

THE RELATIONSHIP BETWEEN ORGANISATIONAL CULTURE AND LIFELONG
LEARNING

by

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DECLARATION

I, Jasmine Mohidin, student number 7173105, declare that this dissertation of limited scope entitled, "**The relationship between organisational culture and lifelong learning**", is my own work, and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

I, further declare that ethical clearance to conduct this research has been obtained from the Department of Industrial and Organisational Psychology, University of South Africa, as well as from the participating organisation.

A handwritten signature in black ink, appearing to read 'Jasmine Mohidin', with a horizontal line underneath.

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SUMMARY
**THE RELATIONSHIP BETWEEN ORGANISATIONAL CULTURE AND LIFELONG
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DEPARTMENT : INDUSTRIAL AND ORGANISATIONAL PSYCHOLOGY

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The objectives of this study were to (1) establish whether a relationship exists between individuals' perception of organisational culture, measured by the South African Cultural Instrument (2005) and lifelong learning, measured by the Dimensions of the Learning Organisation Questionnaire (2003); and (2) determine whether the participants differed with regard to these variables in terms of sociodemographic contextual factors such as age, race, gender, education, years of service, disability status and job level. A quantitative study, using primary data, was conducted on a convenient sample (N=257) of full-time public service officials in a South African public service organisation.

Correlational and inferential statistical analyses revealed statistically significant positive relationships between individuals' perception of organisational culture and lifelong learning. Significant differences were found in the perception of these variables for individuals with different years of service and for individuals of different age groups. The findings should contribute valuable knowledge to the field of organisational behaviour, which could be used to promote a lifelong learning culture in public service organisations. The study concludes with recommendations for future practice.

KEY TERMS

lifelong learner; lifelong learning culture; learning organisation; organisational learning; knowledge sharing; knowledge economy; public service sector

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CHAPTER 1: SCIENTIFIC ORIENTATION TO THE RESEARCH

The context of this research is lifelong learning as it occurs in a South African public service organisation. In this research, the focus is on the relationship between individual perception of organisational culture and lifelong learning.

Chapter 1 explains the problem statement and the research aims. A discussion of the research methodology follows with details of the empirical study, research design, participants, instruments and statistical analyses. The chapter concludes with an overview of the chapters in this dissertation.

1.1 BACKGROUND TO AND RATIONALE FOR THE RESEARCH

Lifelong learning is a global response to coping with the constantly changing environment and the knowledge-based economy of the 21st century (Marquardt, 2011; Tjepkema, Horst, Mulder, & Scheerens, 2000). The concept of lifelong learning was embraced as a principle for education, learning and systems worldwide, but initially to a greater extent by countries situated in the northern hemisphere (Torres, 2003). According to the American Society of Training and Development (ASTD), in a knowledge economy, “it is not the equipment and technology that differentiates organisations”, but the processes by which the organisation’s workforce is established, used and maintained (ASTD, in Truman & Coetzee, 2007, p. 4). Organisations need more than only a skills plan; they need a vision and commitment that will optimise the continued learning of employees and organisational learning as a whole (Wouters, Buyens, & Dewettinck, 2001). Lifelong learning is therefore not only vital for the growth and development of organisations but is the key to surviving and coping in the dynamic environment (Marquardt, 2011).

In response to this growing need for lifelong learning, many researchers worldwide have contributed to the body of knowledge (De Geus, 1997; Marquardt, 2011; Marsick & Watkins, 1990; Tjepkema *et al.*, 2000). Researchers worldwide have different interpretations of this concept and have written extensively about its meaning, suggesting methods for implementation in countries, education systems, communities and organisations (Coffield, 2000; De Geus, 1997; Longworth & Davies, 1996; Preece, 2009; Senge, 1990). In the work, *The fifth discipline: The art and practice of learning organisations*, Senge (1990) suggests principles and models for establishing learning organisations. Longworth and Davies (1996) researched strategies for lifelong learning and developed a pragmatic guide for decision makers and those responsible for developing organisations and people. De Geus (1997) has

written about the learning organisation and presented ways in which organisations can establish themselves as learning organisations or living companies. Preece (2009) mentions Coffield's (2000) two-volume edited collection exploring ten different models for lifelong learning. Despite the huge volume of literature on the topic, the following question arises: How many or which of the principles and models are actually being implemented in the workplace?

Despite the growing volume of literature on lifelong learning, research conducted in the European Union (EU) has indicated that there is a need for literature and research that will provide some "recipe" to help create opportunities for lifelong learning (Wouters *et al.*, 2001, p. 2). In the EU, research has been conducted in the field of human resource development to compare how organisations in EU countries have undertaken to facilitate learning on a continuous basis in organisations (Doyle, 2003; Tjepkema *et al.*, 2000). The lack of literature on how lifelong learning is being implemented seems to be a problem, both globally and in the South African context. According to Coffield (2000), lifelong learning is going through overlapping stages, namely of "romance", "evidence" and "implementation" (Walters, 2006, p. 12). Walters (2006, p. 11) contends that much of the lifelong learning literature remains in the "theological, which is the romantic and that the real challenge lies in the implementation of lifelong learning within a holistic framework". The statistics in the aforementioned study provide a comprehensive account of the degree and level of the organisation's implementation of lifelong learning practices and the challenges experienced (Wouters *et al.*, 2001).

To face the challenge of the knowledge economy in post-apartheid South Africa, the National Qualifications Framework (NQF) for lifelong learning was developed (Aitchison, 2006). Individuals can use the NQF to plan their continuous learning and develop portable skills that will enable them to remain employable throughout their lives. This encourages lifelong learning (Truman & Coetzee, 2007). A combination of legislation was promulgated to operate as building blocks in creating a new South African workforce (Truman & Coetzee, 2007). A number of Acts were passed and policies were adopted to operationalise lifelong learning in organisations (Walters, 2006). Partnerships between the public and private sectors of the economy were encouraged in order to provide education and training in and for the workplace (Walters, 2006). A number of institutional and financial frameworks have been established to facilitate skills development and lifelong learning (Wagner, 2001). According to the Skills Development Levies Act 9 of 1999 (<http://www.info.gov.za>), companies are required to contribute 0.5% of their annual payroll in the first year towards the National Skills Development Fund, and thereafter, 1% (Department of Labour, 2004). If companies can

prove that they have arranged and acquired training for their employees, they can be reimbursed (Walters, 2006). In addition, annual budgetary allocations are made and have been made by the South African government for skills development. In the Budget Speech on 23 February 2011, the Finance Minister announced that R25 billion had been set aside for skills development (<http://www.parliament.gov.za>). This allocation indicates a huge investment and commitment by government to lifelong learning.

Despite this national commitment, questions about delivery and implementation of lifelong learning still remain. The Democratic Alliance (DA), in response to the call by the Congress of South African Trade Unions (Cosatu) for an increase in Sector Education and Training Authority (Seta) levies, objected to the large budgetary allocation for skills development, stating that these funds remain unclaimed by many companies (Cosatu's call, 2010). This, together with ongoing claims by several skills development initiatives over the years, indicates that some companies are not sufficiently committed to skills development and lifelong learning. According to Walters (2006, p. 4), a multitude of work-based training, both formal and informal, has "mushroomed" everywhere, but there seems to be little coherence because these programmes are not seen as part of the lifelong learning framework. Truman and Coetzee (2007, p. 4) state that the "levels of Education, Training and Development challenge still overwhelms most employers and the task of appropriate skills development awaits all South African workplaces".

Luthans (2008) posits that the culture of an organisation places a high value on the way organisations learn. Organisations that embrace learning and subscribe to lifelong learning can be regarded as learning organisations (Wouters *et al.*, 2001). Learning organisations are in a better position to attract and retain knowledge workers and remain competitive in the knowledge economy (Kerr-Phillips & Thomas, 2009).

Lifelong learning and human capital development share a common purpose because both concepts embrace the development of individuals. According to Schreuder and Coetzee (2011), development is a process that helps employees improve their knowledge and skills and enhance their life experiences. Organisations that embrace a learning culture and continuously learn will seek to optimise their workforce through investing in human capital development. Robbins, Judge, Odendaal, and Roodt (2009) highlighted the importance of establishing a culture of lifelong learning in organisations in order to foster continuous learning. Organisations that invest in lifelong learning are better able to cope with the complex and dynamic demands of the knowledge economy.

Marsick and Watkins (2003) contend that continuous learning must be integrated into the systems and structure of the organisation in order to increase the organisation's knowledge and performance. In order for organisations to invest in lifelong learning they need to focus on the elements of culture that could essentially inhibit learning in organisations (Marsick & Watkins, 2003).

1.2 PROBLEM STATEMENT

Research studies conducted internationally have pointed to the significance of a lifelong learning culture to enable organisations to adapt to a changing world (Aggarwal, 2012; Longworth & Davies, 1996; Marquardt, 2011; Marsick & Watkins, 1990; Tjepkema *et al.*, 2006). It is crucial to build a lifelong learning culture in organisations in order to enhance productivity and decrease turnover intentions and talent drainage (Ellinger, Ellinger, Yang, & Howton, 2002; Kerr-Phillips & Thomas, 2009; Wang, Yang, & McLean, 2007). According to Marsick and Watkins (2003), leaders and other key individuals use their learning and experience to influence the culture of the organisation and to create an environment that supports the desired results. Mahler (1997) suggests that while culture either inspires or inhibits learning, it is necessary to study the cultural effects on learning. Although organisations, through regulatory practices, direct employee participation and learning, individuals engage in ways that best serve their own interests and purposes (Billett, 2004). Hence lifelong learning in the workplace seems to depend on both organisational culture and individual participation.

South Africa has experienced changes in its political dispensation that have impacted on organisational culture and on their approach to learning and development. The mission of the organisation for this research study is "to build an effective organisation that is responsive to the needs of the people" (PCS, 2007, p. 6). Being responsive to the needs of the people requires individuals and organisations to be able to adapt and change in order to render a service that meets the diversity of needs. According to Argyris and Schon (1978), organisational learning involves both the organisation's ability to meet the objectives of the organisation and learning how to learn, which has cultural implications. Organisational culture is deeply rooted in the organisation and is based on employees' values, beliefs and assumptions (Castro, 2008). If culture is based on employee values, beliefs and assumptions, is there a relationship between the perceptions of organisational culture and lifelong learning?

The purpose of this study was to determine whether there is a relationship between the perceptions of organisational culture and lifelong learning and the various dimensions of these constructs, and whether specific subgroups based on biographical variables differ significantly in their perception of organisational culture and lifelong learning and the dimensions of these constructs. The research was prompted by the substantial international body of knowledge emphasising the significance of culture and lifelong learning (Finger & Brand, 1999; Mahler, 1997; Marquardt, 2011; Marsick & Watkins, 2003; Pfister, 2009; Rebelo & Gomes, 2011). However, research highlighting the relationship between organisational culture and lifelong learning in public service organisations appears to be limited. There also seems to be a paucity of South African literature pointing to a relationship between these two concepts. In this regard, research on the relationship between organisational culture and lifelong learning, as it manifests in the public service sector organisation, could make a contribution to the discipline and practice of industrial and organisational psychology. It is hoped that the findings of this research will help industrial and organisational psychologists, specialists, and training and development practitioners in the establishment to understand, promote and maintain a lifelong learning culture in organisations.

The general research question and several specific research questions relevant to the literature review and empirical study were formulated on the basis of the problem statement.

1.2.1 General research question

What is the relationship between individuals' perceptions of organisational culture and lifelong learning and the various dimensions of these constructs, and do individuals of different ages, races, genders, education, years of service, disability status and job levels differ in terms of these two variables and their dimensions?

1.2.2 Research questions relating to the literature review

The following specific research questions were addressed in the literature review:

- How is organisational culture conceptualised in the literature?
- How is lifelong learning conceptualised in the literature?
- Does a theoretical relationship exist between individual perceptions of organisational culture and lifelong learning?

- Is there a theoretical basis for differences in the perceptions of organisational culture and lifelong learning among the subgroups in terms of the biographical variables, age, race, gender, education, years of service, disability status and job levels?
- What are the implications of the theoretical relationship for the creation of a lifelong learning culture in the organisation?

1.2.3 Research questions relating to the empirical study

The following specific research questions were addressed in the empirical study:

- Does a statistically significant positive empirical relationship exist between individual perceptions of organisational culture and lifelong learning and the various dimensions of these constructs as manifested in a sample of respondents in a South African organisational setting?
- Are there statistically significant differences between subgroups based on age, race, gender, education, years of service, disability status and job levels in terms of their perceptions of organisational culture and lifelong learning and the various dimensions of these constructs respectively in a sample of respondents in a typical South African organisational setting?

1.3 AIMS OF THE RESEARCH

1.3.1 General aim

The general aim of this study was to investigate whether there is a statistically significant positive relationship between individual perceptions of organisational culture and lifelong learning and the various dimensions of these constructs, and to determine whether subgroups based on age, race, gender, education, years of service, disability status and job levels differ statistically significantly in their mean scores on these two variables.

1.3.2 Specific aims

In terms of the literature review, the specific aims of this research were to determine

- how lifelong learning and organisational culture are conceptualised.
- whether a theoretical relationship exists between organisational culture and lifelong learning and the various dimensions of these two constructs.

- the implications of the theoretical relationship to create a lifelong learning culture in the organisation.
- In terms of the empirical study, the specific aims of this research were
- to determine whether there is a statistically significant positive empirical relationship between individual perceptions of organisation culture and lifelong learning and the various dimensions of these two constructs as manifested within a sample of respondents in a typical South African organisational setting.
- to determine whether there are statistically significant differences in the mean scores of subgroups based on age, race, gender, level of education, years of service, disability status and job levels of perceptions of organisational culture and lifelong learning respectively, as manifested in a sample of respondents in a typical South African organisational setting.
- to formulate recommendations for practices aimed at creating a lifelong learning culture and for further research based on the findings of the study in the field of industrial and organisational psychology.

1.4 PARADIGM PERSPECTIVES

A paradigm can be defined as a model that forms the basis for conducting research (Terre Blanche, Durrheim, & Painter, 2006). It can also be referred to as the lens through which the researcher approaches the research (Covey, 1989). According to Mouton and Marais (1996), a paradigm provides a framework incorporating various metatheoretical, theoretical and methodological beliefs and assumptions that define the problem area for researchers. In addition, a paradigm provides an indication of possible solutions in the form of a model supported by theoretical predictions, which ultimately directs what may be considered valid and acceptable solutions (Terre Blanche *et al.*, 2006). The metatheoretical concepts pertaining to the present study are discussed below.

1.4.1 The intellectual climate

Thematically, the literature review focuses on theories relating to lifelong learning and organisational culture presented from the humanistic and open systems paradigm. The empirical study is presented from the functionalistic paradigm.

1.4.1.1 Humanistic paradigm

One of the underlying assumptions of the humanistic paradigm is that individuals are directed to fulfilment and growth and strive to create, achieve and become complete human beings (McLeod, 2003). This need for fulfilment can be viewed as self-actualisation, which is the need to realise one's true intellectual and emotional potential (McLeod, 2003).

One of the early humanistic concerns raised about human beings striving to become self-actualised, is the attainment of this fulfilment through flexible organisations and learning (Aggarwal, 2012). After World War II, psychologists started focusing on what humans need in order to be satisfied at work (Van Vuuren, 2010). One of the approaches in industrial and organisational psychology is the "humanistic orientation" which helps employees to cope with the changing demands of the workplace (Van Vuuren, 2010, p. 4). Lifelong learning is studied in the context of the humanistic paradigm because it is concerned with the continuous development of human potential of individuals over a lifetime. Continuous development is aimed at empowering individuals to effectively fulfil their roles as individuals in their dynamic and changing environments.

1.4.1.2 Open system's paradigm

According to systems theory, organisations are open systems in constant interaction with the different subsystems and elements of the environment (French & Bell, 1999). Interaction between subsystems occurs at different levels between individuals and groups in the organisation and the external environment. These interactions are viewed as determinants of the behaviour of organisations (Martins & Terblanche, 2003).

Changes in the environment initiate learning, and organisational culture determines the organisation's response to the environment (Nyhan, Cressey, Tomassini, Kelleher, & Poell, 2004). According to Mahler (1997), specific elements of culture affect the capacity of organisations to learn and influence the way in which they learn.

1.4.1.3 Functionalistic paradigm

The empirical study focused on measuring the two variables, lifelong learning and organisational culture, according to the functionalistic paradigm. Morgan (1980, p. 608) explains the basic assumptions of the functionalistic paradigm as follows:

- Society has a concrete, real existence and a systematic character oriented to produce an ordered state of affairs.
- The functionalistic paradigm encourages an approach to social theory that promotes the understanding of the role of human beings in society.
- Human behaviour is always seen as being contextually bound in a real world of concrete and tangible social relationships.
- The basic orientation of the functionalistic paradigm is pragmatic and regulatory.
- The functionalistic paradigm is concerned with understanding society in a way that generates useful empirical knowledge.

The functionalistic paradigm applied to this empirical study, which focused on examining individuals' perceptions of organisational culture and lifelong learning and their dimensions to establish whether a relationship exists between these two constructs and their dimensions.

1.4.2 Metatheoretical statements

According to Mouton and Marais (1996), the researcher is obligated to make assumptions in order to justify specific theories and methodological strategies that are not tested in the specific study. Of significance here are the metatheoretical assumptions underlying the theories, models and paradigms that form the precise context of the study (Mouton & Marais, 1996). The metatheoretical statement of this study is presented below.

1.4.2.1 Industrial and organisational psychology

This study was conducted in the field of industrial and organisational psychology, which can be described as the study of how people function in organisations in order to apply methods, principles and theories of psychology to enhance both individual and organisational effectiveness and improve individuals' quality of life (Greenberg & Baron, 1997).

Organisational behaviour, a subfield of industrial and organisational psychology, was relevant to this study. Organisational behaviour can be defined as the understanding, prediction and management of human behaviour in organisational settings by systematically studying individual, group and organisational processes (Greenberg & Baron, 1997; Luthans, 2008). Organisational psychology, which embraces the study of organisational behaviour relates to the needs of humans in order to promote satisfaction in the workplace (Van Vuuren, 2010). The phenomena covered in this subfield include culture, climate, organisational change and development (Van Vuuren, 2010).

Thematically this research should help industrial and organisational psychologists to understand the culture in the organisation and its relevance to lifelong learning in order to enhance the individual and organisational effectiveness through the application of principles, methods and theories that should improve continuous learning at individual, group and organisational level.

1.4.2.2 Applicable theories and models

The literature review in this study investigates organisational culture on the basis of the South African Cultural Instrument (Martins, 2005) and the Dimensions of Organisational Learning (Marsick & Watkins, 2003).

1.4.2.3 Conceptual descriptions

The conceptual descriptions relevant to this study are defined below.

(a) Organisational culture

The theoretical model of culture is based on systems theory and the open systems paradigm, which posits the interrelatedness between subsystems and elements in an environment (French & Bell, 1999). The model of organisational culture of Martins (2007) was used in this study because it provides all the dimensions of the organisation that manifest in culture (Martins & Martins, 2002). It is based on the interaction between the organisational subsystems, the external environment and the internal systems and dimensions of culture (Martins, 2007).

According to Martins and Martins (2003), interactions at different levels are important determinants of workplace behaviour. This research study explored culture from a systems perspective and examined the different cultural dimensions, including vision, mission, interpersonal relations, leadership and management processes, in order to determine the relationship between these dimensions and lifelong learning.

(b) Lifelong learning

Lifelong learning is referred to as continuous learning and the development of human potential over a lifetime as a means to empower individuals by enabling them to gain the necessary skills, knowledge and competencies in order to effectively fulfil their roles in

different environments (Jarvis, 2009; Longworth & Davies, 1996; Marquardt, 2011). Longworth and Davies (1996, p. 22) define lifelong learning as “the development of human potential through a continuous supportive process which stimulates and empowers individuals to acquire all the knowledge, values, skills and understanding they will require throughout a lifetime and to apply them with confidence, creativity and enjoyment in all roles circumstances and the environment”. Different dimensions of lifelong learning, including the promotion of enquiry, shared learning and on-the-job learning, were explored in this study. Theories exploring lifelong learning at individual, team and organisational level will be discussed. The theory on formal and incidental learning is based on the work of Dewey (1938) and Lewin (1946) and explores how people shape the culture for learning. The model for organisational learning is based on the concept that change must occur at the individual, group and organisational level of learning in order to improve organisational performance (Marsick & Watkins, 2003).

1.4.3 Central hypothesis

The central hypothesis of this study was formulated as follows:

There is a statistically significant positive relationship between individuals’ perception of organisational culture and lifelong learning and their dimensions in a South African public service organisation. Furthermore, subgroups based on age, gender, race, education, years of service, disability status and job levels differ significantly in terms of their mean scores on perceptions of organisational culture and lifelong learning and their dimensions.

1.5 RESEARCH DESIGN

The aim of research design is to structure the research study in a manner that will maximise the validity of the research results (Mouton & Marais, 1996). In this section, the design of the research, the research variables, the types of research and the methods used to ensure reliability and validity are discussed.

Variables are the unit of objects researchers observe in their studies (Mouton & Marais, 1996). A variable is defined as a concept that can take two or more values. In research design, two types of variables are often distinguished, namely independent and dependent variables. An independent variable is manipulated by the experimenter to determine the effects on a dependent variable (Terre Blanche *et al.*, 2006).

The dependent variable in this study was lifelong learning and its dimensions, while the independent variable was individuals' perception of organisational culture and its dimensions. The research focused on determining whether a significant empirical relationship exists between these two variables and their dimensions.

A quantitative research design was used in this study. The hypothesis was clearly stated, beforehand and measured by making use of measuring instruments. A cross-sectional field survey was used in this study. Cross-sectional studies involve the study of groups of people of different age, race and gender at a particular point in time (Mouton & Marais, 1996). Convenient sampling was used in this study because of the accessibility of the employees of the organisation. Convenient sampling entails that the researcher obtains data from anyone available in the organisation at a particular point in time (Brewerton & Millward, 2001). Although convenient sampling can produce large samples, it is non-representative and generalisation to a large population is limited (Brewerton & Millward, 2001). However, the research design offers high measurement reliability, if properly constructed questionnaires with proven psychometric properties are used.

The study can be regarded as descriptive because the relationship between individual perception of organisational culture and lifelong learning and its various dimensions was described. According to Mouton and Marais (1996), the aim of descriptive research is to investigate certain domains in depth in order to describe issues as accurately as possible. The descriptive research in this study would allow for the conceptualisation of organisational culture and lifelong learning in order to determine the relationship between the two variables. According to Terre Blanche *et al.* (2006), the unit of analysis is the object of the research study specifying about whom or what conclusions will be drawn. The unit of analysis in this study comprised a group of individuals employed at a South African public service organisation. The individuals were permanent employees and some of them were consultants.

Research needs to be valid, both internally and externally. External validity is realised by ensuring that instruments are used with proven validity for different groups under different sets of circumstances and which should result in the same observations (Mouton & Marais, 1996). Using instruments that have been shown to be valid enhances internal validity, thus providing a structured approach to the literature review (Mouton, 2011).

Theoretical validity was ensured by researching the most relevant and recent literature and by extracting the concepts from these resources. Classical literature that has relevance to the concepts was used in order to provide a historical perspective where necessary.

In the empirical research, validity was ensured through the use of appropriate measuring instruments. The measuring instruments were critically examined for their criterion-related validity, content validity and construct validity. These details are provided in chapter 3.

Reliability refers to the degree to which the results are repeatable and relates to the scores obtained by participants on measurement instruments and to the outcomes of the study as a whole (Terre Blanche *et al.*, 2006). Reliability is deemed to be a significant criterion indicating the accuracy and conclusiveness of the findings (Terre Blanche *et al.*, 2006).

Reliability in the literature review was addressed by using existing literature sources, theories and models that are available to researchers. The reliability of the empirical research was ensured by using measuring instruments that are internally and externally consistent (Brewerton & Millward, 2001). The Cronbach alpha coefficient was used to ensure the internal reliability of the measuring instruments.

1.6 RESEARCH METHOD

The study consisted of a literature review and an empirical study.

Phase 1: Literature review

The literature review involved the following steps:

- Step 1: conceptualising organisational culture and lifelong learning
- Step 2: determining whether a theoretical relationship exists between the concepts of lifelong learning and organisational culture
- Step 3: explaining the practical implications of the theoretical relationship for the establishment of a culture of lifelong learning in a public service sector environment

Phase 2: Empirical study

The empirical study is presented in the form of a research article in chapter 3. The research article explains the core focus of the study, the background to the study, trends in the

research literature, the potential value added by the study, the research approach, research method, the results, conclusions, limitations and recommendations for future research and practice. Chapter 4 integrates the research study and concludes with a detailed discussion of the conclusions, limitations and recommendations.

1.7 CHAPTER LAYOUT

The chapters in this study are as follows:

Chapter 1: Scientific orientation to the research

Chapter 2: Literature review: organisational culture and lifelong learning. This chapter focuses on the concepts of lifelong learning, organisational culture, learning organisations and implications for implementation.

Chapter 3: Research article

Chapter 4: Conclusion, limitations and recommendations

1.8 CHAPTER SUMMARY

This chapter focused on the scientific orientation of the research and described the background to and rationale for the research, the problem statement, the aims of the study, the paradigm perspectives and the research design and methodology of the study. The chapter concluded with a description of the chapter layout.

Chapter 2 addresses the literature aims of the study and discusses the constructs of organisational culture and lifelong learning and their dimensions, and the interrelationships between these dimensions.

CHAPTER 2: LITERATURE REVIEW: ORGANISATIONAL CULTURE AND LIFELONG LEARNING

In this chapter a literature study of the conceptualisation of organisational culture and lifelong learning will be presented as it appears in the literature, and the theoretical relationship between organisational culture and lifelong learning will be described. Furthermore, the implications of the existence of a relationship for the creation of a lifelong learning culture in the organisation as presented in the literature will be discussed.

2.1 ORGANISATIONAL CULTURE

2.1.1 Definition of culture

The importance of organisational culture has been emphasised in many research studies because of its enduring influence on various aspects of the organisation (Chatterjee, 2009; Gibson, Maznevski, & Kirkman, 2009; Martins, 2007; Marsick & Watkins, 2003). Researchers have identified organisational culture as a key variable in a variety of organisational behavioural studies (Davidson, 2003; Martins, 2007; Martins & Coetzee, 2007; Martins & Martins, 2003; Martins, Martins, & Terblanche, 2004; Seloane, 2010; Wang, Su, & Yang, 2011). Schein (2010) attested to the pervasive influence of culture on all aspects of organisational functions and interactions with its environments. Organisational culture is regarded as the way of doing things that not only contributes to the success of organisations but also gives them a competitive advantage (Davidson, 2003). According to Wang *et al.* (2011), culture is an antecedent of knowledge creation capability, which in turn contributes to the organisation's competitive edge. Culture enhances employee commitment in organisations and improves the consistency of employee behaviour (Martins & Martins, 2003). Employee retention is determined by culture, practices and processes, which allow individuals to grow in the organisation (Chatterjee, 2009). According to Martins (2007), culture plays a key role in organisational transformation, and if the current culture of organisations is understood, it is possible to work towards a desired culture.

An ideal organisational culture is believed to have a positive influence on organisational performance because it is aligned to the organisational objectives and purpose (Pfister, 2009). Some researchers highlight organisational culture as the best predictor of organisational performance (Davidson, 2003; Van der Post, De Conning, & Smith, 1998). In order to understand how culture affects the various aspects of organisational functioning it is necessary to understand what constitutes culture.

Since organisational culture has been of interest to many researchers, a variety of definitions exist in the literature, each identifying particular elements of culture (Deal & Kennedy, 1982; Denison, Janovics, Young, & Cho, 2006; Dauber, Fink, & Yolles, 2012; Pfister, 2009). Pfister (2009, p. 35) lists the following elements of culture in the descriptions as set out in table 2.1.

Table 2.1

The elements and descriptions of culture

Element	Description
Observed behavioural regularities when people interact	The language that is used, customs and traditions that evolve, and the rituals employed in a variety of situations
Group norms	The implicit standards and values that evolve in working groups, such as a particular norm of a “fair day’s work” for a “fair day’s pay”
Espoused values	The articulated and publicly announced values that a group claims to be trying to achieve
Formal philosophy	The broad policy and ideological principles that guide a group’s actions towards employees, customers and stakeholders
Rules of the game	The implicit and unwritten rules for getting along in the organisation The ropes the newcomer must learn in order to become an accepted member “The way we do things around here” (Martins, 2007)
Embedded skills	The special competencies displayed by group members in accomplishing certain tasks. The ability to make certain that things get passed on from generation to generation without necessarily being articulated in writing
Habits of thinking, mental models and linguistic paradigms	The shared cognitive frames that guide the perceptions, thought and language used by members of a group and taught to new members in the early socialisation process

Note: Adapted from Pfister, 2009, p. 35

It is evident from the elements in table 2.1 above that culture comprises the following:

- shared thinking and understanding among members in a group that translate into and guide
- group members' interactions or behavioural regularities which are both
- implicit and explicit and based on history and tradition that get transmitted to all newcomers in the organisation (Pfister, 2009)

Evidently, some of the above key concepts are contained in a variety of definitions, which provide some indication of the approaches and paradigms adopted by researchers when they embarked on a study of organisational culture (Denison *et al.*, 2006; Dauber *et al.*, 2012; Martins, 1989; Schein, 1990a).

Schein (1990a, p. 111) defines culture as “a pattern of basic assumptions invented or discovered by a given group as it learns to cope with its problems of external adaption and internal integration that has worked well enough to be valid and, therefore is to be taught to new members as the correct way to perceive, think and feel in relation to those problems”. Deal and Kennedy (1982) define culture as combined patterns of human behaviour that incorporate thinking, speaking and artefacts and which depend on human beings' ability to learn and transmit knowledge to future generations. Hofstede (1997, p. 262) defines organisational culture as “the software of the mind which distinguishes the members of one organisation from another”.

According to Denison (1990), organisational culture comprises underlying values, beliefs and principles that form the basis of an organisation's management system, practices and behaviours, epitomising and strengthening these principles. These principles and practices endure because they have meaning for the members of an organisation. Martins (2007, p. 75) defines culture as “an integrated pattern of human behaviour, which is unique to a particular organisation and which originated as a result of the organisation's survival process and interaction with its environment. Culture directs the organisation to goal attainment. Newly appointed employees must be taught the correct way of behaving.” Martins's (2007) definition is similar to that of Schein in that it emphasises culture as the integration of patterns of human behaviour that have developed as a result of individuals' response to their environments. Martins's (2007) definition of culture will be used in this research study. In the same way as there are various definitions of culture, there are also variations of the dimensions of culture providing an indication of the focus of past research studies.

2.1.2 Dimensions of culture

Although research studies on organisational culture do not indicate uniform characteristics or dimensions of culture (Van der Post *et al.*, 1998), the study of culture can be approached by identifying certain dimensions that shape behaviour, which eventually become the culture of the organisation (Jacobs & Roodt, 2011). The dimensions approach measures the cultural approach of organisations using empirical methods and scales that can be related to other dependent variables (Dauber *et al.*, 2012). Martins (1989) developed a cultural framework based on seven different dimensions, which include leadership, means to achieve objectives, management processes, employee needs and objectives, vision and mission. Although these dimensions will be used in this study, it may be necessary to review the dimensions identified by other researchers to provide a broader context for future studies.

In their attempt to develop an instrument to measure culture Van der Post *et al.* (1998) and later Jacobs and Roodt (2011) identified 15 dimensions of culture, namely conflict resolution, culture management, customer orientation, disposition towards change, employee participation, goal clarity, human resource orientation, identification with the organisation, locus of authority, management style, organisation focus, organisational integration, performance orientation, reward orientation and task structure.

Denison *et al.* (2006) identifies four cultural traits or dimensions, namely the involvement by employees and day-to-day tasks, consistency in the organisation's procedures, adaptability of the organisation to change and mission of the organisation and the performance expectations (Denison, 1990; Denison *et al.*, 2006).

According to Hofstede (1980), there are four dimensions of culture, namely individualism versus collectivism, power distance, uncertainty avoidance and masculinity and femininity. Numerous research studies use Hofstede's framework to examine organisational issues (Lowe & Gibson, 2006).

Hofstede, Bond, and Luk (1993) identified six dimensions of organisational culture, namely process versus result orientation, employee versus job orientation, parochial versus professional orientation, open versus closed systems, loose versus tight systems and normative versus pragmatic.

The dimensions of organisational culture that have been identified in the various aforementioned research studies were initiated by specific research agendas. These dimensions made contributions to the different perspectives of research, hence informing subsequent research by providing multiple perspectives from which to work. Many researchers have adopted the dimensional approach in their studies on organisational culture (Hofstede, 1980; Jacobs & Roodt, 2011; Martins, 1989; Martins & Coetzee, 2007; Martins & Martins, 2003; Martins & Von der Ohe, 2006; Van der Post *et al.*, 1998). Researchers, who have used the dimensional approach believe that it facilitates the measurement of culture along bipolar scales, which can be related to most other variables (Dauber *et al.*, 2012; Tsui, Nifadkar, & Ou, 2007). This study will draw on the different cultural dimensions portrayed by the relevant model.

2.1.3 Models of culture

An organisation's culture is regarded as pervasive and representative of the entire organisation and does not represent the individuals in the organisations (Hofstede *et al.*, 1993).

2.1.3.1 Schein's model of organisational culture

Models for studying and diagnosing organisational culture facilitate the categorisation, interpretation and the understanding of relationships between data and complex organisational phenomena, suggesting methods for intervention (French & Bell, 1999; Martins, 2007). A variety of models attempt to diagnose organisational culture. Schein's (1990a) factor model portrays organisational culture at three levels, namely artefacts, values and assumptions. Schein's (1990a) model uses levels of culture to indicate the visibility of the cultural phenomenon to the observer and suggests that the confusion about culture is a result of not differentiating between the levels of overt manifestation (Schein, 2010). The different cultural levels as depicted by Schein (1990b) are represented in figure 2.1.

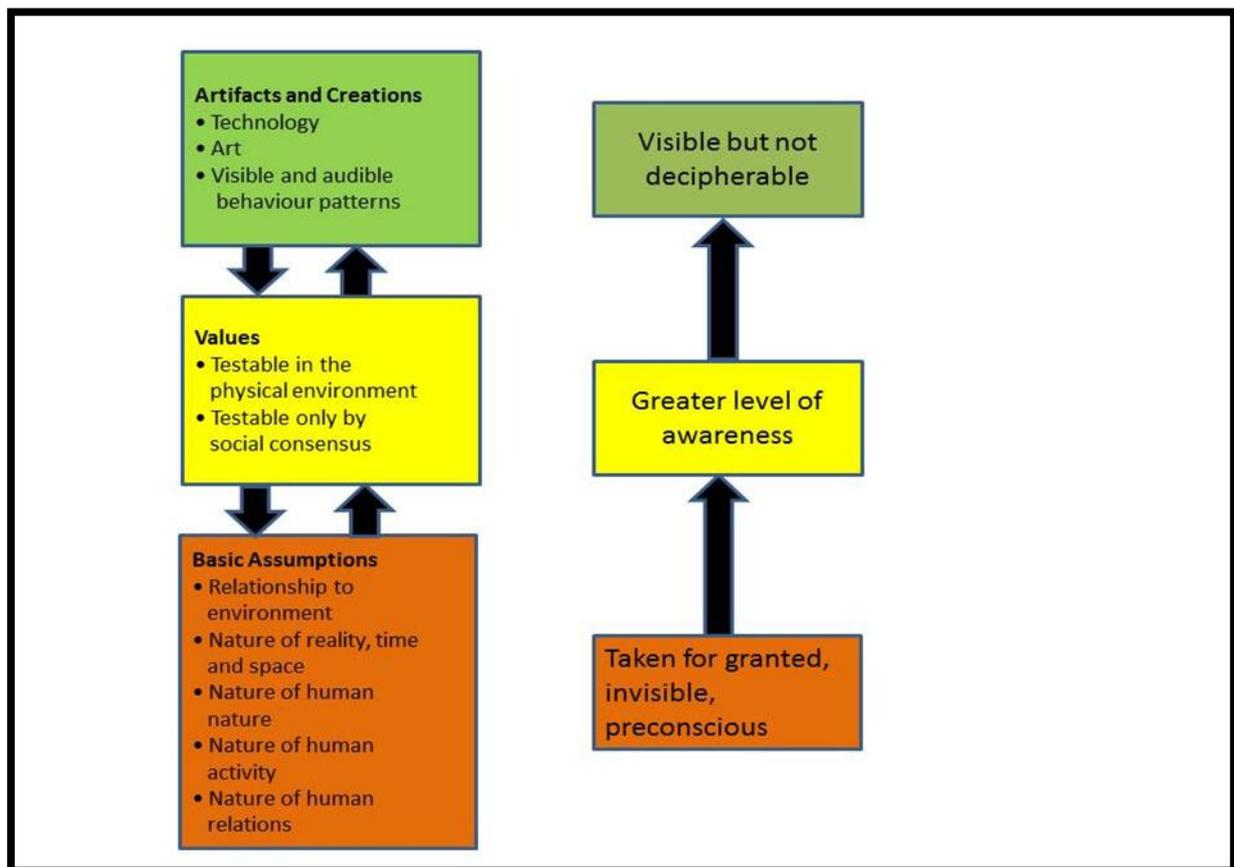


Figure 2.1: Schein's levels of culture (Adapted from Schein, 1990b)

Level 1: Artefacts: This is the most visible of all the levels and includes the physical and structural phenomenon. This includes language, technology, style, dress code, myths, stories and rituals (Schein, 2010). Although it is easy to observe artefacts, it is difficult to understand the underlying meanings, patterns and relationship. Schein (2010) cautioned against inferring deeper assumptions based solely on artefacts.

Level 2: Espoused beliefs and values: Group learning reflects the original belief and values of someone and in the organisational sense the founders of the organisation (Davidson, 2003; Schein, 2010). In the event of being faced with issues or problems, the manner in which problems are dealt with will reflect the values and beliefs of the leader or founder(s). If the solution to the problems proves to be successful and the group shares the perception of the success, then the perceived value is transformed into a shared assumption (Schein, 2010). Only values that continue to provide successful results will become shared assumptions.

Level 3: Basic assumptions stem from repeated success in implementing certain beliefs and values: They are often taken for granted and within a group there is often little variation. There is strong consensus among group members because of repeated success and this

guides behaviour, cognitions, perceptions, human relations and performance (Schein, 1990). Behaviour derived from any other principle is often inconceivable (Schein, 2010). In general, basic assumptions are not debated or confronted, causing much anxiety and distortion in situations (Schein, 2010).

The literature points to a variety of models, which have subsequently been based on the work of Schein (Dauber *et al.*, 2012; Martins, 1989; Martins & Martins, 2003). Schein's model provides the basis for diagnosing the internal development of an organisation, but the external effects of the environment have not clearly been considered in this model (Dauber *et al.*, 2012). There are a host of external factors that could have a profound impact on an organisation's culture and models should therefore be explicit in mapping these effects (Dauber *et al.*, 2012; Sagiv & Schwartz, 2007). Martins's (2007) model gives due consideration to the external environment and because elements of the external environment are extremely important to the public sector organisation of this research study, this model was deemed to be best suited to this study (Martins & Martins, 2005).

2.1.3.2 Martins's (2007) model of organisational culture

Martins's (2007) model embraces the interaction between the organisational subsystems (goals, values, structural, managerial, technological and psychosocial subsystems); the survival functions, namely the external environment (social, industrial and corporate culture) and the internal systems (the artefacts, values and basic assumptions) and the dimensions of culture (Martins & Martins, 2005; Martins & Von der Ohe, 2006). The model is a comprehensive and holistic depiction of culture and succeeds in capturing the essential elements of the organisation and meaningfully integrates the interrelationships between the various elements of the organisation and dimensions of culture. Although this model has not been used in a study of relationships between culture and lifelong learning, it has been used in a study on creativity and innovation (Martins & Terblanche, 2003).

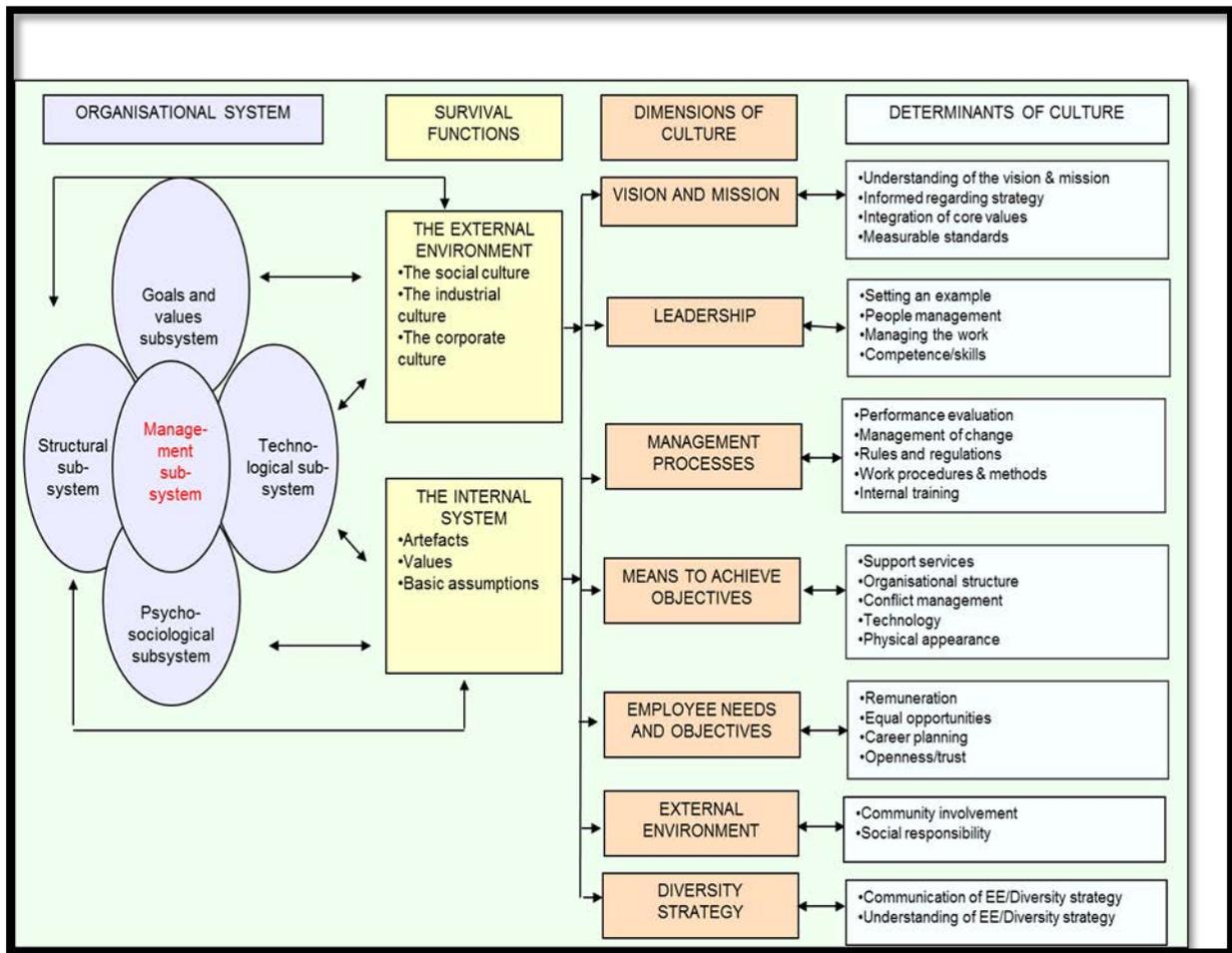


Figure 2.2. Organisational culture model (Martins & Martins, 2005, p. 7)

(a) *The organisational system*

According to the model, the organisation comprises five subsystems. The goals subsystem consists of a variety of related and subordinate goals that are derived from the organisation's mission and strategy. The technical subsystem refers to the application of specialist knowledge, skills, equipment and machinery in the transformation of inputs into outputs. In fact, the technical subsystems consist of artefacts and creations (Martins, 1989).

The structural subsystem stems from the objectives and the technical subsystems (Martins, 1989). The job expectations and the technology have a vital influence on the structure of the organisation. Authority structures and systems for workflow are developed and based on how jobs are grouped. Communication flow, reporting lines and work rules are included in the structural subsystem (Martins, 1989). The psychosociological subsystem comprises individuals and groups in the organisation and refers to the interrelationships between individuals and groups in the organisation (Martins, 1989). Furthermore, it refers to the

climate and motivation in the organisation to strive towards a common purpose by integrating the individual's goals with the organisational goals (Martins, 1989).

The management subsystem cuts across all four subsystems and refers to how the organisation sets goals and objectives, develops comprehensive strategic and operational plans, designs structures, establishes control processes and manages human resources (Martins, 1989).

(b) Dimensions of culture

The key dimensions embraced in the model include vision and mission, external environment, the means to achieve objectives, the image of the organisation, the management processes, employee needs and objectives, interpersonal relationships and leadership (Martins & Martins, 2005). There is an interdependent relationship between the dimensions, the survival functions and the organisational system (Martins, 1989).

The organisational vision and mission statements refer to what employees believe to be the core purpose of the organisation and include the strategy the organisation intends to use in order to achieve its purpose over a period of time (Martins & Coetzee, 2007). Many regard the organisational mission as the most crucial element of the organisational philosophy as it contains the values, guidelines and principles of the organisation (Covey, 1989; McDonald, 2007; Melewar & Karaosmonaglu, 2006). An organisation's mission serves as a long-term goal because when achieved, it is the reason for its existence (McDonald, 2007).

Campbell and Young (1999) elaborated on this definition and regard mission as the organisation's character and identity. According to Campbell and Young (1999), a mission contains the organisation's purpose, strategy, behaviour, standards and values. The mission thus links the rationale for actions to the behaviour standards by explaining why certain behaviour makes the organisation successful, and why certain behaviour is morally correct (Campbell & Young, 1999).

Every organisation should develop a shared core mission (Schein, 2010). According to Covey (1989), an organisational mission statement, which reflects the deeply shared vision and values of everyone, generates greater unity and commitment in the hearts and minds of employees. A shared mission therefore acts as a frame of reference directing individual behaviour in the workplace.

According to the literature, vision is the central concept in the theory of leadership (Booyesen, 2009; Campbell & Young, 1999). It is usually realised by the founding members of the organisation. An example can be found in Nelson Mandela, former President of South Africa and a great leader and visionary, who inspired the people of South Africa to achieve the vision of a free and democratic South Africa. A vision therefore focuses on the future and paves the way for what is to come. Lipton (1999) suggests that visions of effective organisations reveal the mission, the strategy for achieving the mission and the elements of culture supporting the mission and strategy. Blanchard and Stoner (2004) maintain that organisations would not be able to compete globally without a clear vision. A clear and agreed-upon vision is essential for organisational success.

The purpose of the vision statement is to craft an aligned organisation in which everyone works towards the same desired ends (Blanchard & Stoner, 2004). According to Senge (1990), the vision should move beyond being shared and connect to the individual's personal vision. This seeks to ensure greater courage, ownership and commitment, and to enable people to think that their work is worthwhile and joyful (Blanchard & Stoner, 2004; Senge, 1990).

The vision of the organisation in this study is "to build an effective people's organisation that is responsive to the needs of the people and that is driven by the ideal of realising a better quality of life for all the people of South Africa" (PCS, 2007, p. 2), forming the basis of behaviour and rationale for its actions. The instrument adopted for this research focuses on determining the employees' understanding of the vision and mission of the organisation and how this has been transformed into measureable goals and objectives (Martins & Martins, 2005).

The mission of the organisation determines the relationship organisations have with the external environment (Martins, 1989). The external environment of an organisation comprises all entities outside the boundaries of the organisation that have an influence on its performance. These include markets, global financial conditions, political circumstances, competition and customers (Martins & Coetzee, 2007). The notion of the influence of the external environments on the organisation is derived from the open systems approach posited by Katz and Kahn (1966).

The external environments have a significant influence on the survival of the organisation and constant monitoring is needed to ensure that it stays aligned with the external environment (Schraeder, Tear, & Jordan, 2005). Gordon (1991) avers that culture is a result

of organisations adapting to the environment and that change in the environment may initiate a change in culture. According to Ring and Perry (1985), private and public sector organisations operate in different strategic contexts, which impact on their behaviour. These differences can be ascribed to the unique characteristics that shape the boundaries of these organisations (Schraeder *et al.*, 2005).

Public sector organisations are forced to adopt and modify their cultures otherwise they may experience higher turnover and an erosion of public and private confidence in their organisations (Valle, 1999). One of the most significant differences between private and public sector organisations is that the former operate in highly competitive environments whereas the latter have few or no competitors (Schraeder *et al.*, 2005).

The South African Cultural Instrument (1989) adopted in this study seeks to determine the degree of effectiveness of the organisation's focus on the external environment and internal customers as well as the perception of the organisation's community involvement. In the context of this study, this public sector organisation's response and interaction with its environments were measured in order to determine how it is perceived to adapt to the changing needs of the environments. The manner in which the organisation adapts to its environment is determined by the culture of the organisation (Martins, 2007; Schein, 2010; Schraeder *et al.*, 2005).

The means to achieve its objectives determine the way in which organisational structure and support mechanisms contribute to the effectiveness of the organisation. Organisational structures constitute the arrangement of functions and employees in the specific areas and levels of responsibility and relationships (Martins & Coetzee, 2007). Structures and support mechanisms must be compatible with the culture of the organisations in order for organisations to achieve their objectives (Gordon, 1991). Structures ensure that the organisation's mission and strategy are effectively implemented (Martins & Coetzee, 2007). The nature of the structure is determined by the strategy, size, technology and type of environment (Basson, Lyons, & Nienaber, 2009).

The image that organisations portray to the outside environment can either attract or deter prospective employees from applying for job opportunities in these organisations (Rose, 2004). Corporate image can be defined as the total of people's perceptions of the organisation's personality or characteristics (Spector, 1961). Job applicants prefer to seek employment with certain organisations and not others on the basis of their perception of the

organisation's corporate image (Rose, 2004). Positive image perceptions held by individuals will tend to attract them to the organisation (Cable & Turban, 2003).

The image the organisation portrays goes beyond symbolism and includes attributes which will enable individuals to maintain their self-identity (Lievens & Highhouse, 2003). The image of the organisation is thus also manifested in the work environment, organisational environment, financial and non-financial benefits employees receive, and work-life balance (Munsamy & Bosch Venter, 2009). Knowledge workers who value creativity, innovation and career pathing will be attracted to organisations that offer these attributes. Currently these organisational attributes have come to be the main attractors and retainers of talented employees (Kerr-Philips & Thomas, 2009; Kotze & Roodt, 2005). In public service sector organisations, opportunities for development have been identified as being a key attractor and retainer of talented employees and regarded as crucial in terms of service delivery and organisations delivering on their mandate (Munsamy & Bosch Venter, 2009).

Management processes focus on aspects such as management of change, setting and implementing goals, training, delegation, decision making, innovation processes, control processes and communication (Martins & Von der Ohe, 2006). "What we do, how we do it, where we do it and with whom will change in our lifetime" (Gratton, 2011, p. 249). Accelerating globalisation, technological advancement, societal trends and demographic changes are changing the nature and the context in which we work (Gratton, 2011). These factors impact on the way organisations go about their business, thus making it imperative for management to reconsider their processes of managing the organisations. Organisations that do not align their internal processes to adapt to the outside pressures will suffer from organisational inertia, will not survive (Louw & Martins, 2004) and will lose their talented workforce.

Although it is important to create, share and transfer knowledge in organisational learning (Wang & Ellinger, 2011), the removal of rigid structures that are barriers to communication and learning is also essential (Gratton, 2011). Zdunczyk and Blenkinsopp (2007) suggest that a culture that supports organisational learning is embedded in the values of creativity, innovation, expertise, self-development, knowledge sharing, mutual trust and appreciation of diversity. Kerr-Philips and Thomas (2009) posit that an inclusive organisational culture, encouraging the full participation of diverse employees in decision making will help South African organisations to drive and advance intellectual capital in the organisation, giving them a competitive edge. Although the phenomenon of competition is minimised in public service

organisations, the aforementioned attributes are crucial in ensuring that these organisations remain responsive to the needs of the people and render the services that are required.

Employee needs and objectives should be integrated with those of the organisation (Martins & Von der Ohe, 2006). The degree to which employees perceive their needs and objectives to be met by the organisation will influence their levels of job commitment, job satisfaction, work engagement and turnover intentions (Döckel, Basson, & Coetzee, 2006; Kerr-Phillips & Thomas, 2009). Birt, Wallis, and Winternitz (2004) identified management behaviour such as providing challenging and meaningful work, opportunities for advancement, high management integrity and empowerment and responsibility as factors that would lead to employee satisfaction. Employees who are empowered by managers through greater responsibility, decision making, authority and informal feedback will have increased commitment and a feeling that their objectives have been met (Van Schalkwyk, Du Toit, Bothma, & Rothman, 2010).

The leadership dimension of SACI (2005) focuses on specific areas that strengthen leadership as perceived by individual members in the organisation (Martins & Von der Ohe, 2006). These areas include the perception of how leaders treat their staff, the example set by leaders, management of people, the leadership skills, the leaders' understanding of the value in working with diverse teams and the efforts made by leaders to engage with employees. Leadership is the source of beliefs and values that motivates a group towards interacting with the internal and external environment (Schein, 2010). If the methods proposed by the leaders are successful, the methods are shared among the rest of the group and become their identity (Schein, 2010). Leadership therefore has a significant function in establishing and changing the culture of an organisation (Schein, 2010; Senge, 1990).

2.2 LIFELONG LEARNING

This section provides a conceptualisation of lifelong learning and its major dimensions as well as the instruments for measuring lifelong learning in the organisational context.

2.2.1 Definition of lifelong learning

Lifelong learning is not a new concept. The notion of it has been around since 1609 when a Bohemian exile living in Holland postulated that the whole world is a classroom for the human race from the beginning until the end (Longworth & Davies, 1996). In the 1970s, this concept was translated by Edgar Faure to mean "learning to be", while he was doing work for

UNESCO (Kirby, Knapper, Lamon, & Egnatoff, 2010). The UNESCO Institute of Lifelong Learning adopted the idea of lifelong learning. According to the UNESCO Institute of Lifelong Learning, learning is regarded as an inevitable human activity in the lifetime of the individual. The provision of lifelong learning opportunities is essential for realising human potential and spreading human rights, and has prevailed for centuries in different cultures, traditions and structures (Delors, 1996). Although the concept of lifelong learning has retained its “cradle to grave” connotation (Longworth & Davies, 1996, p. 8), diverse definitions and interpretations have been put forward in literature. Table 2.2 depicts the various definitions of lifelong learning.

Table 2.2
Definitions of lifelong learning

Author (s)	Definition
Longworth & Davies, 1996, p. 22	They define it as “the development of human potential through a continuous supportive process which stimulates and empowers individuals to acquire all the knowledge, values, skills and understanding they will require throughout a lifetime and to apply them with confidence, creativity and enjoyment in all roles circumstances and the environment”.
European Commission, 2007	They describe it as all learning activity undertaken throughout life, aimed at improving knowledge, skills and competence in a personal, social and employment-related environment.
Aspin & Chapman, 2007; Candy & Crebert, 1991	According to them, it involves learning that is open and easily accessible to all at any time in life where self-improvement and enrichment are goals equally important as the need to update professional and vocational skills.
Jarvis, 2009	Lifelong learning involves processes that occur throughout the life of a person. It involves the body and mind of the person. It consists of various experiences and social interactions that are cognitively and emotively integrated into the person’s scripting. The results are a changed and more experienced individual.

The common thread in these definitions is that lifelong learning is continuous and is concerned with the development of human potential over a lifetime as a means to empower individuals to effectively fulfil their roles in their environment (Jarvis, 2009; Longworth & Davies, 1991). Jarvis (2009) maintains that we take our lifeworld for granted until we are faced with a unique situation, which causes a disjuncture between our experience of a situation and our biography. Our biography provides us with the knowledge and skills that enable us to act meaningfully. When a disjuncture occurs, we are unable to cope with the experience and are therefore forced to learn something new. Hence in a rapidly changing environment, disjuncture is a common phenomenon and throughout our lifetime we are forced to keep on learning (Jarvis, 2009).

2.2.2 How does lifelong learning occur?

Lifelong learning encompasses formal, non-formal and informal education (Kirby *et al.*, 2010). Kirby *et al.* (2010, p. 292) argued that “not only is learning lifelong but it should also be life-wide extending beyond formal institutions”. Learning is therefore not confined to classroom learning, but occurs in a variety of settings ranging from the organisation to social settings. According to Jarvis (2009), the lifeworld of the individual is contained within a wider society, which comprises a diversity of institutions and groupings such as family, formal, non-formal institutions, work and informal meeting opportunities. Learning is incidental and because we are exposed to the different subcultures in various institutions and opportunities, we adjust our behaviour automatically to fit into the organisations and groups (Marsick & Watkins, 2003).

Marsick and Watkins (1990) contend that informal and incidental learning is needed most when individuals experience a unique situation. This causes cognitive dissonance or disjuncture (Jarvis, 2009; Schein, 2010). According to Silva (2007), incidental learning occurs when there is uncertainty, when mistakes are made, when one is attempting to cope with a difficult situation, when one is testing the limits in unknown situations and when one is involved in challenging and new projects. According to Marsick and Watkins (2003), incidental learning is likely to occur when organisations support individuals to maintain openness to learning and reflection and to translate learning into practice.

2.2.2.1 *The lifelong learner*

Although organisational and continued support structures are key elements of lifelong learning, learning, individual commitment and personal motivation are important stimulators

of the lifelong learning process (Longworth & Davies, 1996). According to Longworth and Davies (1996), the learner in the process of lifelong learning needs to be motivated, have a vision and set goals, have access to learning, possess certain skills and competencies, have guidance and information available and receive validation and feedback as he or she progresses on the lifelong learning journey, moving both in and out of formal and informal education. Senge (1990, p.139) maintains that individuals are the main drivers of learning and “from the people’s quest for continual learning comes the spirit of learning”. Wouters *et al.* (2001) concur with this statement and suggest that organisations depend on the learning of the employees because they exemplify the capacity to acquire or create new knowledge for organisations, spread knowledge to others in the organisation and apply knowledge in the organisation.

Some authors of learning in higher institutions believe that lifelong learning should equip learners with the general ability to guide them throughout their lives (Kirby *et al.*, 2010). According to Kirby *et al.* (2010), lifelong learners know how to learn. They (2010, p. 293) use the following characteristics to describe effective lifelong learners:

Lifelong learners are able to

- “Set goals
- Apply appropriate knowledge and skills to their learning strategies
- Engage in self-direction and self-evaluation
- Locate required information, and
- Adapt their learning strategies to different conditions.”

The idea of knowing how to learn also ties in with the concept of self-directed learning as embraced by researchers mentioned elsewhere in the literature (Collins, 2009). Lifelong learning is therefore also self-directed. Self-directed learning is a process whereby individuals initiate their own learning with the support and collaboration of others in order to increase self- and social awareness (Marquardt, 2011). In this process, individuals critically reflect and analyse their situations. Individuals in collaboration with others identify their learning needs in terms of their competencies, formulate relevant personal and social learning goals, identify the resources for learning, select and implement appropriate strategies for learning and reflect on and evaluate their learning (Collins, 2009). From a humanistic perspective, lifelong learning as a self-directed activity, embraces self-actualisation and the acceptance of responsibility for one’s own learning (Collins, 2009).

Table 2.3 depicts an adapted version of the traits and skills of a lifelong learner as posited by Collins (2009).

Table 2.3

The traits and skills of a lifelong learner

Traits
<ul style="list-style-type: none"> • <i>Curious</i> • <i>Venturesome and creative</i> • <i>Innovative in practice</i> • <i>Resourceful</i> • <i>Motivated to learn</i> • <i>Confident in ability to learn from others, share what they know and accept feedback</i> • <i>Willingness to make and learn from mistakes</i> • <i>Persistent</i> • <i>Flexible in thinking</i> • <i>Interdependent and interpersonally competent as well as independent and self-sufficient</i> • <i>Methodical and disciplined</i> • <i>Logical and analytical</i> • <i>Reflective and self-aware</i> • <i>Adaptable to changing needs of the people they serve</i> • <i>Responsible and accountable for work</i>
Skills
<ul style="list-style-type: none"> • <i>Well-developed communication skills</i> • <i>Self-directed learning skills</i> • <i>Information-seeking and retrieval skills</i> • <i>Higher-order thinking skills</i> • <i>Metacognitive skills (skills for “thinking about thinking”)</i> • <i>Able to develop and use defensible criteria for evaluating learning</i> • <i>Able to work as a change manager</i>

Although lifelong learning is depicted as an individual activity in table 2.3, it occurs in a broader social environment. Ghererdi and Nicolini (2001) concur with this statement and purport that learning does not take place solely in the minds of individuals but stems from the

participation of individuals in social activities. Jarvis (2009) also reported that lifelong learning is individualistic and existential but also social because some of the opportunities to learn are provided by social institutions. Since individuals use the opportunities presented by organisations, organisations depend on the knowledge of their employees. Hence for lifelong learning to be effective in any social institution such as the workplace, the organisation and the individual need to play a role. The focus of this study is on lifelong learning as it occurs in the organisation, and more specifically, in a public sector organisation.

2.2.2.2 The organisation as an institution of lifelong learning

Lifelong learning became the focus of organisations because globalisation became a reality and the knowledge economy emerged (Jarvis, 2009; Mokhtar, 2010). The rationale for the development of learning organisations in the EU was related to lifelong learning and the knowledge society and the fact that organisations should become learning organisations in which individuals learn (Nyhan *et al.*, 2004). The knowledge-based economy generated an interest in knowledge management and information literacy, which involve the ability to correctly access, evaluate and creatively use a wide spectrum of information, skills and ideas held by members of the organisation and to apply them in the required contexts (Singh, 2010). In the South African public sector, managers face the challenge of promoting and creating a culture of continuous learning (Govender, 2009). Hence, as claimed by Govender (2009), the institutionalisation of organisational learning in the South African public sector is a huge problem because it requires the involvement of all stakeholders.

Organisational learning as part of the lifelong learning continuum is a process describing how individuals, groups and organisations learn (Govender, 2009; Nyhan *et al.*, 2004). Graham and Nafukho (2007) maintain that organisational learning is the result of strategies formulated by the organisation to promote learning. Organisational learning encompasses “the process of communication, sharing and integration of new knowledge into organisation’s routines and systems” (Graham & Nafukho, 2007, p. 284). According to Marquardt (2011) organisational learning is concerned with the skills and processes of utilising knowledge. In elaborating on the social dimension of organisational learning, Mahler (1997) contends that organisational learning is a socially constructed process based on the sharing of interpretations of events and reflection on these interpretations. In other words, an individual does not learn on his/her own, but the process requires the participation of individuals in social activities. Researchers agree that organisational learning is a process of acquiring, interpreting, distributing, integrating and creating information and knowledge among the members of the organisation (Marsick & Watkins, 2003; Marquardt, 2011; Wang & Ellinger, 2011).

Organisational learning draws from disciplines such as psychology, organisational development, management sciences, sociology, and organisational theory, strategy, production management and cultural anthropology (Govender, 2009). The contribution of multiple disciplines has led researchers to adopt a multidisciplinary approach to understanding the organisational learning literature (Wang & Ellinger, 2011). This has culminated in the subsequent development of various models and frameworks and attempts by researchers to develop integrative conceptual frameworks. According to Wang and Ellinger (2011), integrative frameworks are necessary because learning leads to changes in the culture, structures, policy and norms of organisations.

2.2.3 A model of organisational learning

Although there are various models based on integrative frameworks and holistic approaches on organisational learning, only a few of them are accompanied by diagnostic tools or measure organisational learning. Among the few, Marsick and Watkins's (2003) model, accompanied by a diagnostic tool, is the most comprehensive depiction of continuous learning in organisations (Moilanen, 2005). Models presented by researchers, which are accompanied by diagnostic tools are either too simple or too broad (Mayo & Lank, 1994; Moilanen, 2005).

According to Marsick and Watkins (2003) and Yang (2003), there are four levels of organisational learning. These levels belong to one of the two components of Marsick and Watkins's (2003) model. The first component represents individuals who constitute the organisation, and the second, the structures and the culture, which are created by the social institution of the organisation (Yang, 2003). Individual learning refers to the change in skills, insights, knowledge, values and attitudes acquired through self-study, instruction and observation. Group or team learning refers to the knowledge skills and competencies acquired by the group. Organisational learning refers to an improvement in intellectual and production capability obtained by commitment to the opportunities presented for continuous improvement across the organisation (Marquardt, 2011).

Although learning is influenced by how individuals learn, "learning at organisational level is not the sum total of many people learning" (Marsick & Watkins, 2003, p.135). Marsick and Watkins (2003) regard learning at organisational level as a collective experience and cohesive action by the organisation. Argyris and Schon (1978) support this notion. They state that organisations do not consist of groups of individuals, yet all organisations consist of such groups. Argyris and Schon (1978) further suggest that although organisational learning is not

individual learning, organisations predominantly learn through the experience and actions of individuals. According to Wang and Ahmed (2003), organisational learning is not a collectivity of individual learning processes, but engages interaction between individuals in the organisation, and interaction between an organisation and its contexts. This interaction is the basis for the formation of relationships. Relationships are built on trust and mutual responsibility and provide the foundation for knowledge sharing, which is a criterion for collaborative organisational learning (Nyhan *et al.*, 2004). Organisational learning is therefore an interactive and interdependent process (Marsick & Watkins, 2003).

Marsick and Watkins's (2003) model depicts learning as being triggered by environmental jolts. This is followed by active scanning of the environments. Members in the organisation then separately and collectively devise a response strategy. Collaborative capacity leads to action. The organisation then responds and individuals make assumptions about the effectiveness of the response. Learning is the result of what the organisation retains – for example, a new capacity, procedure or technology (Marsick & Watkins, 2003).

Wang and Ellinger's model of organisational learning (2011) elaborates on the theory of Marsick and Watkins (2003) by suggesting that individuals' paradigms in scanning and interpreting the external environment and information are crucial in preparing organisations to respond to environmental jolts. In other words, individual paradigms are fundamental to organisational learning. Senge (1990) and Marquardt (2011) refer to these paradigms as mental models and emphasise how they influence our perceptions, behaviour and views of the world.

According to Marsick and Watkins (2003), workplace learning is regarded as ongoing and the lessons learnt form vital links between the learning outcomes and the changes in knowledge and performance. Although individual learning is essential, it is not sufficient to influence perceived performance. They argue that learning has to be captured in the structures, systems and processes of organisations to be shared and used to improve knowledge and performance. It is thus not sufficient to hold individuals accountable for lifelong learning without developing the organisational capacity to support and encourage them to make use of their learning (Marsick & Watkins, 2003).

Another premise put forward by Marsick and Watkins (2003) is that although structured learning is important, valuable learning also takes place informally through conversations and interactions on the job. It is therefore imperative that a learning culture and climate offer support to nurture learning of this kind. Leaders and key individuals build the organisation's

culture and climate (Marsick & Watkins, 2003; Schein, 2010; Senge, 1990). Marsick and Watkins (2003) posit that leaders influence the learning of others and create an environment of expectations that shapes the desired results.

According to the model for individual learning presented by Marsick and Watkins (2003), learning occurs when individuals are faced with challenges. Individuals interpret the challenges on the basis of their own frame of reference, perceptions and values. The development of the strategy and its implementation to deal with the challenges is based on the individual's skills, resources, knowledge and power (Marsick & Watkins, 2003). Evaluation occurs after implementation (Ellinger *et al.*, 2002). Desirable results are attributed to individuals, whereas undesirable results are often attributed to external forces. Individuals attach meaning to their experiences and learning is entrenched in the cognitive structure (Ellinger *et al.*, 2002).

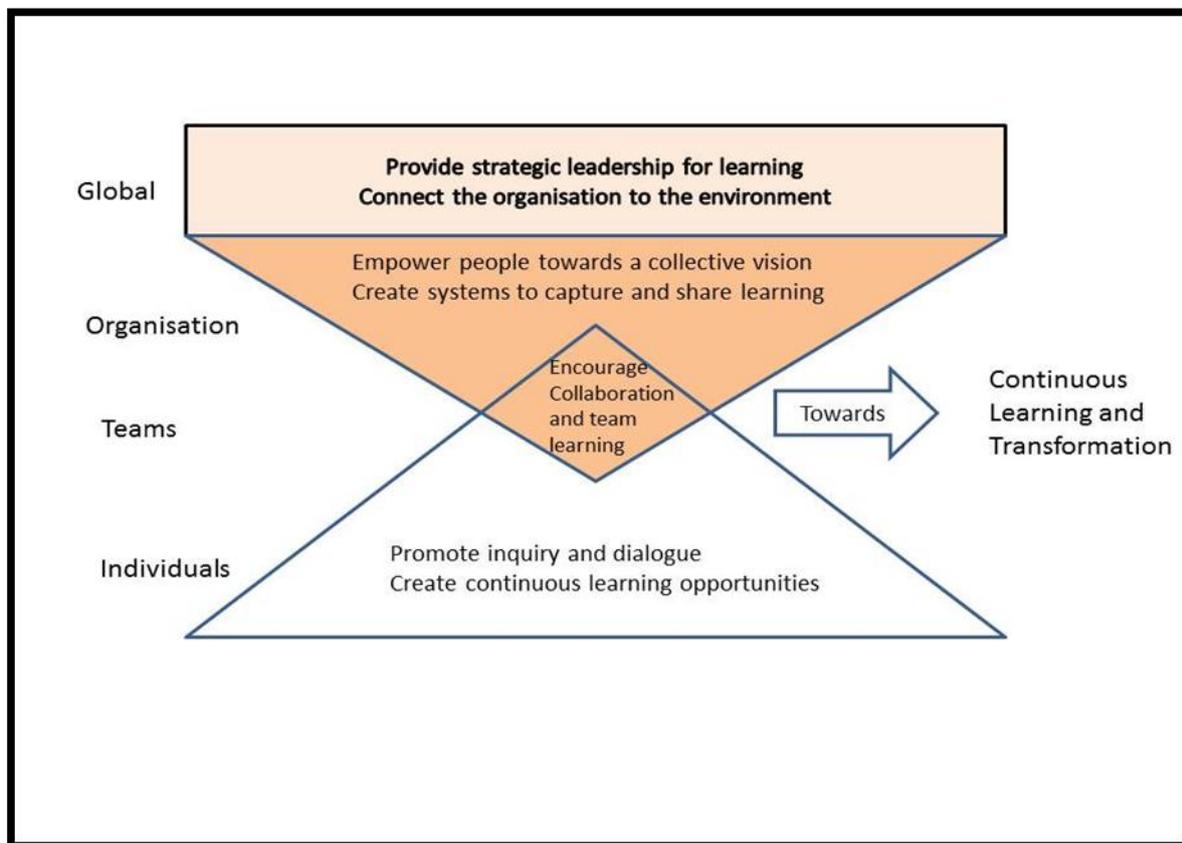


Figure 2.3. Model of the learning organisation (Marsick & Watkins, 1999, p. 11)

The interactive and interdependent processes are fundamental to learning at organisational level (Marsick & Watkins, 2003). According to Marsick and Watkins (2003), the model, as represented in figure 2.3, is based on the notion that change must occur at each level of learning. This change must transform into new practices that facilitate the use of learning for improved performance.

2.2.4 Dimensions of organisational learning

A study of the various perspectives on organisational learning revealed the following common elements or dimensions:

- collaboration and team learning (Senge, 1990; Marquardt, 2011; Marsick & Watkins, 2003; Nyhan *et al.*, 2004)
- inquiry and dialogue (Marsick & Watkins, 2003; Marquardt, 2011; Nyhan *et al.*, 2004; Senge, 1990)
- systems thinking or systems to capture and share learning (Marquardt, 2011; Marsick & Watkins, 2003; Senge, 1990)
- collective vision (De Geus, 1997; Marquardt, 2011; Marsick & Watkins, 2003; Senge, 1990).
- continuous learning opportunities (Marquardt, 2011; Marsick & Watkins, 2003; Senge, 1990).
- connecting the organisation to its environment (Marquardt, 2011; Marsick & Watkins, 2003; Nyhan *et al.*, 2004; Sutherland & Cranwell, 2004; Wang & Ellinger, 2011).
- strategic leadership (Marquardt, 2011; Marsick & Watkins, 2003; Senge, 1990)
- personal mastery (Marquardt, 2011; Senge, 2009).
- mental models (Marquardt, 2011; Senge, 2009; Wang & Ellinger, 2011).

It appears that through the identification of these dimensions, researchers can develop measuring instruments or tools to measure the individual perceptions of lifelong learning in organisations (Sutherland & Cranwell, 2004; Wang & Ellinger, 2011). However, as mentioned earlier, there appears to be a scarcity of instruments that measures organisational learning holistically and economically. The DLOQ, which was developed by Marsick and Watkins (2003), parsimoniously measures organisational learning along seven of the common dimensions, which appear to be fundamental to continuous learning in organisations. This instrument has been empirically verified by research studies conducted in different countries and contexts (Ellinger *et al.*, 2002; Lien, Hung, Yang, & Li, 2006; Marsick & Watkins, 2003; Sharifirad, 2011).

The seven dimensions of the DLOQ (Marsick & Watkins, 2003) are depicted in table 2.4.

Table 2.4

Definition of the dimensions of the DLOQ (adapted from Marsick & Watkins, 2003)

Dimensions	Definition
Creating continuous learning opportunities	Learning is designed into work so that people can learn on the job. Opportunities are provided for ongoing education and growth.
Promote inquiry and dialogue	People gain productive reasoning skills to express their views and the capacity to listen and inquire about the views of others. The culture is changed to support questioning, feedback and experimentation.
Encourage collaboration and team learning	Work is designed to use groups to access different modes of thinking. Groups are expected to learn together and work together. Collaboration by the culture is valued and rewarded.
Create systems to capture and share learning	Both high- and low-technology systems to share learning are created and integrated with work. Access is provided. Systems are maintained.
Empower people towards a collective vision	People are involved in setting, owning and implementing a joint vision. Responsibility is distributed close to decision making so that people are motivated to learn toward what they are held accountable to do.
Connect the organisation to its environment	People are helped to see the effect of their work on the entire enterprise. People scan the environment and use information to adjust work practices. The organisation is linked to its communities.
Leaders model and support learning	Leaders model, champion and support learning. Leadership uses learning strategically for business results.

The model put forward by Marsick and Watkins (2003) presents a theoretical framework of learning in organisations and has been highly regarded by some researchers (Moilanen, 2005; Sharifirad, 2011) for the following reasons:

- It provides a clear and inclusive definition of what constitutes a learning organisation (Ellinger *et al.*, 2002).

- It includes all entities or groups at all levels in the organisation. Learning is therefore perused at all levels (i.e. the individual, group, team and organisation (Ellinger, Yang, & Ellinger, 1998).
- The framework identifies the main dimensions of the learning organisation, portraying their interrelationships (Fard, Rostamy, & Taghiloo, 2009).
- Because it focuses on the action that needs to be taken, it has practical ideas for implementation (Sharifirad, 2011).
- It is accompanied by a comprehensive questionnaire (Moilanen, 2005).

The DLOQ (2003) framework and model of learning in organisations embraces a broad and inclusive foundation, which has been empirically tested in different cultural contexts, organisations and countries (Sharifirad, 2011). The chosen model and measuring instrument were therefore selected for the purpose of this study.

Govender's (2009) research advocates the establishment of a learning organisation in the South African public sector in order to enhance service delivery. Similarly, Sharifirad (2011) felt the need to conduct research to assess the levels of learning in public sector organisations because of their low performance and the general notion that Iranian public service organisations need to change their culture to become learning organisations. Govender (2009) mentioned the implementation of Senge's (1990) principles to establish a lifelong learning organisation, but does not mention the use of a measuring tool that could measure organisational learning. Sharifirad (2011), however, made use of the DLOQ (2003) as a measuring instrument to measure organisational learning. The DLOQ (2003) was therefore used to evaluate the status quo in terms of individual learning processes, team-based approaches and the systems relating organisational structure (Lim & Morris, 2006; Sharifirad, 2011; Ellinger *et al.*, 2002). The current study ultimately embraced similar aims by measuring the individual perceptions of culture and lifelong learning, seeking to establish the relationships, if any, and then to use this as a point of departure for continuous learning in the organisation.

2.2.5 The theoretical relationship between organisational culture and lifelong learning

The literature has alluded to the relationship between organisational culture and organisational learning (Jarvis, 2009; Marsick & Watkins, 2003; Martins *et al.*, 2004; Schein, 1990a). Mahler (1997) succinctly mentioned that culture plays a role in the storage of information to be passed on through socialisation, acts as an interpretive filter through which members view events and their actions and is a source of strategy and action (Mahler, 1997). Culture provides the collective frame of reference and context for the interpretation of organisational data and events. According to Mahler (1997), culture determines how organisations make sense of and interpret ambiguities in information, problematic situations and incomprehensible connections between problems and solutions. Weeks and Weeks (2010) support this notion by positing that culture acts as a behavioural and perceptual determinant, influencing how learning takes place at individual level and in an institutional context.

Mahler (1997) suggests that specific elements of culture impact on the organisation's ability to learn and influence how it learns. In the context of public service organisations, the important role of culture in organisational learning is based on individual and collective behaviours. This is not necessarily the result of new information and technologies, but of behaviours based on the interpretation of information in the context of historically developed organisational meanings, which are contained in the symbolism of culture (Mahler, 1997). In some instances, culture is regarded as a source of resistance and defence against learning and change (Argyris, 1991; Schein, 2010), but also as the basis for interpreting situations and experiences that could inspire learning and facilitate the formulation of effective solutions (Mahler, 1997).

According to Mahler (1997), organisational culture directly affects learning by

- determining how performance results are interpreted
- informing the meaning inscribed in established routines, programmes and procedures
- defining what constitutes legitimate information
- specifying the consideration that needs to be given to external demands
- defining the subculture relations

These effects of organisational culture on learning indicate the relationship between culture, interpretation and learning and are prevalent in public service organisations (Mahler, 1997).

Mahler's (1997) research indicated that the manner in which public service organisations interpreted successes or failures of procedures, operations and programmes was influenced by the beliefs officials held about their professional identities. This determines whether errors will be blocked or corrected because decisions will be made in a way that protects the professional identities of officials. Similarly, cultural assumptions that are built into routines or the manner in which organisations go about their business can either impede or inspire learning (Mahler, 1997). For instance, organisations can choose to improve their operations by using different management systems and empowerment programmes, or defend routines to the detriment of the progress and advancement of the organisation (Mahler, 1997).

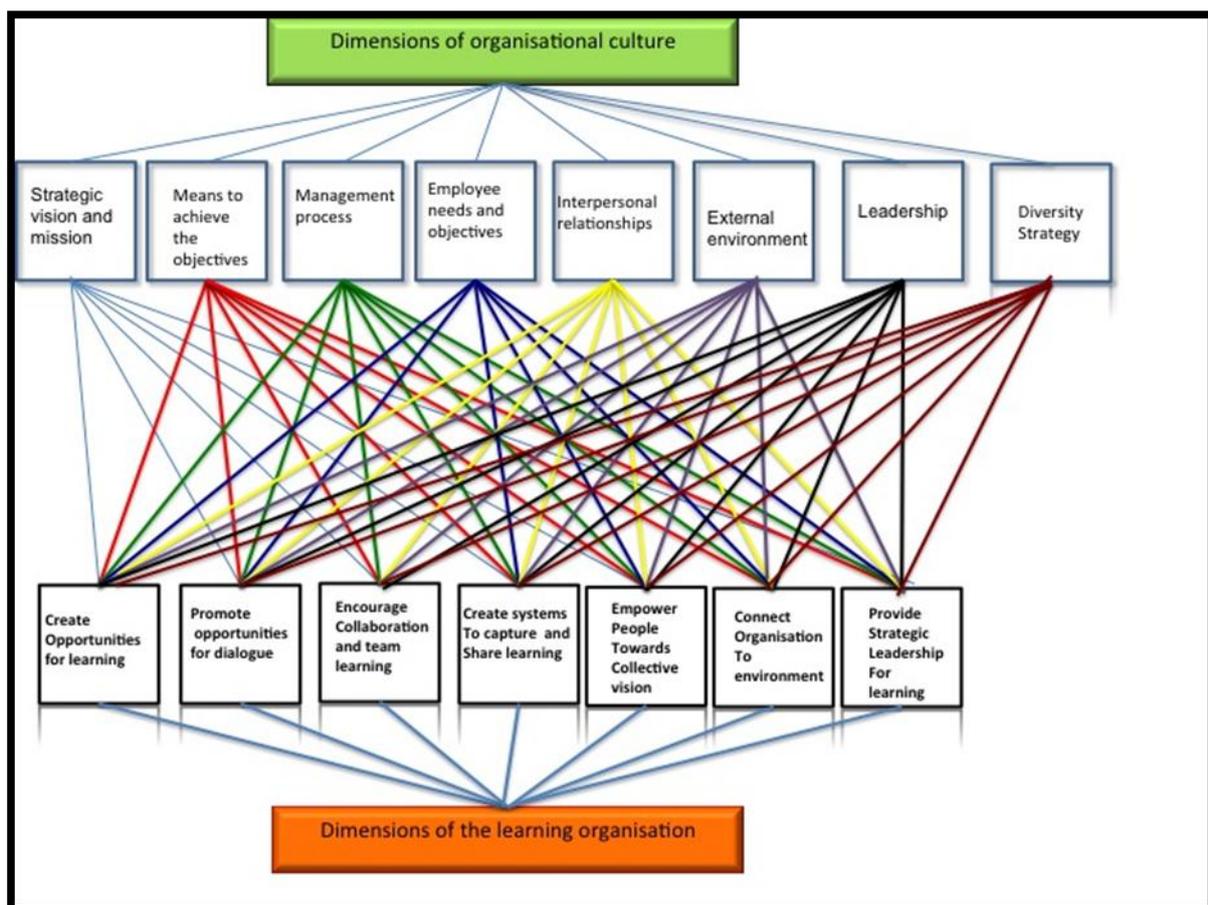


Figure 2.4. The relationship between the dimensions of organisational culture and of organisational learning (based on Marsick & Watkins, 2003; Martins & Martins, 2005)

The next section focuses on the existence of a theoretical relationship between individual perceptions of organisational culture and lifelong learning. The model (figure 2.4) is an integrated version of the instruments that were used to measure the two concepts. In the figure and ensuing discussion, each dimension of organisational culture is linked to the dimensions of organisational learning to highlight the existence of a theoretical relationship between the two concepts.

2.2.6 The relationship between shared mission and vision and lifelong learning

Many regard the organisational mission as the most crucial element of the organisational philosophy because it contains the values, guidelines and principles of the organisation (Covey, 1989; McDonald, 2007; Melewar & Karaosmonaglu, 2006). An organisation's mission serves as a long-term goal which, when achieved, is the reason for its existence (McDonald, 2007). According to Campbell and Young (1999), a mission contains the purpose, strategy, behaviour, standards and values of the organisation linking the rationale for actions to the behaviour. The mission and vision therefore appear to be important cultural elements forming the basis of organisational learning.

In the context of organisational learning, a shared vision provides individuals with a set of principles that ensure ownership, commitment and common points of departure for interaction with the environment. Individuals who are involved in the drafting of the vision are empowered and motivated to accept responsibility and accountability for achieving the goals, which they set themselves (Marsick & Watkins, 2003). A shared vision forms the foundation for the sharing of values and meanings to respond to the changing environments and processes (Nyhan *et al.*, 2004).

Every organisation should develop a shared core mission (Schein, 2010). According to Covey (1989), an organisational mission statement, which reflects the deep-shared vision and values of everyone, generates greater unity and commitment in the hearts and minds of employees. A shared mission therefore acts as a frame of reference directing individual behaviour in the workplace ultimately influencing whether learning takes place. The establishment of the collective vision and mission empowers employees to accomplish their work and achieve organisational objectives (O'Neil, 2003).

2.2.7 The relationship between leadership and lifelong learning

Leaders play a crucial role in the formulation of the vision and inspire individuals to realise the vision. The establishment of organisational and lifelong learning can be effective if championed by strategic leadership (Marsick & Watkins, 2003). Lifelong learning in organisations is facilitated by leaders' commitment and support, and the provision of infrastructures that are necessary for the establishment of a culture that inspires learning (Marsick & Watkins, 2003).

Trends in the literature indicate that in order to survive in a dynamic and changing environment, South African leaders need to act as role models (Kerr-Philips & Thomas, 2009). Kerr-Phillips and Thomas (2009) suggested that South African organisations display a culture of mistrust and a reluctance to share information owing to the challenges of the country's historical past which brought with it exclusionary workplace practices. At the heart of organisational learning, are information acquisition, distribution and interpretation (Wang & Ellinger, 2011). It is therefore essential for leaders to embrace change and diversity, and to promote the collaboration of diverse teams through the sharing and distribution of information.

Team learning is another key cultural element under leadership and organisational learning. It is initiated by dialogue, which is an important dimension of organisational learning. Leaders usually initiate opportunities for dialogue through the creation of an environment, which encourages and supports teamwork. Dialogue through discussion enables team members to tap into each other's minds in order to facilitate coordinated and innovative actions while continuously learning from each other (Senge, 1990; Wang & Ellinger, 2011).

Collaboration supports team learning and is fundamental to organisational learning (Marsick & Watkins, 2003; Nyhan *et al.*, 2004; Wang & Ellinger, 2011). It is thus vital from an organisational cultural perspective that leaders encourage collaboration and team learning in order to realise organisational learning.

Another factor contributing to the relationship between leadership as a cultural dimension and lifelong learning is the generational differences of leaders and how these impact on the nature of leadership. According to Erickson (2010), leaders born prior to 1961 were accustomed to operate within well-understood boundaries backed by a set of corporate policies, practices and hierarchical structures, but leaders from Generation X (born after 1961) are better equipped for the challenges of constantly changing environments. Leadership requires the creation of the context for innovation and inclusion in the midst of uncertainty. Generation X leaders appear to be able to cope with this challenge (Erickson, 2010).

Simultaneously, leaders are faced with the challenge of how to use valuable skills and expertise of existing leaders in nurturing the skills of future leaders. Schein (2010) suggests that leaders would need to become lifelong learners and develop a culture that is more learning oriented, adaptive and flexible. It appears from the literature studies that the most important skill for managers currently is that of being able to learn and enabling others to

learn (Marquardt, 2011; Schein, 2010; Senge, 1990). It is therefore crucial that through lifelong learning, leaders develop the skills that are necessary to manage a multicultural workplace.

2.2.8 The relationship between the means to achieve objectives and lifelong learning

The way in which an organisation is structured determines whether it will be effective in achieving its objectives (Joseph & Dai, 2009). An organisation with too many hierarchical levels does not promote a culture conducive to inquiry, dialogue, feedback and experimentation, all of which are key elements of organisational learning (Weeks & Weeks, 2010). Although dialogue is important, solving of differences, which arise through dialogue, and providing feedback are equally significant and can be achieved through flexible management processes (O'Neil, 2003).

A learning culture is characterised by exploring, stimulating courage and curiosity to solve complex problems and challenging existing assumptions and paradigms, which are entrenched in the culture of organisations (Weeks & Weeks, 2010). A hierarchical culture does not facilitate the flexibility required of individuals when dealing with ambiguous situations and in coping with challenges requiring a variety of insights (Joseph & Dai, 2009). Organisational learning requires an organisational culture that is flexible and encourages multiskilling and participative management (Kirby, Knapper, Evans, Carty, & Gadula, 2003).

2.2.9 The relationship between the external environment and organisational learning

The manner in which the organisation responds to the external environment is determined by the organisation's culture (Wang & Ellinger, 2011). Elements that are the focus of this cultural model are the community involvement and social responsibility of organisations. The dimensions of organisational learning are concerned with how the organisation connects to the external environment. In accordance with the models on organisational learning, researchers indicate that organisational learning is initiated by the organisation's response to the environmental jolts (Marsick & Watkins, 2003; Wang & Ellinger, 2011). However, organisational learning is dependent on how the external environment is perceived (Wang & Ellinger, 2011).

According to Mahler (1997), culture-based assumptions will determine how organisations socialise individuals to deal with the outsiders such as clients, oversight institutions, interest groups and other agencies. In the context of public service organisations, it also determines

what needs, requests and demands are prioritised on the agenda for action and change (Mahler, 1997). In public service organisations, because outputs are not directly observable, learning based on feedback on performance depends on the public service ethic and professionalism, which is culturally dependent (Mahler, 1997). External clients are also unable to discern the quality of the services rendered because they either do not understand the services that are supposed to be rendered or the role of the public service organisation (Mahler, 1997). Hence organisational learning is inhibited because the feedback that could potentially be received from the environment to help individuals see the effects of their work is non-existent.

2.2.10 The relationship between meeting employee objectives and organisational learning

The manner in which the organisation meets the objectives and needs of employees is inherent in the culture of the organisation (Marsick & Watkins, 2003). In meeting the needs and objectives of employees, elements under scrutiny include providing equal opportunities for employees; providing a supportive environment for experimentation and mistakes; valuing employee contributions; and ensuring open communication channels and opportunities for career growth (Martins & Martins, 2003). The aforementioned elements are covered in the dimensions of organisational learning. For instance, a relationship between opportunities for career growth and the dimension of the creation of continuous learning opportunities is apparent. If there is a culture of career growth opportunities for employees, then the possibility of continuous learning will exist through the provision of ongoing education.

Similarly, a culture of open communication channels and dialogue will promote the development of productive reasoning, skills to express views and the capacity to listen and inquire into the views of others as portrayed in the model of continuous organisational learning (O'Neil, 2003). A culture of transparency supports questioning and feedback and this will enhance organisational learning by facilitating adaptation to the changing environment, learning from others and contributing to the learning of a wider community of which individuals are part (Marsick & Watkins, 2003; Senge 1990; Wang & Ahmed, 2003). However, a culture that restricts communication and stresses hierarchy will inhibit learning (Joseph & Dai, 2009). A culture in which the needs and objectives of knowledge workers are taken into account by enabling them to transmit knowledge, will empower individual learning and involvement and thus facilitate continuous learning (Wang & Ahmed, 2003).

2.2.11 The relationship between management processes and lifelong learning

Management processes, as a dimension of culture, are determined by the organisation's internal training programme rules and regulations – how these are arrived at and work procedures and methods and management of change (Marsick & Watkins, 2003). These elements are related to the various determinants of lifelong learning. Internal training is related to the elements of continuous learning and opportunities for growth. The nature of the organisation's internal training programme, work procedures and methods will indicate whether the organisation supports continuous learning. These opportunities can be both on and off the job, but the organisation should ultimately ensure, through its processes, that facilities exist for employee learning (Kirby *et al.*, 2003). The organisation therefore enables employees not only to attain new knowledge but also to acquire skills in the field of learning and problem solving that could enhance their capacity for lifelong learning (Wouters *et al.*, 2001).

The culture to renew policies and rules indicates that the organisation is not static but that it is willing to align its internal policies and processes to accommodate changes and demands in the dynamic environment (Louw & Martins, 2004). In so doing, the organisation ensures that it does not suffer from organisational inertia (Louw & Martins, 2004). The state of inertia fosters unproductive behaviour, which blocks and is detrimental to organisational learning.

Coaching and mentoring form part of management processes of the organisation and may occur through coaching employees for the roles of both manager and leaders (Evered & Selman, 1989). This is directly related to lifelong learning, as suggested by Marsick and Watkins (2003) and Govender (2009). There is also a relationship between culture and the coaching and mentoring of new employees in the underlying values and norms of the organisation. Govender (2009) agrees that a coaching and mentoring culture in South African public service organisations would encourage continuous learning, dialogue and the establishment of trusting relationships between multicultural and diverse employees.

The organisation's culture of delivering innovative services stimulates a culture of further innovation and creativity, which is conducive to lifelong learning (Govender, 2009; Louw & Martins, 2004). A culture in which innovation is valued provides individuals with the freedom to explore, experiment and share ideas and knowledge (Marsick & Watkins, 2003).

2.2.12 The relationship between the organisation's diversity strategy and lifelong learning

Organisations comprise diverse populations of individuals. A productive environment requires individual differences to be embraced and the talent of all individuals to be nurtured (Govender, 2009). Diversity management focuses primarily on the improvement of the abilities of the previously disadvantaged individuals (Govender, 2009). Govender (2009) argues that organisations that are diversity oriented focus on employees who may have been discriminated against in the past. In order for organisations to embrace diversity and lifelong learning, the potential of all employees must be nurtured and developed in order to benefit the entire organisation (Govender, 2009). Lifelong learning embraces the maximisation of organisational learning through individual, group and team learning (Govender, 2009; Marsick & Watkins, 2003).

2.3 THEORETICAL BASIS FOR DIFFERENCES IN PERCEPTIONS OF ORGANISATIONAL CULTURE AND LIFELONG LEARNING AMONG THE SUBGROUPS

2.3.1 Differences in perception of organisational culture among subgroups

Literature studies point to the differences in perception of organisational culture and its dimensions based on age, gender, tenure, job level and race (Helms & Stern, 2001; Martins & Coetzee, 2007; Martins & Von der Ohe, 2006). Although, various measuring instruments were used to measure the perceptions of culture and its dimensions, differences in perceptions of organisational culture among subgroups were apparent (Helms & Stern, 2001; Martins & Coetzee, 2007).

Understanding the differences in perceptions of culture and its dimensions among subgroups is vital for the establishment of a solid culture, which fosters consistent organisational actions (Helms & Stern, 2001). According to Helms and Stern (2001), a consistent culture may create an environment in which employees will provide excellent service to their customers. Cummings and Worley (2011) concur with this statement provided that the culture emphasises innovation and change.

The mission of the organisation in this current study is to increase organisational responsiveness to the environment (PCS, 2009). This requires consistency, adaptiveness, creativity and innovation (Cummings & Worley, 2011; Helms & Stern, 2001; Louw & Martins,

2004). The ensuing paragraphs provide evidence of the differences in perception of culture and its dimensions, based on demographic variables as portrayed in the literature.

Research studies conducted by Martins and Coetzee (2007) using the South African Cultural Instrument (1989) indicated significant differences in subgroups with regard to age, gender, job level and race. In terms of age and race, white employees below the age of 35 experienced the organisational culture less positively than the rest of these subgroups (Martins & Coetzee, 2007). Helms and Stern (2001) suggest that individuals from different age groups will differ in their perception of organisational culture because of their personal circumstances and their different ways of interacting.

Martins and Von der Ohe (2006) found significant differences between the various race groups, particularly in certain dimensions such as vision and mission. Significant differences were also found between the different job levels (Martins & Von der Ohe, 2006). Significant differences in perception of organisational culture and its dimensions were also evident among the different job levels in studies conducted by Martins and Coetzee (2007). This is supported by studies conducted by Harris and Ogbonna (1997) who purported that employees at different job levels in the organisation differ in their perception of organisational culture. Studies using the same instrument found that males and females do not perceive organisational culture differently (Martins & Von der Ohe, 2006). In contrast to these findings on gender, Martins and Coetzee (2007) reported significant differences between males and females in their perceptions of organisational culture.

Research studies using SACI (2005) such as those conducted by Martins and Coetzee (2007) and Martins and Von der Ohe (2006) did not include tenure as a biographical variable. Studies conducted by Helms and Stern (2001) using a different cultural measuring instrument, indicated differences in perceptions of organisational culture among subgroups with different years of service. According to Helms and Stern (2001) individuals with varying length of service in the organisation differ in their perception of organisational culture because they are socialised differently in the organisation over time. According to Martins (2007), employees must be taught the culture and ways of behaving. A solid culture may facilitate the socialisation process and determine how individuals experience the workplace (Helms & Stern, 2001; Martins, 2007).

2.3.2 Differences in perception of lifelong learning among subgroups

Although there is a growing body of literature on lifelong learning, few empirical studies have been conducted in organisations dealing with differences in perceptions of lifelong learning among demographic subgroups using the DLOQ (Wang *et al.*, 2007). There thus appears to be a lack of evidence of differences in perception of organisational learning among subgroups using this instrument. Marsick and Watkins (2003) made recommendations for further research to be conducted focusing on demographical variables and culture. Some studies that were conducted on perceptions of organisational learning and its dimensions using the DLOQ, focused on demographic variables such as age, gender, years of service and education levels (Hunter-Johnson & Closson, 2012; Lim, 2003; Nazari & Pihie, 2012; Wang *et al.*, 2007).

Studies conducted by Wang *et al.* (2007) showed that individuals of different age groups differed significantly in their perception of organisational learning and its dimensions. Among the respondents, employees between 41 and 60 years of age had the highest evaluation of organisational learning and its dimensions, while those between 18 and 30 years of age had a median score (Wang *et al.*, 2007). The age group between 31 and 40 scored the lowest for perceptions of organisational learning and its dimensions (Wang *et al.*, 2007). Consistent with these findings, Nazari and Pihie (2012) found significant differences between the different age groups with regard to the dimensions of organisational learning. Older employees, in contrast to their counterparts, appeared to have a more positive perception of organisational learning and its dimensions. These differences in perception of organisational learning and its dimensions with regard to age contradict the research findings of the studies conducted by Lim (2003), who found no differences in perception of organisational learning with regard to age.

Regarding education levels, Wang *et al.* (2007) reported that employees with the highest level of education scored the lowest on perception of organisational learning and its dimensions, while the employees with the lowest education levels scored the highest on perceptions of organisational learning and its dimensions. These research findings contradict those of Nazari and Pihie (2012), who found that employees with doctoral degrees showed a higher perception of organisational learning and its dimensions than those with master's degrees. Similar differences in perceptions of organisational learning and its dimensions were also observed between master's degree employees and bachelor's degree employees (Nazari & Pihie, 2012).

A recent study by Hunter-Johnson and Closson (2012) in a law enforcement organisation produced evidence to indicate that the perceptions of a group of adult educators on lifelong learning and its dimensions were low in comparison with the aforementioned studies. In contrast to some of the aforementioned studies, Hunter-Johnson and Closson (2012) found no significant differences between the adult educators on organisational learning and its dimensions with regard to job level, years of service and gender.

2.4 THE IMPLICATIONS OF A THEORETICAL RELATIONSHIP FOR THE CREATION OF A LIFELONG LEARNING CULTURE

The literature reviewed thus far indicates a theoretical relationship between organisational culture and lifelong learning. However, researchers concur that to become a learning organisation, organisations need to have a “learning culture” or “a culture of learning”. According to Weeks and Weeks (2010), the need for new skills, knowledge and innovation in dealing with the challenges associated with the complexities of change calls for a culture of lifelong learning in organisations. Literature by a variety of theorists attempts to define and provide characteristics of a learning culture in order to engender in organisations the drive to strive towards the establishment of such a culture (Kumikaite, 2008; Longworth & Davies, 1996; Marquardt, 2011; Marsick & Watkins, 2003; Nyhan *et al.*, 2004).

2.4.1 A culture of lifelong learning

The culture of learning embraces “reflection, deep thought, curiosity, questioning, exploration, examination of thought, search for more questions and answers, of investigation, of more search and research” (Mbeki, 1997). These words of the former President of South Africa attempt to explain some of the elements of a learning culture. The purpose of the speech was to motivate South African organisations to nurture a culture of learning in all institutions. According to Weeks and Weeks (2010, p. 613), a learning culture is “rooted in the mental habits acquired by individuals in the school context where the foundation of learning is laid”. These skills as purported by Weeks and Weeks (2010) play a crucial role in the adult lives of individuals because they influence their social interactions and responses in dealing with complex issues in the organisational context.

Prevalent in a learning culture is social collaboration and exploration, stimulating courage and curiosity to solve complex problems and challenge existing assumptions and paradigms which are entrenched in the culture of organisations (Weeks & Weeks, 2010). According to these authors (2010), although an abundance of literature discusses what comprises a

learning culture, information on how such a culture should be established in practice, is sorely lacking, and the prevailing situation in South Africa appears to be deteriorating. In addition, there is also a paucity of empirical studies, which could guide the establishment of such a culture. Weeks and Weeks (2010) recommended that a thorough understanding of the foundations of a learning culture and how such a culture becomes entrenched in an institution should be the point of departure.

2.5 THE FOUNDATIONS OF A CULTURE OF LIFELONG LEARNING

Weeks and Weeks (2010, p. 604) used the works of Claxton and Lucas (2009, p. 11) to pinpoint the origins of “lifelong, life-wide and life-deep learning”. According to Claxton and Lucas (2009), formal education plays a fundamental role in developing the attitudes, habits and mental skills necessary for the development of lifelong learning habits in individuals. Lifelong learning habits are believed to be initiated during the school years. Claxton and Lucas (2009) identified eight habits of learning, which Weeks and Weeks (2010) refer to as the “learning habits of the mind”, namely “curiosity, courage, exploration and investigation, experimentation, reasoning and discipline, imagination, sociability and reflection” (Claxton & Lucas, 2009, p. 16; Weeks & Weeks, 2010, p. 604). These habits, which have their roots in the school and educational institutions, are pertinent in the organisational contexts.

The habits, as mentioned by Claxton and Lucas (2009), are also contained in the suggestions made by Schein (2010) for building a culture of learning in organisations. Schein (2010, p. 366) maintains that “commitment to the truth through pragmatism and inquiry” encourages individuals not to be satisfied with one source or method but to search for different approaches to solve problems. Similarly, it is believed that through curiosity and exploration individuals are able to gain a deeper understanding of phenomena (Claxton & Lucas, 2009). These are regarded as crucial lifelong learning habits, which need to be nurtured in schools. In the same vein, management guru, Charles Handy, described the foundation of lifelong learning, as a wheel, in which questions lead to ideas, which, in turn, lead to new questions (Kennedy, 2002). Schein (2010) also suggested that the generation of new ideas leads to the testing of ideas and this relates to the habit of experimentation. In this lies the courage and confidence to articulate and implement new ideas, despite the chance of failure. In learning cultures, failure is regarded as an opportunity for individuals to learn from their mistakes, and better still, to reflect on their actions with the idea to bounce back and try again.

The habit of imagination is linked to creativity and innovation (Schein, 2010). Weeks and Weeks (2010) claim that without imagination, it is difficult for individuals to create a vision. Longworth and Davies (1996) posit that a learning culture is supported by a shared vision and commitment to learning. One of the disciplines of organisational learning recommended by Senge (1990) is shared vision and commitment. In the establishment of a learning culture, a solid foundation needs to be built on a shared vision of learning. A shared vision provides the focus and energy for learning. Effective learning will take place once individuals are deeply committed to objectives that are meaningful to them. Vision will drive individuals to action. Individuals will surrender their values in favour of achieving and striving for a higher ideal and purpose (Senge, 1990). Shared vision encourages individuals to take risks and to be innovative.

The habits of reasoning and discipline are associated with the ability to think carefully and methodically as described by Weeks and Weeks (2010) and systemic thinking and analysis as referred to by Schein (2010). Reasoning relates to reflection (taking stock of the process), which is emphasised by several researchers in the field of lifelong learning (Claxton & Lucas, 2009; Marquardt, 2011; Marsick & Watkins, 2003; Senge, 1990; Weeks & Week, 2010).

The last habit introduced by Claxton and Lucas (2009) is that of sociability. Sociability relates to collaboration and the sharing of ideas to enable new learning to take place (Weeks & Weeks, 2009). In the organisational context, Schein (2010, p. 366) referred to this as “commitment to full and open task-relevant communication”. According to Schein (2010), this entails the development of a multichannel communication system connecting everyone with the aim of sharing task relevant information. The inculcation of these habits in individuals requires the support of the institution and a culture, which is conducive to lifelong learning (Marquardt, 2011; Marsick & Watkins, 2003; Nyan *et al.*, 2004).

Table 2.5

Recommended habits for the development of a lifelong learning culture

Foundational (Claxton & Lucas, 2009)	Organisational context (Longworth & Davies, 1996)	Creation of a learning culture in the organisational context (Schein, 2010)	Creation of a learning culture in the organisational context (Senge,1990)
Curiosity	Learning to learn	Proactivity	Questioning our personal vision to make sense of our current reality
Courage	Putting knowledge into practice	Commitment to learning and learning to learn	Reflection on our paradigms or mental models
Exploration and investigation	Questioning and reasoning: curiosity and assessing information	Commitment to the truth through pragmatism and inquiry	Team learning with the emphasis on learning conversations
Experimentation	Managing oneself and others	Commitment to full and open task-relevant communication	Building a shared vision through collaboration and dialogue
Reason and discipline	Managing information	Commitment to cultural diversity by ensuring cross-cultural communication and understanding	Systems thinking
Imagination	Communication	Commitment to systemic thinking	
Sociability	Team work: sharing information and collaboration	Cultural analysis and reflection on culture as essential parts of the learning process	
Reflection	Problem solving skills: creativity and innovation Adaptability and flexibility Being responsible for updating skills		

In table 2.5, the habits recommended for the development of a lifelong learning culture in the school context as suggested by Claxton and Lucas (2009) are listed and incorporate the characteristics suggested by Schein (2010), Longworth and Davies (1996) and Senge (1990) for the organisational context. This table shows the pervasiveness of lifelong learning habits and the significant role of schools and educational institutions in laying the foundation of a culture of learning and the role of organisations in entrenching these habits.

2.5.1 The establishment of a lifelong learning culture in organisations

Robbins *et al.* (2009) suggest that in order to change, organisations need to become continual learners. This requires management to make a commitment to change, innovation and continuous improvement. Robbins *et al.* (2009) argue that organisational structure and culture can hamper learning. According to Wouters *et al.* (2001), developing organisations into lifelong learning institutions has a profound effect on the relationship between work and learning. They argue that previously, learning was regarded as training, but with lifelong learning it now becomes associated with learning from experience and self-directed learning (Wouters *et al.*, 2001). This paradigm shift impacts on the way managers manage the workplace because they have to manage the workplace as a place of learning, which is a shift from traditional classroom training. The responsibility of taking the initiative to learn is also more on the employees because they have to take responsibility for their own learning. Nyhan *et al.* (2004, p. 76) refer to this as “human agency characterised by a sense of initiative”. Organisations should be a place that supports learning as well as the transfer of learning. This implies creating the workspace for individuals to take risks and make mistakes (Robbins *et al.*, 2009).

Different ways of encouraging lifelong learning, which includes both formal and informal learning, need to be sought. According to Senge (1990), learning organisations regard all experiences, particularly where there is a commitment to continuous personal development, as opportunities for learning. In line with this, Mokhtar (2010) argues in favour of a multidimensional model for learning where learning becomes more continuous and wide-ranging and where the individual’s need for development in more than one area is addressed. Multidimensional learning, as proposed by Mokhtar (2010), provides individuals with opportunities for both professional and personal development in work performance.

The implementation of a lifelong learning culture requires the exploration of different implementation tools that facilitate lifelong learning. Formal training is not the only means to engage in lifelong learning. According to Mokhtar (2010), one needs to find ways to foster

on-the-job learning by creating a favourable work environment. Wouters *et al.* (2001) maintain that systems for mentoring, coaching and job rotation need to be devised, as well as a system through which employees with less experience and knowledge can access employees with more experience and knowledge. Fischer (2000) contends that environments that support lifelong learning should include open systems that enable learners to locate other experts in the environment because many stakeholders possess knowledge. This idea is in congruence with that of Longworth and Davies (1996) who refer to the knowledgeable workforce as third age employees. They argue that systems should be in place to allow these valued employees to share their knowledge with new and less experienced employees.

Lifelong learning is considered essential for inventing the future of our societies –hence the need for innovation, a systems approach, technological innovations and learning management systems (Robbins *et al.*, 2009). According to Fischer (2000), lifelong learning goes beyond adult education and training because it embraces a habit, which people must acquire. Fischer (2000) argues that since lifelong learning creates the challenge to understand, explore and support, essential dimensions of learning such as self-directed learning, learning on demand, collaborative learning and organisational learning, it requires new media and innovative technologies in order to adequately support these new dimensions of learning. Longworth and Davies (1996) posit that organisations should look to innovations and technology that will enable them to create open learning systems allowing learners to learn at their own pace and on demand. According to Murray (2001), forward-thinking organisations are using e-learning to turn their employees into self-directed lifelong learners.

The aforementioned suggestions for the creation of lifelong learning organisations indicate the complexity of the task. A shift to lifelong learning not only impacts on the vision, structure and culture of the organisations, but also means that careful strategies have to be devised to enable organisations to become lifelong learning organisations (Marsick & Watkins, 2003).

2.6 CHAPTER SUMMARY

This chapter provided a literature review for the current study. Organisational culture and lifelong learning were conceptualised by summarising the views on and definitions of these constructs. The dimensions of each construct were also identified and explained. Models measuring instruments for these constructs were described. The theoretical basis for the differences in perceptions among subgroups was discussed. The implications for a relationship between these constructs for the establishment of a lifelong learning culture

were discussed. Based on the overview of the literature, a model representing the relationship between these constructs was developed.

Chapter 3 addresses the empirical research aims and presents the research in the format of the research article.

CHAPTER 3:¹ RESEARCH ARTICLE

THE RELATIONSHIP BETWEEN ORGANISATIONAL CULTURE AND LIFELONG LEARNING

ABSTRACT

Orientation: Effective service delivery is one of the key objectives of public service organisations. Crucial to effective service delivery is the organisation's ability to be responsive to its environments. Environments are constantly changing, and the ability to adapt is imperative for effective performance. A lifelong learning culture has been identified globally as a key determinant in enabling organisations to adapt to their changing environments. This is reflected in the values, beliefs and behaviours of individuals, and reinforced in maintaining the outcomes of the organisation. In order to establish a culture of continuous learning in an organisation, it is necessary to determine whether a relationship exists between organisational culture and lifelong learning as perceived by employees.

Purpose: The objectives of this study were to (1) establish whether a statistically significant positive relationship exists between individuals' perception of organisational culture measured by the South African Cultural Instrument (SACI, 2005) and lifelong learning measured by the Dimensions of the Learning Organisation Questionnaire (DLOQ, 2003); and (2) to determine whether the mean scores of subgroups based on sociodemographic contextual factors such as age, race, gender, level of education, years of service, disability status and job level differed for these variables.

Motivation for the study: The need to establish a lifelong learning culture in organisations has been emphasised globally. Despite the wealth of literature on its importance and benefits, there is no evidence of empirical studies on the relationship between organisational culture and lifelong learning having been conducted in South African public sector organisations. Furthermore, there appears to be a scarcity of literature pertaining to the implications for the establishment of a continuous learning culture in public service organisations. This study seeks to establish (1) whether such a relationship exists, and (2) what recommendations can be made for the establishment of a learning culture.

¹ Please note: The guidelines provided by the *South African Journal of Industrial Psychology* have been used as a broad and general guideline for the framework of the research article

Research design: A quantitative study, using primary data, was conducted on a convenient sample ($N = 257$) of full-time public service officials in a South African public service organisation.

Main results: Statistically significant relationships were evident between the individuals' perception of organisational culture and lifelong learning. Statistically significant differences were found in the perceptions of these variables for individuals with different years of service and of different age groups. The 36 to 45 age group had the lowest mean scores for organisational culture and lifelong learning. The 25 to 35 age group had the highest mean score for organisational culture. Employees with less than one year of service had the highest mean score for organisational culture and lifelong learning.

Practical/ managerial implications: When embarking on an organisational change strategy to create a lifelong learning culture, organisational development practitioners and managers should examine individuals' perceptions of organisational culture and continuous learning. This information may be useful in the planning and execution of intervention strategies.

Contribution/value add: The findings should add knowledge to the field of organisational behaviour, which could be used to create a lifelong learning culture in public service organisations.

Keywords: lifelong learning culture; learning organisation; organisational learning; knowledge sharing; knowledge economy; public service sector

1. INTRODUCTION

Key focus of the study

A lifelong learning culture has been put forward globally by several researchers as an important determinant of an organisation's ability to adapt and meet the needs of its changing environments. Although there are volumes of literature on a lifelong learning culture in organisations (Longworth & Davies, 1996; Mahler, 1997; Marquardt; 2011; Marsick & Watkins, 2003), there are no empirical studies highlighting the existence of a relationship between organisational culture and lifelong learning and their dimensions, in the context of the South African public service organisations (Govender, 2009). There also appears to be a paucity of empirical studies dealing with the implications of the existence of such a relationship, which could provide guidelines for the establishment of such a culture.

This public service sector organisation has as its mission, the building of an effective organisation that is responsive to the needs of the people. The basic values and principles guiding and governing public service administration are clearly outlined in chapter 10 of the Constitution of Republic of South Africa (1996). In the Green Paper on Transforming the Public Service (1996), the principles and framework for public service delivery are addressed and a customer-focused approach is emphasised (Department of Public Service and Administration, 1996). This means that public service organisations need to be adaptable to change in order to meet the diversity of needs of the citizens or customers (Mahler, 1997). Organisations that learn continuously are in a better position to satisfy the needs of their customers and meet the organisational objectives (Argyris & Schon, 1978).

Organisational culture is deeply rooted in the organisation and is based on employees' values, beliefs and assumptions (Castro, 2008). If culture is based on employee values, beliefs and assumptions, what is the relationship between the perceptions of organisational culture and lifelong learning? The present study aims to determine whether a relationship exists between public service employees' perception of organisational culture and lifelong learning and their dimensions in a South African public service organisation.

Background to the study

The culture of lifelong learning has been identified globally as the key to the growth and development of organisations and as imperative to surviving and coping with the dynamic environment and the knowledge economy (Marquardt, 2011; Tjepkema, Horst, Mulder, &

Scheerens, 2000). Despite the global outcry for lifelong learning, researchers have indicated that public service organisations are experiencing challenges in promoting and establishing a culture of lifelong learning in the organisation (Govender, 2009; Majam, 2005). This impacts on the continuous development of an organisation's diverse employees and the enhancement of the organisation's potential, which is detrimental to organisational performance and service delivery.

The public sector appears to be the largest employing organisation (Govender, 2009; Majam, 2005; Schraeder, Tear, & Jordan, 2005). Their employees function in a complex and ever-changing environment, making their functions and service to the public increasingly complex and challenging (Schraeder *et al.*, 2005). In order to meet the challenges, these organisations require a skilled, talented, knowledgeable and committed workforce to enable these organisations to adapt appropriately to environmental challenges.

Included in the core functions of this particular public sector organisation are law-making, oversight and ensuring that the public participates in the processes of law-making and oversight. According to the Constitution of the Republic of South Africa (1996), it is incumbent on this institution to increase public participation in these processes. These functions require employees to learn continuously in order to remain knowledgeable and keep abreast of current affairs and issues so that they can inform and educate the public about the processes of law-making and oversight.

Trends in the literature

A huge body of literature focuses on the reasons for the establishment of a continuous learning culture in organisations as a means to ensure organisational effectiveness (Jarvis, 2009; Kirby, Knapper, Lamon, & Egnatoff, 2010; Marquardt, 2011). Many of the works are theoretical, suggesting models and strategies for implementation (De Geus, 1997; Govender, 2009; Jarvis, 2009; Majam, 2005; Marquardt, 2011; Senge, 1990). However, there appears to be a paucity of empirical studies that could provide some evidence of the successes and limitations of implementation strategies; nor is there sufficient empirical evidence to explain why a continuous lifelong learning culture should be or should not be implemented.

Literature studies point to the existence of a lifelong learning culture that merges these two concepts (Collins, 2009; Doyle, 2003; Senge, 1990). Organisational culture and lifelong learning thus appear to be related. However, few studies refer to this relationship, which could mean that this relationship is implied. Argyris and Schon (1978) allude to

organisational learning by stating that it involves learning how to learn, which has cultural implications. Wouters, Buyens, and Dewettinck (2001) allude to the existence of a relationship by stating that organisations need to have a vision and commitment that will optimise continued learning in its entirety. According to Mahler (1997), there is a connection between culture and learning because of the impact of culture on both the organisation's ability to learn and on influencing how it learns. Jarvis (2009) contends that learning is inseparable from culture because it is a social and cultural phenomenon.

Empirically based culture studies refer to the relationships between organisational culture and possible elements of lifelong learning such as innovation and creativity (Martins, Martins, & Terblanche, 2004) and e-learning (Winter, 2007). Empirical studies that come closest to the current study include the following: Alas and Vadi (2006) on the impact of organisational culture on organisational learning; Fard, Rostamy, and Taghiloo (2009) on how types of culture shape organisational learning; a study conducted by Joseph and Dai (2009) on the influence of organisational culture on organisational learning, worker involvement and worker productivity; and a study by Singh (2010) on the analysis of the relationship between organisational culture and organisational learning. However, only the study by Fard *et al.*, (2009) has been conducted in public sector organisations.

Research objectives

The research objectives of this study were to (1) investigate whether a statistically significant positive relationship exists between individuals' perceptions of organisational culture and lifelong learning and the various dimensions of these constructs; and (2) to determine whether the mean scores of subgroups based on age, race, gender, education, years of service, disability status and job levels differ significantly for these two variables and their dimensions.

The potential value-add of the study

In the light of the paucity of empirical research studies pointing to a relationship between individual perception of organisational culture and lifelong learning in the public service environment, the purpose of this study was to generate knowledge for the field of organisational behaviour and employee engagement that can be used to establish a lifelong learning culture in South African public service organisations.

2. LITERATURE REVIEW

Organisational culture

Many researchers believe that culture has an enduring influence on organisational functions and interactions with its environments (Davidson, 2003; Martins, 2007; Martins *et al.*, 2004; Seloane, 2010; Wang, Su, & Yang, 2011). An ideal organisational culture is believed to have a positive influence on organisational performance. In order to understand how organisational culture affects the various aspects of organisational functioning, it is necessary to understand what constitutes organisational culture.

Literature studies have pointed to various definitions of culture (Longworth & Davies, 1996; Aspin & Chapman, 1997; Candy & Crebert, 1991; Jarvis, 2009). These definitions embrace concepts such as values, basic assumptions, integrated patterns of behaviour, beliefs and shared thinking (Deal & Kennedy, 1982; Denison, 1990; Martins, 2007; Schein, 1990). Martins (2007, p. 75) defines culture as “an integrated pattern of human behaviour, which is unique to a particular organisation and which originated as a result of the organisation’s survival process and interaction with its environment. Culture directs the organisation to goal attainment.” Newly appointed employees must be taught how to behave in the particular context of the organisation (Martins, 2007). Martins’s (2007) definition incorporated Schein’s (1990) definition of culture, which emphasises the integration of patterns of behaviour that have developed as a response to their environments. Martins’s (2007) definition of culture was used in this research study.

Models for organisational culture facilitate the categorisation, interpretation and the understanding of relationships between data and complex organisational phenomena, suggesting methods of intervention (French & Bell, 1999; Martins, 2007). The literature has pointed to a variety of models for diagnosing culture (Martins, 1989; Dauber, Fink, & Yolles, 2012; Denison, Janovics, Young, & Cho, 2006). However, not all these models reflect the influence of the external environment on culture in the manner portrayed in Martins’s (2007) model.

According to Dauber *et al.*, (2012) and Sagiv and Schwartz (2007), a host of external factors have a profound effect on an organisation’s culture and therefore models should be explicit in mapping these effects. Martins’s (2007) model portrays the interaction of organisational subsystems with internal and external environments and embraces all organisational factors that could influence organisational culture. This complex interaction occurs between

individuals and groups in the organisation and with other organisations and the external environment (Martins, 1989). “The patterns of interaction between people, roles, technology and the external environment represent a complex environment which influences behaviour in organisations” (Martins, 2007, p. 77).

This interaction is central to the public sector organisation in this research study. Public sector organisations are faced with the challenge of having to be responsive to the needs of the people they serve (Govender, 2009) and the interrelationship between the organisation subsystems and their external environments therefore plays a fundamental role in the accomplishment of the organisation’s mission and vision (Martins, 1989).

One approach to studying culture is to identify certain dimensions of culture that shape behaviour (Martins, 2007). The dimensional approach measures the cultural approach of organisations using empirical methods and scales that can be related to other dependent variables (Dauber *et al.*, 2012). Martins (1989) developed a cultural framework based on seven different dimensions. These include leadership, means to achieve objectives, management processes, employee needs and objectives, vision and mission, external environment and diversity strategy (Martins, 2007). Martins (1989) depicted the interaction between dimensions of culture, the external environment, internal systems and the organisational subsystems. Determinants of culture influence each dimension (Martins, 1989).

The vision and mission of the organisation provide the rationale for the actions and behaviour of the organisation’s members (Senge, 1990). It is thus essential for organisation members to understand and agree with the vision and mission. This basically means that the achievement of organisational objectives is influenced by structure and support mechanisms, which facilitate the effective implementation of the organisational mission and vision.

The external environments have a significant effect on the survival of the organisation (Ellinger, Yang, & Ellinger, 1998) – hence the need for constant monitoring to ensure that it stays aligned with the external environments (Schraeder *et al.*, 2005). Although public sector employees have fewer competitors than the private sector organisations, they experience similar pressures to be aligned with the external environment. Constant monitoring is thus needed to ensure that the organisation delivers on its vision and mission. Furthermore, public sector organisations have to adapt and modify their cultures to prevent the erosion of public confidence in the organisation (Valle, 1999).

Management processes focus on factors such as management change, setting and implementing goals, training, delegation, decision-making innovation processes and communication (Martins & Von der Ohe, 2006). Accelerating globalisation, technological and societal trends and demographical changes are changing the nature and the context in which we work (Gratton, 2011). Management therefore need to review their processes to ensure that the organisation's internal processes are aligned in order to adapt to the outside pressures. Various researchers emphasise different processes to cope with the changing environments (Gratton, 2011; Kerr-Philips, 2009; Wang & Ellinger, 2011).

Employee needs and objectives need to be integrated with the needs of the organisation (Martin & Von der Ohe, 2006). The degree to which employees perceive their needs and objectives to be met by the organisation impacts on their job commitment, job satisfaction, work engagement and their turnover intentions (Döckel, Basson, & Coetzee, 2006; Kerr-Philips & Thomas, 2009). Employee empowerment through greater responsibility, decision making, authority and informal feedback will increase employee commitment because they feel that their needs and objectives have been met (Van Schalkwyk, Du Toit, Bothma, & Rothman, 2010).

Leadership is the source of beliefs and values that motivates a group towards interacting with the internal and external environment (Schein, 2010). If the methods proposed by leaders are successful then “the leader's assumptions become the shared assumptions of the group” (Schein, 2010, p. 85). Leadership is therefore a crucial function in establishing and changing organisational culture.

Lifelong learning

Lifelong learning is not a new concept and has been defined over the years in many different ways (Collins, 2009; Jarvis, 2009; Longworth & Davies, 2009). The common thread in the definitions of lifelong learning is that it is continuous learning, dealing with the development of human potential over a lifetime (Aitchison, 2006; Longworth & Davis, 2009). Lifelong learning encompasses formal, non-formal and informal learning and is also life-wide, “extending beyond formal institutions” (Kirby *et al.*, 2010, p. 292). Lifelong learning is incidental because as we are exposed to different subcultures in different institutions, we automatically adjust our behaviour to fit into the group (Marsick & Watkins, 2003). Incidental learning is likely to occur when organisations support individuals to maintain openness to learning and reflection and to translate learning into practice (Marsick & Watkins, 2003).

Although organisational support is an important element of lifelong learning, individual commitment and personal motivation are significant stimulators of the lifelong learning process (Longworth & Davies, 1996). According to Senge (1990), individuals are the main drivers of learning. Wouters *et al.* (2001) support this notion by emphasising the organisation's dependence on the employees' learning and their ability to create, disseminate and apply new knowledge in the organisation.

Although lifelong learning is depicted as an individual activity, it occurs in the broader social environment (Marquardt, 2011). Ghererdi and Nicolini (2001) support this statement and state that learning does not occur in the minds of individuals but is a result of individual participation in social activities. In the context of the organisation, lifelong learning became the focus because of the emergence of globalisation and the knowledge economy (Jarvis, 2009; Mokthar, 2010).

The knowledge economy spurred an interest in knowledge management and information literacy (Mokthar, 2010). Knowledge management and information literacy include the ability to correctly access information, skills and ideas and the application of these in the required context (Weeks & Weeks, 2010). In South African public sector organisations, these skills and continuous learning are essential. South African public sector organisations are experiencing the challenge of promoting and creating a culture of learning in organisations because this requires the involvement of all stakeholders (Govender, 2009). Knowledge management, information literacy and social interaction with a variety of stakeholders are crucial skills for continuous learning and survival in the knowledge economy.

Because organisational learning is part of the lifelong learning continuum, it is a process describing how individuals, groups and organisations learn (Govender, 2009; Nyhan, Cressey, Tomassini, Kelleher, & Poell, 2004). It is based on the skills of sharing and integrating knowledge into the organisation's routines and systems. According to Mahler (1997), organisational learning is based on the sharing of and interpretation of events, and on reflecting on these interpretations. Researchers agree that organisational learning is a process of acquiring, interpreting, distributing, integrating and creating information and knowledge among the members of the organisation (Marquardt, 2011; Marsick & Watkins, 2003; Wang & Ellinger, 2011).

Organisational learning draws from various disciplines, which has given rise to the development of various integrated models of organisational learning (Moilanen, 2005). However, tools to measure lifelong learning accompany few of these models. One of the few

is the model of Marsick and Watkins (1999), which is a comprehensive depiction of continuous learning in the workplace (Moilanen, 2005). This model is depicted in figure 3.1. Other models that are accompanied by diagnostic tools are either too simple or expansive (Moilanen, 2005).

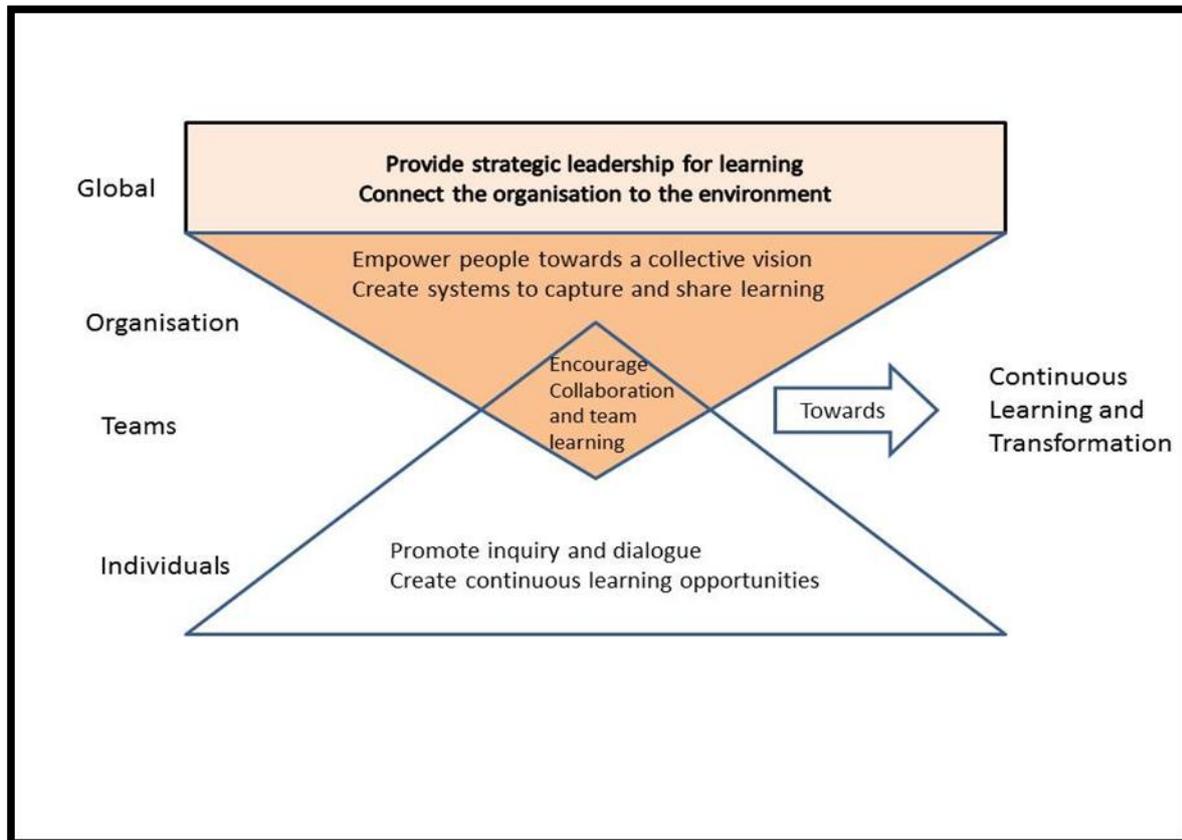


Figure 3.1. Model of the learning organisation (Marsick & Watkins, 1999, p. 11)

According to Marsick and Watkins (2003), organisational learning occurs at individual, team, organisational and global levels. Individual learning refers to the change in skills, insights, knowledge, values and attitudes acquired through self-study, instruction and observation. Group or team learning refers to the knowledge, skills and competencies acquired by the group. At each of these levels, various dimensions of organisational learning are measured. These include opportunities for continuous learning and collaboration, inquiry and dialogue, systems thinking, shared vision and mission and connecting the organisation to the environment (Marsick & Watkins, 2003). Organisational learning encompasses improvement in intellectual and production capability obtained by commitment to the opportunities presented for continuous improvement across the organisation (Marquardt, 2011).

The relationship between organisational culture and lifelong learning

Literature studies have pointed to a theoretical relationship between organisational culture and lifelong learning (Jarvis, 2009; Marsick & Watkins, 2003; Martins, 1989; Schein, 1990). Organisational culture provides the collective frame of reference and context for the interpretation of events. According to Mahler (1997), culture determines how organisations make sense of and interpret ambiguities in information, problematic situations and incomprehensible connections between problems and solutions. Weeks and Weeks (2010) support this notion by stating that culture acts as a behavioural determinant, influencing how learning takes place at individual level and in an institutional context.

In the context of public service organisations, the key role of culture in organisational learning is based on individual and collective behaviours, which are not necessarily the result of new information and innovative decision support systems, but behaviours that are based on the interpretation of information in the context of historically developed organisational meanings found in the symbolism of culture (Mahler, 1997). Although culture is, in some instances, regarded as a source of resistance and defence to learning and change (Argyris, 1991; Schein, 2010), it is also regarded as the basis for interpreting situations and experiences that could inspire learning and facilitate the formulation of effective solutions (Mahler, 1997). These elements are depicted in the relationships between the dimensions of culture and the dimensions of lifelong learning.

The organisation's mission contains the purpose, strategy, behaviour, standards and values of the organisation, linking rationale for actions to behaviour (Campbell & Young, 1999). The mission and vision are significant cultural elements and form the basis of organisational learning (Armstrong & Foley, 2003). In the context of organisational learning, a shared vision and mission, which is developed by employees, ensures that they are empowered and motivated to accept responsibility for achieving the goals, which they set (Marsick & Watkins, 2003). A shared mission is a frame of reference, which directs individual behaviour in the workplace and ultimately influences whether learning occurs and whether organisational goals are being met.

Leaders should set examples and provide the infrastructures that are necessary for the establishment of a culture that inspires learning and facilitates lifelong learning in organisations (Schein, 2010). Kerr-Philips and Thomas (2009) suggest that South African organisations display a culture of mistrust and a reluctance to share information because of the challenges of its historical past, which brought with it exclusionary practices. The acquisition, interpretation and distribution of information are at the heart of organisational

learning (Wang & Ellinger, 2011). Leaders therefore need to embrace change and promote the working together of diverse teams through sharing and distributing information.

Team learning as a dimension is emphasised by culture and organisational learning (Marsick & Watkins, 2003). It is initiated by dialogue, which is a dimension of organisational learning (Ellinger, Ellinger, Yang, & Howton, 2002). Dialogue enables individuals to discover innovative ideas and facilitate coordinated actions while continuously learning from team members (Wang & Ellinger, 2011). Leaders need to encourage collaboration and team learning in order to realise organisational learning (O'Neil, 2003). Moreover, leaders should lead by example, become lifelong learners and develop a culture that is learning oriented, adaptive and flexible. Leaders should also mentor and coach employees for prospective leadership positions so that the intellectual capital of the organisation is preserved.

An organisation with too many hierarchical levels does not promote a culture conducive to inquiry, dialogue, feedback and experimentation (Weeks & Weeks, 2010). These are vital elements of organisational learning. Dialogue is important to solve differences and provide feedback. This can be achieved through flexible management processes (O'Neil, 2003). Prevalent in a learning culture is exploration, stimulating courage and curiosity to solving problems and challenging existing assumptions and paradigms, which are entrenched in the culture of organisations (Weeks & Weeks, 2010). A hierarchical culture does not facilitate the flexibility that is required of individuals when dealing with ambiguous situations and in coping with challenges requiring a variety of insights (Joseph & Dai, 2009). Organisational learning requires an organisational culture that is flexible, encourages multiskilling and participative management (Kirby, Knapper, Evans, Carty, & Gadula, 2003).

The relationship between the organisation meeting the objectives of the individual and lifelong learning is prevalent in opportunities provided for career growth and the creation of continuous learning opportunities (Weeks & Weeks, 2010). If there is a culture of career growth opportunities for employees, then the possibility of continuous learning opportunities will exist through the provision of ongoing education. Similarly, a culture of open communication channels and dialogue will promote the development of productive reasoning, the skills to express views and the capacity to listen and inquire into the views of others as portrayed in the model of continuous organisational learning (Collins, 2009). A culture of transparency supports questioning and feedback and this will enhance organisational learning by facilitating adaptations to the changing environment, learning from others and contributing to the learning of a wider community of which individuals are part (Marsick & Watkins, 2003; Senge, 1990; Wang & Ahmed, 2003). However a culture that restricts communication and stresses hierarchy will inhibit learning (Joseph & Dai, 2009).

Management's internal processes are related to the dimensions of lifelong learning because they indicate whether the organisation supports continuous learning (Senge, 1990; Govender, 2009). The internal training programme, work procedures and methods could create opportunities for on-the-job and off-the-job learning. The organisation can help employees to attain new knowledge and also acquire skills in the field of learning and problem solving that could enhance their capacity for lifelong learning (Wouters *et al.*, 2001). Coaching and mentoring, as management processes, are related to lifelong learning (Govender, 2009; Marsick & Watkins, 2003) and are suggested by Govender (2009) to be implemented in public sector organisations to encourage employees to learn by objectives, share experiences and encourage dialogue by creating trusting relationships between multicultural and diverse employees.

Lifelong learning requires a culture of flexibility and adaptability (Govender, 2009). To embrace diversity and lifelong learning, organisations should nurture the potential of all employees that will benefit the whole organisation (Govender, 2009). Lifelong learning embraces the maximisation of organisational learning through individual, group and team learning (Govender, 2009; Marsick & Watkins, 2003).

Theoretical basis for differences in perceptions of organisational culture and lifelong learning among the subgroups

Differences in perception of organisational culture among subgroups

Literature studies point to the differences in perception of organisational culture and its dimensions based on age, gender, tenure, job level and race (Helms & Stern, 2001; Martins & Coetzee, 2007; Martins & Von der Ohe, 2006). Although these aforementioned studies used various instruments to measure the perceptions of organisational culture and its dimensions, differences in perceptions of organisational culture among subgroups were apparent (Helms & Stern, 2001; Martins & Coetzee, 2007).

Understanding the differences in perceptions of culture and its dimensions among subgroups is essential for the establishment of a culture, which fosters consistent organisational actions (Helms & Stern, 2001). According to Helms and Stern (2001), the creation of a consistent culture may create an environment in which employees will provide high quality service to their customers. Cummings and Worley (2011) concur with this statement but add that the culture should emphasise innovation and change.

The mission of the organisation in the current study is to increase organisational responsiveness to the environment (PCS, 2007). This requires consistency, adaptiveness, creativity and innovation (Cummings & Worley, 2011; Helms & Stern, 2001; Louw & Martins, 2004). The ensuing paragraphs provide evidence of the differences in perception of culture and its dimensions based on demographic variables as portrayed in the literature.

Research studies conducted by Martins and Coetzee (2007) using the South African Cultural Instrument (2005) indicated significant differences in subgroups with regard to age, gender, job level and race. In terms of age and race, white employees below the age of 35 experienced the organisational culture less positively than the rest of these subgroups (Martins & Coetzee, 2007). Helms and Stern (2001) suggest that individuals from different age groups will differ in their perception of organisational culture because of their personal circumstances and their different ways of interacting. Martins and Von der Ohe (2006) found significant differences between the various race groups, particularly in certain dimensions such as the vision and mission.

Significant differences were also found between the different job levels (Martins & Von der Ohe, 2006). Significant differences in perception of organisational culture and its dimensions were also found among the different job levels in studies conducted by Martins and Coetzee (2007). This is supported by the studies of Harris and Ogbonna (1998), who purported that employees at different job levels in the organisation differ in their perception of organisational culture. Studies using the same instrument found that males and females do not perceive organisational culture differently (Martins & Von der Ohe, 2006). In contrast to these findings on gender, Martins and Coetzee (2007) found significant differences between males and females in their perceptions of organisational culture.

Research studies using the South African Cultural Instrument (2005) such as those conducted by Martins and Coetzee (2007) and Martins and Von der Ohe (2006) did not include tenure as a biographical variable. Studies conducted by Helms and Stern (2001) using a different cultural measuring instrument indicated differences in perceptions of organisational culture among subgroups with different years of service. According to Helms and Stern (2001), individuals with varying length of service in the organisation differ in their perception of organisational culture because they are socialised differently in the organisation over time. According to Martins (2007), employees must be taught the culture and ways of behaving. A consistent culture may facilitate the socialisation process and determine how individuals experience the workplace (Helms & Stern, 2001; Martins, 2007).

Differences in perception of lifelong learning among subgroups

While there is a growing amount of literature on lifelong learning, hardly any empirical studies have been conducted in organisations dealing with differences in perceptions of lifelong learning between demographic subgroups (Wang, Yang, & McLean, 2007; Fard *et al.*, 2009; Alas & Vadi, 2006). There thus appears to be a lack of evidence of differences in perception of organisational learning among subgroups. Recommendations were made by Marsick and Watkins (2003) for further research to be conducted focusing on demographic variables and culture. Some studies on perceptions of organisational learning and its dimensions using the Dimensions of the Learning Organisation Questionnaire (2003) focused on demographic variables such as age, gender, years of service and education levels (Hunter-Johnson & Closson, 2012; Lim, 2003; Nazari & Pihie, 2012; Wang *et al.*, 2007).

Studies conducted by Wang *et al.* (2007) showed that individuals of different age groups differed significantly in their perception of organisational learning and its dimensions. Among the respondents, employees between 41 and 60 years of age had the highest evaluation of organisational learning and its dimensions, while those between 18 and 30 years of age had a median score (Wang *et al.*, 2007). The 31 to 40 age group scored the lowest for perceptions of organisational learning and its dimensions (Wang *et al.*, 2007).

Consistent with these findings, Nazari and Pihie (2012) found significant differences between the different age groups in the dimensions of organisational learning. Older employees appeared to have a more positive perception of organisational learning and its dimensions than younger employees. These differences in perception of organisational learning and its dimensions regarding age contradict the research findings in the studies conducted by Lim (2003), which found no differences in perception of organisational learning with regard to age.

According to Wang *et al.* (2007), with regard to education levels, employees with the highest level of education scored the lowest on perception of organisational learning and its dimensions, while the employees with the lowest education levels scored the highest on perceptions of organisational learning and its dimensions. These findings contradict those of Nazari and Pihie (2012), who reported that employees with doctoral degrees showed a higher perception of organisational learning and its dimensions than those with master's degrees. Similar differences in perceptions of organisational learning and its dimensions were also observed between master's degree employees and bachelor's degree employees (Nazari & Pihie, 2012).

A recent study by Hunter-Johnson and Closson (2012) in a law enforcement organisation indicated that the perceptions of a group of adult educators on organisational learning and its dimensions were low in comparison with the aforementioned studies. In contrast to some of the aforementioned studies, Hunter-Johnson and Closson (2012) found no significant differences between the adult educators on organisational learning and its dimensions with regard to job level, years of service and gender.

In the light of the preceding literature review, the following hypotheses were empirically tested:

- H1: There is a statistically significant positive relationship between individuals' perception of organisational culture and lifelong learning and the various dimensions of these constructs.
- H2: The mean scores of individuals from different gender, race, age, education, years of service, disability and job level groups differ statistically significantly in their perception of organisational culture and lifelong learning and their dimensions.

3. RESEARCH DESIGN

Research approach

This study was exploratory. A quantitative survey approach was used to achieve the aims of the study and which allowed the conversion of concepts into operational definitions in order to obtain numerical results, which could be reported in statistical language. This approach enables one to conceptualise the constructs in accordance with specific measurement instruments, and to use the measurement instruments to measure these constructs (Mouton & Marais, 1996). Quantitative designs are reliable because they follow a fixed procedure, which facilitates replication of the studies (Mouton & Marais, 1996).

Research method

Research methodology provides an explanation of how the research was conducted and the data collected to allow for the testing of the stated hypotheses and answering of the research questions (Terre Blanche, Durrheim, & Painter, 2006). The next section provides a discussion of the research method and includes a description of the research participants, measuring instruments, research procedure and statistical analyses.

Research participants

The total population of the study comprised 1 100 members. The sample was based on convenient sampling. An initial number of 350 questionnaires were distributed throughout the organisation and 347 were returned. However, only 257 questionnaires were complete. Hence the final sample that participated in the research study yielded a response rate of 74% ($N = 257$). Table 3.1 provides a biographical distribution of the sample.

Table 3.1

Biographical distribution of the sample (N = 257)

Item	Category	Frequency	%
Gender	Males	127	49
	Females	130	51
Race	Africans	108	42
	Coloureds	103	40
	Indians	24	6
	White	16	9
	Other	6	2
Job level	Manual	20	8
	Technical and administrative	47	18
	Transactional operational, specialist	149	58
	Specialist, management, professional	39	15
	Executive management	2	1
Tenure	Less than 1 year	23	9
	1–2 years	24	9
	2 but fewer than 3 years	14	5
	3 but fewer than 4 years	15	6
	4 years and more	181	71
Education	Grade 12	34	13
	National certificate	21	8
	National Diploma	43	17
	Degree	57	22

	Postgraduate	102	40
Age	55 and older	16	6
	46–55	55	21
	36–45	103	40
	25–35	83	32
Disability	Disability	4	2
	None	250	97
	Do not want to disclose	3	1

Measuring instruments

(a) The South African Cultural Instrument (SACI, 2005)

The SACI (2005) was used for the present study to measure the individual perception of organisational culture (Martins & Martins, 2005). The SACI (2005) has been used since 1989 in various cultural studies (Martins & Coetzee, 2007). Studies conducted by Martins and Terblanche (2003) reported an overall reliability (Cronbach coefficient alpha) of 0.93 and internal consistency of the dimensions between 0.65 and 0.93. Reliability studies of the SACI (2005) for this study yielded an overall reliability of 0.98 and an internal consistency of the dimensions between 0.84 and 0.98. These results are indicated in the table 3.2. The following dimensions were included in the questionnaires: vision and mission, means to achieve objectives, management processes, employee needs and objectives, leadership, external environment and diversity strategy. The SACI (2005) is a self-completed questionnaire comprising 98 items and includes biographical information. A shorter version of this questionnaire is not available. A five-point Likert scale is used in the questionnaire requiring a response, which ranges from strongly disagree (low rating) to strongly agree (high rating). Low scores indicate non-acceptance of the cultural item, whereas high scores indicate an acceptance of the cultural items.

(b) The Dimensions of the Learning Organisation Questionnaire (DLOQ, 2003)

The DLOQ (2003) was used to measure the individuals' perception of lifelong learning (Marsick & Watkins, 2003). The rationale for using the DLOQ (2003) scale is in the approach followed by Marsick and Watkins (2003), which was deemed appropriate for this study because it categorises the perceptions of lifelong learning into seven dimensions. These dimensions can be correlated with the SACI (2005) identifying the areas where interventions need to be made. According to Jamali and Sidani (2008), the DLOQ (2003) has the ability to

gauge the perceptions of learning in organisations at any point in time. A number of studies were conducted to test the reliability and validity in different contexts (Ellinger *et al.*, 1998; Marsick & Watkins, 2003; Soong, Joo, & Chermack, 2009; Wang *et al.*, 2007; Yang, 2003). The individual item reliability yielded an alpha coefficient between 0.71 and 0.91. This indicated the applicability of the DLOQ (2003) in societies with different cultural backgrounds. Reliability statistics conducted for this study yielded an overall reliability of 0.96 and an internal consistency of the dimensions between 0.87 and 0.95. This is depicted in table 3.2.

The DLOQ is available in two formats, namely the short and complete versions (Soong *et al.*, 2009). The complete DLOQ comprises 43 items and the shortened version 21 items. Both versions contain seven dimensions of learning in the organisation, namely the creation of continuous learning opportunities, the promotion of inquiry and dialogue, encouraging collaboration and team learning, empowering people towards a collective vision, connecting the organisation to its environment and providing strategic leadership for learning. For the purposes of the current study, the shortened version of the questionnaire was used. The reason for using the abbreviated 21-item version of the DLOQ is that this simplified version yields better psychometric properties (Wang *et al.*, 2007; Yang, 2003). According to Brewerton and Millward (2001), questionnaires that are self-completed and too long will require extreme motivation to complete. Longer questionnaires may cause fatigue, carelessness and respondents to lose interest (Meadows, 2003). The questionnaire uses a six-point Likert scale for the respondent to rate the dimensions of learning in the organisation. The ratings are defined as learning tasks occurring “almost never” (1) or learning tasks occurring “almost always” (6). A low rating indicates a negative perception of lifelong learning and a high rating, a positive perception.

Research procedure

Ethical clearance and permission to conduct the study was obtained from the management of the institution that participated in this study. Participation was voluntary and the questionnaires, accompanied by a letter explaining the aim and purpose of the research, confidentiality declaration forms and consent forms, were personally handed to each participant. The researcher explained the voluntary nature of the research to all the participants and assured them of the confidentiality of their information and anonymity of their participation. The participants completed a consent form, indicating that informed consent was obtained from them and that they granted permission for their completed questionnaires to be used for research purposes. Participants informed the researcher via email once they had completed the consent form as well as the questionnaires. The researcher collected the consent forms and questionnaires from the participants. This procedure ensured that the

participants completed the questionnaires privately in their own time and that they remained anonymous.

Statistical analysis

The statistical programme, StataCorp (2009), was used to analyse the data. Descriptive statistics, correlation and inferential statistics were calculated. Cronbach alpha coefficients were used to assess the internal consistency of the measuring instruments. Spearman's correlation coefficients were calculated to determine whether there was a relationship between the continuous valued variables. Statistical significance was determined at a 5% level.

The distribution of each measuring instrument was assessed for normality using histograms and then the Shapiro-Wilk test (Pretorius, 2007). Normally distributed overall scores were assessed using Anova tests and non-normal instruments using Kruskal-Wallis tests for the comparison of subgroups based on the biographical variables indicated earlier. For instruments, means and standard deviations were reported for normally distributed subscales, and medians and interquartile ranges for subscales that were not normally distributed.

An Anova test was used to test whether the mean scores of the subgroups being compared differed significantly from one another. Once significant differences had been confirmed at a probability level $p < 0.05$, post hoc tests were done to identify which groups differed significantly. Tukey's honestly significant difference (HSD) test as conducted in Lim's (2003) research was used for this purpose. Tukey's HSD is generally considered to be a powerful test and is used for comparing all possible combinations of means (Pretorius, 2007).

4. RESULTS

Descriptive statistics

Table 3.2 indicates the Cronbach alpha coefficients for the subscales of the SACI (2005). Cronbach alpha coefficients were used to assess the internal consistency and reliability of the measuring instruments. Each of the subscales of the SACI (2005) reflected high Cronbach alpha coefficients and thus high internal reliability and consistency (0.72 – 0.94), which are consistent with previously reported reliability coefficients (Martins & Coetzee, 2007; Martins, 2007).

Table 3.2

Reliability of the SACI (2005): Cronbach alpha for the SACI (2005)

SACI (2005) and subscales	Number of items in subscale	Cronbach alpha
Leadership	17	0.94
Means to achieve objectives	23	0.91
Management processes	23	0.93
Employee needs and objectives	14	0.93
Vision and mission	6	0.84
External environment	3	0.88
Diversity strategy	4	0.71
SACI (2005) total scale	90	0.98

Table 3.3 provides the Cronbach alphas for the subscales of the DLOQ (2003). The scales reflect high Cronbach alpha coefficients and high internal reliability and consistency (0.72 – 0.89), which are consistent with previously reported reliability coefficients (Marsick & Watkins, 2003; Yang, 2003).

Table 3.3

Reliability of the DLOQ: Cronbach alpha for the DLOQ (2003)

DLOQ and subscales	Number of items in subscale	Cronbach alpha
Creating continuous learning opportunities	3	0.72
Promote inquiry and dialogue	3	0.85
Encourage collaboration and team learning	3	0.87
Create systems to capture and share learning	3	0.87
Empower people towards a collective vision	3	0.87
Connect the organisation to its environment	3	0.85
Leaders model and support learning	3	0.89
DLOQ total scale	21	0.96

All dimensions for the SACI (2005) as well as the overall dimension were normally distributed except the leadership and employee needs (see figure 3.1). The only normally distributed dimensions for the DLOQ (2003) were continuous learning and connecting the organisation to the environment (see figure 3.2).

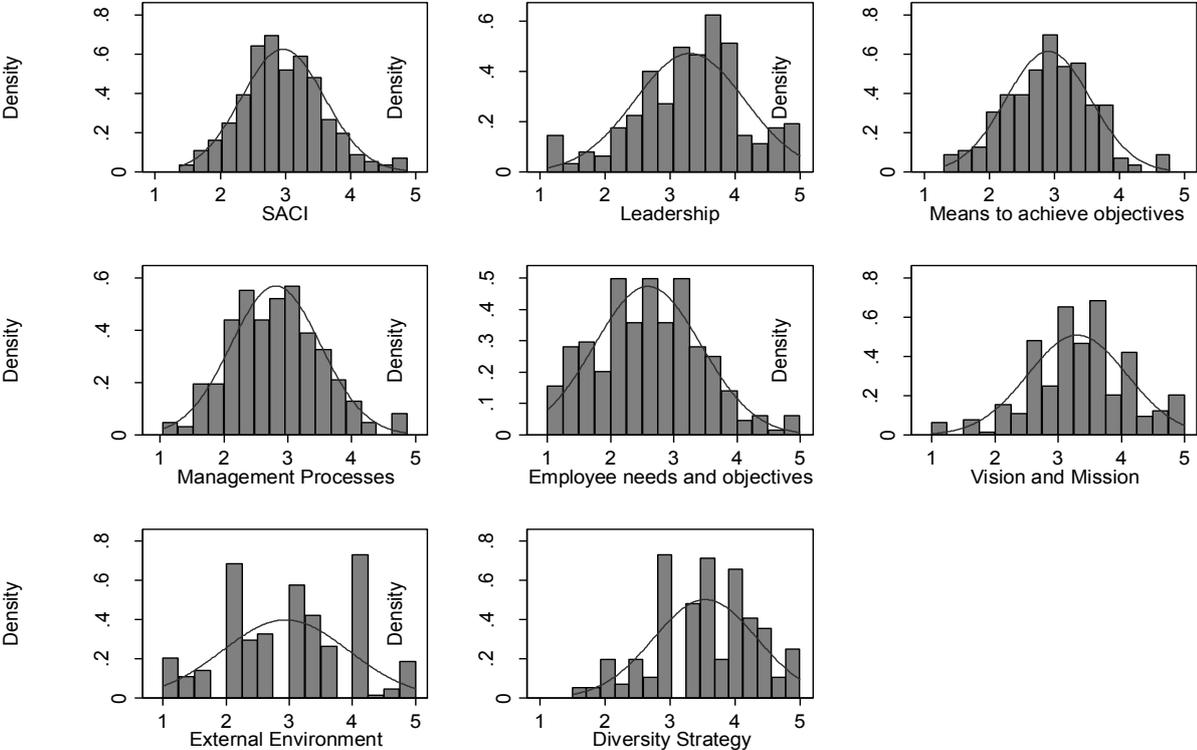


Figure 3.2. The distribution of the means of the SACI (2005)

For normally distributed variables, the means and standard deviations are reported. For variables that are not normally distributed, the median and the interquartile range (which is the middle section of the data) were reported (IQR: 25th – 75th percentile).

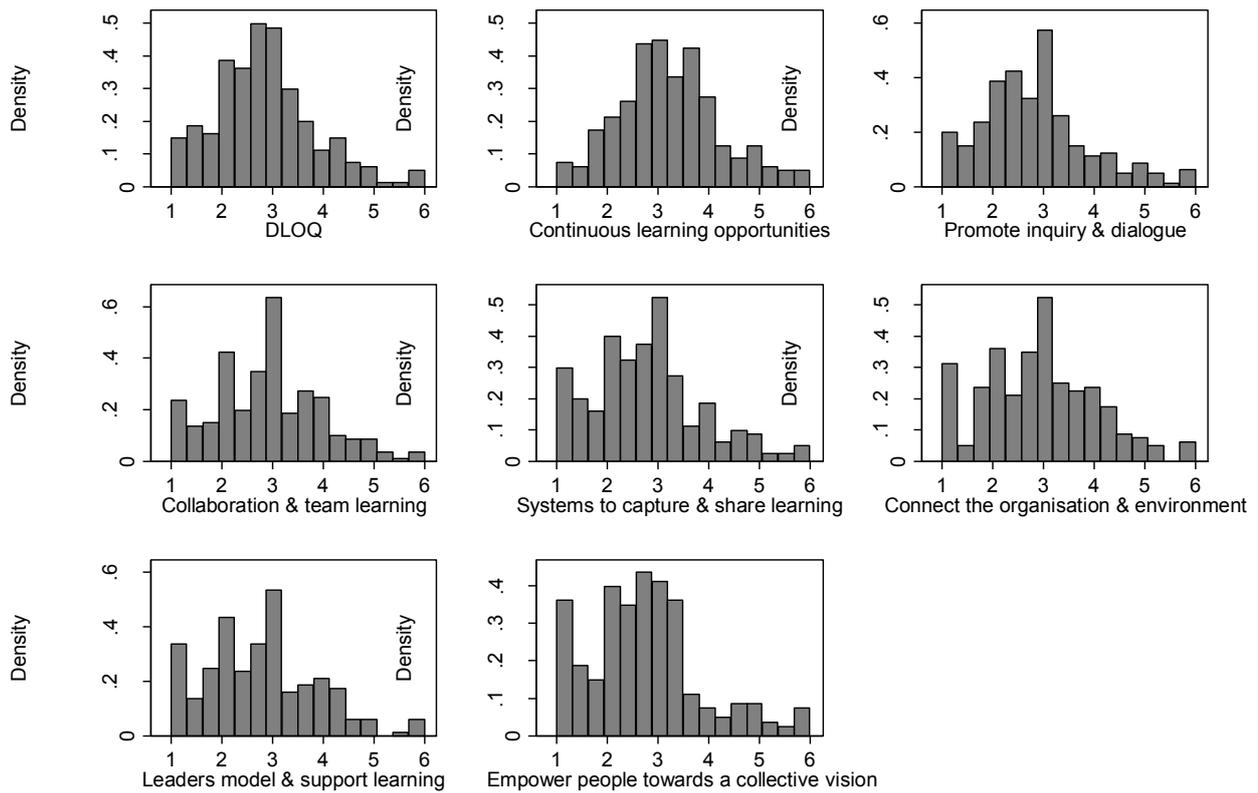


Figure 3.3. The distribution of the means of the DLOQ

Table 3.4 represents the mean, standard deviation, median and the interquartile ranges for all the subscales ($N = 257$).

Table 3.4

Descriptive statistics: means, standard deviation, median and interquartile range (N = 257)

	Minimum	Maximum	Mean	Median	SD	25 th Percentile	75 th Percentile
Leadership	1.12	5.00	3.31	3.41	0.85	2.76	3.82
Means to achieve objectives	1.30	4.78	2.91	2.87	0.65		
Management processes	1.04	4.87	2.81	2.78	0.70		
Employee needs and objectives	1.00	5.00	2.59	2.57	0.84	2.00	3.21
Vision and mission	1.00	5.00	3.30	3.33	0.78		
External environment	1.00	5.00	2.94	3.00	1.00		
Diversity	1.50	5.00	3.54	3.50	0.79		
Total organisational culture	1.38	4.87	2.96	2.91	0.64	2.56	3.37
Continuous learning opportunities	1.00	6.00	3.20	3.00	1.07	2.67	
Inquiry and dialogue	1.00	6.00	2.79	2.67	1.11	2.00	3.33
Collaboration and team learning	1.00	6.00	2.88	3.00	1.10	2.00	3.67
Systems to capture learning	1.00	6.00	2.74	2.67	1.14	2.00	3.33
Empower people: towards collective vision	1.00	6.00	2.77	2.67	1.18	2.00	3.33
Connect the organisation to its environment	1.00	6.00	2.89	3.00	1.16		
Leaders model and support learning	1.00	6.00	2.73	2.67	1.15	2.00	3.33
Total perception on organisational learning	1.00	6.00	2.85	2.76	0.98	2.19	3.38

Descriptive statistics organisational culture

In terms of means and standard deviations, the total mean score for organisational culture was ($M = 2.96$; $SD = 0.64$) on a scale ranging from 1 to 5. The highest average score obtained was for diversity ($M = 3.54$; $SD = 0.79$). The lowest average score was obtained on the employee needs and objectives scale with a median of 2.59 and an interquartile range between 2.00 and 3.21. Leadership and employee needs and objectives were not normally distributed (see figure 3.1) and the median and interquartile ranges were thus used for these values instead of the median, mean and standard deviation.

Descriptive statistics for lifelong learning

In terms of the mean and the standard deviations, the total mean of the DLOQ (2003) was, $Mdn = 2.67$; IQR (2.00–3.33), on a scale ranging from 1 to 6. The highest mean score was obtained for the creation of continuous learning opportunities ($M = 3.20$; $SD = 0.63$) dimension. The lowest average score was obtained for leaders model and support learning, $Mdn = 2.67$; IQR (2.00–3.33) scale. According to Underhill and Bradfield (1996), the range, median and interquartile range provide more robust measures when data is skewed.

Correlation statistics

Correlations between the perceptions of organisational culture and lifelong learning

Regarding the total scores on the two measures, table 3.5 shows that the perceptions of organisational culture correlated statistically significantly with the perceptions of lifelong learning ($r_s = 0.79$; $p \leq 0.0001$).

Table 3.5

Correlation between perceptions of organisational culture and lifelong learning (N = 257)

		Culture	Lifelong learning
Culture	Spearman's correlation	1	.79**
	Sig. (2-tailed)		<0.0001
Lifelong learning	Spearman's correlation	.79**	1
	Sig. (2-tailed)	p<0.0001	

** Correlation is significant at the $p \leq 0.0001$ level, two-tailed.

Table 3.6 shows correlations between the perceptions of each dimension of organisational culture and each dimension of lifelong learning. Based on the results, there was a statistically significant relationship between each dimension of organisational culture and each dimension of lifelong learning ($p \leq 0.0001$ and $0.90 \geq r_s \geq 0.20$). All correlations (r_s) were positive (greater than 0), indicating direct relationships of varying strength with the maximum potential strength being 1.

This empirical evidence supports the theoretical relationship that each organisational cultural dimension was related to each dimension of lifelong learning as depicted in table 3.6.

Table 3.6

Correlation between SACI (2005) and DLOQ (2003) and their dimensions

	DLOQ and subscales							DLOQ
	Creating continuous learning opportunities	Promote inquiry and dialogue	Encourage collaboration and team learning	Create systems to capture and share learning	Empower people towards a collective vision	Connect the organisation to its environment	Leaders model and support learning	
Leadership	0.50*	0.54*	0.46*	0.40*	0.48*	0.46*	0.49*	0.54*
Means to achieve objectives	0.52*	0.56*	0.55*	0.59*	0.60*	0.57*	0.62*	0.68*
Management processes	0.59*	0.61*	0.63*	0.63*	0.68*	0.64*	0.69*	0.75*
Employee needs and objectives	0.55*	0.60*	0.62*	0.61*	0.68*	0.64*	0.64*	0.72*
Vision and mission	0.52*	0.54*	0.52*	0.60*	0.59*	0.60*	0.61*	0.66*
External environment	0.36*	0.40*	0.48*	0.52*	0.49*	0.59*	0.50*	0.55*
Diversity strategy	0.46*	0.39*	0.40*	0.40*	0.38*	0.44*	0.47*	0.49*
SACI (2005)	0.62*	0.67*	0.66*	0.66*	0.71*	0.69*	0.72*	0.79*

*Correlation is significant at the $p \leq 0.0001$ level, two-tailed.

Inferential statistics: tests for significance of mean differences

Gender

The mean differences for gender for the perceptions of organisational culture and lifelong learning are represented in tables 3.7 and 3.8. There was no statistically significant difference between males and females with regard to the average value of the cultural scales and their dimensions. For each scale, $p \geq 0.05$. The only statistically significant difference between males and females with regard to the average lifelong learning was for the dimension promoting enquiry and dialogue, $\chi^2 (1) = 6.23$, $p = 0.012$. This is indicated in the shaded area in table 3.7.

Table 3.7

Test results for differences in gender

Subscale/scale	Test statistic	P-value
Leadership†	$\chi^2 (1) = 0.77$	0.381
Means to achieve objectives*	F (1) = 1.02	0.314
Management processes*	F (1) = 0.83	0.362
Employee needs and objectives†	$\chi^2 (1) = 2.41$	0.121
Vision and mission*	F (1) = 0.92	0.338
External environment*	F (1) = 0.78	0.378
Diversity strategy*	F (1) = 0.10	0.746
SACI (2005)*	F (1) = 1.54	0.215
Creating continuous learning opportunities*	F (1) = 0.05	0.819
Promote inquiry and dialogue†	$\chi^2 (1) = 6.23$	0.012
Encourage collaboration and team learning†	$\chi^2 (1) = 3.34$	0.068
Create systems to capture and share learning†	$\chi^2 (1) = 2.03$	0.154
Empower people towards a collective vision†	$\chi^2 (1) = 1.51$	0.219
Connect the organisation to its environment*	F (1) = 3.04	0.083
Leaders model and support learning†	$\chi^2 (1) = 2.75$	0.097
DLOQ†	$\chi^2 (1) = 2.42$	0.120

† Kruskal-Wallis

* Anova

Males scored a higher median value than females on the dimension promoting enquiry and dialogue (see table 3.8).

Table 3.8
Summary statistics by gender: median (IQR)

Subscale/scale	Male	Female
Promote inquiry and dialogue†	3.00 (2.33–3.33)	2.67 (2.00–3.00)

† Kruskal-Wallis

Race

Table 3.9 shows that the various racial groups did not differ significantly in their perceptions of organisational culture and lifelong learning. However, the only dimension of culture that showed a significant difference was the external environment, $F(4) = 3.96, p = 0.0039$.

Table 3.9

Test results for mean differences for race

Subscale/scale	Test statistic	P-value
Leadership†	$\chi^2(4) = 2.39$	0.6652
Means to achieve objectives*	F (4) = 2.29	0.0602
Management processes*	F (4) = 1.57	0.1826
Employee needs and objectives†	$\chi^2(4) = 3.90$	0.4207
Vision and mission*	F (4) = 0.39	0.8141
External environment*	F (4) = 3.96	0.0039
Diversity strategy*	F (4) = 1.28	0.2775
SACI (2005)*	F (4) = 1.40	0.2333
Creating continuous learning opportunities*	F (4) = 1.19	0.3152
Promote inquiry and dialogue†	$\chi^2(4) = 0.13$	0.9979
Encourage collaboration and team learning†	$\chi^2(4) = 6.20$	0.1844
Create systems to capture and share learning†	$\chi^2(4) = 7.71$	0.103
Empower people towards a collective vision†	$\chi^2(4) = 5.71$	0.2222
Connect the organisation to its environment*	F (1) = 1.96	0.1006
Leaders model and support learning†	$\chi^2(4) = 6.62$	0.157
DLOQ†	$\chi^2(4) = 5.53$	0.2372

† Kruskal-Wallis

* Anova

Table 3.10 shows that the white respondents scored higher means on the dimension external environment of SACI (2005) than the black and other respondents.

Table 3.10

Summary statistics by race: mean and standard deviation

Subscale/scale	African	Coloured	Indian	White	Other
External environment*	3.12 (1.07)	2.73 (0.94)	3.08 (0.90)	3.14 (0.72)	1.94 (1.10)

* Anova

Job level

Table 3.11 shows that individuals at various job levels in the organisation did not differ significantly in their perceptions of organisational culture and lifelong learning.

Table 3.11

Test results for differences by job level

Subscale/scale	Test statistic	P-value
Leadership†	$\chi^2 (4) = 4.63$	0.3274
Means to achieve objectives*	F (4) = 1.08	0.3656
Management processes*	F (4) = 0.73	0.5742
Employee needs and objectives†	$\chi^2 (4) = 4.22$	0.3771
Vision and mission*	F (4) = 0.71	0.5888
External environment*	F (4) = 0.78	0.5417
Diversity strategy*	F (4) = 0.69	0.6022
SACI (2005)*	F (4) = 0.25	0.9103
Creating continuous learning opportunities*	F (4) = 0.33	0.8594
Promote inquiry and dialogue†	$\chi^2 (4) = 1.44$	0.8378
Encourage collaboration and team learning†	$\chi^2 (4) = 2.90$	0.5763
Create systems to capture and share learning†	$\chi^2 (4) = 8.87$	0.0644
Empower people towards a collective vision†	$\chi^2 (4) = 3.76$	0.439
Connect the organisation to its environment*	F (4) = 0.80	0.5244
Leaders model and support learning†	$\chi^2 (4) = 8.88$	0.0643
DLOQ†(2003)	$\chi^2 (4) = 4.26$	0.3718

† Kruskal-Wallis

* Anova

Education

Table 3.12 shows that individuals with different levels of education only differed significantly in their perceptions of culture on the dimension: means to achieve objectives, F (4) = 2.55, p = 0.0399. Individuals with different levels of education only differed significantly in their

perception of lifelong learning on the dimension: create systems to capture learning, $\chi^2(4) = 9.77$, $p = 0.044$, and empowering people towards a collective vision, $\chi^2(4) = 9.70$, $p = 0.046$.

Table 3.12

Test results for differences for level of education

Subscale/scale	Test statistic	P-value
Leadership†	$\chi^2(4) = 4.85$	0.3026
Means to achieve objectives*	$F(4) = 2.55$	0.0399
Management processes*	$F(4) = 1.15$	0.3357
Employee needs and objectives†	$\chi^2(4) = 5.52$	0.2382
Vision and mission*	$F(4) = 1.85$	0.1198
External environment*	$F(4) = 0.73$	0.5689
Diversity strategy*	$F(4) = 1.52$	0.1976
SACI (2005)*	$F(4) = 1.17$	0.3237
Creating continuous learning opportunities*	$F(4) = 1.02$	0.3963
Promote inquiry and dialogue†	$\chi^2(4) = 6.40$	0.1714
Encourage collaboration and team learning†	$\chi^2(4) = 5.06$	0.2816
Create systems to capture and share learning†	$\chi^2(4) = 9.77$	0.0444
Empower people towards a collective vision†	$\chi^2(4) = 9.70$	0.0458
Connect the organisation to its environment*	$F(4) = 1.02$	0.3993
Leaders model and support learning†	$\chi^2(4) = 2.09$	0.7196
DLOQ†(2003)	$F(4) = 6.44$	0.1688

† Kruskal-Wallis

*Anova

Table 3.13

Summary statistics by level of education: mean, SD, median (IQR)

Subscale/scale	Grade 12	National Certificate	National Diploma	Degree	Post-graduate
Means to achieve objectives*	3.07 (0.73)	2.88 (0.67)	3.02 (0.60)	3.00 (0.68)	2.76 (0.60)
Mean (SD)					
Create systems to capture and share learning† (DLOQ)	2.67 (2.00–3.00)	2.33 (1.67–3.00)	2.67 (2.00–4.00)	3.00 (2.00–3.67)	2.50 (2.00–3.00)
Median (IQR)					
Empower people towards a collective vision† (DLOQ)	2.67 (2.00–3.00)	2.33 (1.33–3.00)	3.00 (2.00–3.33)	2.67 (2.33–4.00)	2.67 (2.00–3.00)
Median (IQR)					

† Kruskal-Wallis

*Anova

Tenure

The Anova and Kruskal-Wallis tests in table 3.14 show that individuals with different years of service differed significantly in their perception of organisational culture and lifelong learning and their dimensions. It appears that individuals with less than one year of service scored significantly higher for organisational culture, $M = 3.62$, $SD = 0.55$, and lifelong learning, $Mdn = 3.62$; $IQR (3.10 - 4.24)$, than the respondents with one to two years, three to four years and four years and more years of service.

Post hoc Tukey HRD tests showed that individuals with less than one year of service differed significantly from individuals with three to four years of service ($p = 0.001$) and four years and more ($p < 0.0001$) on their perception of organisational culture. Regarding individual perception of lifelong learning, significant differences were found between individuals with three to four years of service ($p = 0.001$) and four years of service and more ($p < 0.0001$) in comparison with the individuals with less than one year of service.

Significant differences were found on all the dimensions of organisational culture except for leadership between individuals with less than one year of service and four years of service and more ($p < 0.0001$). For the dimension employee needs, significant differences were found between individuals with three to four years of service and individuals with less than one year of service ($p < 0.0001$). Individuals with less than one year of service had higher mean scores than individuals with three to four years of service.

Significant differences were found on all dimensions of lifelong learning between individuals with less than one year, three to four years and four years and more years of service. Individuals who had less than one year and four years and more years of service differed significantly on the dimensions of continuous learning ($p < 0.0001$), collaboration and team learning ($p = 0.001$) and connecting the organisation to the environment ($p < 0.0001$). Individuals who had less than one year, three to four years and four years of service differed significantly on the dimensions inquiry and dialogue ($p < 0.0001$ for both), systems to capture learning ($p < 0.0001$ for both), collective vision and mission ($p = 0.001$ and $p < 0.0001$ respectively) and leaders model and support behaviour ($p = 0.001$ and $p < 0.0001$ respectively).

Table 3.14 shows significant p-values in the shaded area. Summary descriptive statistics are reported only for significant values.

Table 3.14

Anova and Kruskal-Wallis tests: difference in perceptions of organisational culture and lifelong learning and their dimensions according to years of service

Subscale/scale	Years of service					Test statistic	P-value
	<1 year	1–2 years	2–3 years	3–4 years	more than 4 years		
Leadership†	3.76 (3.35–4.59)	3.82 (3.26–3.97)	3.41 (2.71–3.76)	3.41 (3.05–3.76)	3.29 (2.64–3.76)	$\chi^2(4) = 15.41$	0.0039
Means to achieve objectives*	3.47 (0.59)	3.04 (0.61)	2.96 (0.61)	2.71 (0.42)	2.83 (0.65)	F(4) = 5.91	<0.0001
Management processes*	3.51 (0.55)	2.99 (0.70)	3.04 (0.72)	2.63 (0.58)	2.70 (0.67)	F(4) = 8.87	
Employee needs and objectives†	3.43 (3.14–3.93)	2.79 (2.43–3.29)	2.79 (2.36–3.14)	2.36 (2.00–3.00)	2.43 (1.86–3.07)	$\chi^2(4) = 34.17$	0.0001
Vision and mission*	3.87 (0.69)	3.40 (0.93)	3.46 (0.73)	3.14 (0.78)	3.22 (0.75)	F(4) = 4.09	0.003
External environment*	3.70 (0.91)	3.15 (1.03)	3.14 (1.06)	2.78 (0.87)	2.81 (0.98)	F(4) = 4.79	0.001
Diversity strategy*	3.98 (0.73)	3.55 (0.88)	3.91 (0.76)	3.35 (0.72)	3.48 (0.78)	F(4) = 3.11	0.016
SACI (2005)*	3.62 (0.55)	3.14 (0.62)	3.07 (0.68)	2.82 (0.43)	2.86 (0.61)	F(4) = 8.85	<0.0001
Creating continuous learning opportunities*	4.09 (0.88)	3.40 (1.24)	3.38 (1.23)	3.02 (0.75)	3.06 (1.02)	F(4) = 5.82	0.0003
Promote inquiry and dialogue†	3.67 (3.00–5.00)	3 (2.33–4.00)	2.83 (2.33–3.33)	2.33 (2.00–2.67)	2.67 (2.00–3.00)	$\chi^2(4) = 25.33$	0.0001
Encourage collaboration	3.67 (3.00–)	3 (2.33–)	3.33 (2.67–)	2.67 (2.33–)	2.67 (2.00–)	$\chi^2(4) = 16.79$	0.0021

and team learning†	4.00)	3.83)	4.00)	3.67)	3.33)		
Create systems to capture and share learning†	3.33 (3.00– 4.67)	3 (2.33– 4.00)	3 (2.00– 3.33)	2 (1.33– 3.00)	2.67 (2.00– 3.00)	$\chi^2(4) =$ 24.27	0.0001
Empower people towards a collective vision†	3.33 (3.00– 5.00)	2.67 (2.00– 3.83)	2.5 (2.00– 3.67)	2.67 (1.67– 3.00)	2.67 (2.00– 3.00)	$\chi^2(4) =$ 22.82	0.0001
Connect the organisation to its environment*	3.70 (1.12)	3.29 (1.33)	3.21 (1.13)	2.71 (0.81)	2.73 (1.12)	$F(4) =$ 5.00	0.0007
Leaders model and support learning†	4 (2.67– 4.67)	2.67 (2.00– 4.00)	3.17 (2.33– 3.67)	2.33 (1.67– 3.00)	2.67 (1.67– 3.00)	$\chi^2(4) =$ 21.23	0.0003
DLOQ†	3.62 (3.1– 4.24)	2.9 (2.33– 4.02)	3.09 (2.71– 3.43)	2.43 (2.05– 2.90)	2.67 (2.10– 3.14)	$\chi^2(4) =$ 28.76	0.0001

† Medians and IQRs, Kruskal-Wallis

*Means and SDs, Anova

However, the only dimension on which individuals with different years of service did not differ significantly was the management processes dimension of the cultural instrument.

Disability

Individuals with differing disability status did not differ in their perception of organisational culture and lifelong learning (see table 3.15).

Table 3.15

Test results for differences by disability

Subscale/scale	Test statistic	P-value
Leadership†	$\chi^2(2) = 0.16$	0.921
Means to achieve objectives*	$F(2) = 0.19$	0.8289
Management processes*	$F(2) = 0.30$	0.7394
Employee needs and objectives†	$\chi^2(2) = 0.55$	0.7584
Vision and mission*	$F(2) = 0.95$	0.3877
External environment*	$F(2) = 0.38$	0.6871
Diversity strategy*	$F(2) = 1.16$	0.314
SACI (2005)*	$F(2) = 0.21$	0.8133
Creating continuous learning opportunities*	$F(2) = 0.26$	0.7698
Promote inquiry and dialogue†	$\chi^2(2) = 4.12$	0.1274
Encourage collaboration and team learning†	$\chi^2(2) = 4.56$	0.1022
Create systems to capture and share learning†	$\chi^2(2) = 2.51$	0.2845
Empower people towards a collective vision†	$\chi^2(2) = 1.24$	0.5391
Connect the organisation to its environment*	$F(2) = 1.47$	0.2329
Leaders model and support learning†	$\chi^2(2) = 0.87$	0.647
DLOQ† (2003)	$\chi^2(2) = 2.21$	0.3308

† Kruskal-Wallis

*Anova

Age

Table 3.16 shows that various age groups differed significantly in their perceptions of organisational culture and lifelong learning. However, no significant differences were found for the cultural instrument dimensions, vision and mission and diversity strategy.

Post hoc Tukey HRD tests showed significant differences in perception on organisational culture and lifelong between the age groups 25 to 35 and 36 to 45 ($p = 0.003$). Regarding the dimensions of organisational culture, individuals between the ages of 25 and 35 and 36 and

45 differed in their perception of means to achieve objectives ($p = 0.006$), management processes ($p = 0.002$) and employee needs and objectives ($p = 0.004$). Individuals between the ages 36 and 45 and 46 and 55 differed significantly in their perception of means to achieve objectives ($p = 0.04$). Individuals between the ages 25 to 35 had higher mean scores for these dimensions than individuals aged between 36 and 45. Similarly, individuals aged between 46 and 45 had higher mean scores for these dimensions than individuals aged between 36 and 45.

Table 3.16

Anova and Kruskal-Wallis: difference in perceptions of organisational culture and lifelong learning and its dimensions between age groups

Subscale/scale	25–35 years old	36–45 years old	46–55 years old	above 55 years old	Test statistic	P-value
Leadership†	3.65 (3.00– 3.94)	3.29 (2.71– 3.76)	3.12 (2.53– 3.76)	3.62 (2.91– 3.97)	$\chi^2(3) =$ 7.19	0.0661
Means to achieve objectives*	3.03 (0.66)	2.73 (0.06)	3.00 (0.63)	3.06 (0.77)	F(3) = 4.73	0.0031
Management processes*	2.98 (0.70)	2.61 (0.62)	2.88 (0.74)	2.99 (0.77)	F(3) = 5.09	0.0019
Employee needs and objectives†	2.79 (2.21– 3.29)	2.36 (1.64– 2.93)	2.57 (2.00– 3.21)	2.75 (2.04– 3.32)	$\chi^2(3) =$ 12.06	0.0072
Vision and mission*	3.40 (0.77)	3.18 (0.77)	3.41 (0.81)	3.24 (0.75)	F(3) = 1.72	0.1641
External environment*	3.10 (0.98)	2.73 (1.03)	3.16 (0.87)	2.71 (1.12)	F(3) = 3.41	0.0183
Diversity strategy*	3.63 (0.72)	3.49 (0.76)	3.56 (0.92)	3.41 (0.96)	F(3) = 0.70	0.5538
SACI(2005)*	3.12 (0.65)	2.79 (0.57)	3.02 (0.67)	3.08 (0.73)	F(3) = 4.56	0.0039
Creating continuous learning opportunities*	3.38 (1.14)	3.01 (1.00)	3.16 (1.08)	3.58 (0.95)	F(3) = 2.61	0.0519

Promote inquiry and dialogue†	3.00 (2.00– 3.67)	2.67 (2.00– 3.00)	2.67 (2.00– 3.33)	3.00 (2.83– 3.33)	$\chi^2(3) = 8.95$	0.03
Encourage collaboration and team learning†	3.00 (2.33– 4.00)	2.67 (2.00– 3.00)	2.67 (2.00– 3.67)	3.00 (2.67– 3.33)	$\chi^2(3) = .04$	0.0451
Create systems to capture and share learning†	3.00 (2.00– 4.00)	2.33 (2.00– 3.00)	2.67 (1.66– 3.67)	3.00 (2.67– 3.00)	$\chi^2(3) = 11.69$	0.0085
Empower people towards a collective vision†	3.00 (2.33– 3.67)	2.33 (1.67– 3.00)	2.67 (2.00– 3.33)	3.00 (2.33– 3.17)	$\chi^2(3) = 12.02$	0.0073
Connect the organisation to its environment*	3.18 (1.14)	2.61 (1.06)	2.95 (1.25)	3.04 (1.31)	$F(3) = 3.92$	0.0092
Leaders model and support learning†	3.00 (2.00– 4.00)	2.67 (1.66– 3.00)	2.67 (2.00– 3.33)	3.00 (2.17– 3.67)	$\chi^2(3) = 8.95$	0.0299
DLOQ†	3.05 (2.33– 3.71)	2.62 (2.05– 3.10)	2.67 (2.24– 3.19)	3.12 (2.64– 3.38)	$\chi^2(3) = 12.15$	0.0069

† Medians and IQRs, Kruskal-Wallis

* Means and SDs, Anova

In terms of the dimensions of lifelong learning, individuals between the ages 25 and 35 and 36 and 45 differed in their perception on inquiry and dialogue ($p = 0.049$), collaboration and team learning ($p = 0.032$), systems to capture and share learning, ($p = 0.002$) empowering people towards a collective vision ($p = 0.003$) and leaders model and support behaviour ($p = 0.009$).

Based on the results, H2 (individuals from different age, gender, race, education, job level, disability and years of service groups) was only partially accepted. Only two of the variables showed differences in perception.

Table 3.17 provides a summary of the decisions on the hypotheses.

Table 3.17

Summary of decisions on the research hypotheses

Hypotheses		Decision
H_0	There is no significant relationship between individual perception of organisational culture and lifelong learning and their various dimensions.	Rejected
H_1	There is a significant relationship between individual perception of organisational culture and lifelong learning and their various dimensions.	Accepted
H_{02}	Individuals from different gender, age, level of education, job level, years of service, disability status and race groups do not differ significantly in their perceptions of organisational culture and lifelong learning and their various dimensions.	Rejected for all except age and years of service. Therefore partially rejected.
H_2	Individuals from different gender, age, level of education, job level, years of service, disability status and race groups differ significantly in their perceptions of organisational culture and lifelong learning	Accepted for age and years of service. Therefore partially accepted.

5. DISCUSSION

The objectives of the study were to (1) establish whether a statistically significant positive relationship exists between individual perception of organisational culture, measured by the South African Cultural Instrument (2005) and lifelong learning, measured by the DLOQ (2003); and (2) determine how the participants differ in these variables and their dimensions in terms of sociodemographic contextual factors such as age, race, gender, level of education, disability, years of service and job level.

The biographical profile of the sample

The sample consisted mostly of black females between the ages of 36 and 45 in the organisation. The majority of the sample indicated tenure of four years or more, which could relate to their age group and higher qualifications. Most of the participants worked at a transactional, operational and specialist level where graduate and postgraduate qualifications are recommended. Respondents mainly indicated that they had no disabilities.

The relationship between organisational culture and lifelong learning

The results suggest that there was a statistically significant positive relationship between organisational culture and lifelong learning. Overall, individuals in this organisation were dissatisfied with the culture (based on the mean score of 2.96 on a rating scale of between 1 and 5) and this relates significantly to their overall low perception of lifelong learning (indicated by the mean score of 2.85 on a rating scale of between 1 and 6). Since this is a relationship study, the direction of the relationship between culture and lifelong learning was not the focus of the current study. However, the strength of the relationships between the dimensions of organisational culture and lifelong learning could be determined.

The strongest relationship appeared to exist between management processes and empowering employees towards a collective vision. It could be interpreted that consideration should be given to both management processes as well as the empowering of employees towards achieving their own goals. Considering the low mean scores obtained for the dimension, empowering employees towards a collective vision, it is possible that employees do not understand the vision and mission of the organisation and have not bought into them. Individuals who understand the vision and have bought into it, are empowered and motivated to accept responsibility and accountability for achieving the organisation's goals (Marsick & Watkins, 2003). A shared vision forms the foundation for sharing values and meanings to respond to the changing environments and management processes (Nyhan *et al.*, 2004).

The strong statistically significant positive relationship between the dimensions, management processes and leaders model and support learning, could imply that management rules, policies, regulations and performance management should be considered together with implementation strategies that indicate that leaders emulate lifelong learning behaviour such as coaching and mentoring. Alternatively, leaders could model lifelong learning behaviour by imparting knowledge through coaching and mentoring, which could be incorporated into the organisation's policies. As suggested by Govender (2009), coaching and mentoring in public

sector organisations would encourage employees to continually learn by objectives and would pave the way for more trusting relationships between diverse employees.

A statistically significant positive relationship was found between meeting the employee needs and objectives and empowering people towards a collective vision. Low mean scores were obtained on the dimension, meeting the employee needs and objectives and empowering employees towards a collective vision. Researchers thus believe that employees should be involved in developing the vision and mission of the organisation (Covey, 1989; Nyhan *et al.*, 2004; O'Neil, 2003 & Schein, 2011). This holds true for newly established organisations, but organisations that have been in existence for many years should also ensure that employees understand the vision and buy into it. According to Martins (2002), the founders of the culture should take the lead in sustaining the organisational culture by socialising newly appointed employees into the culture and ensuring that they adapt effectively. The establishment of a collective vision and mission empowers employees to accomplish their work and achieve both the organisation's and their own objectives (O'Neil, 2003).

Significant differences between sociodemographic variables

In the present study, significant differences in the perception of organisational culture and lifelong learning and their dimensions were found for two of the sociodemographic variables, namely age and tenure. This contradicts research studies that found considerable differences in individual's perception of culture in terms of job level, education, gender and race (Martins & Coetzee, 2007; Helms & Stern, 2001; Van Dyk, 2011). The limitation of the study-restricted demographics in terms of job level, education, gender and race could have had an effect on the results because the sample consisted mostly of black females between the ages 36 and 45.

Age

In the current study, employees between the ages of 36 and 45 appeared to be the most dissatisfied with organisational culture and lifelong learning. Employees of this age group were mostly dissatisfied with the organisation not meeting their needs (culture), not creating systems to capture and share learning (lifelong learning) and not empowering them towards a collective vision (lifelong learning). Employees' needs and objectives include issues such as remuneration, equal opportunities for all employees, caring of employees, transparency, career planning and decision making (Martins & Coetzee, 2007). Systems to capture learning

include systems to measure gaps between current and expected performance, communicating lessons learnt and measuring the results of the resources spent on learning (Marsick & Watkins, 2003). Individuals perceive that the organisation does not recognise people who take the initiative, does not give them control over the resources needed to achieve their objectives and does not provide support to individuals who take calculated risks. According to O'Neil (2003), organisations that score low on these measures do not have performance measure systems that link desired performance to actual performance, systems to capture and share what works and what does not work and systems to evaluate training.

This age group was also most unsure about the vision and mission of the organisation and the organisation creating continuous learning opportunities. Elements involving the vision and mission include the perception that the executive management in the organisation do not have the knowledge to lead the organisation to successfully achieve its strategic objectives. Employees also perceive that they are not continuously informed about the strategy of the organisation, and this could hamper their performance. Elements creating continuous learning opportunities include the valuing of individual success at the expense of sharing knowledge and building knowledge systems to share learning experiences (O'Neil, 2003; Marsick & Watkins, 2003).

The 46 to 55 age group were almost equally dissatisfied with culture and organisational learning. Employees in this age group were mostly dissatisfied with the vision and mission of the organisation culture and equally dissatisfied on all the dimensions of lifelong learning.

The 25 to 35 age group seemed to be the most satisfied with culture and lifelong learning. They seemed to be particularly satisfied with the leadership dimension of culture. This age group also appeared to be satisfied with the institution's ability to provide opportunities for continuous learning. Their more satisfied responses could be viewed in terms of their career life stage. Research by Schreuder and Coetzee (2011) indicated that individuals at this career stage are preoccupied with career establishment and achievement issues and are therefore motivated to learn organisational rules, norms and ways to fit into the existing culture. Their satisfaction with the leadership could be interpreted as their way of seeking guidance to fit into the chosen organisation and occupation.

The 55 and older age group seemed to be more satisfied with the leadership dimension of organisational culture and opportunities created by the organisation for lifelong learning than the 36 to 54 age group. This group consisted mostly of black males, with grade 12 certificates, occupying transactional positions. They had earned their positions through being

in service for more than four years and through on-the-job training and work experience. This could be interpreted as the reason for their satisfaction with opportunities for continuous learning and the leadership dimension of culture. This age group seemed to be mostly unsure about the means to achieve objectives and all other dimensions of lifelong learning. Individuals in this age group seemed to be dissatisfied about issues such as solving differences, conflict resolution, the support services provided by the organisation, administration issues, role clarity and the management of change.

Years of service

Those employees who had worked for the organisation for less than one year, expressed the greatest satisfaction with organisational culture and lifelong learning. However, their satisfaction with the organisational culture and lifelong learning seemed to decrease the longer they worked in the organisation. Employees who had been in the organisation for less than a year were mostly satisfied with aspects of culture such as diversity strategy and leadership. Aspects of diversity strategy include the company's employment equity strategy. Leadership includes satisfaction with the supervisory and management aspects of the work. Employees who had been in the organisation for less than one year were mostly satisfied with the continuous learning opportunities and leaders modelling and supporting behaviour. Aspects of leaders modelling and supporting behaviour included attempts made by supervisors to mentor and coach individuals and leaders looking for opportunities to learn. Those who had been in the organisation for four years and more demonstrated the greatest dissatisfaction with organisational culture and learning. These individuals appeared to be mostly dissatisfied with their needs and objectives not being met and the management process. Regarding lifelong learning, these individuals were equally dissatisfied with all aspects of lifelong learning except for creating opportunities for continuous learning, which they appeared to be unsure of.

When comparing age with years of service, similar patterns of satisfaction and dissatisfaction in perceptions of organisational culture and lifelong learning were prevalent. During the first two years of employment, individuals between the ages of 46 and 55 had a favourable view of organisational culture and lifelong learning. After three to four years of service, the view of both culture and learning was less favourable. Their perceptions became more unfavourable after four years of service. Similarly, if one looks at the first two years of employment, the 25 to 35 age group were more satisfied than the 36 to 45 age group (see table 3.16). The same trend was evident in the group with three to four years of service.

These patterns may be interpreted as failure by the organisation to socialise individuals into its culture (Martins & Martins, 2003). These individuals would have difficulty accepting the values of the organisation and probably have difficulty adapting. This would lead to rejection of individuals and thus lead to loss of the key goals, values and assumptions (Schein, 2010). This could ultimately result in disengagement and turnover.

6. CONCLUSIONS: IMPLICATIONS FOR PRACTICE

Overall, it can be concluded that there was a statistically significant positive relationship between individuals' perception of organisational culture and lifelong learning and their dimensions. Groups with different ages and years of service differed significantly in their perception of organisational culture and lifelong learning and their dimensions.

The findings suggest valuable information on the significant relationships found between the core variables and focus on the practical implications of establishing a lifelong learning culture in the organisation.

The conclusion derived from the findings indicates that practitioners can benefit from knowledge of the existence of a relationship between organisational culture and lifelong learning in order to establish a culture of lifelong learning in the organisation. Practical recommendations were made for understanding the relationship between organisational culture and lifelong learning and their various dimensions and for working towards the establishment of a lifelong learning culture.

7. LIMITATIONS OF THE STUDY

Since the present study was limited to a relatively small sample of participants employed in the public sector, the findings cannot be generalised to other industry contexts. Convenient sampling limited this study and the findings cannot be generalised to the population of the public sector in this organisation. Because this was an exploratory study, statements of causation cannot be assumed.

Despite the aforementioned limitations, the results of this study show potential for the analysis of the relationship between the individuals' perception of organisational culture and lifelong learning and the dimensions of these constructs as well as the differences between the biographical groups in terms of these constructs and their dimensions. This study could therefore be used as a basis for understanding the relationships between these constructs

and their dimensions and the differences between the subgroups on the different scales and subscales in order to inform strategy for establishing a lifelong learning culture in organisations.

8. RECOMMENDATIONS

The findings of this study confirm the existence of a relationship between individuals' perceptions of lifelong learning and organisational culture. Although this study could be used as a basis for further study, it is recommended that a relational study revealing how changes in the one variable cause changes in other variables should be conducted. As posited by Tredoux and Smith (2006, p. 169), "it is not enough to establish that there is a relationship between two or more variables, but we need to know how and why they are related". Furthermore, it is recommended that future research studies should include analysis by means of structural equation modelling (Yang, 2003; Yang, Watkins & Marsick, 2004) in order to elicit a more in-depth relationship between each dimension of organisational culture and lifelong learning, hence providing information on the nature of the relationship between these two variables.

9. CONCLUSION

In this chapter, the core aspects of the literature and empirical study were discussed. The results of the study were interpreted by analysing the findings. Conclusions were drawn, recommendations made and the limitations of the study highlighted.

In this chapter, it was established that there was a statistically significant positive relationship between individuals' perception of organisational culture and lifelong learning and their dimensions. It was also established that groups with different ages and years of service differed significantly in their perception of organisational culture and lifelong learning and their dimensions.

Chapter 4 provides a more detailed discussion of the conclusions drawn, the limitations of the study and recommendations for the practical application of the findings.

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CHAPTER 4: CONCLUSIONS

4.1 CONCLUSIONS RELATING TO THE LITERATURE REVIEW

The general aim of this study was firstly to establish whether a statistically significant relationship exists between individuals' perception of organisational culture and lifelong learning and their various dimensions. Secondly, the aim was to determine whether the mean scores of subgroups of individuals of different age, gender, race, education, job level, years of service and disability status differed significantly in their perception of organisational culture and lifelong learning. The third theoretical aim was to determine the implications of a theoretical relationship between organisational culture and lifelong learning for organisational practices. Addressing and realising the specific aims, accomplished the general aims of the study.

4.1.1 The first theoretical aim: Conceptualise organisational culture and lifelong learning

The first aim was realised in chapter 2. The following conclusions may be drawn:

- From the literature review it can be concluded that despite the available research on lifelong learning, a further refinement of the concept is needed, particularly with regard to its occurrence in the workplace and in public service organisations in particular.
- It can be concluded that organisational culture constitutes combined patterns of behaviour, originating from the organisation's response to its environment, and directing the organisation to achieve its goals (Martins, 2007). Martins's (1989; 2007) approach, model and instrument, the South African Cultural Instrument (2005), is a comprehensive and holistic depiction and measurement of culture and succeeds in capturing the essential elements of the organisation by meaningfully integrating the interrelationships between the various elements of the organisation and dimensions of organisational culture.
- It can be concluded that lifelong learning is continuous learning and is concerned with the development of human potential over a lifetime as a means to empower individuals to effectively fulfil their roles in their environments (Aitchison, 2006; Longworth & Davis, 2009). Furthermore, lifelong learning in the context of the

organisation embraces organisational learning and focuses on how individuals, groups and organisations learn. The model of Marsick and Watkins (2003) and its associated measure, the DLOQ (2003), were used in this study and constitute seven dimensions of organisational learning. These dimensions constitute creating continuous learning opportunities, promoting inquiry and dialogue, encouraging collaboration and team learning, empowering people towards a collective vision, establishing systems to capture and share learning, connecting the organisation to its environment and providing strategic leadership for learning (Marsick & Watkins, 2003).

4.1.2 The second theoretical aim: To determine theoretically the relationship between individuals' perception of organisational culture and lifelong learning

The second aim was realised in chapter 2. Previous research focused on the concepts of organisational culture and lifelong learning separately or in relation to other variables. However, there seems to be a paucity of literature focusing on the relationship between organisational culture and lifelong learning in the public sector environment.

- From the literature review, it can be concluded that there is a theoretical relationship between the individuals' perception of organisational culture and lifelong learning.

4.1.3 The third theoretical aim: To determine the implications of a theoretical relationship between organisational culture and lifelong learning.

The third aim was realised in chapter 3.

- From the literature review it can be concluded that a theoretical relationship between organisational culture and lifelong learning implies that in order for organisations to engender lifelong learning, they need to establish a culture of learning. This implies that a thorough understanding of the foundations of a learning culture and how such a culture becomes entrenched in an institution should be the point of departure. The establishment of a lifelong learning culture in organisations requires that leaders and managers be committed to change, innovation and continuous improvement. Robbins *et al.*, (2009) suggest that in order to change, organisations need to become continual learners. They argue that the organisational structure and culture can hamper learning. Furthermore, a shift to lifelong learning not only impacts on the vision, structure and culture of the organisations, but also means that carefully thought-out

strategies will have to be devised in order for organisations to become lifelong learning institutions (Marsick & Watkins, 2003). To establish lifelong learning in organisations, cultural elements should be given ample consideration.

4.1.4 Conclusions relating to the empirical study

The three main aims of this empirical study were as follows:

- To empirically determine whether there is a statistically significant positive relationship between individuals' perception of organisational culture and lifelong learning and their dimensions.
- To empirically determine whether statistically significant differences exist between the mean scores of subgroups based on gender, race, age, job levels, disability status, tenure and education in the perceptions of organisational culture and lifelong learning.
- To formulate recommendations for practices aimed at creating a lifelong learning culture and for further research based on the findings of the study in the field of industrial and organisational psychology.

Based on the findings, hypothesis H_1 , namely that there is a statistically significant relationship between the individual perception of organisational culture and lifelong learning and their dimensions, was accepted. However, hypothesis H_2 , which posed that there is a statistically significant difference between the mean scores of subgroups based on gender, race, age, education, tenure, job levels and disability status in terms of their perception of organisational culture and lifelong learning, was only accepted for age and years of service.

4.1.5 The first empirical aim: To determine if there is a statistically significant relationship between individuals' perception of organisational culture and lifelong learning

- The results of the empirical study indicated that there is a statistically significant positive relationship between individuals' perception of organisational culture and lifelong learning and their dimensions.

- Based on the findings it can be concluded that participants who had a low acceptance of organisational culture also had a low perception of lifelong learning.
- Similarly, individuals who had a high acceptance of organisational culture also had a higher perception of lifelong learning.

4.1.6 The second empirical aim: To determine whether the mean scores of subgroups of individuals based on different gender, race, job levels, age, education, tenure and disability status differ in their perceptions of organisational culture and lifelong learning

The following conclusions were drawn:

- Overall, individuals' perception of organisational culture and its dimensions and lifelong learning did not differ significantly between the subgroups' gender. However, males and females differed in their perception of lifelong learning on the dimension: promoting enquiry and dialogue.
- Overall, individuals' perception of organisational culture and lifelong learning and their dimensions did not differ significantly between the subgroups' race. However, individuals from different race groups differed in their perception on the organisational cultural dimension of "external environment".
- Individuals' perception of organisational culture and lifelong learning and their dimensions did not differ significantly between the subgroups' job level.
- Overall, individuals' perception of organisational culture and lifelong education did not differ significantly between the subgroups' education levels. However, individual perceptions differed significantly on the organisational culture dimensions: "means to achieve objectives" and on the dimensions of lifelong learning: "create systems to capture and share learning and empower people towards a collective vision".
- Individual's perception of organisational culture and lifelong learning and their dimensions did not differ significantly between the subgroups' disability.
- Individuals' perception of organisational culture and lifelong learning and their dimensions differed significantly between the subgroups' age.

Participants between the ages of 36 and 45 scored statistically significantly lower on their perceptions of organisational culture and lifelong learning than the other age groups. This age group scored low on the “organisation meeting their objectives” and on the “vision and mission” dimensions of organisational culture. The most significant differences for this age in relation to lifelong learning were “creating systems to capture learning” and “empowering individuals towards a collective vision”.

The 25 to 35 age group were most satisfied with organisational culture and lifelong learning. This age group, compared with the other age groups, were particularly more satisfied with the leadership aspect of organisational culture and the organisation’s ability to provide opportunities for continuous learning.

- Individuals’ perception of organisational culture and lifelong learning and their dimensions differed significantly between the subgroups with different years of service. Differences were evident for participants who had worked in the organisation for four years and more, and those who had been in the organisation for less than a year.

Participants who had been with the organisation four years or more experienced the greatest dissatisfaction with organisational culture and lifelong learning and their dimensions. The cultural elements that these individuals were mostly dissatisfied with were, “meeting their needs and objectives” and the management processes. Furthermore, these participants were also significantly dissatisfied with all aspects of lifelong learning but expressed uncertainty about the organisation creating opportunities for continuous learning.

Participants with less than one year of service, relatively, expressed the greatest satisfaction with organisational culture and lifelong learning.

4.1.7 Conclusions relating to the central hypothesis

Regarding the central hypothesis, it was concluded that there was a statistically significant positive relationship between the individuals’ perception of organisational culture and lifelong learning in this South African public sector organisation. Furthermore, differences in age and years of service influenced individuals’ perceptions of organisational culture and lifelong learning. The empirical study yielded statistically significant evidence in support of the central hypothesis.

4.1.8 Conclusions relating to the contribution of this study to the field of industrial and organisational psychology

Both the findings from the literature review and empirical study should contribute to the field of industrial and organisational psychology and to the subdisciplines of personnel, organisational and career psychology, in particular. The literature review provided insights into the conceptualisation of these constructs (organisational culture and lifelong learning), the possible relationships between these constructs and the differences in biographical groups for these constructs.

The results of this literature review are similar to those of literature reviews conducted by researchers who found that there is a relationship between organisational culture and lifelong learning and the dimensions of these constructs (Alas & Vadi, 2006; Fard *et al.*, 2009; Joseph & Dai, 2009; Singh, 2010). These researchers' literature studies indicated that in order for organisations to operate in their changing environments, they need to have a culture that supports transformation and learning (Alas & Vadi, 2006; Fard *et al.*, 2009; Joseph & Dai, 2009; Singh, 2010). Apart from the studies of Fard *et al.* (2009), studies conducted by Alas and Vadi (2006), Joseph and Dai (2009) and Singh (2010) were conducted in private sector organisations. Fard *et al.* (2009) focused on the relationship between types of organisational culture and organisational learning dimensions. Literature studies by the aforementioned authors do not include a review of the differences in perceptions of the subgroups with regard to organisational culture and lifelong learning and their dimensions as provided in this study. The current study is similar to that of Singh (2010) in that it presents a model that combines the dimensions of organisational culture and the dimensions of lifelong learning, which could provide a basis for future studies on establishing a culture of lifelong learning in organisations.

The literature review provided insight into the different dimensions of organisational culture and their relationship with the dimensions of lifelong learning as it occurs in this public service organisation. The theoretical relationship between each dimension of organisational culture and each dimension of lifelong learning provides valuable information, which could be used to facilitate the transformation of public service organisations to learning organisations, where lifelong learning practices may be implemented. The implementation of the recommended lifelong learning practices could help to strengthen the human resource skills base in the organisation, which could ultimately lead to performance satisfaction, work engagement, career growth and a more productive environment.

The conclusions drawn from the literature review indicated that practitioners should consider the theoretical models of both organisational culture and lifelong learning when embarking on the establishment of lifelong learning in the organisation. The theoretical models used, comprehensively depicted organisational culture and lifelong learning, showing meaningful interrelationships between the different dimensions, hence providing useful information for the establishment of a culture of learning in organisations.

The results of this empirical study provided new knowledge on the relationships between individuals' perceptions of organisational culture and lifelong learning in this public service organisation. This study is similar to the studies conducted by Fard *et al.* (2009) who found that there is a significant relationship between the types of organisational culture and the dimensions of organisational learning in an Iranian public sector organisation. Furthermore, this empirical study also provided information on the differences of perceptions of these constructs and their dimensions between biographical groups in relation to years of service and age. An empirical study conducted by Alas and Vadi (2006) reflected similar differences in perceptions on age and years of service. These differences in perceptions between the subgroups provide valuable insight into induction practices, work engagement, performance satisfaction and career growth in the South African public service multicultural environment.

The results of this study should reawaken the drive to establish a culture of lifelong learning in South African public service organisations, in which the sharing of knowledge, reflection, questioning, dialogue, exploration and experimentation enrich performance, productivity and contribute to the knowledge economy. Furthermore, the findings may instil confidence in the establishment of a lifelong learning culture in the public sector as a means to build a skilled, talented and knowledgeable workforce, who will be able to cope with the changing demands of their environments, thus enhancing service delivery.

4.1.9 Limitations of the study

Several limitations in both the literature review and the empirical studies were identified, as highlighted below.

4.1.10 Limitations of the literature review

Limitations of the literature review include a lack of research in the South African public sector environment and abroad on the relationship between organisational culture and lifelong learning. Although there is a broad base of research on organisational culture and

lifelong learning, no studies have been conducted that focus specifically on the relationships between these two constructs, especially in the South African public service environment. Hence no comparisons could be made in terms of the results of this study.

The models of Martins (2007) and Marsick and Watkins (2003) were used to conduct this study. However, there were no ideal models that could be used to determine whether there is a relationship between individuals' perception of organisational culture and lifelong learning.

4.1.11 Limitations of the empirical study

The results of this study presented a small sample in a particular public service organisation. Owing to the fact that convenience sampling was used, the sample in this study was not representative of the population. Hence caution should be exercised when generalising the findings to the general population in the public sector. The sample represented the public service environment of one institution only. Other public service institutions could contribute insightful information.

Limited empirical studies have been conducted on the relationship between organisational cultures and lifelong learning and their dimensions. Studies conducted abroad both in the public and private sector organisations indicated that there is a relationship between these constructs and their dimensions (Alas & Vadi, 2006; Fard *et al.*, 2009; Joseph & Dai, 2009). Studies that were conducted abroad used different instruments to measure organisational culture and lifelong learning (Alas & Vadi, 2006; Fard *et al.*, 2009; Joseph & Dai, 2009). At the time of the current study, in South Africa, no empirical studies had been conducted in the public sector environment that could provide support for the findings pointing to the existence of such a relationship in a South African context. This limited the comparisons that could be made.

The SACI (2005) and DLOQ (2003) questionnaires are based mainly on participants' perceptions of organisational culture and lifelong learning. These perceptions could have been influenced by countless other confounding variables that were beyond the scope of this study. It is therefore recommended that personal characteristics, values, attitude to learning and social competencies be included in future studies.

The research study was exploratory and could not yield any statements of causation. It is therefore recommended that future studies should include causal relationships across the

public and economic sector organisations before final conclusions are drawn about individuals' perception of organisational culture and lifelong learning.

Despite the aforementioned limitations, the results of this study have potential for the analysis of the relationships between organisational culture and lifelong learning as well as the differences between biographical groups' perception of these constructs. This study could be used as the basis for understanding the relationship between the variables measured and the differences between the biographical groups in order to inform strategies for establishing a culture of continuous learning in organisations.

4.1.12 Recommendations

Based on the findings of this research, recommendations are made for the establishment of a lifelong learning culture and for future studies.

4.1.13 Industrial psychologists and practitioners

The results of this study indicate that it is necessary to consider organisational culture and lifelong learning in order to understand how lifelong learning manifests in organisations. The relationship observed between these two constructs could provide insight into the establishment of a lifelong learning culture in organisations. The following interventions are proposed to achieve this:

- Review the organisational cultural and structural mechanisms that can create and improve learning (Armstrong & Foley, 2003). The cultural features include values, basic assumptions, integrated patterns of behaviours, beliefs and shared thinking (Deal & Kennedy, 1982; Denison, 1990; Martins, 2007; Schein, 1990). Structural features that facilitate the collection, analyses, dissemination and storage of information are embedded in the organisational management processes and systems. Organisational culture, processes and systems should encourage continuous learning and development by identifying and facilitating the learning needs of employees (Armstrong & Foley, 2003).
- Explore a variety of models that could be used to facilitate the establishment of a lifelong learning culture in organisation. Martins's (2007) model, which was used in this research study, provides both cultural and structural elements, but there are other models that may also incorporate these elements. Similarly, the model by Marsick

and Watkins (2003) used in this study incorporates the elements of lifelong learning as it occurs in the organisation. These are based on instruments that could be used to measure and review the status of culture (SACI, 2005) and learning (DLOQ, 2003) in the organisation.

- Establish a shared vision and mission, which is embedded in the culture of the organisation (Senge, 1990) and which is reflected in commitment to change, innovation and continuous improvement (Robbins *et al.*, 2009). The commitment should emanate from the leadership and management in organisations. Leadership should lead by example and emulate lifelong learning habits that awaken learning in individuals in the organisation and help to develop a commitment to learning.
- Increase interaction and communication activities throughout the organisation between individuals, teams and groups. Such activities will lay the foundation for open communication, enquiry, dialogue and reflection. According to French and Bell (1999), this mechanism is the foundation of all organisational development interactions.
- Establish systems that may encourage the sharing of knowledge and learning. Encourage the knowledgeable employees to share their knowledge with those who are less knowledgeable. Ensure the establishment of mentorship and coaching programmes to facilitate and support this process.
- Build effective performance improvement systems that tie promotions to knowledge, and measure gaps between current and expected performance. Establish minimum hours for the development of individuals on an annual basis (O'Neil, 2003). Provide recognition and celebrate the achievements of those employees who exceed the minimum requirements.
- Develop incentive schemes for public sector training.
- Build systems so that employees can learn from each other and systems that integrate work and learning. Provide recognition and rewards to employees for helping others and for sharing their knowledge.
- Develop an intensive and integrated induction programme for newly appointed employees to ensure that they are taught correct behaviour (Martins, 1989) and that they acquire the appropriate skills to function effectively in their work environments.

The establishment of lifelong learning in organisations is and should be treated as a strategic objective, which can lead to customer satisfaction (Finger & Brand, 1999). In the type of organisation studied in this research, it could lead to employees becoming more responsive to the needs of the people – hence more citizen focused, customer driven and results oriented, which could bring public sector organisations a few steps closer to the ideal of realising a better quality of life for all the people of South Africa.

4.1.14 Future research

In the light of the limitations and conclusions of this study, the following recommendations are made for future research.

There is continued need for research into the relationship between individuals' perception of organisational culture and lifelong learning in the South African public sector environment and other sectors. It is recommended that future studies address the limitations inherent in this study. This study was limited to a relatively small sample of mostly black females, with graduate and postgraduate qualifications in a particular public sector environment. It is therefore recommended that future studies include larger samples representing various age, gender, race, education and job level groups across a variety of public sector environments.

Despite the fact that this study explored the relationship between individuals' perception of organisational culture and lifelong learning, the relationship between the constructs requires further research in terms of causal relationships and analysis in order to probe a more in-depth relationship between each dimension of organisational culture and lifelong learning. Furthermore, future studies could provide valuable insights into the relationship between these constructs by including other variables such as individual attitudes to lifelong learning, values and social competencies.

4.2 INTEGRATION OF THE STUDY

This study explored the relationship between individuals' perception of organisational culture and lifelong learning. The results suggest that a statistically significant positive relationship does exist between these variables and that this relationship could provide insight into the establishment of a lifelong learning culture in organisations.

A review of the relevant literature points to the existence of a relationship between organisational culture and lifelong learning (Jarvis, 2009; Mahler, 1997; Marsick & Watkins,

2003; Schein, 2010). Literature studies also indicate that there is little opposition to the fact that lifelong learning, incorporated into the culture of organisations, is a strategic competence that all organisations should develop to enable them to cope with the turbulent environment (Armstrong & Foley, 2003; De Geus, 1997; Govender, 2009; Jarvis, 2009; Majam, 2005; Marquardt, 2011; Senge, 1990). Equal consideration should be given to cultural and lifelong learning elements when embarking on the establishment of lifelong learning culture in organisations. Furthermore, ongoing research initiatives in the establishment of a lifelong learning culture in organisations in South Africa, in particular, could facilitate the transformation to a knowledge-based economy and help public service organisations respond more effectively to the needs of their environments and honour their commitment to service delivery.

The empirical study provided statistically significant support for the central hypothesis. The findings suggest that a statistically significant positive relationship exists between individuals' perception of organisational culture and lifelong learning and their dimensions. In addition, the mean scores of subgroups of different age and years of service differed significantly in their perceptions of organisational culture and lifelong learning and their different dimensions. In conclusion, the findings of the study revealed that a significantly positive relationship exists between individuals' perception of organisational and lifelong learning and their various dimensions, and that individuals of different ages and differing years of service differ in their perceptions of organisational culture and lifelong learning and their dimensions. The knowledge gained from the existence of the relationship between these variables could have practical implications for the establishment of a lifelong learning culture in organisations. Hopefully this research will inform organisational practices aimed at establishing a lifelong learning culture in public service organisations.

4.3 CHAPTER SUMMARY

In this chapter, conclusions were drawn on the basis of the findings and the possible limitations of the study were discussed. The focus was on the literature review and the empirical findings of the study. Recommendations and practical suggestions were made for the establishment of a lifelong learning culture in organisations and possible future research were suggested. Finally, the study was integrated by highlighting the fact that the results support the existence of a relationship between individuals' perception of organisational culture and lifelong learning.

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