THE RELATIONSHIP BETWEEN LEADERSHIP RESILIENCE AND SELF-RENEWAL PRACTICES

BY

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DECLARATION

I, Celeste Venter, hereby declare that:

- The work in this treatise is my own original work;
- All sources used or referred to have been documented and recognised; and
- This treatise has not been previously submitted in full or partial fulfilment of the requirement for an equivalent or higher qualification at any other recognised institution.

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ABSTRACT

Most organisations operate in a turbulent environment characterised by volatility, uncertainty, complexity and ambiguity. Disruptive and unpredictable forces of change are key features of this environment and sustainability of organisations has become fragile and unstable. Organisations that are able to grow and thrive within this environment have adaptive capabilities to learn (Ovans, 2005) and adjust faster with more confidence compared to their competitors. Leadership is a decisive influence in the creation of a competitive advantage within thriving organisations. Leaders absorb high levels of turmoil, unpredictability and uncertainty and need to respond to regular shocks and surprises in a productive manner so that the organisation can be responsive to threats and opportunities. The ability of leaders to offer this type of leadership is determined by their own levels of leadership resilience.

Leadership resilience is a capability that can increase or diminish depending on the leader's ability to learn and adapt following unexpected disruptive experiences, continued adverse conditions or while dealing with persistent pressure. Practices associated with self-renewal offer leaders, opportunities to develop disciplined intentional processes of change and adjustment. These are based on a state of awareness regarding one's level of internal well-being, energy and balance, aimed at replenishing or strengthening resilient qualities and protective factors. Leadership development programmes can make a significant contribution to sustained leadership being effective, by developing personal strengths and strategies that can buttress tough resilience capabilities in leaders.

The main research problem in this study was to explore the relationship between leadership resilience and self-renewal practices. To address the main and identified sub-problems, a literature study was conducted focusing on the main components of resilience with specific reference to resilience in leaders, while exploring self-renewal practices that can be used by leaders to improve their resilience.

A web-based survey with a questionnaire was administered to a target group consisting of middle and senior managers who have participated in leadership development programmes at the Leadership Academy of the Nelson Mandela Metropolitan University Business School. The survey was a self-reporting instrument that included the Leadership Resilience Profile developed by Dianne Reed and Jerry Patterson (2009) as well as a section focused on self-renewal practices that included physical, spiritual, cognitive and socio-emotional renewal practices.

The results from the empirical study revealed that the levels of leadership resilience are related to the self-renewal practices of leaders. The study identified spiritual self-renewal as most significant to leadership resilience. Higher levels of resilience were demonstrated with regard to value-driven leadership, optimism, courageous decision-making and self-efficacy. Senior managers reported higher levels of self-efficacy as compared to their counterparts at middle level management. The study identified adaptability, perseverance and social support as resilience capabilities that leaders should grow. In general, lower scores were obtained for self-renewal practices than for resilience levels.

Leadership development initiatives that integrate resilience capabilities and self-renewal practices will create an adaptive resource within organisations. Supporting the development and maintenance of strong leadership resilience capabilities will contribute to the development of adaptive organisations that are able to navigate turbulent conditions with confidence.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

CHAPTER ONE: INTRODUCTION TO THE STUDY

1.1   RESEARCH CONTEXT

Organisations operate in turbulent environments as the pace and the disruptive nature of change are continuously increasing over time. The environment is described as a VUCA world meaning volatile, uncertain, complex and ambiguous (Horney, Pasmore & O'Shea, 2010). Some organisations are able to develop and sustain competitive advantage throughout lengthy periods of turbulence due to renewal capacities within the organisation to respond to regular shocks and surprises. Reeves, Love and Mathur (2012) refer to these organisations as adaptive organisations that are, for example, capable of changing hierarchical structures and systems to develop alternative sources of competitive advantage. The nature of organisational change creates leadership challenges due to the interconnectedness among elements within the operating environments of organisations as well as the multiple layers of complexity (Drucker, 2001).

McCann and Selesky (2012) describe an increasing awareness of leaders of organisations who are loosing control within this turbulence as too many shocks and surprises erode the adaptability of leaders and teams within organisations. The resulting leadership challenges are not only more complicated but the levels of connectivity within the system are also more extreme and therefore the process of effective leadership in this environment is crucial. For example in South Africa (SA), the changing legislative landscape with regards to Broad-based Black Economic Empowerment (BBBEE) represents challenges with regard to the transformation of business ownership, but simultaneously it represents organisations with opportunities to establish new shareholder engagements that can create access to new local and international market opportunities.

The above example illustrates that the leadership environment represents different types of challenges and opportunities that are interrelated in a dynamic relationship. Challenges and opportunities need to be viewed within the same context in order to optimize future possibilities for a business. Simply responding to emerging

challenges and demands by changing operations and business strategies is not enough. Leaders have to proactively reinvent business models at the edge of changing possibilities, without losing focus of the importance of consistently delivering services and products that meet customer expectations (Kotter, 2007).

Organisations that consistently deliver results or even grow within a turbulent environment are led by resilient leaders who are able to maintain these adaptive capacities, including the ability to maintain a culture of continuous learning (Lawrence, 2013). McCann and Selsky (2012) conclude that organisational success or failure within a turbulent environment is largely influenced by the decisions, actions and adaptability of the leadership.

At the opposite end, McCann (2009) refers to leaders who leave organisations embattered due to their failure to provide proper command, inspiration and vision for agility and resiliency. The effects of leadership failures are less damaging when market conditions are stable and the competitive environment is non-threatening, but ineffective leadership is catastrophic for organisations within the VUCA environment. As conditions change, leaders can become more or less effective due to a number of factors including persistent high levels of demands and the phenomena of power stress that ulitmately erode the leader's ability and commitment to leadership effectiveness. Power stress describes the consequences of unrelenting demands, responsibilities, daily threats and crises that leaders face (McKee, Boyatzis & Johnston, 2008).

This unrelenting pressure refers to organisational stakeholders, including shareholders who expect leaders to drive business performance effectively with sufficient energy and optimism regardless of the levels of stress and pressure experienced (Joiner & Josephs, 2007). Sustaining effective leadership can be elusive as talented leaders could inevitably show a level of imbalance when facing unrelenting pressures. The possibility of career derailment, burn out and leadership failure can be profound within this environment (McKee et al., 2008).

Other demands include the prerequisite for leaders to engage in an ever increasing learning curve as their knowledge and experience can become irrelevant or obsolete

in a short period of time. The need to stay ahead of the demand curve, places tremedous pressure on the resilience of leaders (De Vries, Ramo & Korotov, 2009). Furthermore, many leaders experience a sense of isolation as they climb the hierarchical ladder and this aggravates the stress cycle. They can become disconnected from their existing networks due to changes in power relationships as well as the the inavailability of time to sustain relationships. New relationships take time to grow and with growing work demands leaders do not have a lot of time. They also become the target of envy as others wish to be in their position, a factor contributing to further isolation (McKee et al., 2008; De Vries et al., 2009).

Leadership resilience is not a fixed characteristic but a capability that can grow or diminish, and as leaders negotiate treacherous landscape powered by globalisation, technology and social-political changes, their levels of resilience are constantly challenged (McCann & Selsky, 2012). Research shows that the absence of resilience substantially increases the probability of career derailment and ineffective leadership (McKee et al., 2008).

In conclusion, organisations that are achieving extraordinary results in turbulent environments require leaders who remain effective regardless of many adverse conditions. As the levels of complexity within the organisational system increase, the demand for resilient and effective leadership increases exponentially and Reeves (2012) concludes that these complex conditions require leadership of the highest quality, ingenuity and creativity. Quality leadership is described as leaders who are able to operate with confidence and agility in a changing landscape whilst maintaining the capacity to inspire and support the effective functioning of others (Patterson, Goens & Reed, 2009).

1.2   THE PROBLEM STATEMENT

Based on the research context, the landscape within which modern organisations operate, the changing profile of leadership and the extreme adversity that leaders face in order to remain effective, become evident. A report published by the Centre for Creative Leadership (CCL) identifies elements such as low stress tolerance, low impulse control, difficulties to adapt to new routines and ineffective relationships as

the most noticeable contributors to the derailment of leaders' careers (Rudderman, Hannum & Steed, 2001).

The focus of this study is on leaders who thrive in adverse situations as opposed to leaders whose careers are derailed because of persistent pressure and the study therefore falls in the field of positive organisational scholarship. McCann and Selsky (2012) investigated the differences among leaders in global organisations that are performing well as opposed to organisations that are facing declining results. They found that higher performing organisations have leaders who typically perceive their environments as more manageable in terms of profitability, competitiveness and growth and in which they are able to present more possibilities and opportunities. Lower performing organisations have leaders who perceive the rate and predictability of change as more overwhelming.

The question arises why turbulence and change are viewed by some people as menacing and by others as an opportunity. McCann and Selsky (2012) identify optimism as an important variable that enables leaders to view adverse situations as manageable or even as potentially advantageous. Optimism is a significant factor in personal resilience. They concluded that agility and resilience were the two most critical attributes required by leaders to maintain high performance in the midst of turbulence.

The development and maintenance of resilience in leaders therefore represents an important building block in sustained, effective leadership. Siebert (2005) defines resiliency as the ability to cope well with high levels of continuous disruptive change; sustain good health and energy when under constant pressure; easily bounce back from setbacks and find new ways of working when old ways are no longer possible. Leaders, who are able to increase their levels of resilience, ensure that organisations have access to resilient leadership. In essense, it is evident that leaders cannot encourage resilience in others if they are not resilient themselves.

The definition of leadership resilience consists of two interrelated features, namely 'self' and 'others'. 'Self' defines a resilient leader as someone who consistently recovers from shock and surprises and is able to learn from and mature when

confronted with chronic adversity (Patterson, Goens & Reed, 2009). Applying the defintion of resilience by Coutu (2002), leadership resilience is based on a steadfast acceptance of reality, a value system that considers events as meaningful and an unrelenting ability to improvise.

'Others' relates to the leader's role and responsibility towards team members and other stakeholders. In relation to others, leadership resilience is described as a set of leadership qualities that motivates and inspires others during crisis including those actions that help others adapt to or rebound from adversity (McCann & Selsky, 2012). Everly, Douglas and Everly (2010) identify three main actions that leaders take to build resilience. According to them, resilient leaders strive towards building trust and devotion in others, acting with strength and decisiveness and promote the capacity of everyone in the system. Considering these three actions, it is evident that they are aimed at the self, others and the organisational sytem.

When resilient leadership is available in organisations, turbulence can be managed in all directions, namely downstream as well as across and outwards of the business environment. Resilient leadership influences the downstream so that teams can function optimally in the context of stress overload; the across stream so that various functions and departments can collaborate and the outwards stream to manage relationships with other organisations and supplier networks (McCann & Selsky, 2012). It is therefore imperative that leaders build and sustain resilience.

According to Seligman (2011), building resilience involves three development challenges, namely:
- to build mental toughness including decisiveness,
- to build signature strengths (unique strengths) and
- to build strong relationships.

Building mental toughness involves the process of re-framing how people view the world and the adverse events that they deal with. Seligman (2011) emphasises the importance of optimism that is the key to viewing setbacks as temporary and changeable. The ability to challenge existing mental models will influence the leader's perceptual appraisal of the adverse event in a resilient manner.

The development of leadership resilience relies on a deep understanding and acceptance of one's unique strengths. Recognising and developing individual signature strengths contribute to the leader's confidence and levels of self-efficacy. High levels of self-efficacy are characteristic of leaders who demonstrate resilience.

Remaining connected to others provides opportunities for on-going support, honest feedback and connectivity to a broader system. Relationships become a source of strength and energy within the turbulent environment.

The level of leadership resilience is not constant and can increase or diminish due to cycles of stress and sacrifice. Every challenge has the possibility of driving leaders from adapting to recovering and ultimately growth. Alternatively the challenge or crisis can result in unending deterioration that leads to dysfunction. It is therefore imperative for leaders to remain aware of their levels of resilience at all times in order to find ways to continuously renew their resilience levels (Patterson, Goens & Reed, 2009).

Within the literature on resilience, self-renewal is described in various ways. Siebert (2005) describes renewal as taking care of all aspects of the self including holistic health and well-being. Covey (1989) refers to the concept of self-renewal as *sharpening the saw.* He describes self-renewal as preserving the most valuable asset of a leader namely him/herself. Gardner (1995) defines self-renewal as the continuous process of learning and growing. He concludes that the process of renewal will promote personal clarity with regard to meaning, purpose and commitment.

Regardless of the various definitions, authors agree that renewal is a significant element in the development and maintenance of resilience. Renewal is associated with re-energising oneself so that the leader can continue to deal with tough situations. Self-renewal can be limited to recovering what was lost during a trauma, shock or surprise. Alternatively, it can be a more generative process where something different, with greater insight and maturity emerges overtime (Gardner, 1995; Siebert, 2005; Everly et al., 2010).

From the above discussion, it is evident that organisations operate in a turbulent environment and leaders influence the perception of and reaction towards this environment. Leaders require resilience to cope with the demands of the external and internal environment and to influence employees and systems positively. To develop and maintain their capacity for resilience, leaders have to engage in self-renewal practices.

Based on the above discussion the main problem as well as sub-problems identified for this study are presented in Figure 1.1. The sub-problems provide a systematic breakdown of aspects related to the main problem that require investigation in order to explore the relationship between level of leadership resilience and self-renewal practices used by leaders.

Figure 1.1: Summary of research problem

MAIN PROBLEM
What is the relationship between the level of leadership resilience and self-renewal practices used by leaders?

SUB-PROBLEM 1
What are the characteristics of the complex environment in which leaders operate that require them to have high levels of resilience?

SUB-PROBLEM 2
What are the main components of resilience with specific reference to resilience in leaders?

SUB-PROBLEM 3
What self-renewal practices can be used by leaders to improve their resilience?

SUB-PROBLEM 4
What are the levels of resilience within the target group as measured by the Leadership Resilience Profile?

SUB-PROBLEM 5
What self-renewal practices do the target group engage with in a consistent manner?

SUB-PROBLEM 6
Do the categories of resilience, as measured by the Leadership Resilience Profile, correlate with each other?

SUB-PROBLEM 7
What is the relationship among the various dimensions of self-renewal including physical, spiritual, cognitive and socio-emotional renewal practices?

SUB-PROBLEM 8
What is the relationship between the categories of resilience and the four self-renewal dimensions?

SUB-PROBLEM 9
What is the link between different levels of resilience (low versus high) in leaders and their engagement in self-renewal practices?

SUB-PROBLEM 10
Are there significant differences in the levels of resilience and self-renewal activities of the target group based on gender, age and management position?

Theoretical exploration

Measurement within target group

Relationship, correlation and significant differences

1.3 AIMS OF THE STUDY

Resilience is recognised as an indispensable component of effective leadership within the turbulent context of an organisation. Sustaining levels of leadership resilience is essential in maintaining effective leadership in organisations.

The success of developing resilience through leadership development programmes is well documented by authors such as Siebert (2005), Patterson et al. (2009) and Seligman (2011). Creating resilient leaders who are able to sustain their levels of resilience through self-renewal processes can enable resilient teams in organisations to thrive and grow within a complex environment.

The main aim of the study was to explore the relationship between levels of resilience and self-renewal practices.
The secondary aims were to:
- Clarify the complex environment in which leaders operate including the relevance of resilience within this environment.
- Identify and unpack the building blocks of resilience with specific reference to leadership.
- Identify and investigate self-renewal practices that elevate levels of resilience in individuals.
- Explore the levels of resilience in leaders in terms of the categories of resilience that include optimism, value-driven leadership, self-efficacy, courageous decision-making, strong social support, adaptability and perseverance.
- Explore the extent to which leaders engage in self-renewal practices with regard to four self-renewal dimensions namely physical, spiritual, cognitive and socio-emotional self-renewal.
- Determine whether there is a link between levels of resilience (low versus high) in leaders and their engagement in self-renewal practices.
- Draw conclusions about which self-renewal practices are most likely to increase the levels of resilience in leaders.

- Describe the correlation and relationship among the categories of resilience that are used to measure resilience.

- Describe the correlation and relationships among the four dimensions included in the self-renewal practices.

- Examine the correlation and relationships between the categories of resilience and the dimensions of self-renewal practices.

- Identify whether differences exist in resilience and self-renewal practices based on selected demographical variables namely gender, age and level of management.

Figure 1.2 illustrates the relationship between dependent variables (levels of resilience) and independent variables (use of self-renewal practices) that were tested in the study.

Figure 1.2: Factors and relationships tested in the study
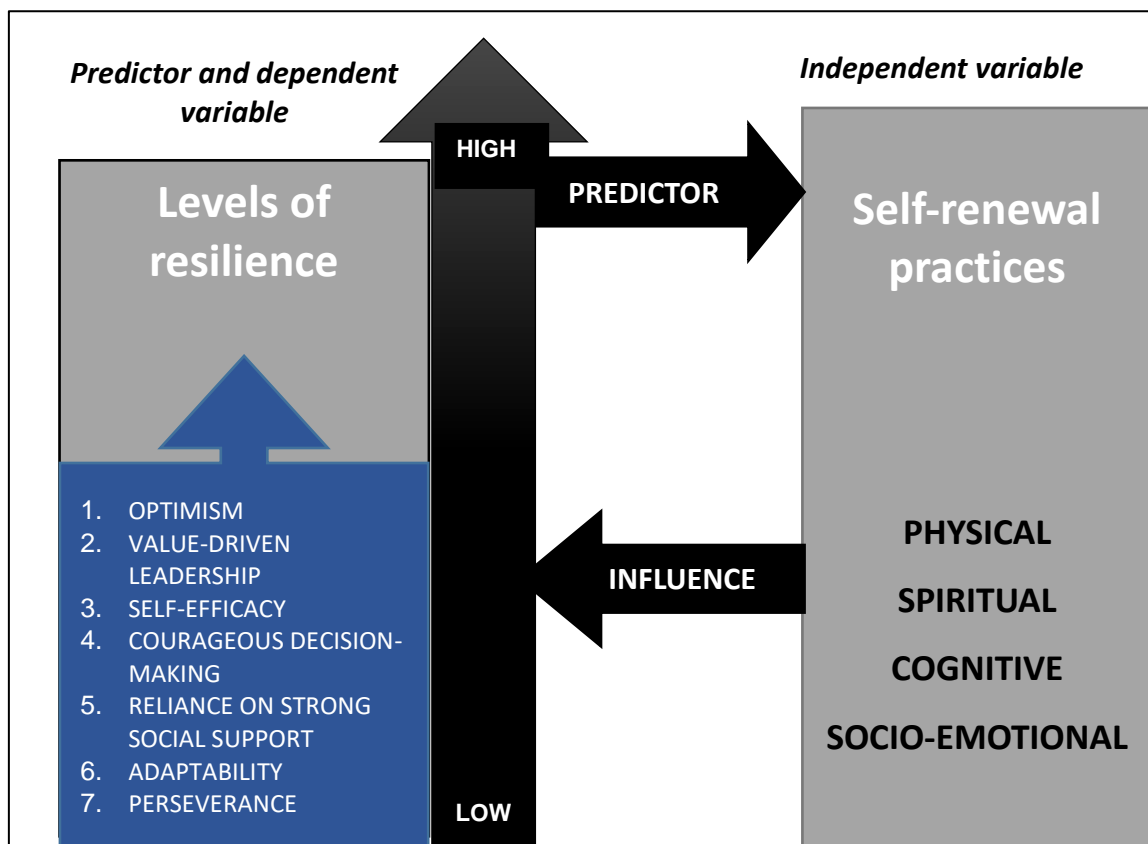
1.4 RESEARCH DESIGN AND METHODOLOGY

This section outlines the plan that guided the collection and analysis of the data with specific reference to meeting the aims of the study. The aim of the study was to determine the relationship between leadership resilience and self-renewal practices. The main problem was converted into theoretical and empirical sub-problems and objectives. The plan captured the decisions and intended actions of the researcher with regard to the nature of the research design, a description of the intended sample population, the data collection instruments and procedure as well as the statistical analysis of the collected data.

1.5 LITERATURE REVIEW

The literature review provided an overview of the current organisational and leadership context, the importance and nature of resilience, factors that deplete resilience leadership and self-renewal practices that leaders can utilise to enhance their resilience. The main factors of resilience include optimism, value-driven leadership, self-efficacy, courageous decision-making, reliance on strong social support, adaptability and perseverance, as described in Figure 1.2. Self-renewal practices include physical, spiritual, cognitive and socio-emotional practices.

1.6 EMPIRICAL STUDY

An empirical study, in the form of a survey with a questionnaire as data collecting instrument, was conducted to collect information regarding the levels of resilience and self-renewal practices used by middle and senior level managers.

1.6.1 Research paradigm and approach

The empirical study was conducted from a positivistic paradigm that asserts that there is a universal truth to be discovered if adequate data is collected from a meaningful size sample or population (Creswell, 2014). A quantitative, explanatory approach was used to examine the relationship between leadership resilience and self-renewal practices. An explanatory approach is a suitable option for researchers

interested in investigating areas of new knowledge. Although, the role of self-renewal practices in sustaining high levels of leadership resilience have been addressed in literature (Creswell, 2014), this study aimed to explore the nature of the relationship in more detail, and specifically considered the different aspects of leadership resilience as well as the various types of self-renewal practices.

A web-based survey was used which ensured that the information received was automatically quantified and stored. The data is presented in the form of descriptive (means scores and standard deviations - SD) and inferential statistics (Pearson Product Moment Correlation, Chi-square, Cramer's V and Fischer Exact Test).

1.6.2 Population and sample

The aim of the study was to understand the relationship between resilience and self-renewal practices with particular reference to leaders who occupy middle and senior level managerial positions within organisations. The target population for the study therefore included middle and senior level managers operating in the private or public sector who were responsible for leading teams in turbulent environments. As it was impossible to include the whole population in the study, a representative sample of leaders had to be selected (Creswell, 2014).

The target group consisted of middle and senior level managers who were enrolled in formal leadership education programmes or recipients of leadership coaching initiatives at the Leadership Academy at the Nelson Mandela Metropolitan University Business School. The participants in these training programmes and coaching initiatives were managers who were nominated by their respective organisations for further training and development. The aim was to have a sample of 50 managers participating in the data collection process.

In order to access the database of the NMMU leadership academy, written permission was obtained from appropriate authorities. The database provided a contact list of 621 possible participants with some overlap of participants enrolled in leadership development programmes during 2015 and 2016. To achieve the target of 50 participants, one hundred and seventy five (175) female participants and two

hundred and fifty five (255) male participants were selected. A twenty percent response rate was required to meet the 50-sample requirement.

1.6.3   Data collection instrument

Thirty years of research suggests that resilience can be measured and can be taught. (Seligman, 2011). Scales associated with the measurement of resilience are well presented in the literature and existing measurement instruments with proven reliability and validity were used in this study.

The Leadership Resilience Profile (LRP-R) was developed by Jerry Patterson and Diane Reed and the authors presented the tool in their book *Resilient leadership in turbulent times* (2009)**.** The web-based questionnaire included 73 items that measured the individual's perception of their individual resilience strengths. The reliability and validity of the tool is documented in a technical supplement published by Diane Reed and Jerry Patterson (Reed & Patterson, 2008).

Questions related to self-renewal practices were developed by the researcher based on a review of existing literature on self-renewal as presented in chapter two. The questionnaire consisted of three sections each dealing with a particular requirement of the study aims. These included:

Section A: Demographical information (gender, age, level of management and size of team managed).

Section B: Leadership resilience. For this section an established questionnaire, the Leadership Resilience Profile (LRP-R) was used in an adapted form to cater for a smaller sample size. This questionnaire used in this study presented seven categories of resilience namely optimism, value-driven leadership, self-efficacy, strong social support, courageous decision-making, adaptability and perseverance.

Section C: Self-renewal practices. This section was self-developed based on four dimensions of self-renewal namely physical, spiritual, cognitive and socio-emotional renewal practices, as revealed in the literature study.

1.6.4 Data collection procedures and analysis

Following the endorsement of the research proposal and questionnaire by the NMMU Research Ethics Committee, the researcher created a web page for the purpose of the study. The questionnaire was uploaded by using Google Survey for easy recording and organising of the responses.

Participants were invited to participate in the study via an e-mail invitation. The invitation letter explained the purpose of the study as well as the data collection process, clarified ethical considerations and the endorsement by the NMMU. The invitation letter explained the purpose of the study as well as the possible benefits for participants. All matters relating to confidentiality and the current or future use of data were clarified in the electronic communication.

Data from the questionnaire was interpreted and analysed in collaboration with the NMMU Unit for Statistical Consultation. The statistical analysis process was designed to make the results available:

- A description of the target group in terms of demographical data including gender, age, level of management and the size of their teams.
- The levels of resilience including the categories used to measure resilience including optimism, value-driven leadership, self-efficacy, courageous decision-making, strong social support, adaptability and perseverance within the target group.
- The extent to which leaders engaged in self-renewal practices including four dimensions: physical, spiritual, cognitive and socio-emotional renewal practices within the target group.
- Clarity with regard to the possible links between the levels of resilience (low versus high) in leaders and their engagement in self-renewal practices.
- Description of the correlation and relationships among the categories of resilience that are used to measure resilience.
- Description of the correlation and relationships among the four dimensions included in the self-renewal practices.

- Description of the correlation and relationships between the categories of resilience and the dimensions of self-renewal practices.
- Explanation of possible significant differences in resilience and self-renewal practices based on selected demographical variables namely gender, age and level of management.

The analysis consisted of three phases. Firstly, the descriptive statistics were calculated to determine possible patterns, variations within the group and the spread of scores among the respondents. The second phase included inferential statistics such as T-tests to compare different groups with each other to determine possible differences and similarities, for example, the display of significant differences generated by demographical factors such as gender, age and level of management. The third phase of the study included a post-test to scrutinise relationships and correlations that were identified during the first two phases.

1.7 DEFINITION OF KEY CONCEPTS

The following key terminologies that were consistently used in the study are defined to ensure clarity throughout the study.

Leaders and leadership
Leadership is defined as the process through which leaders achieve results by setting a visionary direction, inspire others to act decisively and establish remarkable networks to empower and engage others (O'Brien, 2006; Liu, 2010; Bennis & Sample, 2015).

For the purpose of this study, leaders are defined as those who are responsible for creating and sustaining extraordinary business results through driving the adaptive capabilities of organisations within a turbulent environment (Reeves & Deimler, 2015).

Resilience and leadership resilience

Resilience is defined as the ability to positively adapt to and rebound from significant adversity and the stress it creates, through maintaining psychological stability and optimal functioning (Siebert, 2005; Kotter, 2007; McCann & Selsky, 2012).

Leadership resilience includes the element of 'self' in terms of personal adaptive capabilities as well as an element of 'others' described as a set of leadership qualities that motivates and inspires others during crisis. It includes those actions that help others adapt to, or rebound from adversity (McCann & Selsky, 2012).

Self-renewal practice

A self-renewal practice is defined as a process of preserving and enhancing one's greatest asset, namely the self (Gardner, 1995). Preservation means to take care, maintain or protect various aspects of oneself including a person's physical well-being, emotion stability, spiritual growth and mental development (Covey, 1989) and for purposes of this study; it implies practices aimed at developing and maintaining resilience.

1.8   STRUCTURE OF THE TREATISE

The treatise consists of the following chapters and content.

Chapter one introduces the study, including the context of leadership resilience in a turbulent organisational environment. This background led to the development of the main and sub-problems that clarify the scope of the study in terms of the relationship between leadership resilience and self-renewal and all of the related research questions. A brief overview of the research design is presented.

Chapter two presents on overview of the literature related to the turbulent environment in which leaders operate, resilience and self-renewal practices aimed at increasing resilience. The leadership challenges that are created by constant pressures in the VUCA environment outline the increasing relevance of leadership resilience. Leadership resilience is presented as a capability that can grow or diminish through experiences of disruption and reintegration. In order to sustain high

levels of resilience, self-renewal practices are introduced as mechanisms of refuelling resilience.

Chapter three provides an outline of the research methodology including all elements of the research plan. It clarifies the aim of the study and describes the research approach. The research approach explains the target group and the sample of the study, the data collection instruments, the data collection procedures as well as the process of the statistical analysis.

Chapter four presents the analysis of the results. The structure of the chapter is aligned to the aims of the study to respond systematically to the original research questions. It presents the demographical composition of the target group before providing the outcomes of the levels of resilience and self-renewal practices within the target group. Based on the recorded scores, the analysis describes the results regarding the relationships and linkages among various variables presented in the data. Lastly, the chapter considers significant differences within the target group based on demographical factors.

Chapter five offers the summary and conclusion of the study. A review and discussion of the conclusion are presented for each sub-aim of the study explored in the empirical study. This includes a discussion with regard to the levels of resilience obtained by the target group, the commitment to self-renewal practices, the relationship between leadership resilience and self-renewal practices, the relationship between the categories of resilience and dimensions of self-renewal as well as the differences in resilience and self-renewal practices based on selected demographical variables. During the discussion, the linkages between the literature review and the statistical results of the study are created. A summary is presented with regard to the conclusions and implications for leadership development. Finally, the problems and limitations of the study are presented plus the identification of areas for future research.

CHAPTER TWO: ORGANISATIONS AND TURBULENCE

2.1 INTRODUCTION

Chapter one provided the background to the study as well as the main and sub-problems. The purpose of the study was to determine the relationship between leadership resilience and self-renewal practices.

This chapter outlines the characteristics of the contemporary world of work that makes being a leader very challenging and demanding. Not all leaders cope equally well in this environment with some thriving and others experiencing strain that influences their effectiveness as leaders. Against this background, the importance and role of leadership in organisations are also outlined.

The focus of this chapter then moves to self-renewal practices that can be used to build resilience. In line with the purpose and aim of the study, the researcher wanted to determine the extent to which leaders with high levels of resilience made use of these self-renewal practices.

2.2 THE TURBULENT NATURE OF THE CURRENT WORLD OF WORK

The purpose and nature of leadership in present-day organisations are shaped by dynamic environmental trends such as globalisation, downward economic trends, market volatility and the increasing speed of information dissemination. Macro-economic, scientific and social changes contribute to a highly complex landscape. Turbulence is the most pervasive condition that describes the leadership context and encounters that contribute to increasing pressure in the workplace. Turbulence refers to the speed and disruptive nature of change in organisations and institutions (Drucker, 2001; Boyatzis & McKee, 2005; Horney et al., 2010).

The Latin origin of the word turbulence is *turbulentus* meaning *full of commotion* and the Oxford dictionary translates turbulence as *"a violent and unsteady movement"* or *"a state of conflict and confusion".* Leaders encounter and confront conditions of

continuous commotion, confusion and sometimes, violent movements that alter the requirements of leadership in modern organisations. Turbulence requires leaders to apply their leadership strengths and capabilities in a flexible manner and across multiple contexts in response to opportunities and challenges (McCann & Selsky, 2012).

During the late 1990's, the U.S. Army War College coined the term for the environment which followed the end of the Cold War, as the VUCA world, to describe an increase of volatility, uncertainty, complexity and ambiguity (Horney et al., 2010). Many business leaders adopted the acronym, VUCA to label the rapidly changing and chaotic business environment following global events and trends such as the September 2011 terrorist attacks, the increasing territorial ambitions of China and the increased levels of state conflicts in oil rich countries (Horney et al., 2010). Consensus in literature is that the speed of change as well as the disruptive nature of change are the most salient features of modern day organisations and that incremental change co-exists with incidences of unexpected bouts of change that occur rapidly in a short space of time (Patterson et al., 2009; Horney et al., 2010; McCann & Selsky, 2012).

As turbulence and disruptions become more frequent with greater intensity and persist for longer periods, the existence of volatility, uncertainty, complexity and ambiguity are more prevalent and pervasive in organisations (Reeves et al., 2012). Organisations such as IBM (in the 80s), Hewlett-Packard, Kodak and many others are examples of organisations that were not able to maintain a competitive advantage in a rapidly changing environment and as a result lost market share and faced bankruptcy. In 2013, only nine of the original Fortune 50 companies were still on the list (Lawrence, 2013). This inability to adapt to change might be a reflection of leadership struggling to make sense of the changing environment, which is called a VUCA environment.

Volatility refers to the magnitude, volume and unexpected nature of change in organisations. For example, the market place has changed more in the past five years than in the previous 50 years (Reeves et al., 2012). The disruptive nature of change results in shocks and serious disturbances that organisations have to

absorb and respond to in unanticipated ways (McCann & Selsky, 2012). The adaptive capacity of organisations decreases as the number of disruptions increase without allowing organisations to re-stabilise their systems in preparation for the next shock. For example Toyota, moved from first to third place in worldwide auto production after a series of disruptive events including major auto recalls in the United States in 2007 (due to suspected accelerator dysfunction), followed shortly by the economic impact of first an earthquake, secondly a tsunami and lastly the unexpected Fukushima nuclear disaster in 2011 (McCann & Selsky, 2012).

The impact of volatility is evident in financial reports and business news from around the world. These reports include a series of failed acquisitions and mergers, for example between AOL and Time Warner in 2001, and Sprint and Nexel Communication in 2005. The impact of turbulence results in the unpredicted destruction of organisational value. Growth that is created during stable periods is radically reduced during times of turbulence (Reeves et al., 2012). The downfall of Enron in 1985 and the demise of Blackberry in 2013 demonstrated the continued volatility in the economic landscape that leads to under-manged relationships and leadership failures (McCann & Selsky, 2012).

Uncertainty refers to the inability of organisations to predict accurately the impact of events as well as predictions with regard to future trends and opportunities. Organisations cannot rely on patterns or trends to create a level of certainty due to the uneven rate of change (McCann & Selsky, 2012). Forecasting and planning outcomes are strategic fundamentals that in the past provided some certainty with regard to future expectations, goals and strategies. In the past, organisations created sufficient levels of predictability through predetermined strategic outcomes and robust environmental scanning. Consequences of the current high levels of uncertainty are that the traditional predict-and-plan approaches including traditional planning and decision-making tools such as forecasting and trend analysis no longer yield sustainable results in organisations. Leaders have limited use for past events and trends to predict or inform future strategies and solutions (Kotter, 2012; Reeves et al., 2012).

Economic globalisation includes the expansion of production, trade, consumption and investment beyond the national borders of countries and leaders need to shift their horizon to include international customers, competitors and investors (Hicks, 2010). These changes create more uncertainty as leaders and organisations venture into new environments. Organisations also face greater challenges in sustaining competitive advantage as globalisation increases the number of stakeholders within the system. Unexpected market trends relate to predictions that China will become the greatest economy by 2030 with India competing with the USA for second place by 2050. Emerging economics such as Indonesia and Mexico are predicted to become larger than the UK and French economies (Hawksworth & Chan, 2015). The expanding landscape of stakeholders multiplies rapidly and as interconnectivity increases, the number of interactions, relationships and collaboration become more complex.

Customers, for example are becoming a typical uncertain stakeholder element for organisations (McCann & Selsky, 2012). The instant transfer of information and knowledge exponentially expands the choices of customers and impacts on customer product or service expectations. Organisational leaders have to reinvent their relationship with customers through continual engagement and co-creation of product differentiation (IBM Global Business Services, 2010).

Getting connected to customers is an important priority for leaders in order for organisations to become more efficient in predicting and providing for customer needs, building trust with customers and fostering sustainable collaboration with existing and future customers. The Global CEO Survey Report of 2010 showed that eighty-eight percent of CEOs identified getting closer to the customer as the most important dimension in realising their business objectives. The information explosion, social networks and other technological expansions force organisations to rethink their engagement with customers by developing greater insight with regards to customer expectations (IBM Global Business Services, 2010). Due to high levels of uncertainty, including the ever-increasing number of unknown factors in situations, levels of complexity rise accordingly.

Complexity within organisations is driven by high levels of interdependency among variables and elements within the environment. Problem solving and decision-making processes are more challenging due to the myriad of variables and elements that are connected to each other and interact in dynamic ways. The dynamic nature of the interdependencies create situations that are difficult to understand and the numerous cause-effect relationships among seemingly unrelated factors present problems that are difficult to resolve (Horney et al., 2010).

Dilemmas are a key feature in the world of leaders when one single right answer is no longer sufficient to deal with the levels of complexity. Barry Johnson (2014) refers to the phenomena of dilemmas as leadership polarities or interdependent pairs. The term interdependent pairs, refers to the presence of two opposing ideas that have to be managed in relation to each other in order to create optimal conditions for organisations. For example, balancing strategic leadership and operational leadership; finding the optimal relationship between task and people orientation; driving cost effectiveness and maintaining customer excellence. The tension of these interdependent pairs is unavoidable in all organisations and they cannot be solved.

Tensions can potentially contribute to increased levels of complexity and ambiguity in already tough situations but if managed deliberately and in relation to each other, the best of each element can be available in the operating system. Tushman, Smith & Binns (2011) refer to ambidextrous leaders who are able to manage tangible and intangible business factors and balance the short-term and long-term pressures and strategies. As the rate of change increase, organisations with fluid organisational structures achieve results more consistently, but at the same time employees are demanding greater permanency and security (Price Waterhouse, 1996).

Complexity in an environment can become more manageable as leaders become more flexible and are able to manage many contextual matters simultaneously. Juan Alaix, President of Pfizer Animal Health, suggests that leaders can approach complexity as a catalyst and accelerator of innovation (Lawrence, 2013). Complexity can inspire new ways of delivering value. As per the VUCA concept, leaders can

minimise the impact of complexity by contributing greater clarity in organisations without over-simplifying difficult realities (Lawrence, 2013).

Globalisation has fundamentally shifted the competitive landscape of organisations as well as the ownership of organisations. Globalisation refers to the influence or integration of global activities or frameworks into systems that typically would remain local, national or regional. This integration results in national and local economies are becoming exponentially more vulnerable to international financial crises, unexpected global conflicts, economic power shifts related to emerging market economics and consumer driven commodities or services (Hicks, 2010). The dynamic interdependencies that globalisation creates, increase the levels of complexities that leaders have to manage in order to sustain the organisational performance. Most leaders now view globalisation as a contextual element that needs to be navigated and considered during planning and decision-making (Drucker, 2001).

The exponential pace of technological change with particular reference to information and communication is the initiator of the global economy and the new competitive landscape (IBM Global Business Services, 2012). Technology has always been a major driver of efficiency. The shift is that current leaders see technology as the enabler of collaboration and relationships. Technology changes the way people engage and connect with organisations, driving human capital, customer relationships and innovation. Leading through connections is identified as an important source of competitive advantage for organisations in a VUCA world (IBM Global Business Services, 2012). A single accurate interpretation of information and situations becomes indefinable as more variables interact in a complex manner.

Ambiguity refers to the different possibilities and interpretations that can be linked to a single event by various stakeholders. Complexity contributes to an unclear operating environment and as a result, chaos becomes a widespread feature for organisations (Horney et al., 2010).

Contrary to the expectation that sophisticated systems of information and knowledge management in organisations will reduce the chaos; leaders describe data systems as rich but insight poor. The information and knowledge management systems that these systems deliver are not mature enough to transform vast amounts of data to meaningful insights, conclusions and feasible solutions. The under-utilisation of information that potentially could serve as an essential organisational resource is limited by factors such as an inability to shift through vast amounts of information to isolate what is relevant and important; organisational silos that result in trapped information that does not serve the whole organisational system and the inability to validate information as accurate and reliable (IBM Global Business Services, 2010).

In summary, the VUCA world could result in the financial demise of many companies. Kotter (2012) suggests that businesses that fail to meet the new, adaptive requirements will fall behind their competition. Since many organisations are ill prepared to compete in a turbulent future, they are slow to execute, slow to innovate and unable to collaborate due to silo structures. In these conditions, leaders and employees become disengaged and despondent which ultimately contribute to further crises and an inability to remain relevant in the market. An alternative response to the description above is that organisations will endure and thrive during turbulent times by accepting the challenges of chaos, stagnation and disintegration (Kouzes & Posner, 2012).

In conclusion, the VUCA world has changed the nature of organisations in a dramatic way and change seems to be the central theme. Although change management has been a familiar feature of organisational life in the past, current conditions demand a new understanding of the nature of change. A pivotal role is placed in the success of organisations and the new capabilities associated with successful management of change.

2.3   CHANGE MANAGEMENT IN TURBULENT ORGANISATIONS

Toffler (1970) in his famous work, *Future Shock*, accurately predicted a rapid increase in the rate of change and complexity that would shape conditions within organisations of the future (Conner, 1992). Change has always been an inherent feature of organisational systems. Traditional organisational change theories viewed change as incremental and cumulative. However, the nature of change has evolved from episodic change when normal routines are disrupted by relatively low-impact and manageable disturbances to continuous change driven by powerful forces such as globalisation, technological advances, changing customer demands and shifts in leading markets (Reeves et al., 2012).

Kotter (2007), renowned as a world expert in change, identifies change management as a significant factor in the failure or success of organisations in situations that require adaptability and responsiveness. He developed a well-known change management model that consists of eight systematic steps. The steps guide leaders to be more effective as drivers and facilitators of change in organisations. The leader's responsibility includes increasing the urgency for change by creating burning platforms; building a guiding team that will provide sufficient energy and commitment through tough times; framing the change in an inspirational vision; communicating the vision and change process in a way that ensures buy-in from teams and critical stakeholders; empowering the system for action by ensuring the required capabilities and infrastructure are available; maintaining energy and enthusiasm through short term wins; demonstrating continued commitment and persistency and making the change stick.

Case studies of successful American companies such as Southwest Airlines and Berkshire Hathaway, a holding company led by Warren Buffet since 1970 with more than 600 subsidiary businesses, demonstrated the ability to adapt constantly to change. These companies are able to meet the challenges of a changing competitive landscape and thrive within a complex business environment, as they remain committed to long-term values. At the opposite end, companies such as Polaroid in 2008, failed to respond and adapt to changes resulting in a devastating loss of market share as they became obsolete in the digital age. Skilful organisations

that are able to navigate the shifting landscapes have adaptive capabilities and adaptive leadership practices within the organisational system (Reeves et al., 2012).

In South Africa, many companies also grapple with a shifting and changing landscape characterised by factors such as changing competitors, transformative legislative frameworks and uneven financial markets. Examples are companies in the telecommunication sector such as Vodacom, MTN, Cell C, Neotel and Telkom that in 2016 were subjected to public hearings on the cost of communication as organisations become more open to public scrutiny and accountability (PMG, 2014).

Another example is institutions of higher learning and specifically universities in South Africa, that over time and especially since 2015 have experienced turbulence characterised by lower subsidies from government, student demands for no fee education and better student accommodation. The result of the mayhem and riots in the *Fees Must Fall* campaign influenced the struggle that South African universities have to maintain global rankings. According to the Times Higher Education World University Rankings, since 2014 seven out of the nine listed South African universities perceive themselves dropping down the global ranking list due to academic and employer reputation (Staff Writer, 2016).

Change can be driven by challenges and threats, but it can also be driven by opportunity and innovation. Recently Coca-Cola Company, SABMiller and Port Elizabeth based Coca-Cola SABCO merged into a new company, called Coca Cola Beverages Africa with the view of developing a comprehensive strategy for expanding markets in Africa. With the combined bottling capabilities of the merger, Coca-Cola Beverages Africa will operate within the 12 high-growth countries in southern and east Africa and with 30 bottling plants and over 14 000 employees, the company will be the largest Coca-Cola bottler in Africa, unlocking opportunities for growth (The Coca-Cola Company, 2016). Whether organisations are facing riots, challenges or new opportunities, the possibility of a successful outcome is shaped by the availability of effective leadership during the change management process.

As the nature of change is changing, McCann and Selsky (2012) conclude that each type of change requires a different organisational response. Early change

management literature described change as episodic that can be controlled effectively by change management systems. According to this literature, as change becomes more pervasive, rapid and less predictable, organisations have to respond with a change readiness and capabilities that are embedded in the organisational culture. A feature of current change includes being disruptive at an ever increasing speed. This requires adaptive organisations with agile leadership.

Five years after introducing his famous Eight-step Change Model, Kotter (2012) acknowledged that organisations are not able to keep up with the pace of change or predict it. Traditional change processes, organisational strategies and hierarchical structures that used to generate competitive advantage now contribute to the collapse of organisations. Contemporary organisations require flatter structures, better throughput, greater team work, less boundaries, optimal engagement of employees and a focus on results to be able to meet constantly changing demands of customers and other stakeholders. All aspects of the operating system need to be reviewed, renewed and realigned in order to respond effectively to the changing conditions (Kotter, 2012).

As the organisational playing field is changing, many researchers (Dweck, 2006; Kotter, 2007; Collins & Hansen, 2011; McCann & Selsky, 2012) became interested to understand why some companies thrive within this new environment while others do not. A repeated observation by the researchers is that companies which navigate these landscapes exceptionally well, continuously develop new sets of capabilities within the organisation to respond to fast-moving forces that they cannot control or predict. Reeves et al. (2012) refer to this response as adaptive organisations.

2.4   ADAPTIVE ORGANISATIONS

The VUCA environment demands significant efforts to re-align organisational capabilities, strengths and resources towards greater adaptive abilities. As disruptive change and complexity become permanent features of organisations, turbulence is described as the 'new normal'. Organisations that are able to develop and sustain competitive advantage through sustained periods of turbulence have renewal capacities to respond to regular shocks and surprises. Adaptive

organisations change their hierarchical structures and systems to develop alternative sources of competitive advantage (Reeves et al., 2012).

Studies conducted by the Boston Consulting Group (BCG) concluded that business models and leadership skills needed to strive towards an 'adaptive advantage'. This refers to organisations that are able to adjust and learn better and faster than their competitors. Adaptive advantage is measured in terms of the company's consistent performance during turbulent times in relation to its competitors. Apple, Google, Coca-Cola Company, Amazon and Nike can be considered as adaptive organisations (Reeves et al., 2012). Adaptive organisations are created through the efforts of leaders, which include creating vision and collaborative networks of people to deal with change. Organisational conversations, collaborative problem solving processes and continuous improvement efforts provide increased clarity in organisations as opposed to continual confusion and complexity (McCann, 2009).

Horney et al. (2010) refer to high levels of responsiveness as a 'velcro organisation' – an organisation where people and capacities are rearranged and recombined creatively and quickly without major structural adjustments. Organisations have the possibility of hosting a dual operating system where information, relationships and innovation are not limited to isolated silos and hierarchical layers (Kotter, 2012).

Slow or delayed responses to environmental shifts are detrimental in the VUCA world, as organisational growth can decline significantly in a short period. A vital organisational ability is to identify threats and opportunities early enough (Kotter, 2012). The ability to notice signals consistently in both the external and internal environments provides the foundation for decisiveness and prompt action towards opportunities and threats. Reeves et al. (2012) refer to the ability to notice, make sense and respond to environmental signals swiftly as a signal advantage. This capability is common in adaptive organisations.

Another capability that defines adaptive organisations is based on their acceptance of the conditions in the VUCA world as opposed to being caught off guard or avoiding change. An essential aspect of organisational responsiveness during shocks and surprises is the mental readiness of accepting the likelihood of change

as well as paying careful attention to the environment. A winning organisation is one that does not loose focus of the need for stability, quality, cost and efficiency but can simultaneously pay attention to agility.

The leadership of Unilever, a household products company, used the VUCA concept to drive change in their business strategy, as the leadership believed that the organisation had to renew in order to remain relevant and competitive. The company announced a change drive during 2010 that included the reduction of their environmental footprint and an increased social impact. The Unilever leadership developed competitive advantage by aligning the organisation in advance to emerging social values (Lawrence, 2013). These value-driven efforts provided an anchor for the organisation to re-organise themselves around issues that matter and leaders were responsible in creating these anchors.

To support change management processes in adaptive organisations during unpredictable and turbulent times, Kotter (2012) reviewed his Eight-step Change Model and introduced the concept of eight accelerators. The most significant changes include the concurrent and iterative implementation of steps rather than the traditional rigid and sequential approach. According to Kotter, the sequential approach was useful in responding to episodic change, but the disruptive nature of change requires higher levels of integration and movement among the steps.

Change is driven by a much larger involvement of stakeholders throughout the organisational eco-system as opposed to change driven by a small, powerful group or guiding coalition. Agility and responsiveness require a change readiness throughout the system to unlock the contribution and commitment of a much broader support system. Lastly, the original eight steps were meant to function within the traditional hierarchy. The traditional hierarchy and processes were effective in dealing with the operational requirements, but it is unproductive to provide a more responsive approach to external demands and opportunities.

In summary, organisations that are able to renew and realign in time to respond to challenges and capitalize on opportunities are referred to as adaptive organisations. Adaptive organisations demonstrate distinctive practices such as acting on

changing signals, experimentation with new ways of creating value and directing change capabilities in all parts of the system (Reeves et al., 2012). These organisations are created by leaders who optimise opportunities as they emerge and respond to challenges timeously (Kotter, 2012). Leaders in adaptive organisations confront and navigate the contextual elements skilfully and sustain business results regardless of the disruptive nature of changes evident in contemporary organisations. Through the practice of contextual awareness, leaders are more flexible in their thinking, behaviours and change practices (McCann & Selsky, 2012).

2.5   LEADERSHIP IN A TURBULENT WORLD

Literature provides many different definitions of leadership that include a number of variations on how leaders use different sources of power to influence and mobilise others in relation to a vision, strategy or intended outcome. Leadership is not about the title or the position, but about behaviours and relationships (Boyatzis & McKee, 2005; Liu, 2010; Kouzes & Posner, 2014). Leadership actions and guidance have the potential to mobilise the energy and effort of others towards a future goal. Therefore, leadership strengths include the ability to influence others, grow commitment and direct the attention of all stakeholders to decisions, actions and outcomes that are most essential within complex environments (Bennis & Sample, 2015).

For the purpose of this study, the focus on leadership was limited to the changing nature of leadership with specific reference to creating and maintaining organisations that thrive in turbulent environments. This includes the increasing relevance of stakeholder relationships; the importance of resonance to connect, influence or inspire others and the intensified awareness of contextual elements to transform adverse situations into sustainable business opportunity.

The risk for leaders who are operating in turbulent environments is that consistent pressure erodes the leader's capacity to maintain high levels of effectiveness. The typical threat response by leaders to relentless change includes narrowing of focus, single-mindedness and defensiveness. As the leader's level of awareness and

openness to learning decrease, the possibility of decisive action within a complex environment diminishes. Leaders miss opportunities and increase risks by misinterpretation of information. As awareness closes down, the leader is limited to old cognitive maps and mental models that might now not be relevant or effective in new conditions and complexities (McCann & Selsky, 2012).

The relevance of leadership in creating successful organisations during turbulent times is illustrated by Carol Dweck (2006) in her account of leaders who contributed to successful companies such as Jack Welch, CEO of General Electric (GE) who increased the value of GE from $14 billion in 1980 to $490 billion in 2000 or Lou Gerstner who increased the value of IBM stock by 800 percent during his leadership from 1993 to 2002. These leaders can be seen in contrast to many others who led to the demise of great companies such as Lee Iaccoca from Chrysler; Kenneth Lay and Jeffrey Skilling of Enron and Steve Case of AOL Time Warner.

The VUCA Model proposes that winning organisations moderate the negative impact of the VUCA elements through thoughtful leadership behaviours and actions. A vision, which is accepted at all levels of the organisation, provides an anchor for decision-making regardless of the levels of volatility. Leaders who support managers and employees to understand challenges and opportunities (internal and external) can reduce the chaos created by uncertainty (McCann, 2009). The reports of organisational success and failure emphasise the role of leaders in transforming the consistently high levels of change into manageable challenges and opportunities (Conner, 1992).

Jim Collins and Morten Hansen engaged in a nine year project to find answers as to why some organisations thrive within a turbulent environment while their competitors do not. They selected seven organisations that maintained growth over a sustained period of time ranging between 20 to 30 years. These included companies such as Southwest Airlines under the leadership of Herb Kelleher, Microsoft with Bill Gates at the lead and Intel with Ande Grove as CEO. Their results and practices were compared with companies within the same industry that failed dismally to deliver sustainable success during the same period of time (Collins & Hansen, 2011).

The study concluded that leaders of successful organisations are able to achieve dramatically different outcomes through a set of three core behaviours that distinguished them from the comparison company leaders. These behaviours included the following: Firstly, discipline to remain focused, committed and consistent in priorities and decisions; secondly, empirical creativity that shifts leaders away from convential wisdom to look for new options that are based on empirical evidence; thirdly a focus on effective, careful action that considers all risks with intensive focus as opposed to being overly optimistic (Collins & Hansen, 2011).

The increased levels of complexity and competition require leaders to maximize the contributions of all resources including employees, existing stakeholders and potential partners (Goleman, 2010; Kotter, 2012). The significance of developing successful stakeholder relationships through collaboration, customer interface, networks and partnerships enable leaders to achieve extraordinary results (Kouzes & Posner, 2014). Successful leaders drive engagement and collaboration as the new competitive advantage within volatile economies and develop the adaptive capabilities to remain relevant in the market (Hogan & Kaiser, 2005). Committed employees and innovative partnerships contribute to results that meet the expectations of customers while maintaining market share, growth and competitive advantage.

Kotter (2007) explains that high employee engagement is a powerful instrument in creating competitive differentiation amongst organisations. The need for high levels of employee engagement during uncertain times is paradoxical as engagement tends to decline as change and uncertainty increase. Leadership is the most important driver of employee engagement when organisations are facing turmoil, transition and turbulence.

Boyatzis and McKee (2005) describe resonant leaders as those who are able to engage and move teams with passion and purpose regardless of an unstable environment. Resonance refers to the ability to create meaning, connectivity and alignment in relationships, teams and within organisations. Resonant leaders approach uncertainty and ambiguity with hope, compassion and mindfulness.

Leadership essentials such as vision, optimism and empathy, make opportunities and possibilities apparent for the team. Leaders who are committed to the engagement of employees pay attention to their own well-being through renewal to ensure that they can sustain resonance within the turbulent world.

Bennis and Sample (2015) describe great leadership during turbulent times as the capability of recognising the situational and contingent aspects of a situation. Effective leaders build operating dexterity that: (1) increases responsiveness to emerging challenges and opportunities; (2) reinvents customer relationships and acknowledges the shift in consumer power and (3) improves the creative effort of the operating systems by removing out dated practices that no longer generate the required value. The role of strategy within adaptive organisations is to align powerful conversations, conduct environmental scanning and create minds prepared for change in the organisation (IBM Global Business Services, 2010).

According to Kotter (2012), the new leadership role is to drive strategy as a powerful force that constantly seeks and identifies opportunities and completes initiatives swiftly and efficiently. Leaders have to take responsibility for two distinct operating systems within organisations, namely the existing system and hierarchical structure that deliver consistent results and the strategy operating system. The strategy operating system should continually assess the business environment in order to make sense of the fast changing landscape that is full of threats and opportunities. With greater environmental awareness and understanding, organisations can react with greater speed, agility and creativity. The strategy operating system consists of collaboration, networks and partnerships throughout the organisation.

Kouzes and Posner (2014) agree that leaders represent significant influence that turns adversity into opportunity. Their original Exemplary Leadership Model includes five practices that are modelling the way: inspiring a shared vision; challenging the process/status quo; enabling others to act and encouraging the heart of teams. These five practices remain fundamental to effective leadership, but in order to generate extraordinary results in the VUCA world, the authors included six indispensable strategies. Firstly, leaders should broaden the context of the challenges that organisations face. Through conversations and communications,

the position of business challenges and disruptions can be viewed as part of a bigger picture. Leaders present a positive story of possibility within the greater scope of concerns and opportunities. The perspective is that challenges and uncertainty are manageable; opportunities will emerge in the chaos and organisations that have dealt with hardship in the past are able to assist teams to engage with hardship more confidently.

Secondly, leaders should define and acknowledge reality and they should accept the toughness of the situation without accepting a verdict of defeat. Thirdly, leaders need to be committed to what is important. Commitment, passion and dedication become effortless when personal values are clear and the leader's actions are aligned to these values. Fourthly, challenging situations can motivate and engage people to do their best. Leaders and their teams need to take charge of change by responding to threats positively and assertively at critical moments (Kouzes & Posner, 2014).

The remaining two strategies of exemplary leaders in the VUCA world are engaging others and showing care for others. Most leadership literature acknowledges the importance of support, networks and stable relationships when facing adversity (Everly et al., 2010; IBM Global Business Services, 2012; Bennis & Sample, 2015). Leaders who recognise the value of trust and collaboration create organisational strength that is particularly valuable in adverse conditions.

The above strategies, with particular reference to commitment, continued optimism when facing tough situations and continuously acting with integrity refer to an attitude described as psychological hardiness (Maddi, 2002). Although stress is debilitating to some, hardiness promotes a *can do* attitude with greater effectiveness in stress management. Hardiness is defined by three distinguishing attitudes, namely commitment, control and challenge. Commitment is defined as a predisposition to be fully engaged with people, issues and situations; control refers to the efforts to influence the outcomes regardless of external variables and challenge refers to the eagerness to learn from experience even when it involves possible failure (Maddi, 2002).

In summary, organisations that successfully turn the VUCA environment into financial advantage have leaders who manage the complexity on behalf of the organisation, customers and partners. The changing leadership profile is therefore characterised by the ability to: (1) manage ever-increasing complexity; (2) deal with a wider range of internal and external stakeholders and (3) communicate clearly and more persuasively (IBM Global Business Services, 2012). The well-being and growth of organisations within the VUCA environment are connected to the quality of leadership available within the system (Drucker, 2001; Kotter, 2007; Kouzes & Posner, 2014; Bennis & Sample, 2015). The concept of psychological hardiness highlights the importance of resilience in leadership thinking and action.

2.6   THE CONCEPT OF RESILIENCE

Literature indicates three waves of inquiries with regard to the concept of resilience. The first wave focused on the set of qualities associated with people who show resilience in adverse conditions. Much of this research involved longitudinal studies involving children or youth operating in difficult socio-economic conditions and the description of resilience qualities are phenomenological in nature. The second wave of inquiry viewed resilience as a process of disruption and reintegration. The process of reintegration will have different outcomes depending on the person's existing level of resilience. The third wave shifted the focus to understand the source of resilience as an internal motivation or energy (Richardson, 2002).

Resilience is defined as the ability to positively adapt to and rebound from significant adversity and the stress it creates though maintaining psychological stability and optimal functioning. The term *bounce back* is often used to describe the idea of returning to a well functioning stance after moving through a period of distress or trauma. The adaptive response depends on the ability to alleviate the negative effects of stress and develop new coping skills to deal with adversity and change that may be presented in future (Keye & Pidgeon, 2013). Conner (1992, p. 6) defines resilience as "the capacity to absorb high levels of change while displaying minimal dysfunctional behaviours".

Resilience can be regarded as an element in Toffler's theory of change assimilation, adaptive responses and disorientation. People have varying capabilities to assimilate change i.e. adapt to change without displaying unstable or dysfunctional behaviours or conditions. Toffler (1970) refers to the ability to assimilate change or new situations as an *adaptive response to novelty*. As the rates of change and complexity increase, these capabilities become insufficient and as a result a person faces a period of disorientation and shock. Persistent situations of change, novelty and complexity drive people to operate in the upper levels of their adaptive capabilities. The need for adaptative responses exceeds the person's capability to deal effectively with change and as a result the continued experience of stress results in a decline of stabilty and functioning (Toffler, 1970).

Patterson et al. (2009) introduced a cycle of resilience consisting of four possible routes of adaptive responses with two opposing outcomes. Resilience occurs as a series of decisions that people make when adversity strikes. People have the choice to deteriorate towards dysfunction or guide the situation towards surviving and/or even growth and development. Those who are resilient choose survival and open themselves to growth and development. The first outcome is dysfunction and the second outcome is growth and success. To experience growth and success, the person journeys through the phases of adaption, recovery and growth.

Figure 2.1: The Resilience Cycle
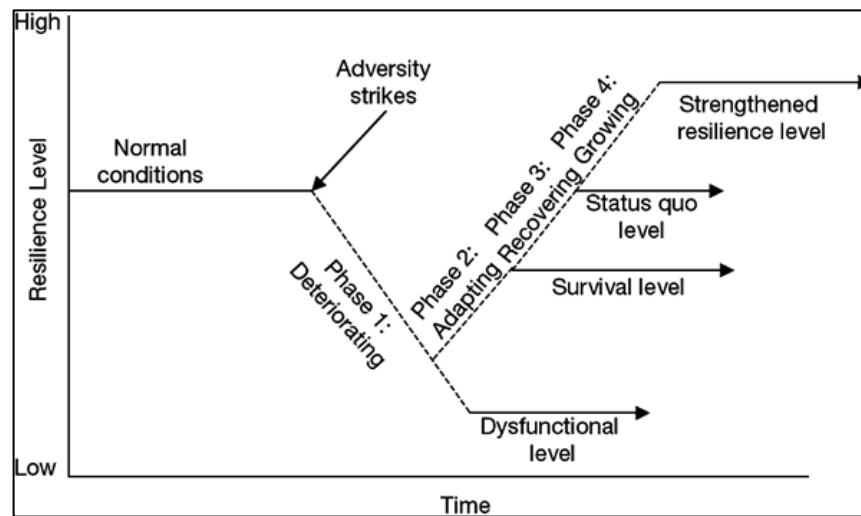
Source: Patterson, Goens and Reed (2009)

The first phase of deteriorating refers to a slippery slope of unhelpful emotions and defensive behaviours. If leaders are unable to move to the adaptive phase, their levels of dysfunction will increase and this results in the breakdown of relationships as well as increased use of positional power and authority. This ultimately leads to a decline in team performance as team members become alienated and disengaged. The alternative route towards adaptation is only possible once the leader takes a more objective view of reality and identifies his/her role and responsibility in the situation.

The adapting phase grows into the recovery phase. Leaders become more inquisitive and active in increasing their understanding of the situation and they recognise others as valuable resources. Efforts are made to restore the status quo and reduce the levels of crisis (Patterson, Goens & Reed, 2009). The growing phase is an option for leaders who are willing to reach beyond the status quo. This is also known as the thriving phase when leaders use reflection and learning to identify and capitalise the unutilised potential and opportunities in the situation.

Resilience is therefore the capability that influences the speed of change assimilation in a person. A person who has high levels of resilience will move quicker through adaptation and recovery time. The advantages of having resilience include

regaining one's balance quicker; achieving more objectives; maintaining higher levels of quality and productivity and maintaining physical and emotional well-being (Conner, 1992).

Grotberg (2003) highlights that resilience is not limited to overcoming adverse situations but includes the possibility to learn, be strengthened and transformed by adversity. During her research, mainly with inner city youth, she presents three categories of protective factors that contribute to resilience: external factors such as good role models and durable relationships; inner strengths such as optimism and empathy; and interpersonal and problem solving skills such as persistence.

Resilience is presented as a human capability that determines how a person deals with the adaptive demands of adverse conditions, shocks and change. Considering the VUCA environment that bombards leaders with fast moving and disruptive change, resilience is a significant capability that enables leaders to remain effective.

2.7   RESILIENCE IN LEADERSHIP

The relevance of resilience in leadership is explained by numerous authors, but little empirical research is available to link resilience and leadership directly. Bennis and Sample (2015) place resilience at the centre of successful leadership and they refer to resilience as the adaptive capacity of the leader. Resilience is the greatest predictor of who will succeed or fail in any given situation, whether the person is in the Olympic team, a cancer ward or the boardroom (Coutu, 2002). It provides the tenacity to keep on working towards a goal in the face of difficulty (Southwick & Charney, 2013). Developing the resilience capacity of leaders is one approach to support and enable effective responses to ambiguity and turbulence in modern organisations (Lucy, Poorkavoos & Thompson 2014).

Siebert (2005) defines resilience in leadership as the ability to cope well with high levels of continuous disruptive change; sustain good health and energy when under constant pressure; easily bounce back from setbacks and find new ways of working when old ways are no longer possible. Resilient leaders are able to do all of the above without acting in a dysfunctional or harmful way. They assist others to

respond with resilience in adverse situations and leaders become catalysts in the development of hardiness and strength in teams (Everly et al., 2010).

Organisational stakeholders expect leaders to drive business performance effectively and with sufficient energy and optimism regardless of the levels of stress and pressure experienced (Joiner & Josephs, 2007). According to Kotter (2012), leaders face the pressure to deliver excellent results consistently and deal with the tension of being responsive to a changing environment. Leaders have to create sufficient organisational stability to remain efficient, while simultaneously driving high levels of agility. Not all leaders are successful at these tasks and differences in levels of resilience are regarded as a determining factor in leader success.

2.8   LEADERSHIP SKILLS AND CAPACITIES ASSOCIATED WITH RESILIENCE

Following a lengthy review of resilience theories, Coutu (2002) concluded that resilient people and organisations demonstrate three major characteristics: a steadfast acceptance of reality, a deep belief that life is meaningful and an uncanny ability to improvise. In addition to these characteristics, many authors refer to the importance of optimism, value-driven decisions and emotional intelligence for resilience in leadership practice (Boyatzis & McKee, 2005; Seligman, 2011; Graham, 2013; Lucy et al., 2014).

Considering the vast amount of literature that relates to leadership resilience, this study used the Leadership Resilience Skills diagram presented by Patterson et al. (2009) as a guide to consider thinking skills, personal capacity skills and action skills associated with leadership resilience. Figure 2.2 presents a coherent framework as an overview of the skills presented in this study.

Figure 2.2: Overview of leader resilience skills

| THINKING SKILLS | • 2.8.1 Realistic world view
• 2.8.2 Optimism |

| PERSONAL CAPACITY SKILLS | 2.8.3 Living with Purpose / 2.8.4 Coherent Value System | 2.8.5 Emotional Intelligence: Self-awareness, Self-management, Social awareness, Relationship management |

Self-efficacy

| ACTION SKILLS | Discipline / Adaptability / Perseverance | Empathy / Context-awareness | Connectivity / Networking |

| INCREASED RESILIENCE CAPACITY | • Stronger values
• Stronger efficacy
• Stronger support base
• Stronger personal well-being |

Source: Adapted from Patterson et al. (2009, p. 12)

2.8.1 Realistic world view

A fundamental predictor of resilience is how a person views the world and this leads to either mental toughness or a fragile disposition (Seligman, 2011). Numerous studies and reports suggest that a person's view of the world is as powerful as the actual event or situation that occurs (Everly et al., 2010). If the leader views a situation as hopeless and without possibility, it is highly unlikely that he/she will notice opportunities or creative solutions. The discipline to direct one's thoughts while dealing with a stressful situation takes high levels of awareness and discipline. When under pressure, people tend to regress to their most habitual reactions while creativity and ingenuity are not likely responses. Resilient leaders apply conscious

efforts to focus their attention and thoughts towards realistic opportunities and actions in stressful situations (Coutu, 2002).

Patterson et al. (2009) suggest that leaders apply interpretation filters when thinking about or assessing a situation. These filters relate to a focus on accuracy and clarity as well as a search for positive possibilities. Resilient leaders are interested in accuracy and clarity about the current situation and they develop this by seeking the diverse opinions of others. Unfortunately, leaders can easily become one-sided in their focus, rigid in their thinking and unable to consider diverse opinions because of high levels of change, chaos and ambiguity. In order to create clarity, leaders have to minimise information, which complicates the situation needlessly. Resilient leaders are able to distinguish what information matters most in terms of understanding the situation and finding the best possible options.

The acceptance of reality suggests that there is a realistic assessment of what is possible and a balanced evaluation of opportunities and challenges. This is also seen in the strategy described by Kouzes and Posner (2014) as *Defy the Verdict* i.e. challenge common opinion. The ability to challenge existing mental models will influence the leader's perceptual appraisal of the adverse event in a resilient manner. The assessment of any given situation is influenced by what a person is willing to confront and accept as reality, information the person denies and the aspects of the situation the person emphasises with (Patterson, Goens & Reed, 2009).

The second interpretation filter is searching for positive possibilities for the future through reframing. The process of reframing is a deliberate and active search for a possible positive outcome or valuable lesson that can shape a stronger or more meaningful future. Reframing is associated with mental toughness (Patterson, Goens & Reed, 2009).

Resilient leaders are also able to distinguish between the permanencies of the adverse condition as opposed to a temporary condition that will change, recognising that a situation will change help resilient people to persevere and not give up. Anti-resilient perspectives include expecting things to get even worse with no possibility

of a positive outcome as well as being stuck - blaming others for setbacks and a difficult situation. Resilience is also supported by a balanced view that not all events and situations are personal (Lock, 2014).

Increased levels of complexity demand leaders to remain engaged with internal organisational dynamics as well as with the external environment. Resilient leaders are consistently engaging with the external environment and they remain interested and aware of events. A structured awareness process ensure that leaders focus their attention effectively by asking the correct questions, involving the relevant stakeholders and communicating efficiently to support productive work in teams. Systematic scanning, sense making and sharing of information and trends are critical to agility and resilience in an organisation (McCann & Selsky, 2012).

In conclusion, leaders need to pay attention to the paradigms and assumptions that shape the way they view the world as these paradigms can either increase possibilities, promote constructive action or alternatively these paradigms can become obstacles to finding the next step in a difficult situation.

2.8.2   Optimism

Seligman (2011) emphasises the importance of optimism as the key to viewing setbacks as temporary and changeable. The ability of resilient leaders to remain optimistic and to identify positive possibilities is mentioned in many definitions of leadership resilience (Siebert, 2005; McKee et al., 2008; Seligman, 2011). Martin Seligman's interest in optimism is linked to his famous research work conduted in the 60's with regard to *learned helplessness*. He noticed that although the majority of animal and human subjects surrendered to being helpless, accepting failure and giving up, a third of the subjects did not give up. During the next 15 years, Seligman focused on optimism as the differentiating factor between those who do not give up or become helpless and those who did. Seligman (2011) translated developed learning programmes for youth and found that, as optimisic behaviours and positive attitudes increased, conditions such as depression and anxiety decreased.

Resilient leaders are associated with realistic optimism in which leaders imagine the future while accepting the reality of set-backs and surprises. They maintian a positive outlook in adverse situations without denying the obstacles and constraints in the current reality. Their pessimistic counterparts tend to focus on the negative aspects and risks in a difficult situation. Pessimistic leaders seldom believe that their efforts will produce a worthwhile result as they believe that continued barriers and disruptions will plague their efforts (Patterson, Goens & Reed, 2009).

Optimism does not refer to a pollyanna approach that is associated with an excessive belief that all outcomes will be pleasant. This view is also referred to as unrealistic optimism when unpleasant elements in a current reality are discounted. Siebert (2005) warns against a one-dimensional continuum where optimism is good and pessimism is bad. Highly resilient people are able to choose from a range of paradoxical qualities depending on the challenges in a situation. He refers to this as counterbalanced traits that allow leaders to operate effectively in a complex world. Pessimism counter balances the disadvantages of being over-optimistic.

The resilient leader uses strategies to deal with barriers and disruptions in a manner that strengthens optimism (Patterson, Goens & Reed, 2009). These strategies rely on thinking skills that include accepting that unexpected disturbances are likely to emerge and are able to derail carefuly made plans. In order to deal with adversity effectively, leaders need to gather all relevant information, good and bad news, from many credible sources and recognise external forces that could limit future efforts. Attitude matters with particular reference to a *can-do* attitude. Attitude influences the effort that a person will put into search for positive aspects within the adverse situation in order to balance the negative aspects.

An optimistic approach provides a number of benefits for leaders including having better social relationships, being more flexible, thinking postively and recovering from illness or trauma faster. Optimistic leaders are also able to transform challenges into opportunities, they are motivated to work harder and remain commited for longer to solve complex problems (Patterson, Goens & Reed, 2009).

Fostering a belief that good things can also emerge from adverse situations ties with the feeling of hope and the practice of optimism. Through ancient times people recognised a spirit of hope as critical in dealing with hardship and challenges. Hopeful people endure longer in difficult situations, although they experience a range of negative emotions. The presence of hope will not necessarily produce the desired outcome, but without hope, purpose, perseverence and resilience, a positve outcome is not possible (Siebert, 2005). The belief that the situation can improve, drive decisions that focus and mobilise energy on positive possibilities instead of being locked into the negative aspects.

The idea of optimism and finding meaning in difficult situations is more prevalent when individuals or organisations operate according to a strong value system. Leaders develop and maintain a focus and a sense of purpose, which is a guiding system through turbulence. Leaders remain centred in a consistently changing environment by remaining connected to a clear sense of purpose, values and strengths (Conner, 1992).

2.8.3   Living with purpose

Viktor E. Frankl (1992) made a significant contribution to understanding the importance of finding meaning and purpose in the life in relation to one's ability to survive great suffering. In his famous work *Man's search for meaning*, Frankl, as a physician trained in psychiatry and neurology, presents a narrative of the experience of prisoners in the Nazi concentration camps that he was part of for three years. He noted that when confronted with the most hopeless situations, resilient people demonstrate a *will to meaning*. This means that finding a meaning or purpose unique and specific to a person is a primary motivational force for a human being. Once such a reason for one's life is clear, one is able to face great struggles and adversity with courage and stamina.

In support of his findings, he refers to a number of survey results that show that a range of 78% to 89% of respondents, identify *finding meaning and purpose in their lives* as an important aspect of their well-being. In all cases, meaning is perceived as more important than aspects such as material goods, power and pleasure

(Frankl, 1992). Frankl's findings with regard to the value of a purposeful life are supported by medical research that demonstrates a *purpose in life* as a protective factor against the onset of diseases such as dementia and cardiovascular conditions (Kaplin & Anzaldi, 2015).

An important element of resilience is that purpose or meaning is specific to a person and that it provides a lense to view all situations in life, both good and bad. Resilient leaders assess and re-evaluate the potential meaning and contribution of a particular situation in relation to a desired future. Based on the assessment, leaders can build bridges from a current adverse situation to a different future by finding significance and meaning within the adverse situation. Accepting that life is not always fair provides the opportunity to take personal responsibility to overcome adversity while discovering new personal strengths (Siebert, 2005).

The leader's thinking is focused on what is important and what will matter in future instead of dwelling only on current or past mistakes and troubles. The result is that resilient leaders develop a longer term perspective that offers stability during the turmoil. This perspective puts the current difficulties in the context of a bigger picture or a broader purpose to assist with identifying positive possiblities or opportunites (Lock, 2014).

2.8.4   Coherent value system

Linked to living a purposeful life is the commitment to a well-defined value system. Covey (1989) refers to this interdependency as *personal security*, which means having clarity with regard to purpose and values and being committed to this system in all decisions and actions. A sense of personal security is driven intrinsically by a coherent value system, a sense of achievement, contribution and an intention to make a positive contribution to others. This shapes a leader's ability to cooperate with others in a consistent manner regardless of a changing stakeholder landscape. A robust sense of personal security cannot be fuelled by external recognition, reward and opinions of others but by internal sources of passion and inspiration (Covey, 1989).

At a practical level, value systems influence decision-making. Leaders have to remain decisive even when surrounded by uncertainty. The writings of Sun Tzu in 500BC conclude that the behaviours of leaders in crisis need to be decisive, swift and bold. Agility in decisions and actions need to be based on trust within the team (Everly et al., 2010). The value system of leaders provide direction during complex decision-making as a strong value system frames decisions when tough choices have to be made among a range of ambigious possibilities (Coutu, 2002). Values offer a way to interpret and shape events and within a VUCA world, values become more relevant to ensure effective decision-making and fuel trust within teams.

Leadership failures are rife in the media and literature both globally and within the local economy. This includes financial scandals such as ENRON, WorldCom and many other global and local reports of corrupt leadership. Leadership failures, unethical or poor decision-making, fraud and corruption wear away at the cornerstone of trust that is required within organisations. As a result, leaders face the overwhelming task of restoring confidence and respect in organisations that operate within a climate of cynicism and mistrust (O'Brien, 2006).

Team members who trust the leader create the possibility for decisiveness and swift action, which in turn increases the levels of resilience in the team. Trust enhances the experience of security within a team that is critical when chaos and uncertainty are key features of the environment. Communicating swiftly and with integrity assists in the creation of trust as a team resource and integrity simply means doing that which is right consistently (Coutu, 2002).

A leader creates trust in an organisation when his/her ethical values and moral compass remain unfaltering in tough situations. Resilience is an internal source of motivation that enables leaders to remain committed to their values and act with integrity regardless of lasting stress and pressure.

In order for leaders to maintain their focus, commitment and energy, they require growing levels of personal and social well-being as adverse conditions increase their levels of stress and dissonance (Boyatzis & McKee, 2005). Literature relating to

emotional intelligence provides a valued body of knowledge with regard to personal capacities that develop and maintain personal and social well-being.

2.8.5   Resilience and Emotional Intelligence

Peter Salovey, one of the original writers on Emotional Intelligence (EI), describes self-understanding and emotional insight as the corner stones for emotional intelligence. He defines emotional intelligence as the ability to monitor your own emotions and the emotions of others and to use this information to guide your thinking and actions. His EI framework includes three core capabilities namely, appraising and expressing emotion; regulating emotion in self and others and thirdly using your understanding of emotion in an adpative manner for decision-making (Goleman, 1995).

Goleman (1995) elaborated on the work of Salovey and defines emotional intelligence (EI) as the ability to sense, understand and effectively respond to one's own emotions as well as the emotions of others. A study of 15 global Fortune 500 companies attributes 85% to 90% of leadership success to emotional intelligence. At the highest managerial levels, emotional intelligence accounts for virtually the entire advantage (Goleman, 2000). In this author's model, emotional intelligence consists of four fundamental capabilities namely self-awareness; self-management; social awareness and relationship management. The capabilities have an interdependent relationship with self-awareness as the foundation for self-management and social awareness.   The fourth capability, relationship management is dependent on the successful demonstration of self-management and social awareness.

Each one of the EI capabilities contributes to sustainable levels of resilience in unique ways. For example self-awareness provides an accurate understanding of strenghts and weaknesses which supports high levels of self-efficacy; adaptiblity is considered a competency within self-management; social awareness links to being contextually aware of the external environment and all of the stakeholders operating within the environment and relationship management makes it possible for leaders to influence and develop strong networks that will enable the achievement of goals.

Self-awareness in leaders ensures that they are able to process emotional information quickly and accurately and by understanding their emotions in the moment, they are able to mitigate the impact of negative emotions such as fear for self and others. Self-aware leaders have an accurate knowledge of their strengths, values, limitations and principles and with this knowledge they can operate with confidence even in situations where many factors are unknown or unclear (Boyatzis & McKee, 2005). Building signature or unique strengths increases the sense of self-efficacy as leaders assess themselves as more capable and able to act in tough situations (Seligman, 2011).

The most important contribution that self-awareness makes to leadership resilience is the influence of the levels of self-efficacy. Self-efficacy is defined as the belief of a person to act decisively in tough situations and produce positive outcomes. This is critical in situations where leaders are required to act with courage and maintain a positive attitude in a time of crisis. Self-efficacy is listed by many authors as a pillar in resilience (Siebert, 2005; Kotter, 2007; Everly et al., 2010; McCann & Selsky, 2012; Graham, 2013).

The self-efficacy of leaders are developed through a number of factors such as belief systems that are developed during childhood, access to verbal reinforcement and encouragement as well as successful performances under pressure (Patterson, Goens & Reed, 2009). Leaders who understand these factors seek feedback from others in order to develop an accurate assessment of strengths and weaknesses. They also seek out challenges and remain commited to achieve set goals to develop greater confidence.

A leader who pays attention to their internal emotional responses and consciously takes responsibility for his/her choices, increases the levels of their internal locus of control. Internal locus of control means that the leader believes that he/she is able to control or influence events that affect them. Leaders who increase their experience of conscious choice as opposed to reactive decisions develop an increased sense of control and self-efficacy. Disruptive change will affect leaders

and whether they grow or diminish will be determined by the leader's choice (Siebert, 2005).

Self-awareness also contributes to leadership resilience by emphasising critical emotional information for the leader. This emotional information serves as an early warning system for increased levels of stress that, if left unmanaged, would result in dysfunctional behaviour. Leaders who are able to notice the physical and emotional impact of situations, pressures or demands are in a better position to manage their well-being and develop adpative strategies to stress. Southwick and Charney (2013) explain resilience as the ability to modulate and constructively deal with stress responses based on a biological perspective. Without self-awareness, leaders do not recognise the emotions or physiological responses associated with stress.

Self-awareness creates the platform for the second EI compentency namely, self-management or self regulation. Frankl (1992) refers to the ability to slow oneself down *in-the-moment* to recognise the choices that a situation presents. Self regulation prevents one from impulsively reacting in difficult situations and promotes concious choices that are not driven by negative thoughts and emotions. An in-the-moment perspective supports resilient behaviours by giving the brain time to think rationally in situations that can be emotionally volatile (Lock, 2014).

Collins and Hansen (2011) emphasise the essence of self-discipline as leaders being consistent with values, long-term goals and performance standards. They define discipline as an independent mind that is able to reject the pressure to conform in ways not aligned to the leader's values, standards or aspirations.

To view the world as complex and filled with both challenges and opportunities requires a handle on disruptive emotions associated with stress that could create single mindedness. Negative emotions increase the physiological stress response, narrow our focus of attention and restrict high-level thinking. Self-management assists leaders to regulate negativity and fear by deliberately directing thoughts towards optimism and a positive attitude (Southwick & Charney, 2013). This

requires one to be aware of one's internal emotional responses and regulate these emotions in order to achieve a desirable outcome (Lock, 2014).

Leaders who leave negative emotions unchecked compromise their ability to think clearly and to act in a rational manner. Repeated thought patterns create mental traps like blaming others and this supports a non-resilient victim mentality (Siebert, 2005). Neuroscience research demonstrates that if a person regulates their own mood, brain activity increases in the prefrontal cortex, a centre responsible for rational thought including problem solving and planning (Southwick & Charney, 2013). An open mind and adaptability are necessary to reappraise and reinterpret adverse events and generate positive possibility and action.

Leaders have a choice to remain active in searcing for alternatives if existing operations and strategies do not deliver results. Being proactive includes efforts to attract the required resources through creativity and innovation (Conner, 1992). The ability to mobilise the appropriate resources implies that the leader has the appropriate relationships and networks of collaboration in place. Social awareness as a precursor to high quality relationships is the third emotional intelligence capability. Social awareness deals with the competencies of empathy and organisational awareness.

Empathy is the practice of connecting with others, making sense of their experiences and communicating a shared understanding of the meaning of experiences. The more skilled leaders are in recognising and understanding their own emotions, the more they can be attuned to the experience of others (Graham, 2013). Being able to demonstrate understanding and acceptance in relation to the experiences of others, expands leaders' awareness of possible resources. Empathy makes constructive relationships more possible and being attuned to others enables leaders to face tough times with creativity and resilience (McKee et al., 2008).

In order for leaders to maintain stability and consistency during the challenge of change, they need attunement with others to sense the emotional climate and mood of the team or organisation. Empathy influences leaders to become interested in the perspectives and concerns of others. This source of information supports effective

decision-making by the leader. Patterson et al. (2009) refer to truly resilient leaders as leaders who demonstrate the ability to assess and react to feelings in a situation while cooperatively building strategies to move forward in a positive direction.

In turbulent environments fear, anxiety and doubt are common emotions that influence the performance of teams. Leaders who are able to recognise and accurately read the emotions of others need to demonstrate their understanding through their actions. Leaders who are better able to motivate and influence others in their actions, demonstrate understanding and care. McKee et al. (2008) define compassion as empathy and care of others in action. Leaders, who demonstrate compassion, generate social capital as a resource in the workplace that influences engagement, teamwork and collaborative networks.

Relationships and networks represent a major variable in the complexity and dynamics of change and adverse situations. Organisational awareness contributes to the leader's understanding of dynamics, influences and power relationships within a system. Leaders with a clear map of stakeholder relationships are in a better position to leverage the resources, strengths and interdependencies within a network. These networks and connectivity represent the landscape of organisational life. New opportunities or challenges emerge because of the high levels of connectivity among internal and external stakeholders.

Successful social awareness, together with high levels of self-management makes it possible for leaders to be more effective in driving powerful relationships and partnerships. This represents the fourth emotional intelligence capability namely, management of relationships. Leaders need to be able to establish the platforms and infrastructure to make interaction and collaboration possible (McCann & Selsky, 2012).

Successful organisations have leaders who drive a collaborative culture with the intention to unlock employee engagement and learning. They invest in customer interface that increases the detection and understanding of changing needs and an improved responsiveness to customer demands and lastly, effective leaders

establish networks of partnerships that propels a powerful innovation drive (IBM Global Business Services, 2012).

Collaboration, networks and increased connectivity do not automatically contribute to resilience and agility in an organisation. Intensified levels of engagement can increase complexity due to information bombardment and hyper-connectivity. Leaders are responsible to set and manage the boundaries and interface among stakeholders in a manner that generates exchange of knowledge, promotes learning and operates in a flexible manner. When opportunities suddenly emerge or organisations have to recover from major market upsets, reliable networks contribute to the agility and resilience of the organisation (McCann & Selsky, 2012).

In summary, the VUCA Model (volatility, uncertainty, complexity and ambiguity) cannot be eliminated by any instrument as it is created by external factors. Leaders have the responsibility to mitigate the impact of these elements so that teams can remain functional as they represent contextual factors, which if unmitigated can result in the demise of organisations. The leadership in the organisation is the only organisational agent to mitigate the impact of the VUCA world. The leader influences how this environment is perceived and reacted upon and this requires resilience to cope with the demands of the external and internal environment and to influence employees and systems positively.

The above discussion reveals some of the outstanding characteristics of leaders who demonstrate resilience. These characteristics include choosing to grow during adverse situations, practising optimism, maintaining a value-driven orientation and trust, remaining emotionally self-aware and nurturing constructive relationships across boundaries. Conner (2013) refers to these characteristics as the five muscles for change. These capabilities provide the building blocks for leadership resilience and as the analogy of the muscle suggests, these abilities can strengthen through practice but can also become depleted by fatigue or a lack of practice.

2.9   CHANGING LEVELS OF LEADERSHIP RESILIENCE

As indicated in the previous sections, the VUCA environment is demanding and affects even the most resilient, competent and talented leader. The effort to sustain effective leadership can be difficult as leaders can inevitably face reduced levels of resilience and energy due to unrelenting pressures. Resilience is an elastic capability and anyone can become more resilient though discipline and practice. Many researchers believe that resilience can be strengthened, as it is not a hard-wired personality trait but rather the capacity for positive adjustment in adverse situations (Keye & Pidgeon, 2013; Southwick & Charney, 2013). The opposite is also true, as resilience is not a fixed characteristic, it can also diminish due to stress and pressure (Patterson, Goens & Reed, 2009).

This section explores the changes in the levels of leadership resilience due to high levels of unmanaged stress. Based on a Grant Thornton survey in 2013 involving 12 000 business leaders in 40 different economies, South African business executives rated as the most stressed people in the world. Typically, South African executives take fewer holidays than their European and Asia counterparts which point to leaders who make little effort to rest and refuel, resulting in an exhuasted leadership cadre (Redelinghuys, 2013). In a global study by Bloomberg, including 74 countries, South Africa is rated as the second most stressed nation in the world. South African statistics, including the second highest divorce rate in the world and a high incidence of coronary disease, seem to support the findings of high levels of stress in the workplace (Chivere, 2016).

Figure 2.3 shows the result of a British study conducted by Sarah Bond and Gillian Shappiro (authors of Tough at the Top) with regard to factors that deplete the resilience capabilities of employees. The study identified that stress related to managing difficult relationships represents the most draining factor on resilience (Ovans, 2005). This is significant considering the increasing importance of networking, collaboration, partnerships and managing daily stakeholder relationships within the new leadership profile.

Figure 2.3: Factors that drain resilience in the workplace

WHAT'S THE BIGGEST DRAIN ON RESILIENCE AT WORK?
Survey responses from 835 British employees.
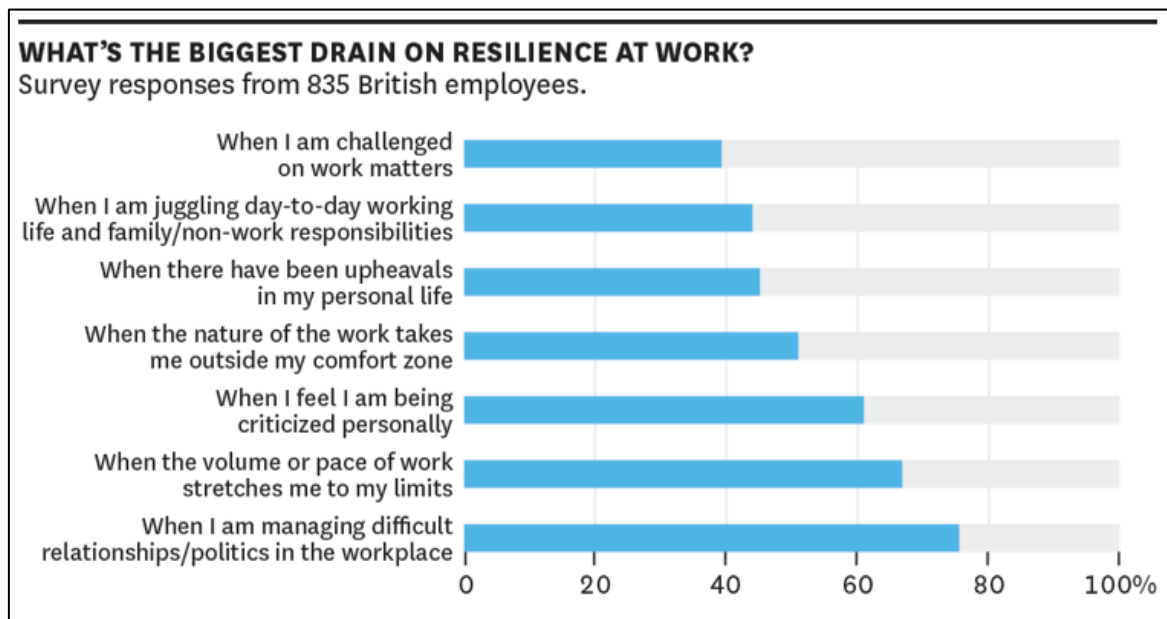
Source: Ovans (2005)

Purpose, meaning and core values have also become major sources of inner conflict and stress that drain the resilience reserves of leaders and break down important relationships. Lock (2014) concluded a study into the meaning and purpose of leadership: 95% of executives identify family as the major source of purpose and meaning; 74% of leaders list family as the most important priority in their lives as opposed to 42%, rating workplace achievement as a priority.

The behaviour, habits and routines of leaders show something different as most leaders report neglecting their family time because of workplace demands. Managers describe the search for a balanced life as an elusive goal. In the age of permanent electronic connectivity, technology and economic instability create a situation for leaders to be permanently available and ready to deal with business needs (Redelinghuys, 2013). This ambivalence places an additional burden on the well-being of leaders who are unable to balance their personal lives with workplace demands.

The impact of pervasive and continued stress among leaders is well presented in the work of Sternberg (2001) through her ground-breaking research that shows the

link between emotion and the human physiology. She demonstrates the consequence of prolonged exposure to stress hormones such as adrenal and cortisol on the human sytem. Toffler (1970) refers to a chain of biological events that are linked to our adaptive responses to shock, surprise and change.

Initially, leaders can take advantage of the stress response in terms of rapid decision-making and high performance under pressure. The presence of stress hormones can be measured in saliva three minutes after a stressful event. In a high pressured situation, leaders can rapidly asess the situation, measure the risks, prioritise and determine manageable work units which lead to a sense of control followed by a reduction in stress hormones.

If leaders are unable to re-establish a sense of control and coherence, the release of stress hormones and chemicals continue in the body. Peak performance is replaced by diminished performance which re-ignites the cycle of stress responses. As stress becomes a chronic condition, immune cells are affected by the biological environment that is created by the stress hormones. The production of new immune cells are also undermined by the environment and the immune system becomes less able to respond effectively to illness or infections (Toffler, 1970; Sternberg, 2001).

Following the work of Sternberg (2001), one can conclude that leaders who continue with a pattern of perpetual stress and self sacrifice will inevitably lead to exhuastion, burn out, career derailment, physical decline, psychological vulnerability and premature death.

Over and above the personal impact described above, the reduced levels of leadership resilience also jeopardise the well-being of the leader's team or organisation, bearing in mind the contagious nature of emotions. Boyatzi and McKee (2005) present the phenomena of emotional contagion among leaders and their teams as an important element that resilient leaders manage consistently. Research shows the powerful impact of the underlying emotional tone of the leader on their teams as the leader's emotions and related behaviours trigger similar emotions in

others. The non-verbal behaviours of the leader will have the greatest impact on the process, mirroring emotions.

When leaders are not aware of their own emotional state, the negative emotions associated with stress will become the predominant mood in the team. Unfortunately, negative emotions are more contagious and persistent than positive emotions within teams. Stressed leaders also pass the pressure and stress down the chain of command through direct communciation and demands. The outcome of this latent and manifested transfer of disruptive emotions is ineffective leadership and dissension in the organisation.

It is important to discuss the contribution of self-renewal in developing protective factors that safeguard the delicate balance between strengthened resilience as opposed to diminished resilience. In order to maintain effective leadership, the balance needs to be tipped towards strengthened resilience.

The cycle of sacrifice and renewal by Boyatzis and McKee (2005) demonstrates the value of self-renewal as the strategic switch between sustainable effective leadership and the possibility of ineffective leadership.

Figure 2.4: Cycle of sacrifice and renewal
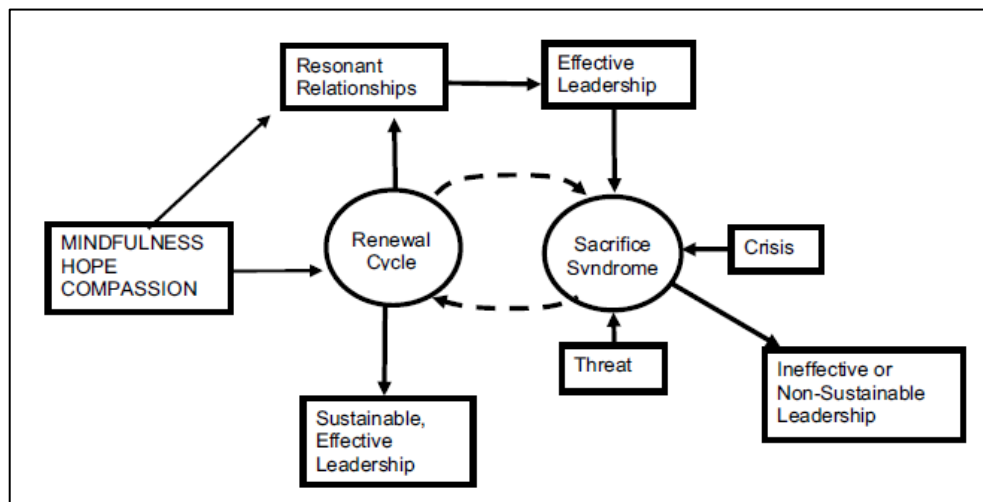
Source: Boyatzis and McKee (2005, p. 21)

Leaders have a personal responsibility to remain effective and resilient in their leadership, regardless of the high levels of pressure and stress and self-renewal practices represent a possible path for leaders to explore.

2.10 THE CONCEPT OF SELF-RENEWAL

Self-renewal refers to the intentional efforts of people and in the case of this study, leaders to create periodically, an internal environment characterised by calm and relaxation within the continuous mental state of arousal and alertness. Renewal is the counter measure to becoming trapped by fixed habits, opinions and behaviours (Covey, 1989; Sternberg, 2001; Brown & Ryan, 2003).

Gardner (1995) suggests that stress and pressure are not the only factors highlighting the importance of self-renewal. Leaders also need to engage in self-renewal practices during periods when they experience success and excellence in order to avoid developing a rigid mental state characterised by limited thinking (Gardner, 1995). Renewal therefore involves a frequent process of reflection, learning and growth that individuals, organisations and societies require throughout their cycle of life. Reflective practices drive self-knowledge and self-managed learning overcomes barriers and builds bridges to the future. This type of learning

allows leaders to develop unique resiliency strengths and skills (Siebert, 2005) and by remaining aware, reflective, open to learning and willing to change, the process of renewal ensures that the leader remains relevant and significant within a changing world (Reeves & Deimler, 2015).

Stephen Covey (1989), renowned for his book *7 Habits of Highly Effective People*, refers to a process of balanced self-renewal in order to sustain excellence, effectiveness and performance. Balanced self-renewal is the 7th habit and he calls this habit *sharpening the saw*. Renewal is defined as a process of preserving and enhancing one's greatest asset, namely the self. Preservation means to take care, maintain or protect various aspects of oneself including physical well-being, emotional stability, spiritual growth and mental development. Self-renewal creates the environment for personal effectiveness.

In summary, self-renewal is a repeated process of intentional change or adjustment fueled by one's awareness of one's level of internal well-being, energy and balance and is aimed at replenishing or strengthening resilient qualities and protective factors.

2.10.1 Self-renewal and mindfulness

Mindfulness is commonly understood as a particular way of paying attention in the present moment without judgment or evaluation. Mindfulness is characterised by an open and receptive awareness (Brown & Ryan, 2003). It implies a different level of consciousness about thoughts, motives and emotions as well as sensory and perceptual stimuli. It adds clarity and vividness to experiences which can guide and shape intentional actions towards new habits or thoughts. Brown and Ryan (2003) introduce two elements of consciousness, namely awareness and attention. Awareness refers to the process of continually scanning the internal and external environment without focusing on any particular element. During the scanning, a person notices background images and/or sensations. Attention is the deliberate focus on selected items with increased sensitivity. Awareness and attention work in tandem, allowing the person to scan the environment and bring into focus what is important at a given point in time.

The relevance of mindfulness to self-renewal is described in different ways by various authors. According to Boyatzis and McKee (2005), mindfulness or acute awarness is a pre-requisite in the renewal cycle as mindfulness enables the leader to pay attention to his/her own well-being and needs. In creating a state of awareness, the person is able to tap into internal resources of calmness and inspiration. This emotional state represents the most suitable conditions for the leader to rationally assess a situation and respond in a resilient manner. As indicated, mindfulness implies a deliberate process of remaining aware and intentionally choosing where to focus attention. The intentional approach to awareness and attention allows leaders to step back from the experience in the moment and use a wider field of awareness to view the elements, emotions and outcomes of the situation (Brown & Ryan, 2003).

Keye and Pidgoen (2013) present mindfulness as a protective factor of resilience that enhances the adaptive capacity of a person. During adverse circumstances mindfulness ensures self-regulation of attention towards the present moment. Thoughts and emotions are observed but not expanded or evaluated which prevents the grip of negative emotions. By reducing levels of anxiety, mindfulness contributes to an open mindedness to face the process of necessary change with more flexibility and tolerance. This openness provides a receptiveness for new ideas and experiences, which in turn stimulate learning and reflection (Graham, 2013). Therefore, mindfulness creates a readiness for self-renewal.

Many authors refer to mindfulness as the single most effective strategy for renewing physical, mental, emotional and spiritual energy (Conner, 1992; Covey, 1989; Goleman, 2000; McKee et al., 2008; Rock et al., 2012). Hence, mindfulness does not only create a readiness for renewal, but practices associated with mindfulness such as meditation, guided relaxation and breathing techniques also help replenish energy and rebuild resilience. Mindfulness is therefore an important factor in personal growth, and this is illustrated in the next section.

2.10.2 Self-renewal and personal growth

Renewal drives an intrinsic motivation for continuous learning and personal development that are required in a fast changing world (Gardner, 1995). A lack of renewal stunts development and leads to rigidity. The risk of rigidity increases with age, experience and complexity when people use the same strategies to deal with challenges. As people become progressively more narrow-minded and less inclined to explore new options, the rigidity becomes the major constraint in navigating tough situations. As a result, many people become stuck and unwilling to engage in opportunities to develop new viewpoints, potential and capabilities (Gardner, 1995).

Leaders who have become stuck in rigid mental models and trapped within the comfort of their own habits, opinions and thinking patterns, become obstacles within organisations where adaptability, agility and innovation are valued capabilities. To succeed, leaders need to be flexible and renew their knowledge by engaging in an ever increasing learning curve. As an essential part of self-renewal, effective leaders explore and develop new capabilities (De Vries et al., 2009).

Leaders who are intent on self-renewal integrate reflection, learning and personal growth within their daily routines. They consistently challenge their own thinking patterns, assumptions and habits to avoid rigidity and restrictive decisions. Renewal ensures that leaders explore opportunities to grow and develop in a proactive manner, instead of developing new capabilities only as and when new or difficult situations emerge (Gardner, 1995).

The deliberate creation of internal coherence (sense making) and the continuous commitment to learning and change are not possible without replenishing internal motivation and energy. Flach's theory of resiliency (presented in Figure 2.5) clarifies the prominent position of energy and resourcefulness to maintain current levels of resilience as well as increase protective factors to strengthen existing levels of resilience (Richardson, 2002). The theory is based on the Law of Disruption and the process of reintegration.

He suggests that the act of falling apart or being distressed by change is a valuable occurrence in life in order to develop coping capabilities. During disruption and distress, individuals look within themselves, adapt to meet new challenges and discover new coping mechanisms (Richardson, 2002).

Figure 2.5: The Resiliency Model
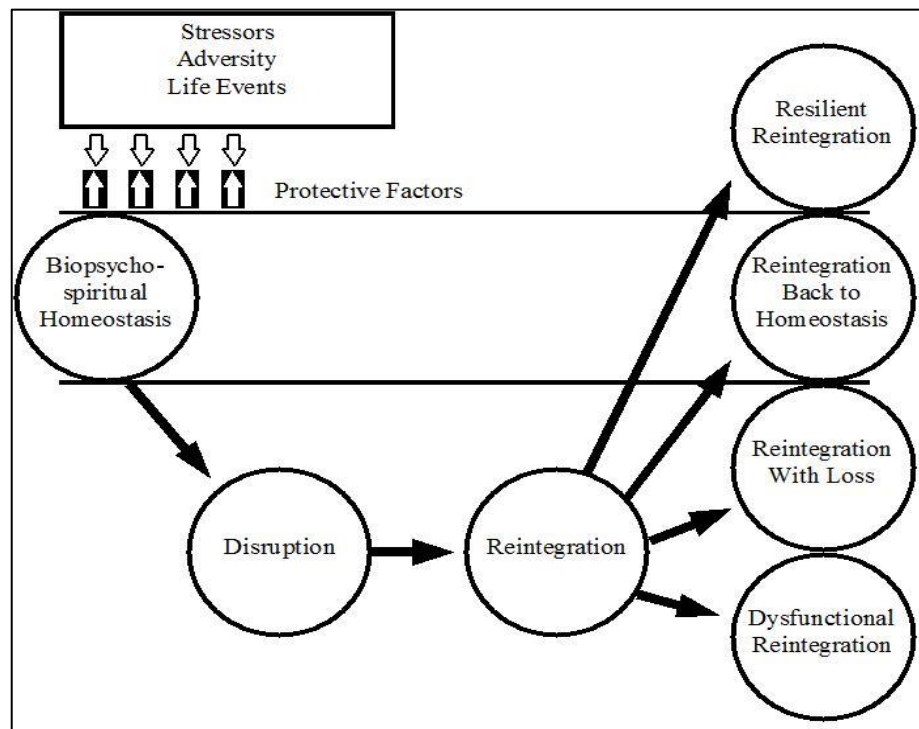
Source: Richardson (2002, p. 311)

The process of reintegration involves re-formulating one's view of the world. Each person has a unique experience and a time frame for reintegration. Each event of change and distress can therefore be an opportunity to strengthen resilience. The Resiliency Model demonstrates four possible reintegration outcomes that can be a deliberate choice or an unconscious response to a planned disruption or unexpected life event. The challenge during reintegration is to establish a sense of balance or homeostasis where all dimensions of the mind, body and spirit (the holistic self) are adapted to the new situation.

Resilient reintegration is the preferred outcome as it includes growth, increased self understanding, new knoweldge and insights. This option is more possible for people

who pay attention to growing resilience protective factors such as optimism as well as those preserving their internal resources and energy (Grotberg, 2003).

Resilient reintegration puts additional resilient capabilities and protective factors into the system. It provides future opporunities for renewal, adaptation and growth, based on lessons learnt during the experience. Simultaneously, routine and intentional self-renewal ensures that leaders have sufficient energy and motivation to choose resilient reintegration as an option.

Resilient reintegration is an objective that all leaders can achieve through deliberate effort in terms of learning and personal growth. Limitations in terms of cognitive or behavioural capabilities, old habits and unhelpful belief systems can cause frustrating obstacles for leaders during the integration process. The field of neuroscience offers an opportunity for leaders to recognise their potential in developing new neural pathways regardless of the previous mental constraints.

2.10.3 Self-renewal and Neuroscience

The neurological origin of resilience supports the idea of a person taking personal responsibility for self-renewal strategies as part of self-development and for purposes of maintaining resilience. Neuroscience indicates that resilience can be developed through two distinct processes, namely conditioning and neuroplasticity. Conditioning refers to a process through which neural circuits are developed through repeated experiences. These experiences can be either positive or negative for example, continuously using disciplined breathing techniques when confronted with high levels of anxiety can condition a person into remaining calm as opposed to feeling panic as a first response (Graham, 2013).

Neuroplasticity refers to the ability of the brain to remain flexible and create new neural circuits that differ from the original conditioning. This implies that people are able to develop new coping strategies throughout their lives through learning and practicing new habits. Jeffrey Schwartz coined the ability to rewire the brain, in other words create new and preferred neural paths through a self-directed process, as neuroplasticity. The implication is that it is necessary to carefully choose

experiences and focus attention on activities that will create new neural structures and rewire old pathways. Two practices that are powerful catalysts for rewiring the brain are mindfulness and empathy (Graham, 2013).

Therefore, leaders can build their resilience by being mindful of their cognitive habits, change their thinking patterns from negative to positive and, at the same time, respond to others in a more empathetic manner. However, to condition oneself into a positive frame of mind and build resilience, one needs to practice new and positive habits on a continuous basis through adopting appropriate strategies. This is the essence of the next discussion.

2.11 STRATEGIES FOR SELF-RENEWAL

Loehr and Schwartz (2003) indicate that nature exhibits a pulse or rhythm between activity and rest. Humans also follow a particular rhythm and to maximize human performance, one needs to alternate periods of activity with periods of rest. This concept of alternating activity with rest was evidently already applied from A.D. 170 to 245 with the training of Greek athletes and is still relevant today in the training of Olympic athletes. To excel during periods of change, chaos and ambiguity, leaders have to compartmentalise their work life into a series of manageable intervals of work and rest that are consistent with their physiological needs. Self-renewal strategies are aimed at creating a rhythm for leaders by balancing work and rest in order to increase their performance. Leaders, who understand when rest and recovery are necessary to balance high stress experiences, are able to maintain their internal resources and resilience (Southwick & Charney, 2013).

Strategies of self-renewal are directed at replenishing internal resources or energy to remain fully engaged, resourceful and in a positive emotional state. The field of performance psychology and specifically research done by Loehr (Loehr & Schwartz, 2003) confirm that the availability of sufficient internal energy resources are essential to resilience. Dr Loehr is a performance psychologist, who has supported many world class athletes to maintain consistently high performances in tough competitive environments. Based on his research and experience, he identified full engagement as an important key to resilience. Full engagement relies

on the availability and management of four key energy sources namely physical, emotional, mental and spiritual energy.

The management of these sources of energy includes balancing the use of energy and renewing one's energy in order to avoid over or under utilisation, challenging one's current limits in order to expand one's capacity and finally practicing routine but positive rituals. Rituals refer to carefully defined, highly structured behaviour practiced with great commitment and without great conscious effort (Loehr & Schwartz, 2003). It is therefore evident that self-renewal is perceived as a process within a person's control and it requires a strategy as well as high levels of personal commitment.

According to Gardner (1995), adjustments or change associated with renewal processes have the most meaning if the result of the change can be aligned to one's purpose. A purpose becomes a powerful source of direction and energy if it moves from a source of external motivation to a source of internal motivation. Extrinsic motivation refers to the desire to attain more of what one does not have, for example money, approval or love. Intrinsic motivation is driven by an internal sense of pleasure, satisfaction and enjoyment and no expectation of an external reward. Individuals with intrinsic motivation are more persistent, creative and confident when completing an activity. Intrinsic motivation drives leaders to explore what really matters and what they have a passion for (Loehr & Schwartz, 2003).

Self-renewal is not only about replenishing depleted resources, but it also involves strengthening existing capabilities or building new ones. Exposing oneself to mental or physical challenges increases one's ability to deal with stressful situations gradually and it is a process referred to as stress inoculation. The principle is to expose oneself to situations that will challenge one's current abilities and fears without creating an unmanageable situation that could be harmful to one (Southwick & Charney, 2013).

Covey (1998) in his book on the habits of highly effective people refers to spiritual, physical, mental and socio-emotional dimensions as four motivations that have to be exercised regularly, consistently and in a balanced way in order to build

resilience. These dimensions are within a person's circle of influence meaning that the person is responsible to initiate and maintain these activities. These dimensions, which are elaborated on below, represent a collection of strategies that people can deliberately engage with in order to maintain and grow resilience.

2.11.1 Spiritual self-renewal

Spiritual renewal includes a number of protective factors such as having a clear purpose, being committed to a well-defined value system, having spiritual routines and practices associated with a higher power as well as exercising creativity and humour. Richardson (2002) identifies spiritual well-being as the most prominent predictor of resilient reintegration following adverse events or change.

Covey (1998) explains that renewing the spiritual dimension implies providing leadership to one's own life. The spiritual dimension refers to one's personal core, which includes commitment to a purpose and a personal value system. George (2015) refers to one's *true north* as the internal compass that guides one through life. This internal compass provides an orientation point of what is most important in terms of purpose, values, passion and inspiration. A well-developed internal compass ensures that the leader behaves consistent with his/her value system during periods of crisis and chaos. However, it is a challenge to maintain a *true north* orientation with increasing pressure, demand and ambiguity in the business environment. Therefore, leaders need to commit to a consistent value system being anchored by values that are clearly constructed, articulated and understood. This assists leaders to remain focused regardless of bombardment by new trends, fads or the latest innovation (Gardner, 1995; Goleman, 2000; Everly et al., 2010).

A threat to the spiritual renewal and well-being of leaders includes being trapped by external sources of motivation such as power, prestige and money. If the purpose of one's leadership is driven exclusively by one's own needs, it will result in viewing others as a means to an end. Consequently, the lack of critical leadership elements such as passion, empathy and compassion will prevent leaders from sustaining the engagement and performance of others. An element of spiritual renewal is defining the purpose of one's leadership that relates to something bigger than oneself and

this will provide an anchor to remain focused and on-course during tough times (George, 2015).

Studies by Dana Dunn in 1994 show that mental and physical predictors of resilient reintegration fade in comparison to the powerful contribution of spiritual well-being and energy. Spiritual well-being includes purpose of life, locus of control, spiritual practices and beliefs associated with a higher power, creativity and humor (Richardson, 2002).

The sources of inspiration and spiritual renewal practices are as diverse as the value systems of people who are unique. Sources of inspiration and activities include prayer, meditation, powerful music, scripture and exploring the greatness of nature. In turn, these activities associated with spiritual renewal become a source of power that releases energy to help leaders tackle difficult conditions.

2.11.2 Physical self-renewal

In dealing with the disorientation and physiological impact of operating at the high end of one's adaptive range, Toffler (1970) suggests tuning out of the external environment to make an objective appraisal of one's internal world. Physical symptoms such as heart palpitations, insomnia, poor digestion, unexplained fatigue and many other physical symptoms are physical clues to overstimulation. Neglecting the physical dimension will ultimately result in stress related diseases and leaders who operate in a high stress environment will be more prone to manifest such physical problems.

The physical dimension involves caring effectively for the physical body, including eating healthy foods, drinking sufficient water, getting sufficient rest and exercising on a regular basis. Physical well-being protects one against the negative effects of stress and promotes resilience through a number of neurobiological mechanisms. For example, physical wellness boosts the levels of endomorphism and neurotransmitters such as dopamine and serotonin that may elevate mood and suppress the release of the stress hormone cortisol (Southwick & Charney, 2013).

Managing one's physical fitness and energy enables a leader to recuperate from stressful situations much faster (Lucy et al., 2014). Compulsory monthly health assessments related to fitness levels, weight management and basic vital health could be used as a basis to encourage self-renewal. Physical renewal is not only relevant for the leader's own health and well-being, but leading by example has a positive impact on the outcomes of employee wellness programmes as well.

In 2010, Discovery Health launched a project called the *Healthiest Company Index* to encourage employer health promotion programmes (Discovery Health, 2016). During 2014, 151 companies registered for the competition and the relevant health related information was collected via surveys. Companies such as Vital Health Foods, Open Box Software, Hatch Goba, OUTsurance and Johnson Matthey (SA) received rewards for achieving the highest company health index and implementing facilities and services to improve employee health. The survey results confirmed that stress, high blood pressure and cholesterol were the most prevalent health concerns. The top three risk factors were poor eating habits, inattention to proactive medical screening and insufficient physical exercise (Discovery Health, 2016).

2.11.3 Cognitive self-renewal

Leaders find that their skills become rapidly obsolete as the business landscape and demands change and hence they find themselves consistently in situations that require a renewal of their knowledge and capabilities (Boyatzis & McKee, 2005; Horney et al., 2010). Mental or cognitive renewal focus on creating conditions that ensure an alert and creative mind that is open to new experiences, insights and mental models. Rock et al. (2012) identify time-linked activities that have beneficial effects for the brain including sufficient sleep time, down time, time for reflective practice, connecting time, physical time and focus time. Although these activities contribute to the renewal processes in the other dimensions as well, each activity makes a significant contribution to cognitive well-being.

Dweck (2006), a world-leading researcher in the field of developmental psychology, investigated factors that predict motivation and achievement in the performance of students. She concluded that students, who believe that intelligence can be

developed through hard work and effort were more likely to embrace challenge, persist through setbacks and understand that effort and hard work determine success. She coined this disposition as displaying a growth mind set as opposed to a fixed mind set. A growth mind set is characterised by an openness to learning and a willingness to engage in novel situations. Someone who is willing to learn must experiment with new strategies and seek the help of others when they are stuck (Dweck, 2006). A precondition for self-leadership in cognitive renewal is a growth mind set as it offers a relevant framework for remaining engaged in a continuous process of learning. A fixed mind set is a powerful barrier that keeps leaders stuck in their current knowledge and capabilities.

Mental development is mostly linked to formal education and study and once people enter the workplace, further education and development are driven by the company agenda. Leaders seldom initiate and drive a learning agenda beyond their own area of expertise or the development agenda of the company. Leaders seldom engage consistently in activities to grow mental alertness, analytical thinking and concise writing. Time constraints and a lack of self motivation prevent people from exploring new subjects or areas of interest beyond the workplace (Covey, 1989).

Southwick and Charney (2013) identified the importance of seeking increasingly difficult challenges for self-renewal. This path includes expanding the mind through new topics and experiences. Mental renewal includes the habit of reading carefully selected literature, subscribing to journals of interest, enrolling in a formal coaching relationship and engaging in the mentoring of others. Activities that broaden available mental models or paradigms assist leaders in opening their minds and minimising thinking traps when dealing with dilemmas and complex problems.

An aspect of cognitive renewal is the idea of downtime that refers to spontaneous, in-the-moment activities that are not associated with any goals. It is a period where a person intentionally has no objective expect for being open to emerging ideas and activities. This particular mental state creates a platform for new insights as the mind deliberately disconnects from any pre-set direction. Research suggests that integration among complex variables and ambiguous elements are more likely during periods of disengagement, which in turn supports complex decision-making.

Most leaders find it challenging to identify and use opportunities for downtime in the middle of deadlines, during moments of crisis and when compiling quarterly reports (Rock et al., 2012).

An important source of mental renewal is learning from day-to-day events and experiences. It involves reflective practice and journaling at regular intervals so that leaders can interrogate their thoughts, experiences, insights and lessons. This process of learning promotes mental clarity, exactness and context (Covey, 1989). It provides an opportunity to identify persistent challenges as well as knowledge and skill gaps that can inform the leader's development agenda (Gardner, 1995).

Cognitive self-renewal ensures that leaders remain relevant and confident to deal with increasingly complex situations. Part of understanding the high levels of complexity and volatility, is also recognising that leaders are not able to manage all these interdependencies on their own. The importance of engaging with others is not only fundamental in terms of creating a culture of life-long learning but also represents an irreplaceable mechanism of social support.

2.11.4 Socio-emotional self-renewal

Leaders who are able to remain resilient have a wide network of friends and colleagues to provide support to them and to get things done. This network benefits as much from giving support to others as they gain by receiving support from others (Lucy et al., 2014). The ability of a leader to establish and maintain positive relationships determines the quality of his/her social network and supportive relationships.

Engagement with others have a number of psychological benefits for leaders, which include increased levels of self-confidence and the creation of a safety net for trying new things and dealing with failures. The psychological well-being of leaders sustains them during tough situations (Southwick & Charney, 2013).

Social connectivity is a basic human need and social support is a precursor to emotional, mental and physical well-being. The quality of social relationships and

the perception of available social support, buffer the negative effects of stress by creating a sense of safety and belonging. The extent, to which people engage actively in social activities and embrace social roles, influences their long-term health (Rock et al., 2012).

Therefore, social support networks do not only support the psychological strength of leaders but also reduce their biological response to stress. Social interaction increases the secretion of oxytocin that is known to reduce anxiety and fear. Oxytocin also promotes affiliative behaviours such as trust (Goleman, 1995) and this is the same neural circuit associated with hope and compassion.

Ironically, as leaders climb the corporate ladder the quality of personal connections and networks for support are reduced and a sense of isolation increases. McKee et al. (2008) refer to this phenomenon as the CEO disease. Leaders become detached from close relationships and social support due to increased work responsibilities and pressures. A consequence of this isolation is that senior leaders have less access to honest feedback and opinions with regard to their leadership performance. This performance blindness limits the possibility of personal growth. The isolation also reduces access to social support during stressful times.

A second challenge with regard to the socio-emotional well-being of leaders is the fact that people live in an age of connectivity and social technology that creates the impression of extended social networks. The depth and intimacy of these relationships may not be sufficient to drive the physical and mental health benefits that resilient leaders require as it contributes to a superficial sense of belonging and connectivity.

Renewal activities associated with social-emotional well-being include practicing challenging communication skills, for example motivational speaking or mediating complex conflict situations. It also includes working towards positive relationships, for example by committing to quality time with family and friends, participating in a formal coaching relationship, committing time to charity work or joining a social group to engage in recreational activities or pursue common interests (Southwick & Charney, 2013). These activities can also contribute to leadership abilities such as

interpersonal relationships, emphatic communication and driving collaboration in the workplace (Covey, 1989).

In conclusion, the four motivations of self-renewal is a complex system of interdependencies. A holistic approach to renewal recognises that all dimensions are interrelated and the process requires a balance. If any of the dimensions are neglected, it will impact negatively on the remaining dimensions. The converse is also true, the dimensions for self-renewal are synergetic in nature and growth in one area creates an opportunity for growth and expansion in another dimension. By renewing one's physical health, a person reinforces self-discipline and creates the platform for resilience.

2.12 CONCLUSION

The literature review presents a clear understanding of the turbulent context within which organisations operate. This context is defined by the acronym VUCA that identifies the main features of the turbulent environment as volatile, uncertain, complex and ambiguous. The pace of change, as well as the disruptive nature of change is the main theme within the VUCA context. An interesting aspect is that some organisations manage to thrive and grow within this unpredictable landscape whilst others do not. Upon investigation it becomes clear that organisations that continue to achieve exceptional results develop adaptability capacities that allow them to be highly responsive to organisational opportunities and challenges. Central to the responsiveness is the ability to learn faster than others can.

Successful, adaptive organisations are created by leaders who operate with confidence and resilience in a turbulent environment. Resilient leadership is defined as being able to cope well with high levels of continuous disruptive change, sustain good health and energy when under constant pressure, easily bounce back from setbacks and find new ways of working when old ways are no longer possible (Siebert, 2005). Therefore, resilience becomes a fundamental building block for effective leadership, but it is not a fixed characteristic.

As organisational stakeholders expect leaders to drive business performance effectively and with sufficient energy and optimism regardless of the levels of stress and pressure experienced, their resilience capacities are depleted. When faced with continued adverse conditions, leaders become less effective in the process of constructive reintegration. As the resilience capability becomes more depleted, the leader, his/her team as well as the organisation are at risk in terms of achieving their objectives. Self-renewal practices present opportunities for leaders to grow their resilience capabilities. Self-renewal refers to the intentional efforts of people, and in the case of this study, leaders who periodically create an internal environment characterised by calm and relaxation within the continuous mental state of arousal and alertness (Covey, 1989).

Effective leadership is vital and is dependent on sustained levels of leadership resilience, thereby creating great organisations, thriving within turbulence. This understanding promotes an interest to explore the variables that can develop and sustain such leadership. Figure 2.6 provides a schematic overview of the key elements explored during the literature review.

Figure 2.6: Overview of literature
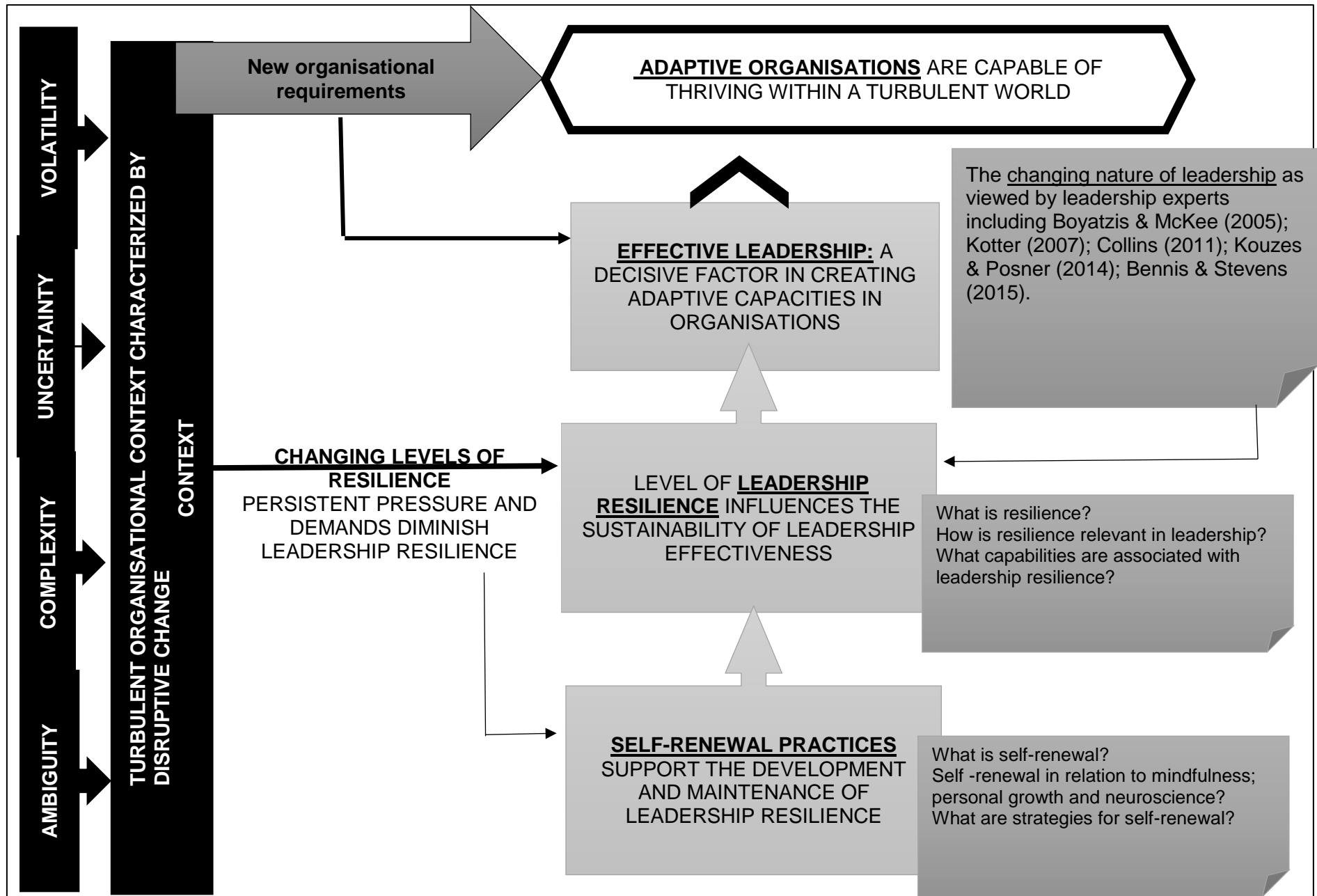
CHAPTER THREE: RESEARCH DESIGN AND METHODOLOGY

3.1   INTRODUCTION

This chapter covers the methodology used during the study. Research methodology represents the blueprint of how, what and when data is collected and analysed to ensure that valid results are available for the study (Mouton, 1996). Decisions with regard to the research methodology include descriptions of the target population, sampling, data collection procedures and instruments as well as an explanation of the statistical analysis during the study.

The purpose of the study was to explore the relationship between levels of resilience and self-renewal practices. Chapter two presents an overview of the leadership context, the nature of resilience and self-renewal practices. The importance of leadership resilience and self-renewal practices must be seen in the changing context within which leaders operate, which is characterised by turbulence and change. Leaders are responsible to plan, make decisions and lead people in a very complex and volatile environment that will not only push them to the limit but also challenge the adaptive capabilities of those that look up to them for direction and guidance. Resilience has therefore become an essential leadership attribute. This study can possibly inform leadership development initiatives that are aimed at developing sustained levels of leadership resilience.

3.2   RESEARCH DESIGN

The aim of the study was to determine the relationship between leadership resilience and self-renewal practices. The main problem was converted into theoretical and empirical sub-problems and objectives. A literature study was undertaken to explore the current leadership environment, the nature of resilience and self-renewal practices.

3.3   LITERATURE REVIEW

A literature review is a summary or description of published information, theories and research reports that offers an overview of existing viewpoints and insights with regard to the research topic (Creswell, 2014). The literature review assisted in identifying a framework for leadership resilience and its relationship to self-renewal practices within modern organisations. This framework responded to the information requirements of the first three sub-problems of the study, namely:

- Clarify the complex environment in which leaders operate including the relevance of resilience within this environment.
- Identify and unpack the building blocks of resilience with specific reference to leadership.
- Identify and investigate self-renewal practices that elevate levels of resilience in individuals.

The literature review offered an orientation for the researcher with regard to the necessity of resilience within the leadership context. The VUCA concept that characterises the landscape of organisations as volatile, uncertain, complex and ambiguous sets the stage for examining the role of leaders in guiding organisations through waves of rapid change. The accelerating change curve has changed the profile of leaders as well as the strategic importance of extraordinary leadership that can assist organisations to thrive. Leaders operate within perpetual tough environments that could result in the inability of leaders to remain effective for prolonged periods.

Resilience emerged as an essential leadership capability that can contribute to sustained leadership effectiveness. The literature review revealed fundamental elements of building resilience capacity as well as options for measuring resilience. Opinions, insights and research results relating to the nature and contribution of self-renewal practices in sustaining leadership resilience were also explored and highlighted.

3.4   EMPIRICAL STUDY

An empirical study was conducted, which measured the levels of resilience and self-renewal practices of middle and senior level managers through a survey with a questionnaire as data collecting instrument.

3.4.1   Research paradigm and approach

The empirical study was conducted from a positivistic paradigm that asserts that there is a universal truth to be discovered if adequate data is collected from a meaningful size sample or population (Creswell, 2014).

A quantitative explanatory approach was used to examine the relationship between leadership resilience and self-renewal practices. An explanatory approach is a suitable option for researchers interested in investigating new areas of knowledge and ideas or exploring novel perspectives of existing concepts and the variables within these concepts (Creswell, 2014). Although the role of self-renewal practices in sustaining high levels of leadership resilience have been addressed in literature (Covey, 1989; Gardner, 1995; Drucker, 2001; Maddi, 2002; Boyatzis & McKee, 2005; Siebert, 2005; Kotter, 2012) this study was aimed at exploring the nature of the relationship in more detail, specifically considering the different aspects of leadership resilience as well as the various types of self-renewal practices. This meets the criteria of an explanatory approach in terms of investigating the full nature of a phenomenon in relation to a range of behaviours.

As indicated, a quantitative approach was applied. Data collected was converted into numbers (quantified) to enable a systematic investigation of the relationships amongst the variables. The descriptive statistics such as the frequencies tables and mean scores allow for further statistical analysis such as T-tests, standard deviations (SD) and variance analyses to develop a greater understanding of relationships between variables. For this study, statistical analyses were used to reduce and order the data in a manner for observing the significance of relationships amongst the levels of leadership resilience and self-renewal practices.

3.4.2   Population and sample

The population of a study is defined as the entire group of people who meet the criteria or specifications set by the researcher in the interest of obtaining the information required for the investigation. The researcher should be able to generalise the results of the study to all members within this specified population (Mouton, 1996). The target population for the study included middle and senior level managers operating in the private or public sector who were responsible for leading teams in turbulent environments. As it was impossible to include the whole population in the study, a representative sample of leaders had to be selected (Mouton, 1996).

The target group consisted of middle and senior level managers who were enrolled in formal leadership education programmes or recipients of leadership coaching initiatives at the Leadership Academy of the Nelson Mandela Metropolitan University (NMMU) Business School. The participants in these training programmes and coaching initiatives were managers who were nominated by their respective organisations for further training and development. These training programmes were targeted at a particular level of management and the researcher could ensure that the participants were in middle and senior management positions by selecting the appropriate programmes. All participants in the programmes were included on a database and had access to e-mail.

A sample is a portion or subset of the total population that for the intention of the research represents the total population (Mouton, 1996). The sampling approach represented random sampling and participants were selected from the NMMU leadership academy database. It was therefore possible to identify a well-represented sample in terms of gender and level of management by using the 2015/16 enrolment database.

The aim was to have a sample of 50 managers participating in the data collection process. In order to achieve this target, four hundred and twenty (420) names were randomly selected from the database after the list was coded according to male and female participants. One hundred and seventy five (175) female participants were

selected and two hundred and fifty five (255) male participants were selected. A 12 percent (12%) response rate was required to meet the 50-sample requirement.

3.4.3   Data collection instrument

Data collection refers to the process of obtaining an optimal amount of information to present meaningful analysis and results. Data collection requires instruments that ensure that the correct type of information is collected to achieve the aims of the study (Creswell, 2014). The instrument must be appropriate in relation to the type of information that is required and it must be suitable in terms of the effort it would require of respondents to provide information. For this study, an electronic web-based questionnaire was used to collect information from the target group. This is a cost effective and user-friendly method of collecting information. The questionnaire consisted of 68 questions and took approximately 15 minutes to complete. A Google Survey format was used to ensure simplicity and accuracy in the recording and organising of the data, which in turn provided a good base for efficient processing of the information. The questionnaire consisted of three parts:

Section A: Demographical information (gender, age, level of management and size of team managed).

Section B: Leadership resilience. For this section, an established questionnaire, the Leadership Resilience Profile (LRP-R) (Patterson and Reed, 2009) was used. This questionnaire presented seven categories of resilience namely optimism, value-driven leadership, self-efficacy, strong social support, courageous decision-making, adaptability and perseverance.

Section C: Self-renewal practices. This section was self-developed based on four dimensions of self-renewal namely physical, spiritual, cognitive and socio-emotional renewal practices, as revealed in the literature study.

The questionnaire was designed to provide sufficient information in exploring the following research sub-aims:

- Explore the levels of resilience in leaders in terms of the categories of resilience which include optimism, value-driven leadership, self-efficacy, courageous decision-making, strong social support, adaptability and perseverance.

- Explore the extent to which leaders engage in self-renewal practices with regard to four self-renewal dimensions namely physical, spiritual, cognitive and socio-emotional self-renewal.

- Determine whether there is a link between levels of resilience (low versus high) in leaders and their engagement in self-renewal practices.

- Draw conclusions about which self-renewal practices are most likely to increase the levels of resilience in leaders.

- Describe the correlation and relationships among the categories of resilience that are used to measure resilience.

- Describe the correlation and relationships among the four dimensions included in self-renewal practices.

- Examine the correlation and relationships between the categories of resilience and the dimensions of self-renewal practices.

- Identify whether differences exist in resilience and self-renewal practices based on selected demographical variables namely gender, age and level of management.

Two decades of research suggest that resilience can be measured and that people can increase their levels of resilience through experiences and learning. Resilience measurement tools are often associated with psychological studies aimed at understanding the coping probabilities of vulnerable youth, aging adults and people who have survived major trauma such as soldiers facing war situations. The instruments typically include resilience scales such as hardiness, mental toughness, determination, self-efficacy and optimism (Seligman, 2011).

As the study focused on a particular aspect of resilience namely, leadership resilience, the researcher selected an existing questionnaire with documented reports of validity and reliability. The content validity of the questionnaire was established through an expert panel review process that included review comments

from 67 selected experts with regard to the applicability of the items as an indicator of leadership resilience. Questionnaire items that achieved an eighty percent or higher consensus from the expert panel were included in the final Leadership Resilience Profile.

The reliability of the questionnaire was tested in terms of both internal consistency and stability over time. A test round including 43 educational leaders achieved the coefficient alpha of at least 0.7 for eight of the twelve subscales. The remaining subscales achieved a coefficient ranging from 0.6349 to 0.6993. With regard to the stability of the instrument over time, the design process included a test-retest assessment with 43 respondents resubmitting the questionnaire two weeks apart. Based on the results from rounds one and two, the Pearson Product Moment Correlation coefficients were reviewed. For eleven of the twelve subscales, the coefficient exceeded 0.6 (Reed & Patterson, 2008).

Following this design phase, the Leadership Resilience Profile (LRP-R) was finalised by Reed and Patterson and they presented the tool in their book *Resilient Leadership in Turbulent times (2009)*.

The Leadership Resilience Profile tool consists of eleven sub-categories that measure elements associated with resilient behaviours. Each category consists of four questions resulting in 44 questions. It is a self-reporting tool with a 5-point Likert-type scale ranging from strongly disagree (1), disagree (2), neutral (3), agree (4) to strongly agree (5).

This study included the results of seven of the eleven sub-categories: optimism, value-driven leadership, self-efficacy, strong social support, courageous decision-making, adaptability and perseverance. The researcher reduced the number of resilience categories for statistical purposes considering the relatively small sample size in relation to a high number of variables. The sub-categories of emotional well-being and physical well-being were excluded, as Section C of the survey dealt specifically with self-renewal practices that included these two elements.

The table below shows the grouping of the sub-categories used for this study.

Table 3.1: Categories applied in the measurement of resilience

Original LRP-R sub-category	Maximum score	Resilience categories applied during the study	Maximum score
Optimism in the present	20	Optimism	40
Optimism for the future	20		
Value-driven leadership	20	Value-driven leadership	20
Self-efficacy	20	Self-efficacy	20
Strong social support	20	Strong social support	20
Decision-making and accountability	20	Courageous decision-making	40
Personal responsibility	20		
Emotional well-being	20	Not included	0
Physical well-being	20	Not included	0
Adaptability	20	Adaptability	20
Perseverance	20	Perseverance	20
Maximum (Original)	220	Maximum for study	180

The questionnaire could provide valuable data with regard to the performance of leaders in each category associated with resilience in leadership. The overall resilience score was used to divide respondents into three categories of resilience namely low, average and high resilience according to the following range of scores.

Table 3.2: Categories of resilience levels - low, average and high

Average score based on seven categories of resilience	7 to 16	17 to 26	27 to 36
Grouping for the level of resilience	Low	Average	High

The researcher received written permission from the author, Dr Reed, Director: Educational Leadership Programme at the St. John Fisher College, to use the LRP-R for the purpose of the study.

Section C represented the second set of data that was collected, namely on self-renewal practices. Following an extensive literature review of self-renewal practices in leadership, the researcher compiled twenty-eight (28) questions for this section. The questions addressed the four dimensions of self-renewal practices namely physical, spiritual, cognitive and socio-emotional renewal practices, as identified in the literature study. The section included eight (8) questions per dimension as described in the work of Covey (1989), Gardner (1995) and McKee et al. (2008).

Similarly, to the LRP-R, the self-renewal section consisted of a self-reporting scale also with scoring based on a 5-point Likert-type scale. This scale is designed to measure the level of commitment of the leaders to particular self-renewal activities ranging from never (1), seldom (2), sometimes (3), often (4) and most of the time (5). The questions were uploaded in the format of an electronic questionnaire via Google Survey.

The questionnaire provided data with regard to the performance of leaders on each individual dimension of self-renewal practices. The overall self-renewal practices' score was used to allocate respondents into three categories of self-renewal namely low, average and high according to the following range of scores:

Table 3.3: Categories of self-renewal practices - low, average and high

Average score based on four dimensions of self-renewal practices	5 - 12	13 - 20	21 - 28
Grouping for the level of self-renewal	Low	Average	High

The three parts of the questionnaire formed part of a single Google Survey document that was uploaded to a designated web site. The survey tool automatically generated a Microsoft Excel® worksheet containing a comprehensive set of data that was ready for further statistical analysis.

3.5 CRONBACH ALPHA COEFFICIENT

Internal consistency refers to the extent of correlation between the various items of a measuring construct and it is widely used to show how well the various items are positively correlated to each other. If the items are strongly correlated with each other, their internal consistency is high and the alpha coefficient will be close to one. An alpha coefficient of 0.70 or higher is sufficient value for questionnaires used in exploratory studies (Gravetter & Wallnau, 2013).

For this study, the statistical analyses were applied to all of the items within each of the resilience categories in Section B of the questionnaire as well as to all of the items relating to each dimension of the self-renewal practices in Section C. Therefore, the internal consistency per category or dimension was calculated. All of the categories achieved a coefficient greater than 0.7, which can be considered as adequate. The results per sub-section are presented in chapter four. Based on the results, the researcher concluded that the questionnaire items were well formulated with sufficient levels of internal consistency.

3.6 DATA COLLECTION PROCEDURES AND ANALYSIS

Following the endorsement of the research proposal and questionnaire by the NMMU Research Ethics Committee, the researcher created a web page for the purpose of the study. The questionnaire was uploaded by using Google Survey for easy recording and organising of responses.

Participants were invited to participate in the study via an e-mail invitation. The invitation letter explained the purpose of the study as well as the data collection process, clarified ethical considerations and the endorsement by the NMMU. The invitation included an electronic link so that participants could access the web-based questionnaire voluntarily in order to submit their information. The questionnaire was available on the web site from 5 August 2016 to 5 Septembers 2016. During the last two weeks, a reminder e-mail was sent to encourage participants to respond to the request. The study achieved a 10% response rate within the four-week period

despite efforts taken to improve the response rate. The data from forty-one (41) completed questionnaires were received.

Data from the questionnaire was interpreted and analysed in co-operation with the NMMU Unit for Statistical Consultation. The analysis consisted of three phases. Descriptive statistics were calculated to determine possible patterns, variations within the group and the spread of scores among the respondents. The results included frequency scores, mean scores and standard deviation values that were presented in numerical and graphical formats.

The second phase included inferential statistics such as T-tests to compare different groups with each other to determine possible differences and similarities, for example, the display of significant differences generated by demographical factors such as gender, age and level of management. Two-way frequency tables or cross tabulation were used to display this analysis. The frequency tables were used to obtain Chi-square test values to define relationships or correlations that were statistically significant (value < 0.05). Due to the small sample, the study proceeded with post-tests to explore the nature of relationships in detail. The Fisher exact test was applied in the study to investigate fifty-five different correlations between categories of resilience and dimensions of self-renewal. The Fisher exact analysis was applied to provide a more accurate result within a two times two table with regard to the statistical significance of the relationship among the factors (Creswell, 2014).

Another dimension was added to the statistical analysis by grouping the obtained resilience scores of respondents into low, average or high resilience groupings (included in chapter four). The groupings were used to determine differences in terms of what self-renewal practices were most often used as well as to check for differences based on the biographical factors of age and level of management. The small sample size required the study to use alternative configuration of the groupings to generate results that were more meaningful. The groupings of low and average resilience were grouped together and compared to the group that obtained high resilience scores.

The third phase of the study included a post-test to scrutinise relationships and correlations that were identified during the first two phases. The study used the Pearson Product Moment Correlation to provide an indication of the strength of the correlation found among the various categories of resilience, among the dimensions of self-renewal practices and lastly the correlation between the categories of resilience and the dimensions of self-renewal. The study applied the following interpretation:

- < 0.30: weak correlation,
- 0.31 – 0.49: moderate correlation, and
- > 50: strong correlation.

The Chi-square test was used to identify significant relationships between resilience and each of the self-renewal dimensions. The Cramer V was done to determine the practical significance of the relationship and for this purpose; the following interpretation was applied (Gravetter & Wallnau, 2013):

- < 0.21: small practical significance,
- 0.22 - 0.34: medium practical significance, and
- > 0.35+: large practical significance.

3.7   CONCLUSION

This chapter explained the research design that was followed for this study to collect meaningful data from middle and senior level managers about their levels of resilience and the self-renewal practices they used. The next chapter provides the results and an interpretation of the results obtained through the survey.

CHAPTER FOUR: RESEARCH RESULTS

4.1   INTRODUCTION

Chapter three provided an overview of the research methodology used for this study. The data for the empirical study was collected and processed as per the study aims and the methodology described in chapter three.

In this chapter, the findings of the data analysis are presented and analysed. The fundamental goal of the data collection and subsequent analysis was to investigate the possible relationship between resilience and self-renewal practices used by leaders. The purpose of the analysis was to provide insights with regard to the following sub-aims of the study:

- Explore the levels of resilience in leaders in terms of the categories of resilience which include optimism, value-driven leadership, self-efficacy, courageous decision-making, strong social support, adaptability and perseverance.

- Explore the extent to which leaders engage in self-renewal practices with regard to four self-renewal dimensions namely physical, spiritual, cognitive and socio-emotional self-renewal.

- Determine whether there is a link between levels of resilience (low versus high) in leaders and their engagement in self-renewal practices.

- Draw conclusions about which self-renewal practices are most likely to increase the levels of resilience in leaders.

- Describe the correlation and relationships among the categories of resilience that are used to measure resilience.

- Describe the correlation and relationships among the four dimensions included in self-renewal practices.

- Examine the correlation and relationships between the categories of resilience and the dimensions of self-renewal practices.

- Identify whether differences exist in resilience and self-renewal practices based on selected demographical variables namely gender, age and level of management.

Four hundred and twenty (420) electronic invitations were sent to managers who were enrolled in various Leadership Development Programmes at the Leadership Academy of the NMMU Business School. The invitation included a link to the web-based survey that enabled these managers to participate in the resilience survey that consisted of three sections:

Section A: Demographical information

This section collected information about gender, age, the level of management as well as the size of the team that the respondents were leading.

Section B: Leadership Resilience Profile

The following seven categories of leadership resilience were measured in the Leadership Resilience Profile: optimism, value-driven leadership, self-efficacy, reliance on strong social support, courageous decision-making, adaptability and perseverance.

Section C: Self-renewal practices

Self-renewal practices included four dimensions namely physical self-renewal, cognitive self-renewal, spiritual self-renewal and socio-emotional self-renewal.

Forty-one (41) usable surveys were completed and submitted. One additional questionnaire was submitted that could not be used, as it was only partially complete. The results represented 82% of the intended sample size of 50 respondents and 41% of the total number of questionnaires distributed.

4.2   DEMOGRAPHICAL RESULTS

Section A required the respondents to indicate their gender, age, management level and the size of the team they were managing. These results are relevant in terms of reporting that the study achieved a good balance within the target group in relation to demographical differences. It is furthermore important in terms of the analysis concerning possible differences with regard to leadership resilience and self-renewal practices based on demographical variables. Figure 4.1 provides an overview of the demographic composition of the sample group in terms of gender.

Figure 4.1: Gender distribution of the target group
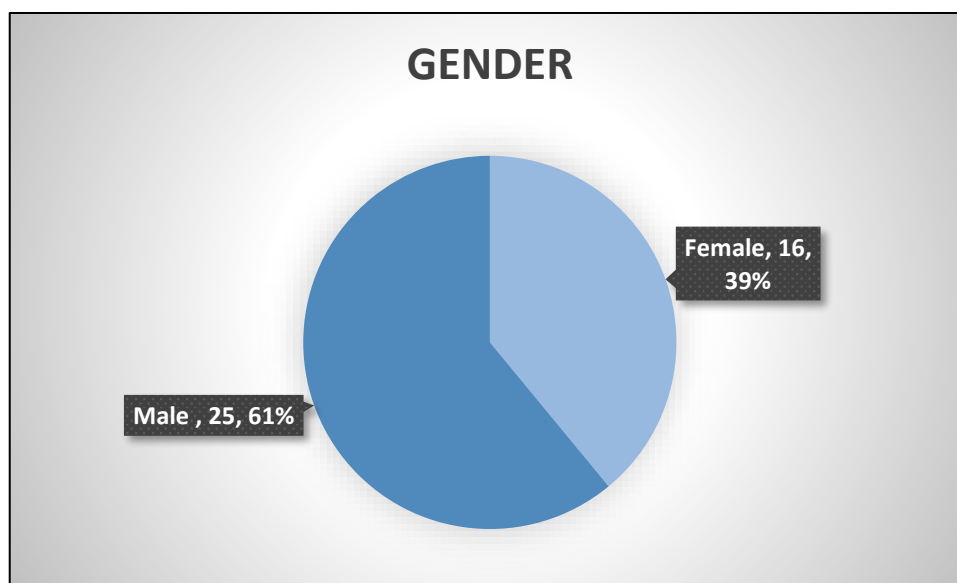
It is evident that the sample group represented both male and female respondents. The gender distribution of the respondents mirrors the proportion of male/females within the sample population that was 65% male and 35% female. The higher proportion of male respondents could imply that more males than females attended the leadership development programmes at the Leadership Academy of the NMMU Business School. It could also reflect the continued under representation of women in leadership positions. According to a 2015 Executive Report, executive teams are still 97.5% male dominant. The representation of females has declined from 5% in 2012 to 2.5% in 2015 (Hammer, 2016).

Below, Figure 4.2 provides an overview of the demographic composition of the sample group in terms of age.

Figure 4.2: Age distribution of target group
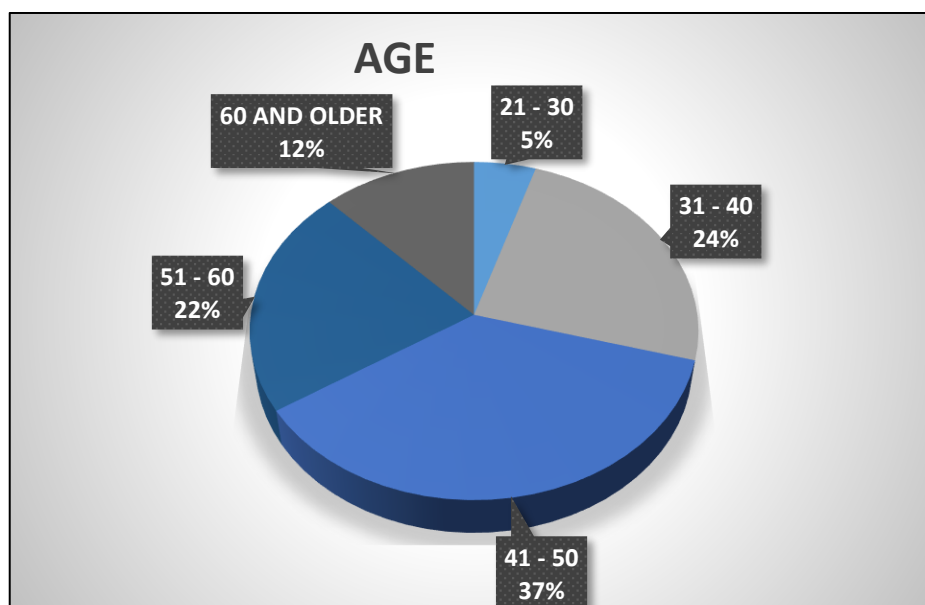
The age group of 21 to 30 have a very small representation in the study, which could imply that younger people are less likely to be in middle or senior management positions. The results could further suggest that the next generation of leaders are not currently enrolled in Leadership Development Programmes. The composition of executive leadership teams in South Africa is that seventy five percent (75%) are older than 50 years and twenty five percent (25%) are between the ages of 40 to 49 (Hammer, 2016). This could mean that 61% of the respondents, between the ages of 31 to 50 years, are currently being groomed or trained for executive positions. Organisations may not be as inclined to invest in leadership development for younger age groups, and specifically those 30 years or younger. Below, Figure 4.3 provides an overview of the level of management.

Figure 4.3: Level of management
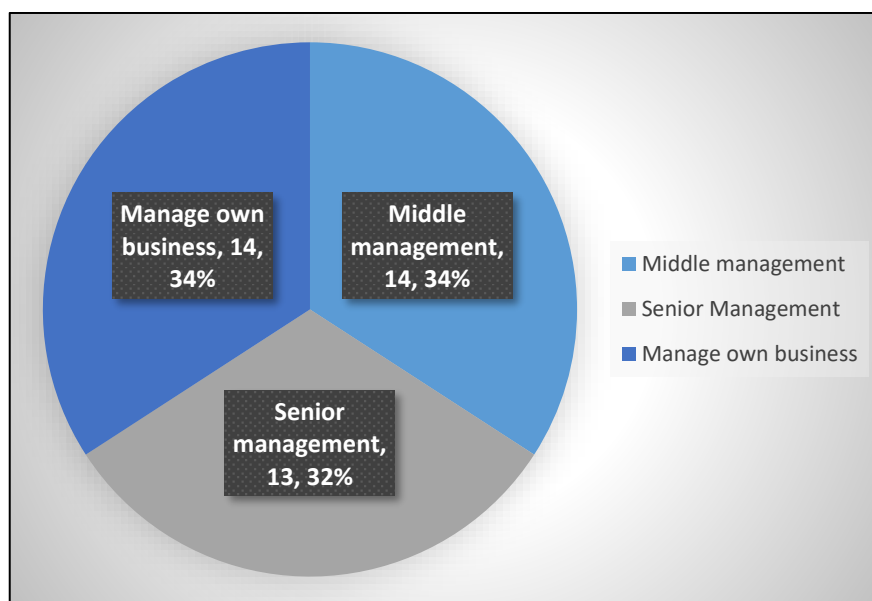
The segments of the figure labelled Senior Management and Manage own business combined, represent the total number of senior managers who participated in the study. The majority of the respondents (66%) in the study therefore held senior management positions.

Table 4.1 provides an overview of the size of the teams managed by the respondents.

Table 4.1: Size of team managed by the respondents

Size of team	Frequency	Percent
< 5	14	34.1
6 to 15	12	29.3
15 +	15	36.6
Total	**41**	**100.0**

The table demonstrates that 65.9% of the respondents were responsible for teams with six or more team members. This is significant considering that leadership resilience includes an element of responsibility towards other people in terms of

those they lead. The definition refers to the ability of leaders to guide, support and inspire other people to remain adaptive and productive in turbulent conditions.

4.3 RELIABILITY OF THE MEASURING SCALES

The Cronbach alpha coefficient was calculated to determine the level of reliability of the measuring scales. The results are presented in Table 4.2.

Table 4.2: Cronbach alpha coefficients for measuring scales

Leadership Resilience Profile (Section B)	Cronbach alpha
Optimism	0.93
Value-driven leadership	0.91
Self-efficacy	0.91
Reliance on strong social support	0.90
Courageous decision-making	0.94
Adaptability	0.88
Perseverance	0.88
Self-renewal practices (Section C)	
Physical renewal	0.88
Spiritual renewal	0.78
Cognitive renewal	0.85
Socio-emotional renewal	0.77

An alpha coefficient of 0.70 or higher is sufficient in exploratory studies (Gravetter & Wallnau, 2013). The Cronbach alpha scores for these scales included in this study varied from 0.94 to 0.77. This indicated sufficient levels of correlation among items measuring each variable.

4.4 LEVELS OF RESILIENCE

As presented in the previous chapter, the Leadership Resilience Profile (LRP-R) was used to determine the levels of resilience in the target group, which consisted of middle and senior level managers attending leadership development

programmes at the Leadership Academy of the NMMU. The Leadership Resilience Profile tool originally consisted of eleven sub-categories with four questions per category measured on a 5-point Likert scale. Each category therefore had a total maximum score of 20.

As explained in chapter three (Table 3.1), the study focused on only seven of the 11 resilience categories listed in the LRP-R tool namely: optimism, value-driven leadership, self-efficacy, reliance on strong social support, courageous decision-making, adaptability and perseverance. Optimism and courageous decision-making consisted of eight questionnaire items with a maximum score of forty as opposed to the remaining five sub-categories consisting of four questions with the maximum score of twenty per category.

The descriptive statistics with regard to the resilience level of managers as measured by the resilience categories are presented in Table 4.3. The percentages reflect the mean score in relation to the maximum score. This provides a comparative figure since the maximums for two of the categories (optimism and courageous decision-making) differ from the rest (40 versus 20).

Table 4.3: Resilience categories - descriptive statistics

Resilience category	Mean	Maximum	% Mean/ Maximum	Standard Deviation
Optimism	32.49	40	81.22	5.86
Value-driven leadership	16.85	20	84.25	3.18
Self-efficacy	16.51	20	82.55	3.18
Strong reliance on strong social support	15.95	20	79.75	3.52
Courageous decision-making	32.61	40	81.52	6.02
Adaptability	15.83	20	79.15	2.99
Perseverance	15.44	20	77.20	3.20

Respondents scored the highest for the category value-driven leadership (84.25%). The relative low standard deviation indicates that the respondents responded in a

similar fashion to the statements in this category. The category refers to operating within a strong and well-defined moral and ethical framework in word and action. Consistently demonstrating strong personal values are important considering the devastating impact of poor ethical leadership noted in the past decade and the relentless emphasis on the re-establishment of trust in organisations by leaders (O'Brien, 2006; George, 2015).

The lowest score (77.2%) was obtained for the category perseverance. Perseverance obtained a relative low standard deviation of 3.20 compared to other categories. This result suggests that most respondents agree that keeping a steady focus on priorities and remaining steadfast regardless of consistent diversions and difficulties is constraining for many leaders.

The results of the individual questionnaire items provide further insight into factors that impact the level of resilience for leaders. Table 4.4 highlights the individual questionnaire items that achieved the highest and the lowest score within the group.

Table 4.4: Resilience - highest and lowest mean scores for individual questionnaire items

Focus	Sub-category of resilience	Questionnaire items	Mean	Max	Standard Deviation
Highest scoring items	Value-driven leadership	I rely on strongly held moral or ethical principles to guide me through adversity	4.34	5	0.88
		I demonstrate an overall strength of being value-driven in my leadership role	4.32	5	0.91
	Courageous decision-making	I have an overall strength of accepting personal responsibility for my leadership actions	4.32	5	0.93
		In my leadership role, I acknowledge mistakes in my judgement by accepting responsibility to avoid these mistakes in future	4.34	5	0.91
Lowest scoring items	Perseverance	I never let distractions interfere with my focus on important goals and tasks	3.56	5	0.98
	Adaptability	I adjust my expectations about what is possible based on the current situation	3.78	5	0.94
	Courageous decision-making	I am able to make needed decisions if they run counter to respected advice by others	3.78	5	0.76
		I take prompt, principled action on unexpected threats before they escalate out of control	3.78	5	0.85
	Strong Reliance on strong social support	I have a reliance on strong social support to help me through tough times in my leadership role	3.78	5	1.01

The highest scores are concentrated within two resilience categories (value-driven leadership and courageous decision-making) as opposed to the lowest scores that are spread among four categories. This could suggest the leaders are typically more

confident about their personal value system and decision-making capabilities compared to other categories of resilience measured in the study. Single elements within the resilience categories represent a spread of challenges that leaders have to pay attention to in order to grow their overall levels of resilience. The challenges are thus not concentrated in one specific area of development.

Table 4.5 shows the lowest and the highest standard deviations noted among the 36 items. This provides an opportunity to view the items for which the respondents recorded similar answers as opposed to items that showed greater variation in the responses.

Table 4.5: Resilience - lowest and highest standard deviations for individual items

Sub-category of resilience	Questionnaire items	Mean	Maximum	Standard Deviation
Courageous decision-making	I am able to make needed decisions if they run counter to respected advice by others	3.78	5	0.76
Optimism	I gather the necessary information from reliable sources about what is really happening relative to the adversity	4.02	5	0.82
Perseverance	I refuse to give up in overcoming adversity even when all realistic strategies have been exhausted	3.85	5	1.01
Reliance on strong social support	I have a reliance on strong social support to help me through tough times in my leadership role	3.78	5	1.01
	I try to learn from role models who have a strong track record of demonstrating resilience	4.02	5	1.01
	When adversity strikes I try to learn from the experiences of others who face similar circumstances	4.00	5	1.00

The respondents rated their ability to make decisions that run counter to the advice of respected persons in a similar manner (Standard Deviation = 0.76). The item received a lower mean score (3.78) than the other within the courageous decision-making category. This could mean that most leaders who participated in the survey were inclined to follow existing, well-known solutions and ideas. This finding is contrary to studies that emphasise that leaders' abilities to improvise and their willingness to take risks are critical in operating effectively within the VUCA world (Coutu, 2002).

The table shows that responses were most diverse in terms of items that relate to the reliance on strong social support (e.g. rely on strong social support and learn from mentors). This implies that leaders have different experiences with regard to their relationships with others and particularly with reference to others as a source of support. Boyatzis and McKee (2005) suggest that leaders do face higher levels of isolation as they successfully rise within organisational hierarchies. The results suggest that this might be true for some leaders, but not necessarily for all.

The respondents were then grouped into low, average or high levels of resilience based on the total score that each respondent obtained for Section B of the questionnaire. The respondents could achieve an overall total score of 180. The total score for each respondent was reduced to a maximum score of 36 by dividing it by five and then identifying brackets for low, average and high scores, as illustrated in Table 4.6. These ranges are aligned to the original categories presented in the Leadership Resilience Profile.

Table 4.6: Range of scores associated with low, average and high resilience groupings

Average score based on seven categories of resilience	7 to 16	17 to 26	27 to 36
Grouping for the level of resilience	Low	Average	High

In order to deal with the limitations of the small sample size in the study, the low and average levels' groups were combined into a single group with a score ranging from seven to 26. The results of the groupings are presented in Table 4.7.

Table 4.7: Number of respondents in low to average and high resilience groups

Resilience score	Total respondents	
	Frequency	**% Total respondents**
Low to average resilience Score range: 7 to 26	12	29.27
High resilience Score range: 27 – 36	29	70.73
Total	**41**	**100**

Table 4.7 shows that 70.7% of the total respondents fell into the category of high levels of resilience and 29.3% in the category of low to average resilience levels. Table 4.8 provides further details with regard to the resilience levels by showing the frequency scores and percentage obtained by the respondents for each of the seven resilience categories. These are sorted into the low to average and high levels of resilience.

Table 4.8: Level of resilience per category for low to average and high resilience groups

Categories of resilience	Low to average levels		High levels	
	Frequency	%	Frequency	%
Optimism	**9**	22.0	**32**	78.0
Value-driven leadership	**8**	19.5	**33**	80.5
Self-efficacy	14	34.2	27	65.9
Reliance on strong social support	16	39.0	25	61.0
Courageous decision-making	**7**	17.1	34	82.9
Adaptability	15	36.6	26	63.4
Perseverance	17	41.5	24	58.5

The results show a clear distinction in the scores of those in the low to average resilience group versus those in the high resilience group. Self-efficacy obtained a high mean score, but in terms of the number of respondents grouped within the low to average group it is clear that the score of respondents ranged significantly. The next section considers the responses for Section C based on self-renewal practices.

4.5   SELF-RENEWAL PRACTICES

The second variable in the study was the level of self-renewal practices with which leaders engaged. Section C of the questionnaire included seven questions for each one of the four self-renewal practices namely physical renewal, spiritual renewal, cognitive renewal and socio-emotional renewal. The questionnaire provided a 5-point Likert-type scale, ranging from never to most of the time, for the respondents to indicate their level of commitment to the different self-renewal practices. The descriptive statistics for self-renewal practices are presented in Table 4.9.

Table 4.9: Descriptive statistics for self-renewal practices

Self-renewal practices	Mean	Maximum	%	Standard Deviation
Physical renewal	24.29	35	69.40	6.17
Spiritual renewal	25.12	35	71.71	5.33
Cognitive renewal	23.85	35	68.14	5.61
Socio-emotional renewal	23.54	35	67.25	4.94

The percentage column describes the mean score in relation to the maximum score that the respondents could achieve for each dimension. Respondents show the most commitment to practices associated with spiritual renewal. This could support the strength of the group in relation to value-driven leadership (Covey, 1989).

The standard deviations for self-renewal practices are higher in comparison to those recorded for resilience (Table 4.3). Table 4.9 shows all self-renewal practices with standard deviation values greater than four. This suggests that there is less common practice among leaders with regard to self-renewal practices. Table 4.10 provides a more detailed view of the individual items related to self-renewal practices. It specifically reports on the highest and the lowest scoring items.

Table 4.10: Self-renewal practices - highest and lowest scores per practice

Focus	Self-renewal practices	Questionnaire items	Mean	Maximum	Standard Deviation
Highest scoring items	Spiritual renewal	I make decisions based on a clear set of personal values	4.27	5	0.81
	Socio-emotional renewal	I act with empathy towards others	4.15	5	0.91
	Physical renewal	I avoid excessive use of alcohol	4.07	5	1.03
	Spiritual renewal	I consciously think about my value system	4.02	5	0.88
Lowest scoring items	Cognitive self-renewal	I keep a journal of daily activities in order to reflect and learn	1.98	5	1.15
	Socio-emotional self-renewal	I rely on a social network for support	2.93	5	1.01
		I do charity work that requires an investment of my time	2.41	5	1.26
		I participate in a professional coaching relationship	2.54	5	1.40
	Physical self-renewal	I practice stress management strategies to remain healthy	3.10	5	1.20

Table 4.10 shows that most respondents identified personal values as a valuable element within their spiritual renewal practices. This is congruent with the findings in Table 4.3 that shows value-driven leadership as the resilience category that obtained the highest scores within the study. The standard deviation of 0.81 indicates that most respondents had a similar response with regard to this item.

Demonstrating empathy towards others was the item that obtained the second highest score. In studies by Goleman (2000), empathy is described as the single most important emotional intelligence competency that distinguishes effective leaders from others. Empathy is an important trigger in the neural circuit associated with compassion that revives resilience and reduces the impact of the self-sacrifice syndrome. This is a positive predictor for continued high levels of leadership resilience.

Three out of the five items that obtained the lower scores are related to socio-emotional self-renewal. This could be influenced by the changing priorities and more demanding schedules that leaders face in the changing business environment. As demands and pressures increase, leaders have less time or inclination to engage in social activities. Leaders become more reliant on themselves and less connected to others. This is a threat to sustainable levels of resilience because resilient leaders show a wide network of robust social networks (Lucy et al., 2014).

The lowest scoring self-renewal item, which is using a journal for reflection and learning, is a cognitive renewal practice. This suggests that leaders do not sufficiently recognise the value of using a journal for systematic reflection as a fundamental element of mindfulness and learning. The practice of continuous mindfulness and learning supports resilience as it grows the adaptive capacity of leaders (Keye & Pidgeon, 2013).

The fourth lowest scoring item is related to stress management. Unmanaged stress is a key contributor in the derailment of the careers of executive managers. Stress related diseases and destructive behaviours such a substance abuse impact more than 40% of South African managers (Redelinghuys, 2013).

Based on the scores for self-renewal practices, respondents were grouped into low, average and high groups. The same approach was applied, as with the overall resilience levels, namely the grouping together of the low and average levels. Table 4.11 shows the results of the grouping process.

Table 4.11: Self-renewal practices per low to average and high self-renewal groups

Self-renewal	Total number of respondents	
	Frequency	%
Low to average Score range: 7 - 26	28	67.68
High Score range: 27 - 35	13	32.32
Total	41	100

The grouping of respondents into low to average and high levels of self-renewal practices revealed only 32.3% respondents being grouped into high levels of self-renewal practices. Table 4.12 shows the level of self-renewal in terms of each self-renewal practice.

Table 4.12: Self-renewal practices for low to average and high self-renewal groups

Dimensions of self-renewal	Low to average self-renewal		High self-renewal	
	Frequency	%	Frequency	%
Physical renewal practices	26	63.4	15	36.6
Spiritual renewal practices	24	58.5	17	41.5
Cognitive renewal practices	29	70.7	12	29.3
Socio-emotional renewal practices	32	78.0	9	22.00

The results show that the low to average self-renewal group mostly made use of cognitive and socio-emotional renewal practices, while the high self-renewal group mostly used physical and spiritual renewal practices.

4.6   THE RELATIONSHIP BETWEEN LEADERSHIP RESILIENCE AND SELF-RENEWAL PRACTICES

The previous two sections presented results specific to the two independent variables, namely resilience and self-renewal practices and their associated sub-categories. This section is aimed at investigating the relationship between resilience and self-renewal practices.

The respondents were, based on their individual scores, categorised according to low, average and high level of resilience and self-renewal. These categories and the number of respondents in each category are presented in Table 4.13 by means of cross-tabulation.

Table 4.13: Cross tabulation of respondents based on individual resilience and self-renewal scores

	Low level of self-renewal	**Average level of self-renewal**	**High level of self-renewal**
Low level of resilience	1	1	0
Average level of resilience	0	4	1
High levels of resilience	1	21	12
Total	**2**	**26**	**13**

Table 4.13 shows that the greatest overlap occurred with twenty one (21) respondents who obtained high levels of resilience with average levels of self-renewal practices as well as twelve (12) respondents who obtained high levels of resilience with high levels of self-renewal.

The observed frequencies were used as a basis for a Chi-square analysis in order to test for a relationship between leadership resilience and self-renewal practices. Based on the observed frequencies, the Chi-square analysis provided a **_p score of 0.038,_** which demonstrated a statistical significant relationship or dependency

among the variables, namely resilience and self-renewal. This interpretation is based on the assumption that $p < 0.05$ represents statistical significance.

As the Chi-square indicated a dependent relationship between leadership resilience and self-renewal practices, a Cramer V analysis was done to determine the practical significance of the relationship. The Cramer V analysis is an effect size measurement that generates a value between $0 – 1$. The analysis showed a practical significance value of 0.35 and based on the Cramer V interpretation guide (Table 4.14), the nature of the relationship between resilience and self-renewal can be described as having a large practical significance.

Table 4.14: Cramer V Interpretation

Measurement	Interpretation
< 21	Small practical significance
0.21 - 0.34	Medium practical significance
0.35+	Large practical significance

Source: Gravetter and Wallnau (2013)

The above result suggests that improving self-renewal practices should significantly influence the levels of resilience in leaders. In order to investigate the nature of this relationship further, the relationship between resilience and each of the self-renewal practices namely physical renewal, cognitive renewal, spiritual renewal and socio-emotional renewal was investigated using the Cramer V test. The results are presented in Table 4.15.

Table 4.15: Relationship between resilience and individual self-renewal practices of self-renewal

Dimensions of self-renewal	Chi-square	Cramer's V	Interpretation
Spiritual renewal	p=.02409	0.37	Statistical significance High practical significance
Physical renewal	p=.16031	0.28	No statistical significance Medium practical significance
Socio-emotional renewal	p=.19110	0.27	No statistical significance Medium practical significance
Cognitive renewal	p=.32435	0.24	No statistical significance Medium practical significance

The table shows that spiritual renewal is the most significant factor that influences levels of resilience. This dimension contributes the most to the relationship between resilience and self-renewal with a high practical significance. This is aligned with Richardson (2002) who identified spiritual well-being as the most prominent predictor of resilient reintegration following adverse events or change. The remaining three dimensions do not show a statistical significant relationship, but according to the Cramer V measurement, each dimension has a medium level of practical significance. These relationships are elaborated on in the next session.

4.7 THE RELATIONSHIP BETWEEN THE CATEGORIES OF RESILIENCE AND DIMENSIONS OF SELF-RENEWAL

The relationship among the seven sub-categories of resilience including optimism, value-driven leadership, self-efficacy, social support, courageous decision-making, adaptability and perseverance) and self-renewal practices including physical, spiritual, cognitive and socio-emotional self-renewal practices was investigated. A Pearson Product Moment Correlation analysis was used to obtain results with regard to the correlation among the various categories and dimensions. The analysis was done in the following order: Firstly, the correlations among the various sub-categories within the resilience measurements were determined; secondly, the

correlations among the four self-renewal practices were determined and lastly, the correlations among the sub-categories of resilience and the self-renewal practices were determined.

A Chi-square test was applied to fifty-five (55) relationships among the seven categories of resilience and the four dimensions of self-renewal. Fifty-four (54) of the relationships showed a statistical significant correlation with a Chi-square value (p) greater than 0.005. The only relationship that did not show a statistically significant relationship was between cognitive self-renewal and the resilience category, social support.

Neither the Chi-square test nor the Fisher exact test provided information with regard to the strength of the relationship or the extent of the dependency among the factors. The Pearson Product Coefficient (r) analysis was applied to provide an indication of the strength of the correlation among factors. Table 4.16 gives an indication of how the Pearson Product Coefficient (r) is interpreted.

Table 4.16: Interpretation of Pearson Product Coefficient (r)

r – value	Description of relationship
< 0.30	Weak correlation
0.30 – 0.49	Moderate correlation
> 0.50	Strong correlation

Source: Gravetter and Wallnau (2013)

The results of the Pearson Product Moment Correlations are presented in Table 4.17. Correlations among the categories of resilience are indicated in blue and the correlations among self-renewal practices are shown in grey. The correlations between resilience categories and self-renewal practices are shown in different shades of orange as these relationships consist of weak, moderate and strong relationships.

Table 4.17: Strength of correlation as per Pearson Product Coefficient (r)

	Optimism	Value-driven leadership	Self-efficacy	Reliance on strong social support	Courageous decision-making	Adaptability	Perseverance	Physical renewal	Spiritual renewal	Cognitive renewal	Socio emotional renewal
Optimism	1.000										
Value-driven leadership	0.928	1.000									
Self-efficacy	0.863	0.870	1.000								
Reliance on strong social support	0.600	0.620	0.710	1.000							
Courageous decision-making	0.863	0.856	0.873	0.721	1.000						
Adaptability	0.884	0.875	0.838	0.645	0.856	1.000					
Perseverance	0.828	0.838	0.778	0.603	0.790	0.841	1.000				
Physical renewal	0.560	*0.475*	0.577	*0.316*	*0.495*	*0.492*	*0.410*	1.000			
Spiritual renewal	0.669	0.667	0.665	*0.497*	0.637	0.548	0.550	0.759	1.000		
Cognitive renewal	0.551	0.550	0.596	0.273	0.550	*0.414*	*0.332*	0.581	0.711	1.000	
Socio-emotional renewal	0.583	0.582	0.662	*0.431*	0.505	*0.458*	*0.388*	0.633	0.681	0.739	1.000

The analysis demonstrated that seventy eight percent (78.18%) of the fifty-five relationships showed strong correlations with R-values greater than 0.50. This includes all relationships within the seven categories of resilience as well as all of the relationships within the four dimensions of self-renewal. This suggests that the development of resilience in leaders requires a holistic approach that deals with all of the elements, considering the interrelatedness among the elements.

The table further illustrates that each of the resilience categories is associated with a different combination of self-renewal practices. Within this set of twenty-eight relationships, fifty seven percent (57.14%) showed strong correlations. Spiritual renewal practices, demonstrated the highest level of correlation to all resilience

categories. Fourteen percent (14.5%) of the relationships are defined as having a moderate level of correlation. The relatedness of physical self-renewal is limited to optimism and self-efficacy.

Adaptiveness and perseverance are two of the lower scoring resilience categories shown in Table 4.17 and neither of these categories was strongly related to any other self-renewal practice except for spiritual renewal practices.

The above Chi-square test was supplemented with the results of a Fisher exact test presented in Table 4.18. The analysis was applied to provide a more accurate result within a 2 x 2 table with regard to the statistical significance of the relationship among the factors.

Table 4.18: Relationship of resilience categories with self-renewal practices (Fischer Exact test)

	Optimism	Value-driven leadership	Self-efficacy	Reliance on strong social support	Courageous decision-making	Adaptability	Perseverance
Physical renewal	0.119	0.687	0.186	0.742	1.000	0.502	0.519
Spiritual renewal	0.262	**0.013**	**0.018**	0.344	0.207	0.519	**0.062**
Cognitive renewal	**0.039**	**0.079**	**0.003**	0.305	0.651	0.480	0.296
Socio-emotional renewal	0.654	0.164	**0.017**	0.441	1.00	0.119	0.711

The results show that spiritual renewal is closely associated with the resilience categories of value-driven leadership, self-efficacy and perseverance. Cognitive renewal is significantly related to optimism, value-driven leadership and self-efficacy. Socio-emotional self-renewal correlates with self-efficacy. Courageous decision-making is the least impacted by self-renewal practices with particular reference to physical self-renewal and socio-emotional self-renewal.

4.8 DIFFERENCES IN RESILIENCE AND SELF-RENEWAL PRACTICES BASED ON SELECTED DEMOGRAPHICAL VARIABLES

This section considers by means of T-tests, the relationship between selected demographic variables namely gender, age, size of team and management level, on leadership resilience profiles as well as the self-renewal practices. The first analysis is related to gender.

The table below compares the mean scores for each resilience category as well as each dimension of self-renewal practices based on gender. The results are presented in Table 4.19.

Table 4.19: Comparison of resilience and self-renewal practices based on gender

	Mean score for male respondents	Mean score for female respondents	Chi-square p – Value
Resilience categories			
Optimism	31.12	34.63	*0.0607*
Value-driven leadership	16.28	17.75	*0.1514*
Self-efficacy	16.28	16.88	0.5654
Reliance on strong social support	16.16	15.63	0.6410
Courageous decision-making	31.96	33.63	0.3945
Adaptability	15.32	16.63	*0.1760*
Perseverance	15.08	16.00	0.3762
Dimensions of self-renewal			
Physical renewal	23.72	25.19	0.4645
Spiritual renewal	24.36	26.31	0.2581
Cognitive renewal	23.04	25.13	0.2507
Socio-emotional renewal	22.80	24.69	0.2374

Based on the T-test results, the p-value of all items are > 0.005, which indicates that no statistically significant differences can be noted between male and female

respondents. Female respondents rated slightly higher on 10 out of the 11 categories measured during the study. Although not statistically significant, females outperformed male respondents the most with regard to optimism, value-driven leadership and adaptability. Male respondents scored slightly higher in one resilience category, namely reliance on strong social support, which included items such as building networks and using these relationships when facing adverse situations.

The following analysis investigates the possible differences among the three age groups namely 21 to 40 years, 41 to 50 years and respondents older than 50 years, in relation to resilience and self-renewal practices. The age group 21 to 40 years represented twenty nine percent (29%) of the total number of respondents, 41 to 50 years represented thirty seven percent (37%) and older than 50 years represented thirty four percent (34%). The age groups presented below were therefore equally well represented within the respondent population.

Table 4.20 displays the mean scores and standard deviations for each age group per resilience category. The second part of the table shows the results of the variance analysis with particular reference to significant differences among the groups.

Table 4.20: Comparison of resilience categories per age group

Category of resilience	Measurement	Age group			Variance analysis	
		21 - 40 years	41 - 50 years	50 + years	F	P
Optimism	Means	33.58	33.20	30.79	0.91	0.4120
	SD	3.96	3.38	**8.67**		
Value-driven leadership	Means	17.08	17.67	15.79	1.33	0.2763
	SD	2.35	1.84	4.56		
Self-efficacy	Means	16.67	17.20	15.64	0.88	0.4216
	SD	2.02	2.08	4.65		
Social support	Means	16.92	16.73	14.29	2.58	0.0893
	SD	1.98	3.28	4.32		
Courageous decision-making	Means	34.08	33.13	30.79	1.06	0.3558
	SD	3.78	4.50	**8.47**		
Adaptability	Means	16.25	16.93	14.29	*3.36*	*0.0453*
	SD	2.53	1.75	3.83		
Perseverance	Means	16.08	16.07	14.21	1.60	0.2148
	SD	2.27	2.43	4.28		
Total Resilience	**Means**	**30.13**	**30.19**	**27.16**		
	SD	**3.37**	**2.92**	**7.41**		

Table 4.20 shows very little variation among the mean scores of the resilience categories between the three age groups. What are noticeable are the consistently higher standard deviation values for the age group older than 50 years with exceptional high values for optimism and courageous decision-making. These values might suggest that this age group is less homogenous in terms of their levels of resilience as compared to other age groups. The age group of 41 to 50 represented the least variation among their responses with particular reference to adaptability and value-driven leadership.

The table concludes that the only significant results regarding differences among the age groups are limited to the sub-category of adaptability. Further analysis was required to determine, among which of the age groups, the variance occurs within the category of adaptability. This post-test included a Turkey HSD analysis to explore these results. The analysis found that the only significant difference occurred between the age group of 41 to 50 years and the group older than 50

years. In the table below, the bottom diagonal contains the p-values indicating statistically significant differences and the top diagonal shows the Cohen's d-values, demonstrating the strength of the difference in terms of practical significance.

Table 4.21: Turkey HSD results for adaptability among age groups

	Group 1 21 - 40 years	Group 2 41 - 50 years	Group 3 51+ years
Group 2: 41 - 50 years	d = 0.8081		d = 0.90
Group 3: 51+ years	p = 0.1950	p = 0.0418	

The only statistically significant difference is between age groups 2 (41 - 50 years) and 3 (51 years and older) with p = 0.0418. Their means scores were 16.93 and 14.29 respectively as per Table 4.20. The d-value ranges from 0 - 1, with values closer to 1 demonstrating large practical significance.

No significant differences were observed among the age groups with regard to self-renewal practices. Table 4.22 shows the mean scores and standard deviations for each dimension of self-renewal practices as well as the total scores for self-renewal practices.

Table 4.22: Descriptive statistics for comparison of self-renewal practices for different age groups

Dimensions of self-renewal practices	Measurement	Age groups			Variance analysis	
		21 - 40 yrs	41 - 50 yrs	51+ yrs	F	Chi-square (P)
Physical self-renewal practices	Means	24.08	24.47	24.29	0.01	0.9878
	SD	5.76	6.51	6.58		
Spiritual self-renewal practices	Means	25.83	25.33	24.29	0.28	0.7573
	SD	4.75	4.85	6.47		
Cognitive self-renewal practices	Means	25.25	22.40	24.21	0.90	0.4153
	SD	5.07	5.80	5.87		
Socio-emotional self-renewal practices	Means	22.50	24.07	23.86	0.37	0.6946
	SD	4.72	4.61	5.65		
Total for self-renewal practices	**Means**	**19.53**	**19.25**	**19.33**	**0.02**	**0.9827**
	SD	**3.49**	**3.59**	**4.62**		

The table shows similar scores for all self-renewal practices, with very little variation among the standard deviation values. Similar to the analysis of the resilience categories, the age group older than 51 years of age had higher values in terms of internal differences within the group.

Table 4.23 show the results of grouping respondents into low, average and high segments based on their total scores obtained for self-renewal practices. The groupings are further associated with the various age groups.

Table 4.23: Allocation of respondents to low, average and high groups with regard to self-renewal practices

Age group	Overall self-renewal practice scores			Total
	Low	**Average**	**High**	
% of respondents within the age group of **21 - 40 years**	0.0%	75.0%	25.0%	**100.0%**
% of respondents within the age group of **41 - 50 years**	6.7%	66.7%	26.7%	**100.0%**
% of respondents within the age group **older than 51 years**	7.1%	50.0%	42.9%	**100.0%**

Table 4.23 shows that 42.9% of respondents in the age group of 51 years and older were recorded in the group of high self-renewal practices compared to the other age groups. The higher percentage of self-renewal practices are relevant to cognitive self-renewal practices compared to physical, spiritual and socio-economic self-renewal practices, which are very similar to the other age groups. This supports the appeal by Gardner (1995) that leaders should avoid becoming obsolete and irrelevant by remaining committed to a lifelong process of learning and development. He warns against the trap of complacency that becomes more attractive with age. The results showed the contrary in terms of older generations displaying more commitment to cognitive renewal in comparison with younger groups.

The following table displays the descriptive statistics with regard to the various levels of management. It considers three groups, namely middle management (34%), senior management (32%) and respondents who are managing their own business (34%). No significant differences were obtained with regard to their scores related to resilience or self-renewal practices.

Table 4.24: Descriptive statistics of different levels of management in relation to resilience and self-renewal practice scores

Level of management	Resilience		Self-renewal practices	
	Means	Standard Deviation	Means	Standard Deviation
Middle management	29.36	2.80	18.29	2.97
Senior management	30.28	3.14	20.02	3.01
Manage own business	27.86	7.75	19.83	5.15

Respondents, who are managers of their own businesses, have the highest standard deviation within their responses for both resilience and self-renewal practices. The results could suggest that this group is less homogenous compared to the remaining middle and senior managers. This could be influenced by the fact that business owners typically demonstrate more characteristics of entrepreneurship such as high levels of autonomy and an inherit responsiveness to changing needs. This is therefore a less homogeneous group.

The table below shows the cross tabulation results for self-efficacy in relation to the various levels of management. Middle managers appear to feel less confident about their abilities to influence a course of action and achieve set goals compared to senior managers. Lower levels of self-efficacy are common within the VUCA world, considering the unpredictability and disruptive nature of change. Senior managers might feel more confident due to their longer number of years of experience. It might also relate to the greater decision-making power and influence associated with different positions within the organisation that impact the perception of managers regarding their ability to influence the outcome of events.

Table 4.25: Cross tabulation results for self-efficacy in relation to level of management

Category of resilience	Allocation of scores	Level of management			Total
		Middle management	**Senior management**	**Manage own business**	
Level of self-efficacy	Low	0.0%	0.0%	14.3%	**4.9%**
	Average	57.1%	15.4%	14.3%	**29.3%**
	High	42.9%	84.6%	71.4%	**65.9%**
Total respondents		**100.0%**	**100.0%**	**100.0%**	**100.0%**

4.9   CONCLUSION

In conclusion, the results presented in this chapter successfully responded to the initial research questions. The study included a good distribution of gender, age and level of management. Most respondents demonstrated high levels of resilience in relation to the total resilience score, but the results identified challenges with regard to particular categories of resilience such as adaptability, reliance on social support and perseverance. Respondents achieved lower scores with regard to self-renewal practices and spiritual self-renewal showed the highest results. Strong correlations were evident among the various categories of resilience and well as among the various self-renewal practices. The correlation between resilience categories and self-renewal practices are more complex as different sets of self-renewal practices influence the categories of resilience in distinctive ways. Spiritual self-renewal practices showed the most consistent correlation with most of the resilience categories.

CHAPTER FIVE: DISCUSSION AND CONCLUSION

The final chapter provides a brief overview of the study, the aims of the study and the methodology applied. The remaining part of the chapter is focused on a summary and discussion of the main findings in relation to the research questions posed in the problem statement of the study. The chapter concludes with a summary of the main findings and implications for leadership development, as well as areas for future research.

5.1   SUMMARY OF THE PROBLEM STATEMENT

Organisational landscapes have changed noticeably in the last decade and this is described in literature as a VUCA world. VUCA is the acronym for volatility, uncertainty, complexity and ambiguity. Consensus is that the speed of change as well as the disruptive nature of the change are the most salient features of modern day organisations and that incremental change co-exists with incidences of unexpected bouts of change that occur rapidly in a short space of time (Patterson et al., 2009; Horney et al., 2010; McCann & Selsky, 2012).

The above description explains why organisations are constantly challenged by shocks and surprises as change becomes more disruptive and unpredictable. Many companies are unable to achieve the required level of adaptability and maintain their competitive advantage.

Organisations that are able to develop and sustain competitive advantage through prolonged periods of turbulence have renewal capacities to respond to regular shocks and surprises. These organisations are capable of turning the VUCA environment into opportunity and financial advantage and have adaptable leaders who manage the complexity on behalf of the organisation, customers and partners. In this environment, successful leaders have the ability to manage ever-increasing complexity, deal with a wider range of internal and external stakeholders as well as communicate clearly and more persuasively (IBM Global Business Services, 2012). The well-being and growth of organisations within the VUCA environment are

connected to the quality of leadership available within the system (Drucker, 2001; Kotter, 2007; Kouzes & Posner, 2014; Bennis & Sample, 2015).

Organisational stakeholders expect leaders to drive business performance effectively and with sufficient energy and optimism regardless of the levels of stress and pressure experienced (Joiner & Josephs, 2007). Sustaining effective leadership can be elusive as talented leaders could inevitably show a level of imbalance when facing unrelenting pressures. Resilient leaders are able to uphold leadership effectiveness throughout persistent demands and pressure. Siebert (2005) defines resiliency as the ability to cope well with high levels of continuous disruptive change, sustain good health and energy when under constant pressure, easily bounce back from setbacks and find new ways of working when old ways are no longer possible.

Resilience in not a fixed characteristic but a leadership capability that can increase or diminsh depending on the leader's ability to bounce back following prolonged pressure, unexpected events and adverse situations. The leader's ability to make constructive decisions during and after a disruptive event influences the outcome of the adverse situation. The process of reintegration includes adapting, recovery and growth. The outcome of the process is dependent on the leader's existing level of resilience and the process can reinforce his/her level of resilience for the future. Leaders who are able to maintain their levels of resilience through self-renewal can deal with tough situations. Self-renewal can be limited to recovering what was lost during a trauma, shock and surprise or alternatively it can be a more generative process where something different with greater insight and maturity emerges overtime (Gardner, 1995; Siebert, 2005; Everly et al., 2010).

5.2 MAIN PURPOSE OF THE STUDY

The main purpose of the study was to investigate the relationship between resilience and the self-renewal practices of leaders. For this purpose, a survey with a questionnaire was conducted that measured the resilience levels of leaders and the self-renewal practices that they engaged in. The categories of resilience measured included optimism, self-efficacy, value-driven leadership, social support, courageous decision-making, adaptability and perseverance. The dimensions of

self-renewal included physical, spiritual, cognitive and socio-emotional practices. The study provided empirical information with regard to the levels of resilience of leaders in the sample group, statistical and practical significance of relationships among the variables as well as differences or similarities among the target group, based on demographical factors such as gender, age and level of management.

An assumption of the study was that an increased understanding of the various relationships could influence leadership development initiatives to ensure that resilience and self-renewal are addressed in a strategic and focused manner. The literature presents resilience and self-renewal as leadership capabilities that can be developed through training. Literature further recognises the relationship between resilience and self-renewal practices, but lacks clarity with regards to the nature of the linkages, interactions or influences among the variables.

An exploratory, quantitative research design was used with a web-based data collection instrument consisting of three sections. The first section collected demographical information, the second section included the Leadership Resilience Profile (LRP-R) that was developed by Jerry Patterson and Diane Reed and the third section included a set of questions designed to measure self-renewal practices.

The sample included 41 respondents (420 questionnaires sent out = 10% response rate) who were enrolled in leadership development programmes at the NMMU Business School's Leadership Academy during 2015 and 2016. These leadership development programmes were aimed at middle and senior managers in both the private and public sector. These leaders were responsible for the achievement of organisational goals and were most likely operating in turbulent environments, described as the typical landscape of leaders.

In the next section, the main findings are presented in line with the aims of the study:

- Explore the levels of resilience in leaders in terms of the categories of resilience which include optimism, value-driven leadership, self-efficacy, courageous decision-making, strong social support, adaptability and perseverance.

- Explore the extent to which leaders engage in self-renewal practices with regard to four self-renewal dimensions namely physical, spiritual, cognitive and socio-emotional self-renewal.

- Determine whether there is a link between levels of resilience (low versus high) in leaders and their engagement in self-renewal practices.

- Draw conclusions about which self-renewal practices are most likely to increase the levels of resilience in leaders.

- Describe the correlation and relationships among the categories of resilience that are used to measure resilience.

- Describe the correlation and relationships among the four dimensions included in self-renewal practices.

- Examine the correlation and relationships between the categories of resilience and the dimensions of self-renewal practices.

- Identify whether differences exist in resilience and self-renewal practices based on selected demographical variables namely gender, age and level of management.

5.3   REVIEW AND DISCUSSION OF MAIN FINDINGS

5.3.1   Levels of resilience

The study aimed to explore the levels of resilience in leaders in terms of optimism, value-driven leadership, self-efficacy, courageous decision-making, strong social support, adaptability and perseverance. The results showed that 70.4% of the target group could be described as having an overall high leadership resilience profile.

Figure 5.1 compares the resilience categories that obtained higher scores against those that obtained lower scores.

Figure 5.1: Summary of the resilience categories in relation to overall resilience levels
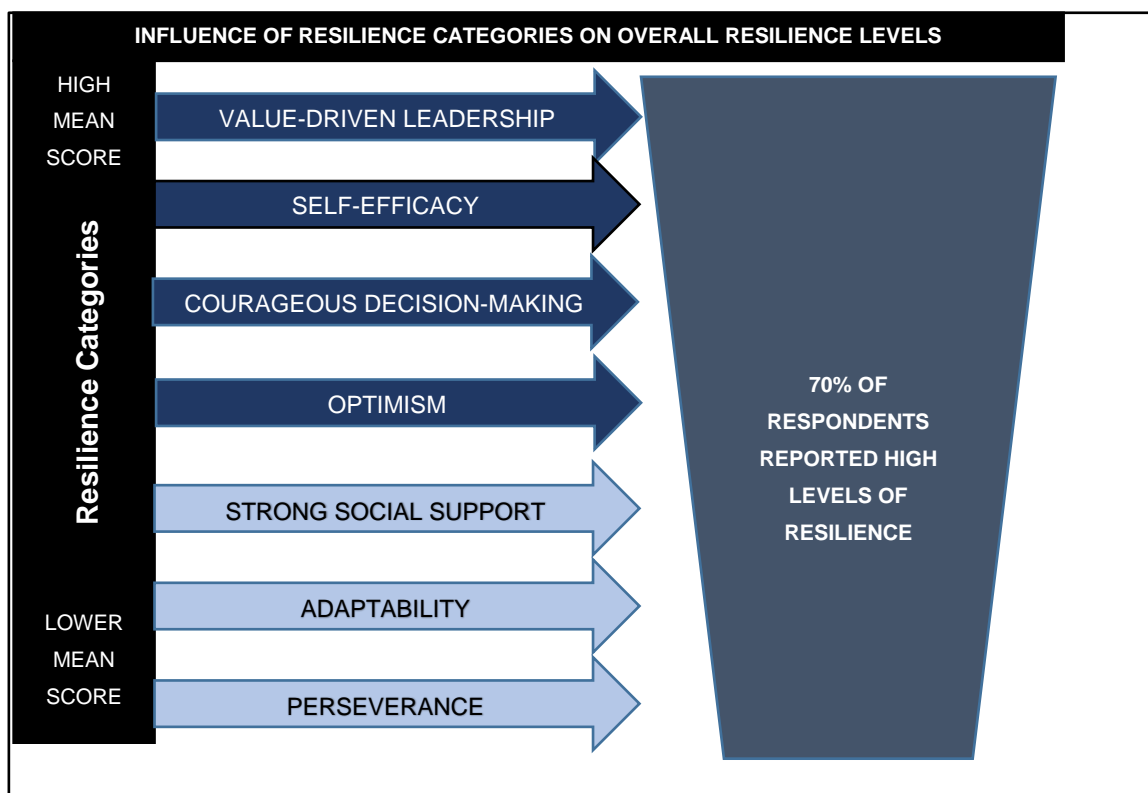
Figure 5.1 shows that higher mean scores were obtained for value-driven leadership, self-efficacy, courageous decision-making and optimism as compared to strong social support, adaptability and perseverance.

Value-driven leadership is the resilience category that made the highest contribution to the overall level of resilience within the target group. Leadership authors including Covey (1989), emphasise the importance of clear personal values that guide the decisions and behaviours of leaders. Within a volatile environment where relationships, networks and partnerships are of vital importance, value-driven leadership provides an anchor that contributes to the development of productive relationships and mitigates the negative impact of bouncing from one idea to the next (Patterson, Goens & Reed, 2009). Articulating and operating from a consistent value system is also an outcome of spiritual renewal practices.

Self-efficacy is the resilience category that made the second highest contribution to the overall resilience levels of the target group. The study results showed a different picture to the IBM studies reported in the literature review in chapter two. The IBM report (2010) states that eighty five percent (85%) of CEOs confirmed that they felt unsure of their ability to deal with the exponential rate of change. Leaders face constant external pressures and high expectations from various stakeholders to deliver results consistently in an ever-changing landscape. This pressure could cause an internal state of concern for the leader with regard to the leader's ability and confidence to contribute significantly in the complex environment (Patterson, Goens & Reed 2009). This lack of confidence threatens the leaders' ability to bounce back following mistakes and other adverse situations. Contrary to the above-mentioned report, this particular target group reported that they felt confident in their ability to achieve successful results as measured by the mean score.

It is worth noting that regardless of the overall higher mean score on optimism; only sixty-six percent of the respondents were allocated to the category of high level of optimism. Senior managers in particular, reported that they were able to organise and take actions that were required to achieve goals regardless of the levels of turbulence. Middle managers reported less confidence in their ability to navigate adverse conditions successfully. It is possible that duration and exposure in a senior leadership position shapes the perception of leaders with regard to levels of self-efficacy.

The target group achieved an overall high score with regard to courageous decision-making, which shows that the target group was willing to take accountability with regard to making tough choices when faced with adverse conditions. However, the respondents scored a particularly low score on two questionnaire items within this category. With regards to the first item, the respondents indicated that they did not feel confident to make decisions that were not aligned to common practice or respected advice. This could mean that most respondents were inclined to follow existing, well-known solutions and ideas rather than to improvise and apply empirical creativity which are adaptive behaviours associated with effective leadership in the VUCA world (Coutu, 2002; Collins & Hansen, 2011).

According to Reeves and Deimler (2015), the ability to experiment to explore new solutions and foster organisational learning represent new, competitive leadership advantages. The second item on which the respondents scored low was related to the ability to make quick principled decisions when faced with unexpected turmoil. Leaders therefore need to experiment and explore new solutions but these should still be guided by grounded principles and values.

The respondents also reported higher levels of optimism. An optimistic approach provides a number of benefits for leaders including having better social relationships, being more flexible, thinking postively and recovering from illness or trauma faster (Patterson, Goens & Reed, 2009). High levels of optimism support leaders in remaining hopeful and finding meaningful solutions to complex prolems and scenarios. This is of significant value to other stakeholders as an optimistic view is contagious within an organisation (Goleman, 2000).

The respondents scored lower on perseverance, adaptability and strong social support. Therefore, these resilience categories represent leaders who participated in the study with a development opportunity. Perseverance refers to the ability of leaders to remain committed to a course of action in order to deliver a set of goals regardless of the adversity, obstacles or disappointment. Leaders within the target group indicated that they struggled to remain focused considering a consistent stream of distractions, which occur within an environment.

Leaders who are not able to maintain focus contribute to the existing levels of uncertainty and ambiguity in organisations. Leadership practices such as having a well-articulated purpose, upholding a bigger picture perspective and paying attention to environmental signals help leaders to identify and focus on priorities and goals.

Leaders demonstrate adaptability by being attentive and responsive to environmental signals, use experiments to develop new strategies and learn by developing new forms of partnerships with stakeholders within the value chain. In addition, they generate greater flexibility within organisational systems, resources and structures (McCann, 2009; Horney et al., 2010; Kotter, 2012; Reeves & Deimler,

2015). Leaders in this study can benefit from greater support to build their resilience with regards to adaptability. Considering the lesser influence of self-renewal practices (Table 4.17), alternative measures need to be explored to support the development of adaptability.

Therefore, while the leaders who participated in this study reflect value-driven leaders, self-efficacy, courageous decision-making and optimism, they could benefit from developing perseverance and adaptability, as well as broadening their reliance on a strong social support basis.

5.3.2   Self-renewal practices

Low scores were obtained for self-renewal practices with only 32.3% of leaders grouped as adopters of high levels of self-renewal practices. Socio-emotional renewal practices obtained the lowest scores. This finding was contradictory to literature that emphasises the importance of strong social support networks. Social networks protect leaders against the typical isolation that occurs as leaders reach senior positions (Boyatzis & McKee, 2005). Social networks and support provide a platform for sharing experiences, exploring ideas and learning. Leaders who recognise the value of strong social support will be more inclined to recognise the value of collective leadership as opposed to the traditional hero leadership mentality (Collins & Hansen, 2011). Resilience is supported by the deliberate effort of the leader to remain connected to a network of well-resourced persons.

The lower scores with regard to cognitive renewal practices present another leadership development opportunity considering the compelling relationship between leadership and learning within the current VUCA context. Knowledge, skills and experience of leaders become obsolete as the organisational environment shifts and changes at regular intervals with varying intensity. Cognitive renewal broadens existing mental models or paradigms and assists leaders to have open minds when dealing with dilemmas and complex problems (Gardner, 1981). Considering this gap that emerged in the study, it is evident that leadership development initiatives should include approaches that encourage leaders to adopt cognitive renewal practices.

It also became evident that the respondents did not consider journaling as a method of reflection and learning. Journaling is a fundamental element of mindfulness and learning. The practice of continuous mindfulness and learning supports resilience as it grows the adaptive capacity of leaders (Keye & Pidgeon, 2013).

Low scores were also obtained for stress management practices. This presents a major risk to leaders, considering research findings in current literature that identify unmanaged stress as a key contributor in the derailment of the careers of executive managers.

In summary, the results with regard to resilience and self-renewal showed that the leaders demonstrated relatively high levels of resilience but that their resilience could be elevated through perseverance, adaptability and strong social support. These leaders will continue to face disruptive change and escalating demands and their resilience levels are likely to be tested. Considering their current lower level of adopting self-renewal practices, these leaders might find it difficult to rebuild or maintain high levels of resilience when they face extraordinary challenges.

5.3.3 The relationship between leadership resilience and self-renewal practices

The study confirmed a relationship between levels of leadership resilience and self-renewal practices. Understanding this relationship is critical for leadership effectiveness, bearing in mind that resilience is not a fixed characteristic but rather a capability that is inclined to diminish when leaders are faced with constant pressure, adverse conditions and unexpected changes. Leaders can maintain or improve their levels of resilience by increasing their commitment to self-renewal practices. This finding is congruent with the views of authors such as Covey (1989), Gardner (1995) and Boyatzi (2005) who suggest that sustainable leadership effectiveness within a turbulent environment requires discipline with regard to personal renewal.

The results also revealed that different self-renewal dimensions have different levels of influence on resilience levels. Figure 5.2 shows the influence of the self-renewal

dimensions on resilience in order from greatest to lowest level of influence, based on the practical significance scores obtained through the Cramer V. These are indicated in the arrow next to each self-renewal practice.

Figure 5.2: The influence of self-renewal on resilience
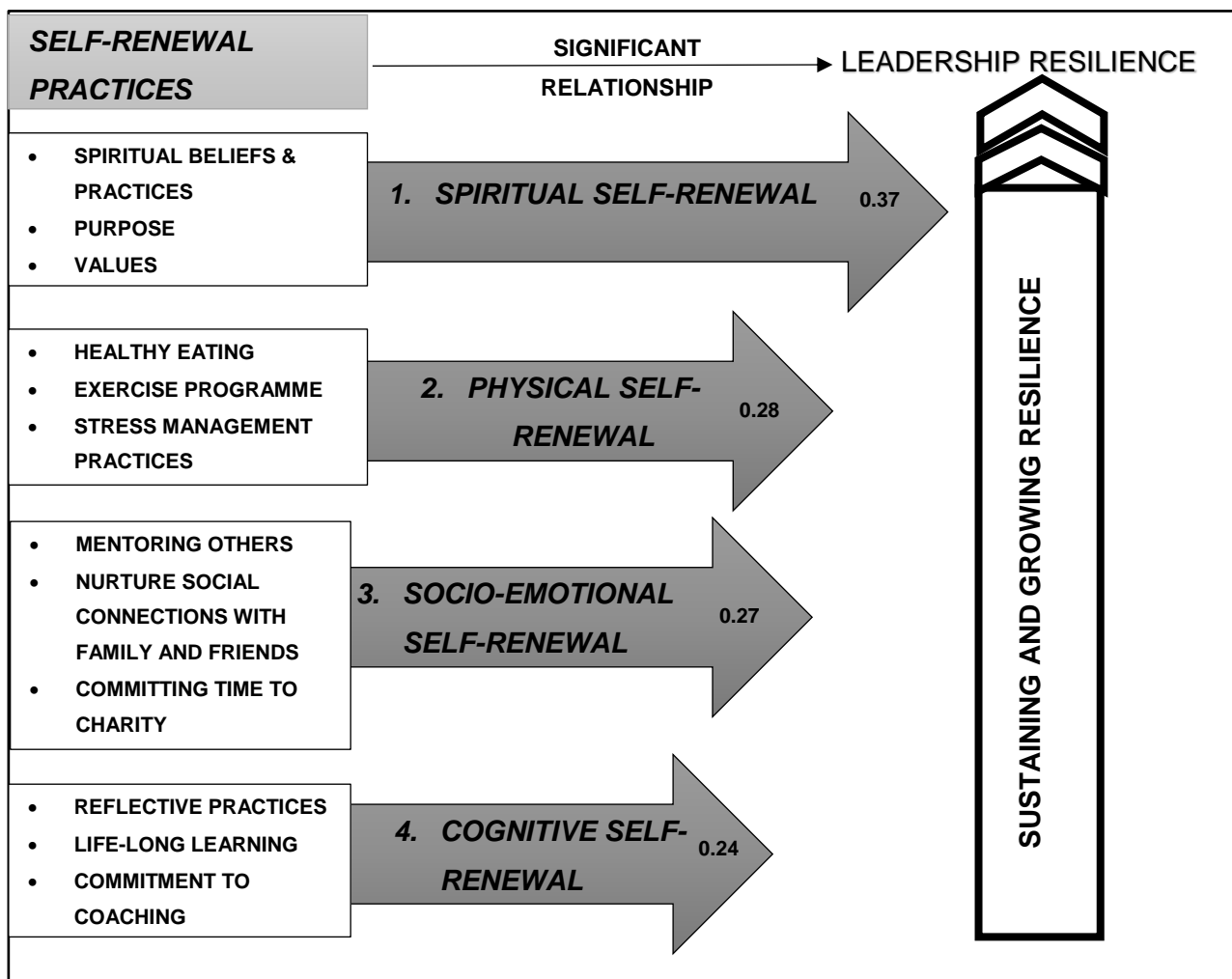
Leaders who develop a personal regime of practicing self-renewal will create an advantage for themselves in terms of strengthening their resilience capabilities. They would be less likely to confront career challenges such as burnout or become less effective in their leadership due to constant pressure and demands.

Currently there is insufficient reference in leadership literature with regard to the deliberate integration of self-renewal practices within the content or processes of leadership development. Reflective practices such as journaling, coaching and

value clarification are possibly the most common self-renewal practices within leadership development programmes. The findings of this study offer the developers of leadership development programmes insight into areas of resilience that are required for leaders to effectively deal with challenges as well as self-renewal practices that are linked to resilience. The model presented in Figure 5.2 provides a systemic framework that leaders can use to develop a personal renewal strategy. The success of such a strategy should be evident in greater leadership resilience.

5.3.4 The relationship between the categories of resilience and dimensions of self-renewal

The study confirms a number of statistically significant relationships amongst the seven categories of resilience, among the four dimensions of self-renewal practices as well as amongst the categories of resilience and the dimensions of self-renewal practices.

In practice, this means that paying attention to a particular category of resilience will in turn influence the other categories. For example, optimism and value-driven leadership are closely related. Leaders who are interested in developing increased levels of courageous decision-making should pay attention to self-efficacy, which can be developed through constructive feedback loops, mentoring relationships and challenging limiting beliefs about the self. Considering the gap identified in leadership adaptability, the adaptability of leaders can be increased by integrating topics such as optimism, value-driven leadership and courageous decision-making within the leadership development approach. Based on the results obtained in this study, efforts to sustain and grow resilience capabilities such as strong social support, adaptability and perseverance will have less influence on self-renewal practices.

The results show a similar pattern of integrated relationships amongst the four self-renewal dimensions. An integrated development approach should therefore involve all four dimensions of self-renewal, as they are then more likely to be effective. The results reiterated the discussion presented in Section 5.3.2 with regard to the

powerful influence of spiritual self-renewal practices to spur other categories of resilience.

Reliance on strong social support as a form (category) of resilience is least related to any of the self-renewal practices including, specifically socio-emotional renewal practices. This seems incongruous considering that socio-emotional renewal strategies are intended for establishing and maintaining supportive relationships, which in turn contribute to sustained levels of resilience. The incongruity might be linked to the fact that the target group achieved lower scores for both of the resilience categories of strong social support and socio-emotional renewal practices, which confirms that these need further attention. The quality and depth of social engagements depend on the availability of time to invest with mentors, family, friends or charitable events. Leaders who are bombarded with work demands are challenged in making time for socially related activities. It also resonates with the phenomena of CEO disease, which is described as increasing levels of isolation experienced by leaders as they move to higher hierarchical positions (Boyatzi and McKee, 2005).

Southwick and Charney (2013) emphasise that leaders need to develop principles and practices that support constructive and intimate social networks in terms of both giving and receiving support. Socio-emotional renewal practices are strongly related to self-efficacy, optimism, value-driven leadership and courageous decision-making. This suggests that meaningful social engagement and strong networks are valuable for supporting confidence and hopefulness in leaders rather than for mere social support.

Strong social support is increasingly important. Firstly, there is the shifting leadership paradigm towards collective leadership. The outdated idea of single hero leaders who operate in isolation is being replaced by leaders who are able to align themselves with leadership capabilities throughout the organisation. Leadership has become a collective process that is spread within a network of people (Petrie, 2014). Secondly, the complex, volatile and unpredictable environment requires a network of knowledge, expertise and ideas where shared learning and innovation create a competitive advantage in organisations. This changing paradigm provides a major

opportunity for developers of leadership development programmes to deliberately initiate and monitor the creation of meaningful social networks as opposed to the continued isolation of leaders.

5.3.5 Differences in resilience and self-renewal practices based on selected demographical variables

The study showed very few significant different results based on the demographical variables including gender, age and level of management.

With regard to gender, there were no statistically different results. Male participants did achieve a slightly higher score than female participants with regard to reliance on strong social support. This could be reminiscent of the historical reality of male leadership dominance within organisations that offers male managers access to an existing network of friends and colleagues, while female managers are more isolated in the workplace. A second aspect might relate to the availability of time outside the formal worktime for social engagements and networking. Males in managerial positions might be better able to assign time for social engagements and networking as many female managers have additional family responsibilities such as being the principle child carer in households. This and other household responsibilities place greater time demands on female managers to balance workplace demands with family responsibilities.

The age variable did present an interesting finding with regards to adaptability. Managers older than 51 years scored significantly lower adaptability than their younger counterparts did. The VUCA environment within which organisations operate, demands high levels of adaptability to deal with the shifting demands, challenges and opportunities. As current patterns of change are characterised by rapid and unpredictable shifts, leaders require an agile disposition to reposition organisations continuously (Horney et al., 2010). The results suggest that leaders who are older than 50 years found adaptability the most challenging category of resilience. This result is concerning since, according to a 2015 Executive Report, 75% of CEOs and executive teams in South Africa's top 40 companies were older than 50 years (Hammer, 2016).

This might signal a potential limitation in organisations in terms of both the continued resilience within executive teams as well as the possible consequences for sustained business. This finding confirmed reports by CEOs that they did not feel ready or capable of dealing with the perpetual increasing speed of change (IBM Global Business Services, 2010). Focusing on developing greater adaptability in older leaders can increase the positive outcomes of leadership development programmes.

When exploring the results for self-renewal practices as per age group, it became clear that leaders older than 51 years indicated that they were more committed to self-renewal practices. Regardless of their higher levels of commitment to self-renewal, their levels of adaptability remain a challenge. This reiterates the finding presented in Table 4.17 that adaptability is not as closely related to the self-renewal practices as compared to other resilience categories. Alternative measures and efforts need to be explored to support older senior managers in developing the required adaptability capacities. This demonstrates the importance of instilling such self-renewal practices in younger leaders so that they can reap the benefits of these practices earlier in their leadership careers and be better able to sustain their resilience. In general, the results with regards to demographic variables point towards very similar conditions, capabilities and practices among leaders regardless of gender, age or level of management.

5.4 SUMMARY OF CONCLUSIONS AND LEADERSHIP DEVELOPMENT IMPLICATIONS

The study was aimed at exploring the relationship between leadership resilience and self-renewal practices. The results of the study are useful for informing the content and nature of leadership development initiatives that have a particular interest in growing and maintaining high levels of leadership resilience. The discussion sessions raised the following issues:

a) Leaders in the study demonstrated high levels of resilience and specifically for value-driven leadership, self-efficacy, optimism and courageous decision-making.

b) The leaders scored lower on the resilience categories of perseverance, adaptability and strong social support. These might represent capabilities that currently are not sufficiently addressed within leadership development programmes or the current efforts do not yield the anticipated results.

c) The majority of leaders were not highly committed to self-renewal practices and this represents a major development opportunity during leadership training programmes and coaching.

d) Spiritual renewal practices were the most significant dimension in terms of influencing the levels of leadership resilience. Although spiritually in the workplace is often questioned, the study presents a case for including it in leadership development.

e) Resilience is a measurable capability and leadership development approaches can determine the gaps and constraints of individual participants in order to shape unique strategies and interventions for leaders.

f) Levels of resilience are related to self-renewal practices that support the importance of leaders to implement a disciplined regime of self-renewal practices, including all four dimensions.

g) The interrelationship among the seven categories of resilience, among the four dimensions of self-renewal practices and between resilience and self-renewal points towards the need for a holistic and integrated development approach to leadership resilience.

h) The leader's reliance on strong social support represents a neglected area both in terms of the resilience categories and in terms of socio-emotional self-renewal practices. It represents an area for further conversation with leaders in order to establish the value of social support as well as the development of practical strategies for leaders to migrate from a more isolated environment towards collective leadership.

i) The influence of demographic variables such as gender, age and level of management in resilience levels and self-renewal practices are minimal. The following aspects can be considered for custom developed interventions:

- Adaptability of leaders older than 51 years requires particular attention and support to enable greater flexibility.
- The resilience and decision-making of middle managers might be affected by lower levels of self-efficacy. This presents a

developmental opportunity within their leadership development plans.

- Female leaders might have more barriers and constraints in terms of establishing and maintaining social engagements and networks.

5.5 PROBLEMS AND LIMITATIONS

No major problems were experienced in the study. However, it was a challenge to secure enough participants, as the study was anonymous and voluntary. The statistical methods utilised in the study were adopted for a smaller sample. Irrespective of the smaller sample size, the results did deliver valuable insights into the resilience levels of leaders and the self-renewal practices that they engaged in. The results of the study provided food of thought for the future development of leadership development interventions.

Furthermore, the data collection instrument relied on self-reporting by leaders, which in itself has limitation as an instrument. The data collection is limited to the perception of each respondent with regards to his or her resilience.

5.6 AREAS FOR FUTURE RESEARCH

Based on the main findings of this study, the following areas for future research are highlighted:

a) The study established a link between resilience and self-renewal practices. The findings are useful for the development of leadership development programmes. It can be established, through research, the extent to which leadership programmes developed and presented at business schools include aspects of resilience and self-renewal.

b) Experiments within leadership development programmes to determine the impact of self-renewal practices, including all four dimensions, on the levels of leadership resilience over a period of one to two years would fundamentally improve understanding with regard to the practical relationship between leadership effectiveness, resilience and self-renewal.

c) Spiritual renewal emerged as a major influence on the resilience levels of leaders. In this respect, it is suggested that a qualitative study is undertaken to determine the extent to which leaders value spirituality as a work-related attribute, how they develop their spirituality and to identify critical incidents in which spirituality sustains them as leaders. The perceptions of team members with regard to their leaders' spirituality and the benefits of such spirituality can also be determined.

d) Women leaders indicated lower levels of social support and networking capability. It is therefore suggested that the extent and nature of work-related social support and the networking capability of women are researched with the view of empowering them for entering into and progressing in executive leadership positions.

e) The study revealed that leaders are not utilising self-reflection and specifically journaling as a self-reflection technique. It would be interesting to conduct an experiment to determine the influence of self-reflective journaling on leadership development.

5.7 CONCLUSION TO THE STUDY

Leadership resilience is imperative in a world of work characterised by VUCA. Although leadership effectiveness is not synonymous with leadership resilience, levels of resilience are powerful determinants of sustained leadership effectiveness within a turbulent environment. For leaders to remain effective in terms of their own performance as well as their ability to remain connected, engaged and inspiring for others, they need to respond to high levels of disruptive change with confidence and continued personal well-being.

Resilience is not an innate characteristic but a leadership capability that can be shaped and fostered through self-renewal practices. Self-renewal practices support the building of leadership capacities that create a resilience advantage, including cognitive skills such as optimism, personal capabilities including self-efficacy and action-oriented skills comprising adaptability and perseverance. The study revealed that spiritual self-renewal was especially important in developing leadership resilience. Spiritual self-renewal practices ensure the manifestation of a purposeful

life anchored by a well-articulated value system. It provides a source of consistency in the face of rapidly changing forces that cannot be predicted or controlled.

The leadership profile has significantly changed and the results of the study provide thought-provoking insights that could shape leadership development initiatives for the future.

REFERENCES

Bennis, W. & Sample, S. (2015). *The art and adventure of leadership.* New Jersey: John Wiley & Son Inc.

Boyatzis, R. & McKee, A. (2005). *Resonant leadership.* Massachusetts: Harvard Business School Press.

Brown, K. W. & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal for Personality and Social Psychology, 84*, 822-848.

Chivere, M. (2016, April 16). *Accelerate performance.* Retrieved from stress in the South African workplace: http://accelerateperformance.co.za/stress-in-the-south-african-workplace/

Collins, J. & Hansen, M. T. (2011). *Great by choice.* New York: Random House Business Books.

Conner, D. (1992). *Managing the speed of change.* Toronto: Random House.

Coutu, D. (2002). How resilience works. *Harvard Business Review, 80* (5 - May), 46-52.

Covey, S. (1989). *The 7 habits of highly effective people.* New York: Simon & Schuster.

Creswell, J. W. (2014). *Research design: Qualitative, quantitative and mixed method approaches.* USA: Sage Publications, Inc.

De Vries, K., Ramo, L. & Korotov, K. (2009). *Organizational culture, leadership, change and stress.* Fountaineblaeu: INSEAD.

Discovery Health. (2016, October 5). *Overall report 2014 - Healthy company index.* Retrieved from Discovery Health: http://healthycompanyindex.co.za/

Drucker, P. S. (2001). *Leading in a time of change.* New York: Jossey-Bass.

Dweck, C. S. (2006). *Mindset: How you can fulfil your potential.* London: Constable & Robinson Ltd.

English Oxford Living Dictionaries. (2017, January 22). Retrieved from: https://en.oxforddictionaries.com/definition/turbulence

Everly, G. S., Douglas, S. A. & Everly, G. S. (2010). *The secrets of resilient leadership - When failure is not an option.* New York: DiaMedia Publishing.

Frankl, V. E. (1992). *Man's search for meaning.* Boston: Beacon Press.

Gardner, J. W. (1995). *Self renewal: The individual and the innovative society.* New York: W.W. Norton & Co.

George, B. (2015). *Discover your true north.* New Jersey: John Wiley & Sons Inc.

Goleman, D. (1995). *Emotional Intelligence.* London: Bloombury Publishing.

Goleman, D. (2000). Leadership that gets results. *Harvard Business Review, 78* (2 - March), 79-90.

Graham, L. (2013). *Bouncing back.* California: New World Library.

Gravetter, F. & Wallnau, L. (2013). *Essentials of statistics for the behavioral sciences.* New York: Cengage Learning.

Grotberg, E. H. (2003). *Resilience for today.* USA: Praeger.

Hammer, J. (2016, December 4). *Finding the facts: South Africa's future leaders, 2015.* Retrieved from jhammer.co.za: www.jhammer.co.za/wp-content/uploads/2016/03/JackHammer-ER3.pdf

Hawksworth, J. & Chan, D. (2015). *The world in 2050: Will the shift in global economic power continue?* London: PriceWaterhouseCooper.

Hicks, D. (2010). Globalization. In G. Hickman (Ed.), *Leading organizations: Perspectives for a new era* (pp. 14-20). California: Sage Publications Inc.

Hogan, R. & Kaiser, R. (2005). What we know about leadership? *Review of General Psychology, 9* (2), 169-180.

Horney, N., Pasmore, B. & O'Shea, T. (2010). Leadership agility: A business imperative for a VUCA world. *People and Strategy, 33*, 33-38.

IBM Global Business Services. (2010). *Capatilizing on complexity.* New York: IBM Corporation.

IBM Global Business Services. (2012). *Leading through connections - May.* New York: IBM Publishers.

Johnson, B. (2014). *Polarity management.* Amherst, MA: HRD Press.

Joiner, B. & Josephs, S. (2007). *Leadership agility: Five levels of mastery for anticipating and initiating change.* San Francisco: Jossey-Bass.

Kaplin, A. & Anzaldi, L. (2015, June 1). *New movement in neuroscience: A purpose-driven life.* Retrieved from The Dana Foundation: http://www.dana.org/Cerebrum/2015/New_Movement_in_Neuroscience__A_Purpose-Driven_Life/

Keye, M. D. & Pidgeon, A. M. (2013). An investigation of the relationship between resilience, mindfulness and academic self-efficacy. *Open Journal of Social Sciences, 1* (6), 1-4.

Kotter, J. (2007). *Succeeding in a changing world.* Cambridge: Enterprise Media.

Kotter, J. (2012). Accelerate. *Harvard Business Review, 90,* (11 - November), 44-58.

Kouzes, J. M. & Posner, B. Z. (2012). *The leadership challenge* (5th ed.). San Francisco: Jossey-Bass.

Kouzes, J. M. & Posner, B. Z. (2014). *Turning adversity into opportunity.* San Francisco: Jossey-Bass.

Lawrence, K. (2013, October 9). *Developing leaders in a VUCA environment.* Retrieved from UNC - Executive Development: www.execdev.unc.edu

Liu, L. (2010). *Conversation on leadership.* San Francisco: John Wiley & Son.

Lock, A. (2014). *The resilient leader.* West Sussex: Roffey Park Institute.

Loehr, J. & Schwartz, T. (2003). *The power of full engagement.* USA: Free Press.

Lucy, D., Poorkavoos, M. & Thompson, A. (2014). *Building resilience: Five key capacities.* West Sussex: Roffey Park Institute.

Maddi, S. (2002). The story of hardiness: Twenty years of theorizing, research and practice. *Consulting Psychological Journal: Practice and Research, 54* (3), 173-185.

McCann, J. (2009). Building agility, resilience and performance in turbulent environments. *People and Strategy, 32* (3), 45-51.

McCann, J. & Selsky, J. (2012). *Matering turbulence.* San Francisco: John Wiley & Son.

McKee, A., Boyatzis, R. & Johnston, F. (2008). *Becoming a resonant leader.* Massachusetts: Harvard Business Press.

Mouton, J. (1996). *Understanding social research.* Pretoria: Van Schaik Publishers.

O'Brien, D. (2006). *Leadership in turbulent times.* Retrieved from CEO Forum Group: http://www.ceoforum.com.au

Ovans, A. (2005, January 15). *What resilience means and why it matters.* Retrieved from Harvard Business Review - Digital article: https://hbr.org/2015/01/what-resilience-means-and-why-it-matters

Patterson, J., Goens, G. & Reed, D. (2009). *Resilient leadership for turbulent times: A guide to thriving in the face of adversity.* Maryland: Rawson & Littlefield Education.

Petrie, N. (2014). *Future trends in leadership development.* North Carolina: Center for Creative Leadership.

PMG, P. M. (2014, November 7). *Costs of telecommunications: Department of Telecommunications, ICASA, Vodacom, MTN, Cell C, Telkom & Neotel briefings.* Retrieved from Parliamentary Monitoring Group: https://pmg.org.za/committee-meeting/17832/

Price Waterhouse. (1996). *The Paradox Principle.* Chigago: Irwin Professional Publishing.

Redelinghuys, J. (2013, September 9). *Stressful news about executive stress.* Retrieved from Daily Maverick: http://www.dailymaverick.co.za/

Reed, D. E. & Patterson, J. L. (2008). *Leadership Resilience Profile: A technical supplement.* Birmingham: Unpublished Manuscript, University of Alabama-Birmingham.

Reeves, M. & Deimler, M. (2015, July 1). *Adaptability: New competitve advangtage.* Retrieved from Harvard Business Review - Digital Article: https://hbr.org/product/adaptability-the-new-competitive-advantage/R1107M-PDF-ENG

Reeves, M., Love, C. & Mathur, N. (2012). *The most adaptive companies 2012.* New York: The Boston Consulting Group.

Richardson, G. E. (2002). The metatheory of resilience and resiliency. *Journal of Clinical Psychology, 58*, 307-321.

Rudderman, M. N., Hannum, J. B. & Steed, J. L. (2001). Making the connection: Leadership skills and Emotional Intelligence. *LIA Centre for Creative Leadership, 21* (5), 3-7.

Seligman, M. E. (2011). Building resilience. *Harvard Business Review, 89* (4 - April), 100-106.

Siebert, A. (2005). *The resiliency advantage: Master change, thrive under pressure and bounce back from setbacks.* San Francisco: Berrett-Koehler Publishers, Inc.

Southwick, S. & Charney, D. (2013). Ready for anything. *Scientific American Mind: July/August*, 32-41.

Staff Writer. (2016, September 22). *What the rest of the world thinks about South Africa's universities*. Retrieved from BusinessTech: https://businesstech.co.za/news/lifstyle

Sternberg, E. M. (2001). *The balance within: The science connecting health and emotions.* New York: W.H. Freeman & Company.

The Coca-Cola Company. (2016, May 10). *The Coca-Cola Beverages Africa merger parties welcome competition tribunal approval for formation of CCBA.* Retrieved from Coca-Cola Company: http://www.coca-colacompany.com/press-center/press-release

Toffler, A. (1970). *Future shock .* New York: Random House Inc.

Tushman, M. L., Smith, W. K. & Binns, A. (2011). The ambidextrous CEO. *Harvard Business Review, 89* (6), 74-80.

ADDENDUM 1: QUESTIONNAIRE					
SECTION A: DEMOGRAPHICAL INFORMATION	**Response Categories**				
Gender	Male	Female			
Age group	21 - 30 years	31 - 40 years	41 - 50 years	51 years and older	
Level of management	Middle management	Senior management	Manage own business		
Size of team	0 to 5 team members	6 to 15 team members	More than 15 team members		
SECTION B: LEADERSHIP RESILIENCE PROFILE (Reed & Patterson, 2006)	**Strongly disagree**				**Strongly agree**
I have a positive influence in making things happen	1	2	3	4	5
I expect that good things can come out of adverse situations	1	2	3	4	5
I focus my energy on the opportunities to rebound in a bad situation without down playing the importance of obstacles	1	2	3	4	5
I demonstrate an overall strength of optimism in my leadership role	1	2	3	4	5
I gather the necessary information from reliable sources about what is really happening relative to the adversity	1	2	3	4	5
I seem to look for the positive aspects of adversity to balance the negative aspects	1	2	3	4	5
I seem to accept the reality that adversity is both inevitable and many times occurs unexpectedly	1	2	3	4	5
I possess the overall strength of understanding current reality in my leadership role	1	2	3	4	5
I make value-driven decisions even in the face of strong opposing forces	1	2	3	4	5
I am able to privately clarify or publicly articulate my core values	1	2	3	4	5
I rely on strongly-held moral or ethical principles to guide me through adversity	1	2	3	4	5
I demonstrate an overall strength of being value-driven in my leadership role	1	2	3	4	5

	1	2	3	4	5
I have an overall sense of competence and confidence in my leadership role	1	2	3	4	5
I take a deliberate step-by-step approach to overcome adversity	1	2	3	4	5
I demonstrate the essential knowledge and skills to lead in tough times	1	2	3	4	5
I maintain a confident presence as a leader in the midst of adversity	1	2	3	4	5
I reach out to build trusting relationships with those who can provide support in tough times	1	2	3	4	5
When adversity strikes I try to learn from the experiences of others who faces similar circumstances	1	2	3	4	5
I have a strong support base to help me through tough times in my leadership role	1	2	3	4	5
I try to learn from role models who have a strong track record of demonstrating resilience	1	2	3	4	5
I take prompt, principled action on unexpected threats before they escalate out of control	1	2	3	4	5
I take prompt decisive action in emergency situations that demand an immediate response	1	2	3	4	5
I am able to make needed decisions if they run counter to respected advice by others	1	2	3	4	5
I demonstrate an overall strength of making courageous decisions in my leadership roles	1	2	3	4	5
When I choose to take no leadership action in the face of adversity, I accept personal accountability for this choice	1	2	3	4	5
I accept accountability for the long term organisational impact of any tough leadership decisions I make	1	2	3	4	5
I have an overall strength of accepting personal responsibility for my leadership actions	1	2	3	4	5
In my leadership role, I acknowledge mistakes in my judgement by accepting responsibility to avoid these mistakes in future	1	2	3	4	5
I adjust my expectations about what is possible based on the current situation	1	2	3	4	5
I put my mistakes in perspective and move beyond them	1	2	3	4	5
I change course as needed to adapt to changing circumstances	1	2	3	4	5

	Never				Most of the time
I search for creative strategies to achieve positive results in difficult situations	1	2	3	4	5
I refuse to give up in over-coming adversity even when all realistic strategies have been exhausted	1	2	3	4	5
I sustain a steady focus on the most important priorities until I achieve successful results	1	2	3	4	5
I demonstrate perseverance in my leadership role	1	2	3	4	5
I never let distractions interfere with my focus on important goals and tasks	1	2	3	4	5
SECTION C: COMMITMENT TO SELF-RENEWAL PRACTICES					
	Never				**Most of the time**
I eat a healthy balanced diet	1	2	3	4	5
I have a routine exercise programme	1	2	3	4	5
I get sufficient sleep every day	1	2	3	4	5
I have specific periods of relaxation weekly	1	2	3	4	5
I go for medical screening as required by my health profile	1	2	3	4	5
I practice stress management strategies to remain healthy	1	2	3	4	5
I avoid excessive use of alcohol	1	2	3	4	5
I consciously think about my value system	1	2	3	4	5
I make decisions based on a clear set of personal values	1	2	3	4	5
I invest time in meditation and/or prayer daily	1	2	3	4	5
I listen to music that uplifts my spirit	1	2	3	4	5
I read literature that supports my spiritual development	1	2	3	4	5
I take time to enjoy the wonder of nature	1	2	3	4	5
I practice a hobby that requires creativity	1	2	3	4	5
I participate in learning programmes to promote my professional development	1	2	3	4	5
I keep a journal of daily activities in order to reflect and learn	1	2	3	4	5
I find new things to learn about	1	2	3	4	5
I read literature that contributes to my professional growth	1	2	3	4	5
I do activities that increase my mental alertness	1	2	3	4	5
I reflect on new personal and professional challenges	1	2	3	4	5

I am involved in mentoring others	1	2	3	4	5
I actively develop constructive relationships with others	1	2	3	4	5
I act with empathy towards others	1	2	3	4	5
I assess my mood and emotional well-being	1	2	3	4	5
I rely on a social network for support	1	2	3	4	5
I do charity work that requires an investment of my time	1	2	3	4	5
I participate in a professional coaching relationship	1	2	3	4	5
I routinely visit with friends and family	1	2	3	4	5