Region as well as future research have been identified.

7.4.1 Recommendations for Eskom Southern Region

The existing organisational culture has been identified as being a power culture. This culture has an element of fear as it is based on rewarding compliance and punishing non-compliance. The preferred culture of the majority of staff members is the achievement

culture, which is defined by excellence of work and performance for satisfaction. It is recommended that the Management of Eskom Southern Region consider the implications of a change in the existing power culture to an achievement culture. According to the research findings this will have a positive impact on the affective commitment of employees.

In order to effect this change the following is recommended:

- Constantly reinforce the mission of the organisation by senior management both verbally and through actions to ensure its entrenchment and understanding.
- Continuing to promote the values of Eskom at every opportunity.
- Employees at the lower levels need to feel empowered to make decisions.
- Failure to be viewed as an opportunity to learn and grow.
- Authority to be given to employees based on their ability to contribute to the mission of the organisation.

It was shown that those respondents that were older were able to obtain higher performance ratings than younger employees. This would indicate that there are a number of talented older staff members in Eskom Southern Region that could be utilised to mentor and develop younger employees. It is therefore recommended that a mentorship program be implemented with measurable targets that would incentivise mentors to train and develop younger staff.

The performance ratings have been found to have a standard deviation of 0.38 around a mean of 3.73 which would indicate that the vast majority of staff are performing well above their expected performance. This could well be the case but it may also be due to inconsistent application of the 50% probability requirement to determine the expected performance targets. It is therefore recommended that the various targets be reviewed statistically over a number of years to ensure that they comply with the statistical requirement as stipulated in the Eskom performance management procedure (Eskom, 2007). This will ensure more consistency in terms of performance ratings and will result in a larger spread of performance rating scores.

7.4.2 Recommendations for future research

In terms of opportunities for future research, it is recommended that:

- This research be extended to other Eskom regions to be able to gauge whether there are any significant differences between regions.

- The research be extended to other South African organisations on a broader scale. This will be able to test the validity of the research results and whether they are applicable to other organisations.

- Future research in Eskom Southern Region could be carried out into the relationship between organisational commitment and the number of staff supervised to determine the reasons for the relationships that were observed.

- Future research work should consider the utilisation of a standardised employee performance measure that will assist in ensuring similar criteria for evaluating employee performance.

7.5 Limitations of the research

Some limitations pertaining to this research have been listed below:

- The research results were obtained by means of quota sampling and care should be taken when generalising beyond the sample. A much broader research across various Eskom Regions would need to be done to generalise the results to the entire organisation.

- The employee performance ratings were obtained from the Southern Region's performance appraisal process. The limitation thereof is that the performance ratings used in the employee performance measure may differ from individual to individual in terms of the ease of achievement of targets. This could have had an impact in the lack of a significant relationship between employee performance and organisational commitment.

7.6 Conclusion of the research

In conclusion, it has been shown that the pursuit of an achievement culture can significantly increase the affective commitment levels of employees in Eskom Southern Region. Likewise, the reduction of the existing power culture to the level of the preferred power culture will also significantly increase the affective commitment levels of employees in Eskom Southern. Employees with a high performance rating were statistically better able to distinguish that the existing culture was low in achievement culture than those employees with lower ratings. The improvement in affective commitment level is expected to have a positive impact in terms of improved organisational performance in Eskom Southern Region.

REFERENCES:

ALLEN, N. and MEYER, J. 1990. "The measurement and antecedents of affective, normative and continuance commitment to the organisation", **Journal of Occupational Psychology**, 63(1): 1–18.

AMARATUNGA, D. and BALDRY, D. 2002. "Moving from performance measurement to performance management", **Facilities**, 20(5): 217–223.

ANDERSEN, B., HENRIKSEN, B. and AARSETH, W. 2006. "Holistic performance management: an integrated framework", **International Journal of Productivity and Performance Management**, 55(1): 61–78.

ANGLE, H.L. and PERRY, J.L. 1981. "An Empirical Assessment of Organizational Commitment and Organizational Effectiveness", **Administrative Science Quarterly**, 26(1): 1–14.

ARVEY, R.D. and MURPHY, K.R. 1998. "Performance evaluation in work settings", **Annual Review of Psychology**, 49(1): 141–168.

BABBIE, E. and MOUTON, J. 2001. **The practice of social research**. Cape Town: Oxford University Press Southern Africa.

BARNEY, J.B. 1986. "Organizational Culture: Can it be a source of sustained competitive advantage?", **The Academy of Management Review**, 11(3): 656–665.

BARTLETT, J.E., KOTRLIK, J.W. and HIGGINS, C.C. 2001. "Organizational Research: Determining Appropriate Sample Size in Survey Research", **Information Technology, Learning and Performance Journal**, 19(1): 43–50.

BASKERVILLE, R.F. 2003. "Hofstede never studied culture", **Accounting, Organizations and Society**, 28(1): 1–14.

BECKER, H. S. 1960. "Notes on the concept of commitment", **American Journal of Sociology**, 66(1): 32–40.

BEHR, A.L. 1988. **Empirical research methods for the human sciences (2nd ed)**. Durban: Butterworth Publishers.

BERRIO, A.A. 2003. "An Organizational Culture Assessment Using the Competing Values Framework: A Profile of Ohio State University Extension", **Journal of Extension**, 41(2). [Online]. Available: http://www.joe.org/joe/2003april/a3.shtml [accessed: 10/01/2008].

BITITCI, U.S., CARRIE, A.S. and MCDEVITT, L. 1997. "Integrated performance measurement systems: an audit and development guide", **The TQM Magazine**, 9(1): 46–53.

BLUMBERG, M. and PRINGLE, C.C. 1982. "The missing opportunity in organizational research: Some implications for a theory of work performance", **Academy of Management Review**, 7(1): 560-569.

BOHRNSTEDT, G.W. 1969. "A Quick Method for Determining the Reliability and Validity of Multiple-Item Scales", **American Sociological Review**, 34(4): 542–548.

BOURANTAS, D. and PAPALEXANDRIS, N. 1992. "Variables affecting organisational commitment", **Journal of Management Psychology**, 7(1): 3–10.

BRINKMAN, R.L. 1999. "The dynamics of corporate culture: conception and theory", **International Journal of Social Economics**, 26(5): 674–694.

BROOKS, G.R., and WALLACE, J.P. 2006. "A discursive examination of the nature, determinants and impact of organisational commitment", **Asia Pacific Journal of Human Resources**, 44(2): 222–239.

BRUMBACK, G.B. 2003. "Blending 'we/me' in performance management", **Team Performance Management**, 9(7): 167–173.

BUCHANAN, B. 1974a. "Building Organizational Commitment: The Socialization of Managers in Work Organizations", **Administrative Science Quarterly**, 19(4): 533–546.

BUCHANAN, B. 1974b. "Government managers, business executives, and organisational commitment", **Public Administration Review**, 34(4): 339–347.

CAPE TIMES, 2006. **Skills crisis**. [Online]. Available: http://www.capetimes.co.za/index.php?fArticleId=3188059&fSectionId=332&fSetId=520 [accessed: 29/05/2008].

CLUGSTON, M., HOWELL, J.P. and DORFMAN, P.W. 2000. "Does Cultural Socialization Predict Multiple Bases and Foci of Commitment?", **Journal of Management**, 26(1): 5–30.

CORCORAN, C. 2006. "Performance Management: Conducting appraisals", **Accountancy Ireland**, 38(8): 42–45.

CREWSON, P. 1997. "Public service motivation: Building empirical evidence of incidence and effect", **Journal of Public Administration Research and Theory**, 7(4): 499–518.

CUMMINGS, L.L. and SCHWAB, D.P. 1973. **Performance in Organisations determinants and appraisal**. Glenview: Scott, Foresman and Company.

DANDRIDGE, T.C., MITROFF, I. and JOYCE, W.F. 1980. "Organizational Symbolism: A Topic to Expand Organizational Analysis", **Academy of Management Review**, 5(1): 77–82.

DEAL, T.E. and KENNEDY, A.A. 1982. **Corporate cultures: the rites and rituals of corporate life**. Reading: Addison-Wesley.

DENISON, D.R. 1984. "Bringing corporate culture to the bottom line", **Organizational Dynamics**, 13(2): 5–22.

DENISON, D.R. and MISHRA, A.K. 1995. "Toward a Theory of Organizational Culture and Effectiveness", **Organization Science**, 6(2): 204–223.

DENSCOMBE, M. 2003. **The good research guide (2nd ed)**. Philadelphia: Open University Press.

DEPARTMENT OF MINERALS AND ENERGY, 2001. **Electricity Distribution Industry: Restructuring Blueprint Report**. [Online]. Available: http://www.ameu.co.za/library/restructuring/AppendixA%20EDI%20Restructuring.pdf [accessed: 11/09/2008].

DESHPANDÉ, R. and FARLEY, J.U. 2004. "Organizational culture, market orientation, innovativeness, and firm performance: an international research odyssey", **International Journal of Research in Marketing**, 21(1): 3–22.

ECCLES, R.G. 1991. "The Performance Measurement Manifesto", **Harvard Business Review**, January/February, 131–137.

ELKINGTON, J. 2005. "The 'triple bottom line' for 21st century business". In Starkey, R. and Welford, R. (eds). **Business & Sustainable Development**. London: Earthscan.

ESKOM, 2007. **Performance Management Procedure 32-43**. Eskom internal document.

FOLAN, P., BROWNE, J. and JAGDEV, H. 2007. "Performance: Its meaning and content for today's business research", **Computers in Industry**, 58(7): 605–620.

FONTANNAZ, S. and OOSTHUIZEN, H. 2007. "The development of a conceptual framework to guide sustainable organisational performance", **South African Journal of Business Management**, 38(4): 9–19.

GEERTZ, C. 1973. **The interpretation of culture**. New York: Basic Books.

GOMES, C.F., YASIN, M.M. and LISBOA, J.V. 2004. "A literature review of manufacturing performance measures and measurement in an organizational context: a framework and direction for future research", **Journal of Manufacturing Technology Management**, 15(6): 511–530.

GOODWIN, L.D. 1999. "The Role of Factor Analysis in the Estimation of Construct Validity", **Measurement in Physical Education & Exercise Science**, 3(2): 85–100.

GUBA, E.G. and LINCOLN, Y.S. 1994. "Competing paradigms in qualitative research". In Denzin, N.K and Lincoln, Y.S. (eds). **Handbook of Qualitative Research**. Thousand Oaks: Sage Publications.

HAMMERSLEY, M. 1987. "Some Notes on the Terms 'Validity' and 'Reliability'", **British Educational Research Journal**, 13(1): 73–81.

HANDY, C.B. 1985. **Understanding organizations**. London: Penguin Group.

HANSEN, G.S. and WERNERFELT, B. 1989. "Determinants of Firm Performance: The Relative Importance of Economic and Organizational Factors", **Strategic Management Journal**, 10(5): 399–411.

HARRISON, R. 1972. "Understanding your organization's character", **Harvard Business Review**, May/June, 119–128.

HARRISON, R. 1993. **Diagnosing organisational culture: Trainer's manual.** New York: Pfeiffer and Company.

HARRISON, R., and STOKES, H. 1992. **Diagnosing Organisational Culture.** New York: Pfeiffer and Company.

HAYES, T.M. and HELMS, M.M. 1999. "Process improvement in a utility company", **Business Process Management**, 5(4): 297–310.

HEATHFIELD, S. 2007. "Performance Appraisals Don't Work - What Does?", **Journal for Quality & Participation**, 30(1): 6–9.

HERZBERG, F. 1968. **Work and the Nature of Man**. London: Staples Press.

HOFSTEDE, G. 1983. "National Cultures in Four Dimensions", **International Studies of Management & Organization**, 13(1): 46–74.

HOFSTEDE, G. and BOND, M.H. 1988. "The Confucius Connection: From Cultural Roots to Economic Growth" **Organizational Dynamics**, 16(4): 5–21.

HOFSTEDE, G., NEUIJEN, B., OHAYV, D.D. and SANDERS, G. 1990. "Measuring Organizational Cultures: A Qualitative and Quantitative Study across Twenty Cases", **Administrative Science Quarterly**, 35(2): 286–316.

HOFSTEDE, G.P., PEDERSEN, P.B. and HOFSTEDE, G.H. 2002. **Exploring culture: exercises, stories, and synthetic cultures**. Yarmouth: Intercultural Press.

HULT, C. 2005. "Organisational commitment and person-environment fit in six Western countries", **Organisation Studies**, 26(2): 249–270.

JARAMILLO, F., MULKI, J.P. and MARSHALL, G.W. 2005. "A meta-analysis of the relationship between organizational commitment and salesperson job performance: 25 years of research", **Journal of Business Research**, 58(6): 705–714.

JOHNSON, G. 1988. "Rethinking Incrementalism", **Strategic Management Journal**, 9(1): 75–91.

JOHNSON, G. 1992. "Managing strategic change – strategy, culture and action", **Long Range Planning**, 25(1): 28–36.

KANTER, R.M. 1968. "Commitment and Social Organization: A Study of Commitment Mechanisms in Utopian Communities", **American Sociological Review**, 33(4): 499–517.

KAPLAN, R.S. and NORTON, D.P. 1992. "The balanced scorecard – measures that drive performance", **Harvard Business Review**, January/February, 71–92.

KAPLAN, R.S. and NORTON, D.P. 1996. "Using the Balanced Scorecard as a Strategic Management System", **Harvard Business Review**, January/February, 75–85.

KEESING, R.M. 1974. "Theories of Culture", **Annual Review of Anthropology**, 3(1): 73–97.

KOTTER, J.P. and HESKETT, J.L. 1992. **Corporate culture and performance**. New York: Free Press.

KUHN, T.S. 1970. **The Structure of Scientific Revolutions (2nd ed)**. Chicago: University of Chicago Press.

LAHIRY, S. 1994. "Building commitment through organisational culture", **Training and Development,** 48(4): 50–52.

LATHAM, G.P., ALMOST, J., MANN, S. and MOORE, C. 2005. "New Developments in Performance Management", **Organizational Dynamics**, 34(1): 77–87.

LEE, J. and MILLER, D. 1999. "People matter: commitment to employees, strategy and performance in Korean firms", **Strategic Management Journal**, 20(6): 579–593.

LEE, K., ALLEN, N.J., MEYER, J.P. and RHEE, K.Y. 2001. "The three-component model of organisational commitment: An application to South Korea", **Applied Psychology: An International Review**, 50(4): 596–614.

LEE, T.W., ASHFORD, S.J., WALSH, J.P. and MOWDAY, R.T. 1992. "Commitment propensity, organizational commitment, and voluntary turnover: a longitudinal study of organizational entry processes", **Journal of Management**, 18(1): 15–32.

LOK, P. and CRAWFORD, J. 2003. "The effect of organisational culture and leadership style on job satisfaction and organisational commitment: A cross-national comparison", **Journal of Management Development**, 23(4): 321–338.

LOUW, M.J. and BOSHOFF, C. 2006. **Cacadu organisational culture survey: 2005**. Unpublished report for Harvard Management Consultants CC. Port Elizabeth: Cacadu District Municipality.

LÜNSCHE, S. 2006. POWER DRIVE. **Financial Mail**. [Online]. Available: http://free.financialmail.co.za/report06/eskom06/aeskom.htm [accessed: 14/05/2008].

MAHONEY, J. and GOERTZ, G. 2006. "A Tale of Two Cultures: Contrasting Quantitative and Qualitative Research", **Political Analysis**, 14(3): 227–249.

MANETJE, O.M. 2005. **Impact of organisational culture on organisational commitment**. Unpublished thesis for Master of Arts. Pretoria: University of South Africa.

MARTIN, J. and SIEHL, J. 1983. "Organizational Culture and Counterculture: An Uneasy Symbiosis", **Organizational Dynamics**, 12(2): 52–64.

MATHIEU, J.E. and ZAJAC, D.M. 1990. "A review and meta-analysis of the antecedents, correlates, and consequences of organizational commitment", **Psychological Bulletin**, 108(2): 171–194.

MCAFEE, R.B. and CHAMPAGNE, P.J. 1993. "Performance Management", **Journal of Managerial Psychology**, 8(5): 24–32.

MEYER, J.P. and ALLEN, N.J. 1984. "Testing the 'side-bet theory' of organizational commitment: some methodological considerations", **Journal of Applied Psychology**, 69(3): 372–378.

MEYER, J.P. and ALLEN, N.J. 1991. "A three-component conceptualization of organizational commitment", **Human Resource Management Review**, 1(1): 61–89.

MEYER, J.P. and ALLEN, N.J. 1997. **Commitment in the workplace**. Thousand Oaks: Sage.

MEYER, J.P., ALLEN, N.J. and GELLATLY, I.R.1990. "Affective and Continuance Commitment to the Organization: Evaluation of Measures and Analysis of Concurrent and Time-Lagged Relations", **Journal of Applied Psychology**, 75(6): 710–720.

MEYER, J.P., ALLEN, N.J. and SMITH, C.A. 1993. "Commitment to organisations and occupations: Extension and test of the three-component conceptualisation", **Journal of Applied Psychology**, 78(4): 538–551.

MEYER, J.P., BOBOCEL, D.R. and ALLEN, N.J. 1991. "Development of organizational commitment during the first year of employment: A longitudinal study of pre- and post-entry influences", **Journal of Management**, 17(4): 717–733.

MEYER, J.P., PAUNONEN, S.V., GELLATLY, I.R., GOFFIN, R.D. and JACKSON, D.N. 1989. "Organizational Commitment and Job Performance: It's the Nature of the Commitment that Counts", **Journal of Applied Psychology**, 74(1): 152–156.

MOWDAY, R.T. 1998. "Reflections on the study and relevance of organisational commitment", **Human Resource Management Review,** 8(4): 387–401.

MOWDAY, R.T., STEERS, R.M. and PORTER, L.W. 1979. "Measurement of organisational commitment", **Journal of Vocational Behaviour**, 14(3): 224–247.

NEELY, A., GREGORY, M. and PLATTS, K. 1995. "Performance measurement system design", **International Journal of Operations and Production Management**, 15(4): 80–116.

NEWMAN, V. and CHAHARBAGHI, K. 1998. "The corporate culture myth", **Long Range Planning**, 31(4): 514–522.

NYENGANE, M.H. 2007. **The relationship between leadership style and employee commitment: an exploratory study in an electricity utility of South Africa**. Unpublished thesis for Master of Business Administration. Grahamstown: Rhodes University.

ØGAARD, T. LARSEN, S. and MARNBURG, E. 2005. "Organizational culture and performance – evidence from the fast food restaurant industry", **Food Service Technology**, 5(1): 23–34.

O'REILLY, C. 1989. "Corporations, culture, and commitment: Motivation and social control in organisations", **California Management Review**, 31(4): 9–25.

O'REILLY, C.A. and CHATMAN, J. 1986. "Organizational commitment and psychological attachment: the effects of compliance, identification, and internalisation on prosocial behaviour", **Journal of Applied Psychology**, 71(3): 492–499.

O'REILLY, C.A., CHATMAN, J. and CALDWELL, D.F. 1991. "People and organizational culture: A profile comparison approach to assessing person organization fit", **Academy of Management Journal**, 34(3): 487–516.

OUCHI, W.G. 1981. **Theory Z: how American business can meet the Japanese challenge**. Reading: Addison-Wesley.

OUCHI, W.G. and WILKINS, A.L. 1985. "Organizational Culture", **Annual Review of Sociology**, 11(1): 457–483.

PARKER, M. 2000. **Organizational culture and identity: unity and division at work**. London: Sage.

PASCALE, R. 1985. "The Paradox of 'Corporate Culture': Reconciling ourselves to Socialization", **California Management Review**, 27(2): 26–41.

PETERS, T.J. and WATERMAN, R.H. 1982. **In Search of Excellence: lessons from America's best-run companies**. New York: Harper and Row.

PETTIGREW, A.M. 1979. "On Studying Organizational Cultures", **Administrative Science Quarterly**, 24(4): 570–581.

PORTER, L.W., STEERS, R.M., MOWDAY, R.T. and BOULIAN, P.V. 1974. "Organisational commitment, job satisfaction, and turnover among psychiatric technicians", **Journal of Applied Psychology,** 59(5): 603–609.

QUINN, R.E. 1988. **Beyond Rational Management**. San Francisco: Jossey-Bass.

RANDALL, D.M. 1987. "Commitment and the Organisational Man revisited", **Academy of Management Review**, 12(3): 460-471.

RASHID, Z.A., SAMBASIVAN, M. and JOHARI, J. 2003. "The influence of corporate culture and organisational commitment on performance", **Journal of Management Development**, 22(8): 708–728.

REMENYI, D. 1996. "So you want to be an academic researcher in business and management studies! Where do you start and what are the key philosophical issues to think about?", **South African Journal of Business Management**, 27(1): 22–33.

REMENYI, D. 1998. "Central Ethical considerations for masters and doctoral research in business and management studies", **South African Journal of Business Management**, 29(3): 109–118.

RHOADES, L. and EISENBERGER, R. 2002. "Perceived organizational support: a review of the literature", **Journal of Applied Psychology**, 87(4): 698–714.

ROBBINS, S.P. 1996. **Organizational Behaviour (7th ed)**. Eaglewood Cliffs: Prentice Hall.

RUSBULT, C.E. and FARRELL, D. 1983. "A longitudinal test of the investment model: The impact on job satisfaction, job commitment, and turnover of variations in rewards, costs, alternatives, and investments", **Journal of Applied Psychology**, 68(3): 429–438.

SAFFOLD, G.S. 1988. "Culture Traits, Strength, and Organizational Performance: Moving Beyond 'Strong' Culture", **Academy of Management Review**, 13(4): 546–558.

SALKIND, N.J. 2000. **Exploring Research (4th ed)**. Upper Saddle River: Prentice Hall.

SATHE, V. 1983. "Implications of corporate culture: A manager's guide to action", **Organisational Dynamics,** 12(2): 4–23.

SCHEIN, E.H. 1983. "The Role of the Founder in Creating Organizational Culture", **Organizational Dynamics**, 12(1): 3–28.

SCHEIN, E.H. 1986. "What You Need to Know About Organizational Culture", **Training & Development Journal**, 40(4): 30–34.

SCHEIN, E.H. 1990. "Organizational culture", **American Psychologist**, 45(2): 109–119.

SCHEIN, E.H. 1992. **Organizational culture and leadership (2nd ed.)**. San Francisco: Jossey-Bass.

SCHLECHTER, A.F., TROMP, D. and VOS, H.D. 2000. "The relationship between organisational culture and organisational performance – a study conducted within a large South African organisation", **Management Dynamics**, 9(4): 34–56.

SCHOLL, R.W. 1981. "Differentiating commitment from expectancy as a motivational force", **Academy of Management Review**, 34(2): 163–184.

SEEL, R. 2000. "Complexity and Culture: New Perspectives on Organisational Change", **Organisations & People**, 7(2): 2–9.

SEKARAN, U. 1992. **Research methods for business: a skill building approach (2nd ed.)**. New York: John Wiley & Sons.

SEKARAN, U. 2000. **Research methods for Business (3rd ed.)**. New York: Hermitage Publishing Services.

SHAW, J.D., DELERY, J.E. and ABDULLA, M.H.A. 2003. "Organizational commitment and performance among guest workers and citizens of an Arab country", **Journal of Business Research**, 56(2): 1021–1030.

SMIRCICH, L. 1983. "Concepts of Culture and Organizational Analysis", **Administrative Science Quarterly**, 28(3): 339–358.

SMITH, M.E. 2003. "Changing an organisation's culture: Correlates of success and failure", **Leadership and Organisation Development Journal**, 24(5): 249–261.

SØRENSEN, J.B. 2002. "The Strength of Corporate Culture and the Reliability of Firm Performance", **Administrative Science Quarterly**, 47(1): 70–91.

SPANGENBERG, H. 1994. **Understanding and implementing performance management**.Cape Town: Juta.

STATSOFT, 2008. **StatSoft Electronic Textbook**. [Online]. Available: http://www.statsoft.com/textbook/stathome.html [accessed 21/11/2008].

STEERS, R.M. 1977. "Antecedents and outcomes of organisational commitment", **Administrative Science Quarterly**, 22(1): 46–56.

STEVENSON, K. and BAKER, R. 2005. "Investigating organisational culture in primary care", **Quality in Primary Care**, 13(4): 191–200.

STRAUB, D.W. 1989. "Validating Instruments in MIS Research", **MIS Quarterly**, 13(2): 147–169.

STUMPF, S.A. and HARTMAN, K. 1984. "Individual exploration to organizational commitment or withdrawal", **Academy of Management Journal**, 27(2): 308–329.

SULIMAN, A. and ILES, P. 2000. "Is continuance commitment beneficial to organizations? Commitment-performance relationship: a new look", **Journal of Managerial Psychology**, 15(5): 407–426.

TANGEN, S. 2004. "Performance measurement: from philosophy to practice", **International Journal of Productivity**, 53(8): 726–737.

TROCHIN, W.M.K. 2000. **Research Methods Knowledge Base**. New York: McGraw-Hill.

TYLOR, E.B. 1920. **Primitive culture: researches into the development of mythology, philosophy, religion, language, art, and custom (6th ed.)**. London: Murray.

VAN DER POST, W.Z., DE CONING, T.J. and SMIT, E.vd M. 1998. "The relationship between organizational culture and financial performance", **South African Journal of Business Management**, 29(1): 30–40.

VAN STUYVESANT-MEIJEN, J. 2007. **The influence of organisational culture on organisational commitment at a selected local municipality**. Unpublished thesis for Master of Commerce. Grahamstown: Rhodes University.

WALDMAN, D.A. and SPANGLER, W.D. 1989. "Putting together the pieces: a closer look at the determinants of job performance", **Human Performance**, 2(1): 29–59.

WANT, J.H. 2003. "When worlds collide: culture clash: Corporate culture – illuminating the black hole", **Journal of Business Strategy**, 24(4): 14–21.

WASTI, S.A. 2003. "Organizational commitment, turnover intentions and the influence of cultural values", **Journal of Occupational & Organizational Psychology**, 76(3): 303–321.

WELMAN, J.C and KRUGER, S.J. 2001. **Research Methodology for the Business and Administrative Sciences (3rd ed.)**. Cape Town: Oxford University Press.

WHOLEY, J.S. 1999. "Performance-Based Management: Responding to the Challenges", **Public Productivity & Management Review**, 22(3): 288–307.

WIENER, Y. 1982. "Commitment in organizations: A normative view", **Academy of Management Review**, 7(1): 418–428.

WILLIAMS, R. 1998. **Performance management: Perspectives on employee performance**. London: International Thomson Business Press.

APPENDIX A: Organisational culture and commitment questionnaire

RHODES UNIVERSITY
INVESTEC BUSINESS SCHOOL
Grahamstown • 6110 • South Africa

Dear Sir/Madam

Organisational culture has been found to separate successful from less successful organisations and to positively contribute to performance.

This questionnaire attempts to identify the influence that organisational culture has on organisational commitment in Eskom Southern Region.

All answers provided will be treated with the strictest of confidence for research purposes only. You are under no obligation to complete this questionnaire.

Please take note that employee names will be deleted from the research and only coded questionnaires will be utilised when linking data to employee performance numbers.

Please complete each section and answer all the questions.

Thank you for your participation in this research.

Regards

Leonardo Pittorino

Instructions:

If completing the form electronically please make your selection in **bold**.

1. How long have you been working for Eskom?

   ☐ Less than one year
   ☐ 1-3 years
   ☐ 4-5 years
   ☐ 6-8 years
   ☐ More than 8 years

2. How many co-workers do you supervise?

   ☐ None
   ☐ 1-2
   ☐ 3-5
   ☐ More than 5

3. Please indicate your gender.

   ☐ Male
   ☐ Female

4. Please indicate your age.

   ☐ Less than 20
   ☐ 20-29
   ☐ 30-39
   ☐ 40-49
   ☐ 50 and older

5. Please indicate your highest level of formal education.

   ☐ Grade 11 and below
   ☐ Grade 12
   ☐ Diploma (s) / Certificate
   ☐ Bachelor's degree
   ☐ Post graduate degree

Section B: Organisational Culture

Instructions:

Indicate the extent to which you agree (1=most preferred) or disagree (4= least preferred) with the following statements about the **preferred** and **existing** culture at Eskom Distribution Southern Region. The **existing culture** meaning the way things are at present and the **preferred culture** meaning the way you would like the culture to be in future. You need to rank all four possibilities from one to four (see example).

1.	Strongly agree	2.	Agree	3.	Disagree	4.	Strongly disagree

An example when answering the statement:

Supervisors and managers in the region seem to be:

Existing   Preferred
Culture
Culture

Existing	Statement	Preferred
3	a. Firm but fair	1
4	b. Impersonal	3
1	c. Democratic	2
2	d. Supportive	4

Please check the answers to ensure you have allocated only one "4", "3", "2" and "1" in both the existing column and the preferred column.

Ranking Key (rank and use each one only once per question):

1.	Strongly agree	2.	Agree	3.	Disagree	4.	Strongly disagree

1. People who do well in the Southern Region tend to be those who

Existing Culture		Preferred Culture
	a. know how to please their supervisors and are able and willing to use power and politics to get ahead.	
	b. play by the rules, work within the system and strive to do things correctly.	
	c. are technically competent and effective, with a strong commitment to getting the job done.	
	d. build close working relationships with others by being co-operative, responsive and caring.	

2. Employees of Eskom Southern Region are expected to give first priority to

Existing Culture		Preferred Culture
	a. meeting the needs of their supervisors and other high level people in the organisation.	
	b. carrying out the duties of their own jobs; staying within the policies and procedures related to their job.	
	c. meeting the challenges of the task, finding a better way to do things.	
	d. co-operating with the people with whom they work, to solve work and personal problems.	

3. Eskom Southern Region treats individuals

Existing Culture		Preferred Culture
	a. as "hands" whose time and energy are at the disposal of persons in higher positions.	
	b. as "employees" whose time and energy are purchased through a contract, with rights and obligations for both sides.	
	c. as "associates" or peers who are mutually committed to the achievement of a common purpose.	
	d. "family" or "friends" who like being together and who care.	

Ranking Key (rank and use each one only once per question):

1.	Strongly agree	2.	Agree	3.	Disagree	4.	Strongly disagree

4. Employees of the Southern Region are managed, directed or influenced by

Existing Culture		Preferred Culture
	a. officials in position of authority, who exercise their power through the use of rewards and punishment.	
	b. the system, rules and procedures that outline what employees should do and the right way of doing things.	
	c. their own commitment to achieving the goals of the organisation.	
	d. their own desire to be accepted by others and to be good members of their own work group.	

5. The decision making process in the Southern Region is characterised by

Existing Culture		Preferred Culture
	a. directives, orders and instructions that come from higher levels.	
	b. the adherence to formal channels and reliance on policies and procedures for making decisions.	
	c. decision making is made close to the point of action, by the employees on the ground.	
	d. the use of consensus decision making methods to gain acceptance and support for decisions.	

6. Assignment of tasks/jobs to individuals in the Southern Region is based on

Existing Culture		Preferred Culture
	a. the personal judgements, values and wishes of those in a position of power.	
	b. the needs and plans of the organisation and the rules of the system (seniority, qualifications, etc.	
	c. matching the requirements of the job with the interests of the individuals.	
	d. the personal preference of the individuals and their need for and development.	

Ranking Key (rank and use each one only once per question):

1.	Strongly agree	2.	Agree	3.	Disagree	4.	Strongly disagree

7. Employees of the Southern Region are expected to be

Existing Culture		Preferred Culture
	a. hard working, compliant, obedient and loyal to the interests of those whom they report to.	
	b. responsible and reliable, carrying out the duties of their jobs while avoiding actions that could embarrass their supervisors.	
	c. self motivated and competent, willing to take the initiative to get things done; willing to challenge those they report to if necessary to get good results.	
	d. good team workers, supportive and co-operative, who get along well with others.	

8. Those in authority (managers and supervisors) are expected to be

Existing Culture		Preferred Culture
	a. strong and decisive; firm but fair.	
	b. impersonal and proper; avoiding the exercise of authority for their own advantage.	
	c. democratic and willing to accept subordinate's ideas about the task.	
	d. supportive, responsive and concerned about the personal needs of those who they supervise.	

9. It is considered legitimate for one employee to tell another what to do when

Existing Culture		Preferred Culture
	a. he or she has more power, authority or "clout" in the organisation.	
	b. it is part of the responsibilities included in his or her job description.	
	c. he or she has greater knowledge/expertise and uses it to guide/teach the other person to do their work.	
	d. the other person asks for his or her help, guidance or advice.	

Ranking Key (rank and use each one only once per question):

1.	Strongly agree	2.	Agree	3.	Disagree	4.	Strongly disagree

10. In the Southern Region work motivation is primarily the result of

Existing Culture		Preferred Culture
	a. hope for reward, fear of punishment or personal loyalty to the supervisor.	
	b. acceptance of the norm of providing a "fair day's work for a fair day's pay".	
	c. strong desires to achieve, to create and to innovate and peer pressure to contribute to the success of the organisation.	
	d. good team workers, supportive and co-operative, who get along well with others.	

11. In the Southern Region relationships between departments are generally

Existing Culture		Preferred Culture
	a. competitive, looking out for their own interests and helping each other only when there is a personal advantage in doing so. .	
	b. characterised by indifference towards each other, helping each other only when convenient or when directed by higher levels.	
	c. co-operative when they need to achieve common goals, employees are willing to cut red tape and cross organisational boundaries to get the job done.	
	d. friendly with a high level of responsiveness to requests for help from other departments.	

12. In the Southern Region intergroup and personal conflicts are usually

Existing Culture		Preferred Culture
	a. dealt with by the personal intervention of people at a higher level of authority in the organisation.	
	b. avoided by reference to rules, procedures and formal definitions.	
	c. resolved through discussions aimed at getting the best outcomes possible for the work issues involved.	
	d. dealt with in a manner that maintains good working relationships and minimises the chances of people being hurt. .	

Ranking Key (rank and use each one only once per question):

1.	Strongly agree	2.	Agree	3.	Disagree	4.	Strongly disagree

13. The external environment of Eskom Southern Region is responded to by its employees as if it were

Existing Culture		Preferred Culture
	a. a jungle, where the Region is in competition for survival with others.	
	b. an orderly system in which relationships are determined by structures and procedures and where everyone is expected to abide by the rules.	
	c. a competition for excellence in which productivity, quality and innovation bring success.	
	d. a community of interdependent parts in which the common interests are the most important. .	

14. If rules, systems or procedures get in the way, employees

Existing Culture		Preferred Culture
	a. break them if they have enough "clout" to get by with or if they think they can get away with it without being caught.	
	b. generally abide by them or go through proper channels to get permission to deviate from them or get them changed.	
	c. tend to ignore or bypass them to accomplish their task or perform their jobs better.	
	d. support to ignore or bypass them to accomplish their task or perform their jobs better. .	

15. New employees in the Southern Region need to learn

Existing Culture		Preferred Culture
	a. who really runs things; who can help or hurt them; whom to avoid offending; the norms (unwritten rules) that have to be observed if they are to stay out of trouble.	
	b. the formal rules and procedures and to abide by them; to stay within the formal boundaries of their jobs.	
	c. what resources are available to help them do their jobs; to take the initiative to apply their skills and knowledge to their jobs.	
	d. how to co-operate; how to be good team members; how to develop good working relationships.	

Section C: Organisational Commitment

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

Example:

I would leave this organisation if offered the same job at another organisation?	4

1.	I would be very happy to spend the rest of my career at Eskom Southern Region.	
2.	It would be very hard for me to leave Eskom Southern Region right now, even if I wanted to.	
3.	I think that people these days move from organisation to organisation (region/BU to region/BU) too often.	
4.	Eskom Southern Region has a great deal of personal meaning for me.	
5.	One of the few serious consequences of leaving Eskom Southern Region would be scarcity of available alternatives.	
6.	I was taught to believe in the value of remaining loyal to one organisation.	
7.	I enjoy discussing Eskom Southern Region with people outside of it.	
8.	Too much in my life would be disrupted if I decided to I wanted to leave Eskom Southern Region now.	
9.	Jumping from organisation to organisation (region/BU to region/BU) does not seem at all unethical to me.	
10.	I really feel as if Eskom Southern Region's problems are my own.	
11.	It wouldn't be too costly for me to leave Eskom Southern Region now.	

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

12.	One of the major reasons I continue to work for this organisation is that I believe that loyalty is important and therefore feel a sense of moral obligation to remain.	
13.	I do not feel like "part of the family" at my organisation.	
14.	Right now, staying with my organisation is a matter of necessity as much as desire.	
15.	If I got another offer for a better job elsewhere I would feel it was not right to leave Eskom Southern Region.	
16.	I do not feel "emotionally" attached to Eskom Southern Region.	
17.	Things were better off in the days that people stayed with one organisation for most of their careers.	
18.	I feel that I have too few options to consider leaving Eskom Distribution Southern Region.	
19.	I do not feel a strong sense of belonging to Eskom Southern Region.	
20.	One of the major reasons I continue to work for Eskom Southern Region is that leaving would require considerable personal sacrifice – another organisation (region/BU) may not match the overall benefits I have here.	
21.	I think that wanting to be a "company man/woman" is not sensible anymore.	

APPENDIX B: Mean, standard deviation and Cronbach's alpha coefficient for organisational culture

B.1 Cronbach's alpha coefficient for the existing power culture

	Mean if	Var. if	StDv. if	Itm-Totl	Alpha if
	Summary for scale: Mean=45.6867 Std.Dv.=8.17033 Valid N:83 (Input culture) Cronbach alpha: .788843 Standardized alpha: .794634 Average inter-item corr.: .211143				
Q1P	42.33	57.01	7.55	0.48	0.77
Q2P	42.06	59.09	7.69	0.50	0.77
Q3P	42.43	56.68	7.53	0.58	0.76
Q4P	42.65	58.28	7.63	0.42	0.78
Q5P	42.04	62.95	7.93	0.28	0.79
Q6P	42.43	56.82	7.54	0.51	0.77
Q7P	42.65	59.84	7.74	0.30	0.78
Q8P	43.18	66.32	8.14	-0.09	0.82
Q9P	42.47	55.67	7.46	0.53	0.77
Q10P	42.64	54.71	7.40	0.60	0.76
Q11P	42.64	57.00	7.55	0.47	0.77
Q12P	42.90	62.18	7.89	0.17	0.79
Q13P	43.42	56.70	7.53	0.39	0.78
Q14P	42.87	58.09	7.62	0.34	0.78
Q15P	42.90	53.39	7.31	0.56	0.76

B.2 Cronbach's alpha coefficient for the existing role culture

	Mean if	Var. if	StDv. if	Itm-Totl	Alpha if
	Summary for scale: Mean=43.6988 Std.Dv.=4.48775 Valid N:83 (Spreadsheet15) Cronbach alpha: .341598 Standardized alpha: .378029 Average inter-item corr.: .039462				
Q1R	41.28	19.02	4.36	0.02	0.35
Q2R	40.93	18.28	4.28	0.15	0.31
Q3R	40.59	17.40	4.17	0.30	0.27
Q4R	40.48	17.96	4.24	0.16	0.31
Q5R	40.61	18.65	4.32	0.11	0.33
Q6R	40.86	18.41	4.29	0.06	0.34
Q7R	40.73	18.58	4.31	0.04	0.35
Q8R	41.06	19.41	4.41	-0.10	0.41
Q9R	40.84	17.94	4.24	0.16	0.31
Q10R	40.92	16.92	4.11	0.24	0.28
Q11R	40.52	18.80	4.34	0.07	0.34
Q12R	40.69	17.71	4.21	0.08	0.34
Q13R	40.65	18.37	4.29	0.10	0.33
Q14R	40.96	17.02	4.13	0.13	0.32
Q15R	40.66	17.74	4.21	0.20	0.30

B.3 Cronbach's alpha coefficient for the existing achievement culture

	Mean if	Var. if	StDv. if	Itm-Totl	Alpha if
	Summary for scale: Mean=31.0361 Std.Dv.=6.38299 Valid N:83 (Input culture) Cronbach alpha: .747257 Standardized alpha: .743759 Average inter-item corr.: .164461				
Q1A	29.06	34.66	5.89	0.34	0.74
Q2A	29.31	35.20	5.93	0.44	0.73
Q3A	28.86	34.75	5.89	0.45	0.72
Q4A	29.08	35.31	5.94	0.41	0.73
Q5A	29.53	38.73	6.22	0.15	0.75
Q6A	29.07	36.16	6.01	0.33	0.74
Q7A	29.07	33.59	5.80	0.49	0.72
Q8A	28.63	38.23	6.18	0.10	0.76
Q9A	28.96	35.96	6.00	0.36	0.73
Q10A	28.96	33.77	5.81	0.48	0.72
Q11A	28.83	36.12	6.01	0.32	0.74
Q12A	28.72	35.04	5.92	0.44	0.73
Q13A	28.88	34.40	5.86	0.41	0.73
Q14A	28.70	38.33	6.19	0.10	0.76
Q15A	28.83	35.20	5.93	0.40	0.73

B.4 Cronbach's alpha coefficient for the existing support culture

	Mean if	Var. if	StDv. if	Itm-Totl	Alpha if
	Summary for scale: Mean=29.5301 Std.Dv.=5.52674 Valid N:83 (Input culture) Cronbach alpha: .603519 Standardized alpha: .600508 Average inter-item corr.: .092491				
Q1S	27.29	27.43	5.24	0.20	0.59
Q2S	27.65	28.78	5.36	0.08	0.61
Q3S	28.06	27.00	5.20	0.31	0.58
Q4S	27.67	28.24	5.31	0.10	0.61
Q5S	27.77	28.32	5.32	0.17	0.60
Q6S	27.59	27.88	5.28	0.14	0.60
Q7S	27.57	27.33	5.23	0.21	0.59
Q8S	27.08	26.56	5.15	0.21	0.59
Q9S	27.67	26.29	5.13	0.28	0.58
Q10S	27.43	24.61	4.96	0.45	0.55
Q11S	27.95	26.62	5.16	0.33	0.57
Q12S	27.65	26.49	5.15	0.26	0.58
Q13S	27.02	25.71	5.07	0.34	0.57
Q14S	27.45	28.42	5.33	0.10	0.61
Q15S	27.55	25.79	5.08	0.34	0.57

B.5 Cronbach's alpha coefficient for the preferred power culture

	Mean if	Var. if	StDv. if	Itm-Totl	Alpha if
	Summary for scale: Mean=22.7952 Std.Dv.=4.64275 Valid N:83 (Input culture) Cronbach alpha: .689347 Standardized alpha: .702166 Average inter-item corr.: .138970				
PQ1P	21.72	20.47	4.52	0.27	0.68
PQ2P	21.19	18.78	4.33	0.26	0.68
PQ3P	21.60	18.72	4.33	0.48	0.66
PQ4P	21.36	17.92	4.23	0.41	0.66
PQ5P	21.01	16.23	4.03	0.51	0.64
PQ6P	21.39	18.31	4.28	0.36	0.67
PQ7P	20.83	17.68	4.21	0.40	0.66
PQ8P	19.57	17.52	4.19	0.30	0.68
PQ9P	21.46	19.48	4.41	0.17	0.69
PQ10P	21.58	19.88	4.46	0.31	0.68
PQ11P	21.52	21.65	4.65	-0.13	0.71
PQ12P	21.02	17.23	4.15	0.47	0.65
PQ13P	21.65	20.08	4.48	0.31	0.68
PQ14P	21.48	19.98	4.47	0.13	0.69
PQ15P	21.75	20.50	4.53	0.30	0.68

B.6 Cronbach's alpha coefficient for the preferred role culture

	Mean if	Var. if	StDv. if	Itm-Totl	Alpha if
	Summary for scale: Mean=36.6867 Std.Dv.=5.28211 Valid N:83 (Input culture) Cronbach alpha: .703088 Standardized alpha: .693572 Average inter-item corr.: .132980				
PQ1R	34.01	25.17	5.02	0.34	0.69
PQ2R	33.84	22.13	4.70	0.46	0.67
PQ3R	34.05	25.01	5.00	0.29	0.69
PQ4R	33.80	23.71	4.87	0.37	0.68
PQ5R	33.99	22.66	4.76	0.42	0.67
PQ6R	33.46	23.93	4.89	0.36	0.68
PQ7R	35.06	25.33	5.03	0.20	0.70
PQ8R	35.33	25.54	5.05	0.23	0.70
PQ9R	34.16	23.67	4.87	0.33	0.69
PQ10R	34.55	25.14	5.01	0.24	0.70
PQ11R	34.90	26.35	5.13	0.16	0.70
PQ12R	35.11	26.19	5.12	0.12	0.71
PQ13R	34.33	24.51	4.95	0.34	0.68
PQ14R	32.94	24.90	4.99	0.29	0.69
PQ15R	34.10	23.56	4.85	0.39	0.68

B.7 Cronbach's alpha coefficient for the preferred achievement culture

	Mean if	Var. if	StDv. if	Itm-Totl	Alpha if
		Summary for scale: Mean=50.4458 Std.Dv.=4.69887 Valid N:83 (Input culture) Cronbach alpha: .694213 Standardized alpha: .673122 Average inter-item corr.: .123860				
PQ1A	46.60	21.35	4.62	0.08	0.70
PQ2A	47.04	18.56	4.31	0.40	0.67
PQ3A	46.76	18.91	4.35	0.45	0.66
PQ4A	47.00	18.24	4.27	0.46	0.66
PQ5A	47.57	16.00	4.00	0.51	0.65
PQ6A	47.24	17.63	4.20	0.50	0.65
PQ7A	46.69	19.35	4.40	0.37	0.67
PQ8A	47.61	19.75	4.44	0.20	0.69
PQ9A	47.14	18.89	4.35	0.32	0.68
PQ10A	46.86	20.80	4.56	0.10	0.70
PQ11A	46.93	20.14	4.49	0.25	0.68
PQ12A	47.07	19.34	4.40	0.37	0.67
PQ13A	46.84	20.59	4.54	0.17	0.69
PQ14A	48.06	20.39	4.52	0.16	0.70
PQ15A	46.83	21.30	4.61	0.03	0.71

B.8 Cronbach's alpha coefficient for the preferred support culture

	Mean if	Var. if	StDv. if	Itm-Totl	Alpha if
		Summary for scale: Mean=40.2289 Std.Dv.=5.64245 Valid N:83 (Input culture.sta) Cronbach alpha: .738010 Standardized alpha: .738439 Average inter-item corr.: .160283				
PQ1S	37.82	28.97	5.38	0.26	0.73
PQ2S	38.08	26.61	5.16	0.43	0.71
PQ3S	37.72	27.19	5.21	0.42	0.72
PQ4S	38.00	27.08	5.20	0.39	0.72
PQ5S	37.59	26.63	5.16	0.35	0.72
PQ6S	38.07	26.98	5.19	0.44	0.71
PQ7S	37.51	27.58	5.25	0.41	0.72
PQ8S	37.61	26.72	5.17	0.40	0.72
PQ9S	37.40	28.96	5.38	0.19	0.74
PQ10S	37.17	27.71	5.26	0.43	0.72
PQ11S	36.81	29.79	5.46	0.26	0.73
PQ12S	36.93	28.55	5.34	0.28	0.73
PQ13S	37.34	27.52	5.25	0.35	0.72
PQ14S	37.67	30.12	5.49	0.10	0.75
PQ15S	37.48	28.27	5.32	0.39	0.72

APPENDIX C: Mean, standard deviation and Cronbach's alpha coefficient for organisational commitment

C.1 Cronbach's alpha coefficient for affective commitment

	Mean if	Var. if	StDv. if	Itm-Totl	Alpha if
Q1	18.77	26.18	5.12	0.48	0.82
Q4	18.37	23.10	4.81	0.73	0.78
Q7	18.80	25.54	5.05	0.57	0.81
Q10	19.02	26.96	5.19	0.38	0.84
Q13	18.64	26.16	5.11	0.50	0.82
Q16	18.83	23.75	4.87	0.68	0.79
Q19	18.63	24.28	4.93	0.70	0.79

Summary for scale: Mean=21.8434 Std.Dv.=5.80261 Valid N:83 (Commitment.sta) Cronbach alpha: .828223 Standardized alpha: .828652 Average inter-item corr.: .419563

C.2 Cronbach's alpha coefficient for continuance commitment

	Mean if	Var. if	StDv. if	Itm-Totl	Alpha if
Q2	18.11	18.55	4.31	0.51	0.61
Q5	18.27	19.33	4.40	0.44	0.63
Q8	18.01	18.73	4.33	0.56	0.60
Q11	18.40	22.46	4.74	0.21	0.70
Q14	17.80	21.87	4.68	0.38	0.65
Q18	18.35	21.05	4.59	0.36	0.66
Q20	18.37	21.66	4.65	0.30	0.67

Summary for scale: Mean=21.2169 Std.Dv.=5.18217 Valid N:83 (Commitment.sta) Cronbach alpha: .683286 Standardized alpha: .681697 Average inter-item corr.: .243291

C.3 Cronbach's alpha coefficient for normative commitment

	Mean if	Var. if	StDv. if	Itm-Totl	Alpha if
Q3	18.14	15.91	3.99	0.23	0.59
Q6	18.99	12.71	3.57	0.49	0.50
Q9	19.55	15.16	3.89	0.19	0.61
Q12	19.40	12.24	3.50	0.50	0.49
Q15	20.19	14.16	3.76	0.47	0.52
Q17	19.17	16.50	4.06	0.10	0.63
Q21	19.45	14.85	3.85	0.27	0.58

Summary for scale: Mean=22.4819 Std.Dv.=4.32903 Valid N:83 (Commitment.sta) Cronbach alpha: .602524 Standardized alpha: .598553 Average inter-item corr.: .180676

APPENDIX D: Pearson's chi-square test: relationship between biographical variables and existing organisational culture

D.1 Pearson's chi-square: Years of service of respondents

Summary Frequency Table (Biographical) Marked cells have counts > 10 (Marginal summaries are not marked)					
Years	**Existing Power**	**Existing Role**	**Existing Achievement**	**Existing Support**	**Row Totals**
1-3 years	6	1	1	1	9
3-5 years	0	0	2	0	2
5-8 years	8	6	2	1	17
More than 8 years	38	14	1	2	55
Totals	52	21	6	4	83

D.2 Pearson's chi-square: No people supervised by respondents

Summary Frequency Table (Biographical) Marked cells have counts > 10 (Marginal summaries are not marked)					
No of people supervised	**Existing Power**	**Existing Role**	**Existing Achievement**	**Existing Support**	**Row Totals**
None	19	7	3	1	30
1-2	13	1	2	1	17
3-5	9	2	1	0	12
More than 5	11	11	0	2	24
Totals	52	21	6	4	83

D.3 Pearson's chi-square: Gender of respondents

Summary Frequency Table (Biographical) Marked cells have counts > 10 (Marginal summaries are not marked)					
Gender	**Existing Power**	**Existing Role**	**Existing Achievement**	**Existing Support**	**Row Totals**
Male	34	15	4	3	56
Female	18	6	2	1	27
Totals	52	21	6	4	83

D.4 Pearson's chi-square: Age of respondents

Summary Frequency Table (Biographical) Marked cells have counts > 10 (Marginal summaries are not marked)					
Age	**Existing Power**	**Existing Role**	**Existing Achievement**	**Existing Support**	**Row Totals**
20-29	6	2	3	1	12
30-39	15	7	1	1	24
40-49	18	6	2	1	27
50 and older	13	6	0	1	20
Totals	52	21	6	4	83

D.5 Pearson's chi-square: Education level of respondents

Summary Frequency Table (Biographical) Marked cells have counts > 10 (Marginal summaries are not marked)					
Education	**Existing Power**	**Existing Role**	**Existing Achievement**	**Existing Support**	**Row Totals**
Grade 11 & below	1	0	0	0	1
Grade 12	8	0	0	0	8
Diploma	24	14	4	2	44
Bachelor's degree	10	2	2	1	15
Post grad degree	9	5	0	1	15
Totals	**52**	**21**	**6**	**4**	**83**

D.6 Pearson's chi-square: Location of respondents

Summary Frequency Table (Biographical) Marked cells have counts > 10 (Marginal summaries are not marked)					
Location	**Existing Power**	**Existing Role**	**Existing Achievement**	**Existing Support**	**Row Totals**
Head office	33	14	4	3	54
Area office	19	7	2	1	29
Totals	**52**	**21**	**6**	**4**	**83**

APPENDIX E: Pearson's chi-square test: relationship between biographical variables and preferred organisational culture

E.1 Pearson's chi-square: Years of service of respondents

Summary Frequency Table (Biographical) Marked cells have counts > 10 (Marginal summaries are not marked)					
Years Service	**Preferred Power**	**Preferred Role**	**Preferred Achievement**	**Preferred Support**	**Row Totals**
1-3 years	0	0	8	1	9
3-5 years	0	0	2	0	2
5-8 years	0	3	11	3	17
More than 8 years	0	2	51	2	55
Totals	0	5	72	6	83

E.2 Pearson's chi-square: No people supervised by respondents

Summary Frequency Table (Biographical) Marked cells have counts > 10 (Marginal summaries are not marked)					
No people supervised	**Preferred Power**	**Preferred Role**	**Preferred Achievement**	**Preferred Support**	**Row Totals**
None	0	0	27	3	30
1-2	0	0	15	2	17
3-5	0	1	11	0	12
More than 5	0	4	19	1	24
Totals	0	5	72	6	83

E.3 Pearson's chi-square: Gender of respondents

Summary Frequency Table (Biographical) Marked cells have counts > 10 (Marginal summaries are not marked)					
Gender	**Preferred Power**	**Preferred Role**	**Preferred Achievement**	**Preferred Support**	**Row Totals**
Male	0	3	49	4	56
Female	0	2	23	2	27
Totals	0	5	72	6	83

E.4 Pearson's chi-square: Age of respondents

Summary Frequency Table (Biographical) Marked cells have counts > 10 (Marginal summaries are not marked)					
Age	**Preferred Power**	**Preferred Role**	**Preferred Achievement**	**Preferred Support**	**Row Totals**
20-29	0	1	10	1	12
30-39	0	2	21	1	24
40-49	0	2	22	3	27
50 and older	0	0	19	1	20
Totals	0	5	72	6	83

E.5 Pearson's chi-square: Education level of respondents

Summary Frequency Table (Biographical) Marked cells have counts > 10 (Marginal summaries are not marked)					
Education	Preferred Power	Preferred Role	Preferred Achievement	Preferred Support	Row Totals
Grade 11 & below	0	0	1	0	1
Grade 12	0	0	8	0	8
Diploma	0	2	39	3	44
Bachelor's degree	0	2	10	3	15
Post grad degree	0	1	14	0	15
Totals	0	5	72	6	83

E.6 Pearson's chi-square: Location of respondents

Summary Frequency Table (Biographical) Marked cells have counts > 10 (Marginal summaries are not marked)					
Location	Preferred Power	Preferred Role	Preferred Achievement	Preferred Support	Row Totals
Head office	0	4	45	5	54
Area office	0	1	27	1	29
Totals	0	5	72	6	83

APPENDIX F: Pearson's chi-square test: relationship between biographical variables and organisational commitment

F.1 Pearson's chi-square: Years of service of respondents

Summary Frequency Table (Biographical) Marked cells have counts > 10 (Marginal summaries are not marked)				
Years Service	**Affective**	**Continuance**	**Normative**	**Row Totals**
1-3 years	3	3	3	9
3-5 years	1	0	1	2
5-8 years	7	6	4	17
More than 8 years	18	17	20	55
Totals	29	26	28	83

F.2 Pearson's chi-square: No people supervised by respondents

Summary Frequency Table (Biographical) Marked cells have counts > 10 (Marginal summaries are not marked)				
No of people supervised	**Affective**	**Continuance**	**Normative**	**Row Totals**
None	9	13	8	30
1-2	2	10	5	17
3-5	7	0	5	12
More than 5	11	3	10	24
Totals	29	26	28	83

F.3 Pearson's chi-square: Gender of respondents

Summary Frequency Table (Biographical) Marked cells have counts > 10 (Marginal summaries are not marked)				
Gender	**Affective**	**Continuance**	**Normative**	**Row Totals**
Male	22	15	19	56
Female	7	11	9	27
Totals	29	26	28	83

F.4 Pearson's chi-square: Age of respondents

Summary Frequency Table (Biographical) Marked cells have counts > 10 (Marginal summaries are not marked)				
Age	**Affective**	**Continuance**	**Normative**	**Row Totals**
20-29	6	3	3	12
30-39	7	10	7	24
40-49	7	9	11	27
50 and older	9	4	7	20
Totals	29	26	28	83

F.5 Pearson's chi-square: Education level of respondents

Summary Frequency Table (Biographical) Marked cells have counts > 10 (Marginal summaries are not marked)				
Education	**Affective**	**Continuance**	**Normative**	**Row Totals**
Grade 11 & below	0	0	1	1
Grade 12	2	3	3	8
Diploma	15	12	17	44
Bachelor's degree	5	7	3	15
Post grad degree	7	4	4	15
Totals	29	26	28	83

F.6 Pearson's chi-square: Location of respondents

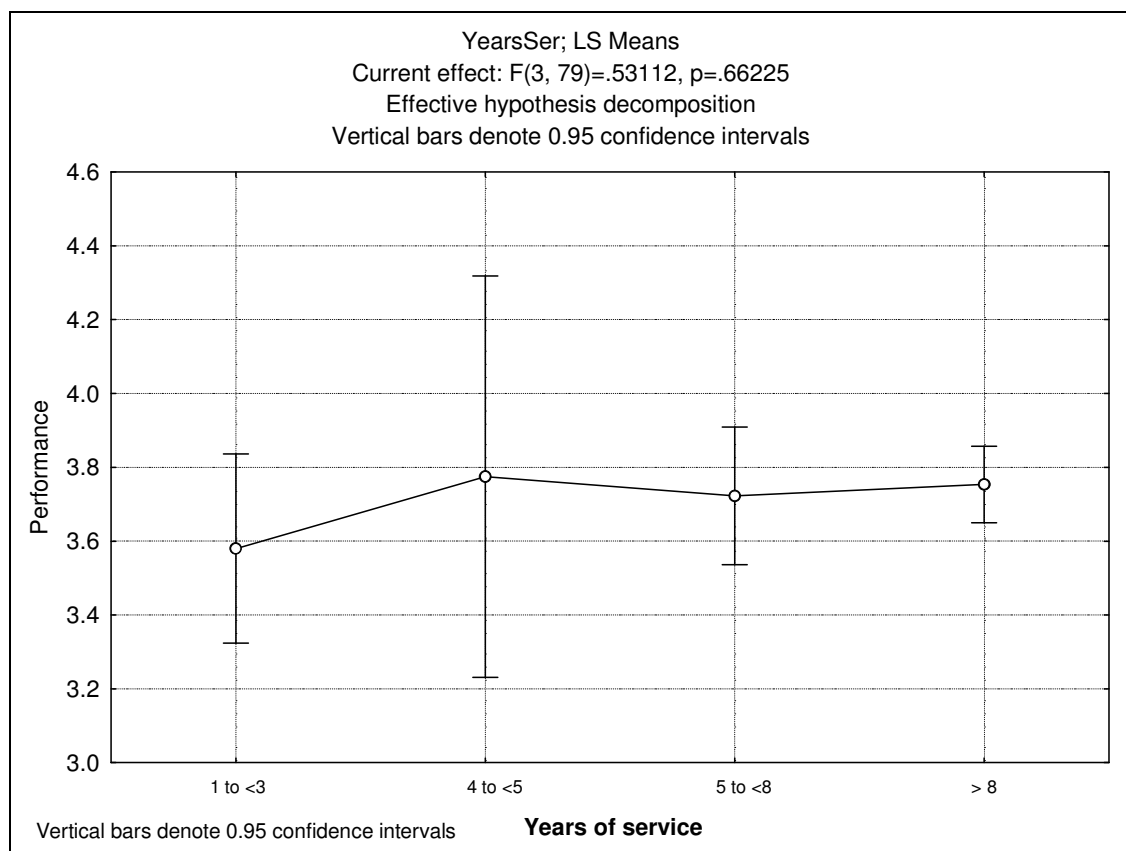| Summary Frequency Table (Biographical) Marked cells have counts > 10 (Marginal summaries are not marked)				
Location	**Affective**	**Continuance**	**Normative**	**Row Totals**
Head office	19	18	17	54
Area office	10	8	11	29
Totals	29	26	28	83

APPENDIX G: Relationships between biographical variables and employee performance ratings

G.1 One way ANOVA between employee performance and age

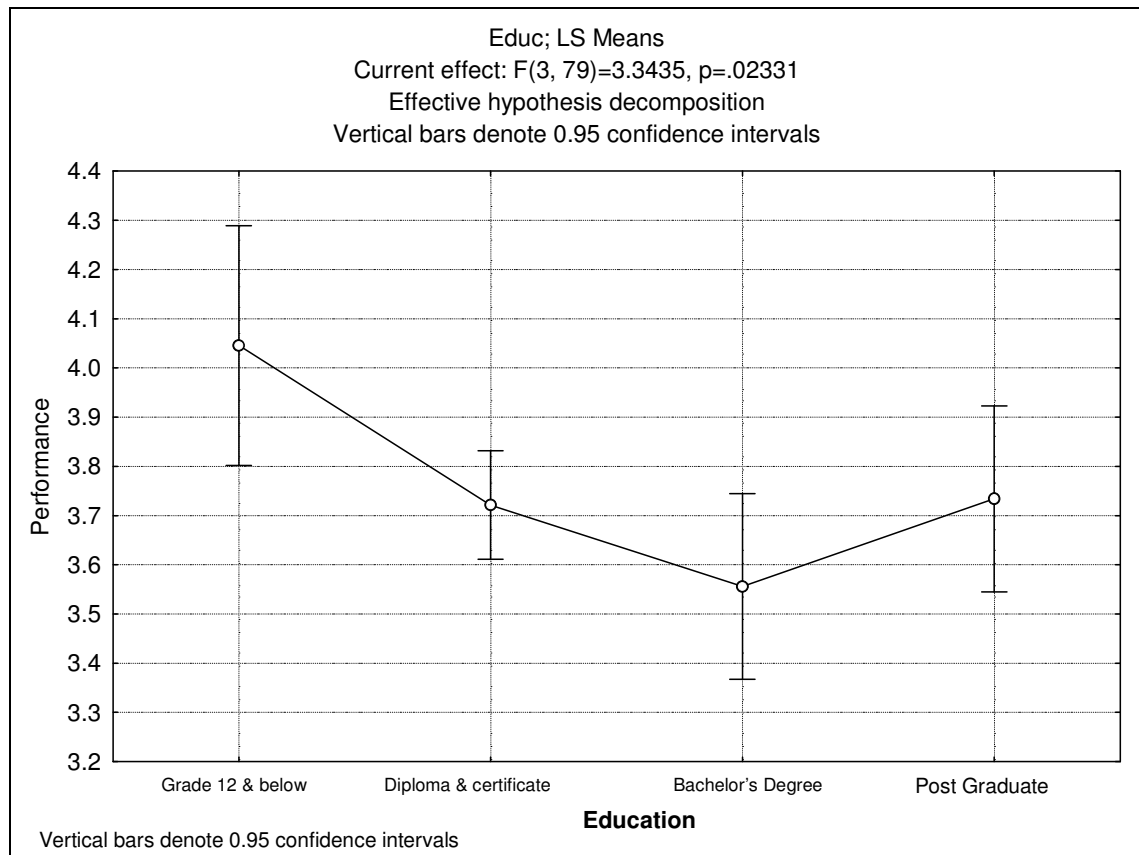|	SS	Degr. of	MS	F	p
Univariate Tests of Significance for Performance (Biographical.sta) Sigma-restricted parameterization Effective hypothesis decomposition					
Age	1.60	3	0.53	4.05**	< 0.01

** = p < 0.01, values rounded to 2 decimal places

G.2 Least square means of employee performance versus years of service

YearsSer; LS Means
Current effect: F(3, 79)=.53112, p=.66225
Effective hypothesis decomposition
Vertical bars denote 0.95 confidence intervals

Vertical bars denote 0.95 confidence intervals

G.3 Least squares means of employee performance versus education

Educ; LS Means
Current effect: F(3, 79)=3.3435, p=.02331
Effective hypothesis decomposition
Vertical bars denote 0.95 confidence intervals

Vertical bars denote 0.95 confidence intervals

G.4 One way ANOVA between employee performance and education

Univariate Tests of Significance for Performance (Biographical.sta) Sigma-restricted parameterization Effective hypothesis decomposition				
	SS	**Degr. of**	**MS**	**F**	**p**
Education	1.35	3	0.45	3.34*	0.02

* = p < 0.05, values rounded to 2 decimal places

APPENDIX H: T-tests and ANOVAs for biographical variables

H.1 T-test: Location of respondents versus organisational culture scales, organisational commitment scales and employee performance

	Mean G1	Mean G2	t-value	df	p	Valid N G1	Valid N G2	Std.Dev. G1	Std.Dev. G2	F-ratio	p
					T-tests; Grouping: Loc (Biographical.sta) Group 1: Area office Group 2: Head office						
EP	46.76	45.11	0.87	81	0.38	29	54	7.69	8.43	1.20	0.61
ER	43.72	43.69	0.04	81	0.97	29	54	4.29	4.63	1.16	0.68
EA	30.72	31.20	-0.32	81	0.75	29	54	6.30	6.48	1.06	0.89
ES	28.90	29.87	-0.76	81	0.45	29	54	6.04	5.26	1.32	0.38
PP	22.93	22.72	0.19	81	0.85	29	54	4.66	4.68	1.01	1.00
PR	36.28	36.91	-0.52	81	0.61	29	54	5.32	5.30	1.01	0.95
PA	50.72	50.30	0.39	81	0.70	29	54	4.33	4.92	1.29	0.47
PS	40.24	40.22	0.01	81	0.99	29	54	5.23	5.90	1.27	0.49
AC	22.00	21.76	0.18	81	0.86	29	54	6.02	5.74	1.10	0.75
CC	20.59	21.56	-0.81	81	0.42	29	54	5.32	5.13	1.07	0.80
NC	22.45	22.50	-0.05	81	0.96	29	54	5.52	3.59	2.36	0.01
Performance	3.71	3.74	-0.38	81	0.70	29	54	0.43	0.36	1.45	0.24

H.2 T-tests between gender and organisational culture, commitment, employee performance

T-tests; Grouping: Gend (Biographical.sta) Group 1: Male Group 2: Female

	Mean G1	Mean G2	t-value	df	p	Valid N G1	Valid N G2	Std.Dev G1	Std.Dev G2	F-ratio	p
EP	45.39	46.30	-0.47	81	0.64	56	27	7.82	8.98	1.32	0.38
ER	43.36	44.41	-1.00	81	0.32	56	27	4.82	3.68	1.71	0.13
EA	30.95	31.22	-0.18	81	0.86	56	27	6.75	5.65	1.43	0.32
ES	30.39	27.74	2.09*	81	0.04	56	27	5.20	5.85	1.27	0.45
PP	23.75	20.81	2.81**	81	<0.01	56	27	4.43	4.52	1.04	0.88
PR	36.43	37.22	-0.64	81	0.52	56	27	5.27	5.37	1.04	0.87
PA	50.27	50.81	-0.49	81	0.62	56	27	4.68	4.80	1.05	0.86
PS	39.61	41.52	-1.46	81	0.15	56	27	5.69	5.42	1.10	0.80
AC	22.73	20.00	2.05*	81	0.04	56	27	6.18	4.49	1.90	0.08
CC	21.25	21.15	0.08	81	0.93	56	27	4.92	5.78	1.38	0.31
NC	23.29	20.81	2.51**	81	<0.01	56	27	4.73	2.75	2.96	0.00
Performance	3.75	3.68	0.87	81	0.39	56	27	0.39	0.36	1.22	0.59

* = p < 0.05, ** = p < 0.01, values rounded to 2 decimal places

APPENDIX I: Determination of the sample size

I.1 Methodology utilised to determine the sample size

The methodology described by Bartlett, Kotrlik and Higgins (2001) which makes use of Cochran's formula as been utilised to determine the sample size.

The following assumptions were made in terms of the sample size:
- Response rate: 40%
- Error: 5%

$$n_o = \frac{t^2 \times s^2}{d^2} = \frac{(1.96)^2 \times (1.25)^2}{(5 \times 0.05)^2} = 96$$

Where:

t = value for selected alpha level of .025 in each tail = 1.96

s = estimate of standard deviation in the population = 5/4 = 1.25 (estimate of variance deviation for 5 point scale calculated by using 5 [inclusive range of scale] divided by 4.

d = acceptable margin of error for mean being estimated = (number of points on primary scale x acceptable margin of error); points on primary scale = 5; acceptable margin of error = 0.05 [error researcher is willing to accept].

As the sample is greater than 5% the population n_o needs to be adjusted by using the following formula:

$$\underline{n} = \frac{n_o}{(1 + n_o / population)} = \frac{96}{(1 + 96 / 203)} = 65$$

Where:

n_0 = required return sample size according to Cochran's formula.

$\underline{n}$ = required return sample size because sample > 5% of population.

Assuming a response rate of 40% the sample needs to be increased to:

$$\underline{n}' = \frac{\underline{n}}{(response\ rate)} = \frac{65}{(0.40)} = 163$$

Where:

$\underline{n}'$ = required return sample size to compensate for estimated response rate.

It was therefore decided to select a sample size of 170.