

**A Leadership Capability Model for the
South African Higher Education Environment**

By

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DATE: DECEMBER 2020

DECLARATION

I, Michael Stanley Cloete, student number 30764335, hereby declare that “A Leadership Capability model for the South African Higher Education Environment” is my original work, and that all the references cited have been acknowledged.

I declare the ethical clearance to conduct the research was acquired from the Department of Industrial and Organisational Psychology, University of South Africa. Permission was obtained from the participants who participated in this research. Furthermore, I declare the study has been carried out in conformity with the Policy for Research Ethics of the University of South Africa (UNISA). Caution was exercised to ensure the research was conducted with the highest integrity, considering Unisa’s Policy for Infringement and Plagiarism.

In addition, I declare that I have not formerly submitted this work, or parts thereof, for examination at UNISA for another qualification or at any other higher education institution.

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This incredible journey would not have been possible without the love, support and encouragement from my beautiful wife, Henriette. A special mention goes to my wonderful father who started the journey with me but was suddenly called by God to support me from a distance, in heaven. To my awesome children Divan, Francois, Caitlin, Hardus and Suné, thank you for encouraging me and helping me maintain a sense of humour throughout this journey. Thank you to the participants for allowing me into their world to understand and explain their experience, without whom this research would not have been possible. A special thank you to Prof Sonja Grobler and Prof Yvonne Joubert for their constant support, advice and encouragement. You played a huge role in assisting me to achieve this milestone. Lastly, thank you to God for giving the ability, strength and perseverance to undertake this humbling journey.



ABSTRACT

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DEPARTMENT : Industrial and Organisational Psychology
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Over the past few years, the world in general has been influenced by several rapid changes and disruptions including climate change, globalisation, economic developments, the fourth industrial revolution, technological advancements, social changes, political changes and most recently the Covid-19 pandemic.

The above changes have also influenced South Africa Higher Education Institutions (HEI) in South Africa. In particular, over the past two to three years, South African HEIs have been increasingly faced with the drive for transformation in higher education (including the decolonisation of the curriculum), reduced government subsidies, increased competition, rising costs, increased enrolments, declining resources the announcement of free higher education, increased politicisation of higher education and the increased need to use information technology in teaching and research. As a result, the aforementioned rapid changes and disruption require that leaders in South African HEIs possess the capabilities that will enable them to successfully lead their organisations during such times.

While leadership has been researched within South African HEIs none was found that focussed on identifying and describing the capabilities needed to lead successfully in South African HEIs during rapid change and disruption. The aim of this research was

to determine a leadership capabilities model required to lead successfully during rapid change and disruption within South African HEIs. This research successfully identified and described the capabilities and competencies needed to lead South African HEIs successfully during rapid change and disruption in general as well as for each leadership level.

Finally, this research formulated a theory and model that explains the relationship between rapid change and disruption, the possession and application of the capabilities required to lead successfully in South African HEIs during rapid change and disruption and actually dealing successfully with the rapid change and disruption.

KEYWORDS:

Adaptability, change management, disruption, higher education, leadership, leadership capabilities, leadership competencies, management, rapid change, South African Higher Education Institutions

ABSTRAK

'n Leierskapbekwaamheidmodel vir die Suidafrikaanse Hoër Onderwys Omgewing

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Oor die afgelope paar jare was die wêreld deur verskillende vinnige veranderinge en ontwrigtings beïnvloed insluitend klimaatverandering, globaliseering, ekonomiese ontwikkelinge asook die vierde industriële rewolusie, tegnologiese vooruitgange, sosiale veranderinge, politiese veranderinge, en mees onlangs, die Covid-19 pandemie.

Die bogenoemde veranderinge het ook die Suid-Afrikaanse Hoër Onderwys beïnvloed. In die besonder, oor die afgelope twee tot drie jaar, is Suid-Afrikaanse Hoër Onderwys Instansies toenemend gekonfronteer deur 'n strewe na transformasie (insluitend dekolonisering van die kurrikulum), vermindende staatsubsidies, toenemende kompetisie, toenemende kostes, toenemende inskrywings, vermindende hulpbronne, die aankondiging van gratis hoër onderwys, toenemende politisering van hoër onderwys en die toenemende behoefte om inligtingstechnologie te gebruik in onderwys en navorsing. As 'n gevolg van bogenoemde vinnige veranderinge en ontwrigtings, word dit van leiers in die Suid-Afrikaanse Hoër Onderwys vereis om vermoëns te besit wat hulle in staat stel om hulle organisasies suksesvol te kan lei gedurende sulke tye.

Alhoewel navorsing oor leierskap binne Suid-Afrikaanse Hoër Onderwys Instansies voorheen gedoen is, kon geen navorsing gevind word wat alleenlik fokus op die identifisering en beskrywing van die eienskappe wat nodig is om Suid-Afrikaanse Hoër

Onderwys Instansies suksesvol te kan lei gedurende tye van vinnige veranderinge en ontwigting.

Die mikpunt van hierdie navorsing was om vas te stel watter leierskap eienskappe nodig is om Suid-Afrikaanse Hoër Onderwys Instansies suksesvol te kan lei, gedurende tye van vinnige veranderinge en ontwigtings. Hierdie navorsing het daarin geslaag om die eienskappe en vaardighede wat leiers benodig om Suid-Afrikaanse Hoër Onderwys Instansies suksesvol te lei gedurende tye van vinnige veranderinge en ontwigtings te bepaal, asook wat vir elke leierskapvlak benodig word. Hierdie navorsing het ook 'n teorie en model geformuleer wat die verhouding tussen vinnige veranderinge en ontwigtings, die besit en toepassing van die eienskappe om Suid-Afrikaanse Hoër Onderwys Instansies suksesvol te kan lei gedurende tye van vinnige veranderinge en ontwigtings en uiteindelik suksesvolle leierskap gedurende vinnige veranderinge en ontwigtings, te beskryf.

SLEUTELWOORDE:

Bestuur, hoër onderwys, leierskap, leierskap eienskappe, leierskap vaardighede, ontwigting, Suid-Afrikaanse Hoër Onderwys Instansies, veranderingsbestuur, vinnige veranderinge.

ISIQINISEKISO

Uhlaka Lokwazi Ubuholi lwe Imvelo Yemfundo Ephakeme YaseNingizimu Afrika

Eminyakeni embalwa edlule umhlaba jikelele ubhekane nezinguquko nokuphazamiseka okuningi okuhlanganisa ukuquka kwesimo sezulu, ukuxhumana kwamazwe omhlaba, ukuthuthuka kwezomnotho, uguquko kwezezimboni kwesine (fourth industrial revolution), ukuthuthuka kwezobuchwepheshe, izinguquko kwezenhlalo, izinguquko kwezombusazwe nokwakamuva nje, ubhubhane i-Covid-19.

Lezi zinguquko ezingenhla zibe nomthelela naseziKhungweni zeMfundo ePhakeme zaseNingizimu Afrika (HEIs). Ikakhulukazi, eminyakeni emibili kuya kwemithathu edlule, iziKhungo zeMfundo ePhakeme zaseNingizimu Afrika zibhekana ngokwengezekile nomkhankaso wezoguquko kwezemfundo ephakeme (okuhlanganisa nokuhlelwa kabusha kwezinhlelozifundo), ukuncipha kwemalisibonelelo kahulumeni, ukukhula kokuqhudelana, ukukhula kwezindleko, ukukhula kwesibalo sababhalisile, ukuncipha kwezinsiza, ukumenyenzelwa kwemfundo ephakeme yamahhala, ukudlondlobala kwezombusazwe ezikhungweni zemfundo ephakeme nokukhula kokusetshenziswa kobuchwepheshe kwezokufundisa nocwaningo. Okungumphumela walokhu, ukudingeka kwabaholi bezikhungo zemfundo ephakeme eNingizimu Afrika abanamakhono azobalekelela ekuholeni ngempumelelo izinhlangano zabo kulezi zikhathi.

Yize noma ubuholi bucwaningiwe ezikhungweni zemfundo ephakeme eNingizimu Afrika akukho okutholakele obekugxile ekuhlonzeni nasekuchazeni ngokuyizidingo zokuhola ngempumelelo lezi zikhungo ngalesi sikhathi sezinguquko nokuphazamiseka okwenzeka ngesivinini. Lolu cwaningo luhlonze futhi lwachaza ngamakhono namava adingekayo ukuze kuholwe ngempumelelo iziKhungo ZeMfundo ePhakeme zaseNingizimu Afrika ngesikhathi sezinguquko nokuphazamiseka okwenzeka ngesivinini kanye nokuyizidingo zezinga ngalinye lobuholi.

Okokugcina, lolu cwaningo lwakhe injulalwazi nohlaka oluchaza ngobudlelwano phakathi kwezinguquko nokuphazamiseka okwenzeka ngesivinini, ukuba namava

adingekayo nokuwasebenzisa ngempumelelo ekuholeni iziKhungo zeMfundo ePhakeme zaseNingizimu Afrika ngesikhathi salezi zinguquko nokuphazamiseka kanye nokubhekana nakho ngempumelelo.

AMAGAMA ABALULEKILE:

Amakhono obuholi, imfundo ephakeme, Izikhungo Zemfundo Ephakeme zaseNingizimu Afrika, ubuholi, ukuphathwa koshintsho, ukuphazamiseka, ukuzivumelanisa nezimo, ukuphathwa, ushintsho olusheshayo

LIST OF ABBREVIATIONS AND ACRONYMS

ANC	African National Congress
COVID-19	Coronavirus Disease 2019
ECDC	European Centre for Disease Prevention and Control
EFF	Economic Freedom Fighters
GLOBE studies	Global Leadership and Organizational Behaviour Effectiveness studies
HEI	Higher Education Institution
HPCSA	Health Professions Council of South Africa
ICT	Information Communication Technology
MOOC	Massive Open Online Course
NSFAS	National Student Financial Aid Scheme
SA	South Africa
SAPS	South African Police Service
SSI	Semi-Structured Interview
SASCO	South African Students Congress
TVET	Technical Vocational Education and Training
VUCA	Volatile Uncertain Complex and Ambiguous
WHO	World Health Organisation

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CHAPTER 1: SCIENTIFIC ORIENTATION TO THE RESEARCH

1.1 BACKGROUND

The current rapid pace of change in the economy, society, technology, political landscape and the different sectors across the world, place great demands on leaders in different sectors, especially in South Africa (SA) and within Higher Education (Drew, 2010; Friedman & Edigheji, 2006; Heyneman, 2013; Shin & Kehm, 2013; Watson & Watson, 2013). Some of the critical changes in Higher Education over the past several years are the significant decrease in government subsidies, increased demands for Higher Education Institutions (HEI) to be fully accountable to the public and increased emphasis on ethics in Higher Education (Altbach, Reisberg & Rumbley, 2009; Friedman & Edigheji, 2006; Jameson, 2012). Other factors influencing HEIs include increased enrolment rates, massification, increased internationalisation, increased focus on research, increased running costs and the announcement on 16 December 2017 that the Government will provide free higher education to all University and Technical and Vocational Education and Training (TVET) college students from South African households with a combined annual income of less than R350 000.00 (Altbach et al., 2009; Areff & Spies, 2018; Friedman & Edigheji, 2006; Jameson, 2012).

There are additional demands on HEI to provide education that increases graduates' employability, which not only means providing quality education (that is in line with what is required by the regional, national and global world of work) but also requires closer partnering and collaboration with the community and stakeholders from different sectors. Other matters such as the expectation of HEI to reclaim their role as leaders of innovation and research in society, increased global competitiveness and the need to become entrepreneurs in creating "third-stream income" add to the global challenges (Altbach et al., 2009; Friedman & Edigheji, 2006; Jameson, 2012; Tonini, Burbules & Gunsalus, 2016). Finally, new challenges have emerged such as the insourcing of previously outsourced services and the decolonisation of the curriculum (Kamsteeg & Wels, 2007; Lockett & Mzobe, 2016; Prinsloo, 2016).

Over the last 30 years the pace and amount of change has increased dramatically (even more so in the last year (2020) with the outbreak of the Covid-19 pandemic which

will be discussed in the next paragraph) for example the drastic changes in information technology such as from cell phones to smart phones, from ADSL line to fibre and Wi-Fi hotspots, on-line shopping, from CDs to digital music sources, DVDs to movie downloads, from library searches to internet, from fax to e-mail and working and saving online (iCloud) (Block, 2013; Christensen & Overdorf, 2000; Weber, 2017). These changes have enabled organisations to overcome the constraints imposed by physical borders and time boundaries, revolutionised the way we interact and have resulted in higher expectations and impatient customers (Block, 2013; Christensen & Overdorf, 2000; Weber, 2017). For example, Block (2013) discusses the need to deliver Health Care in the USA in a way that increases customer retention through providing cost effective and quality patient care by exploring the process of disruptive innovation and transferring the new ideas throughout Health Care organisations. He argues that leadership in Health Care need to look at their business models because even though they were responsible for their success in the past, they are now disabling them because they are not flexible enough to respond during times of disruption (Block, 2013). By implication, it means leaders need to think, act and apply different behaviours to be successful during rapid change and disruption. The impact of the aforementioned rapid and disruptive changes is not only limited to certain sectors such as healthcare, transportation, banking, construction and retail, but also to Higher Education. Hemsall (2014), Jameson (2012), Wang and Sedivy-Benton (2016) and Watson and Watson (2013) discussed the influence of change in the broader world environment, which brought about change in Higher Education resulting in a need for leaders in HEI to acquire new skills.

More recently, as early as December 2019, the World Health Organisation informed the world of the outbreak of the coronavirus (i.e. Covid-19) in Wuhan City, within the Hubei Province of China (Department of Health, 2020). The impact of this virus on humans ranges from flu-like symptoms to severe pneumonia that requires critical medical care (Department of Health, 2020). The virus is spread when an infected person speaks, coughs or sneezes because the droplets contain the virus which lands on surfaces (does not travel further than about a meter) and can survive for several days (WHO, 2020). Because individuals live and work near one another this increases the risk of encountering an infected person or surface (Department of Health, 2020; WHO, 2020). People may touch infected surfaces unknowingly and can become

infected through touching their face or mouth (WHO, 2020). On average an infected person may infect two other individuals with whom they have contact (Department of Health, 2020). Due to the ease with which the virus can be transmitted, it has spread rapidly across the world affecting 213 countries across most regions including Africa, Americas, Europe and Asia, including South Africa (ECDC, 2020; WHO, 2020).

As of 6 October 2020, the Covid-19 pandemic had infected 35 523 518 confirmed cases and caused 1 042 398 deaths (WHO, 2020; WHO, 2020). At the same time in South Africa, 682 215 individuals have been confirmed as having been infected by Covid-19 and the number of confirmed deaths relating to Covid-19 stands at 17 016 (ECDC, 2020; WHO, 2020). To curb the impact of the virus and to contain the spread with the aim to eradicate it many countries, including South Africa, implemented various controls to reduce the spread of the virus (Department of Health, 2020; Department of Corporate Governance and Traditional Affairs, 2020). The aim was to limit social contact and the controls included a nationwide lockdown, restriction of movement, closure of schools, suspension of visits to prisons and the prohibition of gatherings (Department of Corporate Governance and Traditional Affairs, 2020).

The nationwide lockdown was implemented from midnight on 26 March 2020 until initially midnight on 15 April 2020, but was extended until 30 April 2020 (The Presidency, 2020). The nationwide lockdown and extension were aimed at reducing the spread of Covid-19 and to prepare the country to be ready for the eventuality of a peak in infections (Department of Corporate Governance and Traditional Affairs, 2020; Mathiba, 2020; The Presidency, 2020). All public HEIs in South Africa were closed as a result of the nationwide lockdown (Department of Higher Education and Training, 2020). The implication was that the academic programme would end for the Easter break and reopen on 16 April 2020 (Department of Higher Education and Training, 2020). During this time, all campuses and student residences needed to be evacuated and closed (Department of Higher Education and Training, 2020). Furthermore, HEIs were to explore on-line teaching methods to proceed with education (Department of Higher Education and Training, 2020; Shoba, 2020). In addition, the Department of Higher Education established a task team made up of key stakeholders (e.g. University Vice Chancellors, Universities South Africa, labour) in the sector to assist them to map the way forward on how to assist HEIs to convert the academic content so that it can

be delivered through various on-line learning platforms (Department of Higher Education and Training, 2020). Other considerations that needed to be addressed included staff's working and leave arrangements, availability of laptops to staff and students, access to on-line learning portals, orientation sessions for staff and students on how to use on-line learning and extra support for staff and students living with disabilities or those who are not familiar with on-line learning (Department of Higher Education and Training, 2020; Shoba, 2020). With the extension of the nationwide lockdown with an additional two weeks until 30 April 2020, the need for South African HEIs to consider and implement remote learning solutions increased, including the need to review their operations (Mathiba, 2020). Revised operations furthermore included either cancelling events such as conferences and graduation ceremonies or conducting them remotely and converting course content into on-line version so that they can be delivered remotely (Department of Higher Education and Training, 2020; Mathiba, 2020; Shoba, 2020).

The above examples provide an indication of rapid changes and disruptions affecting the broader world, Africa, South Africa and South African HEIs. It is within this fast changing and disruptive environment in which leaders, in this case leaders of South African HEIs, need to adapt in order for their organisations successfully respond, survive and grow.

1.2 MOTIVATION FOR THE RESEARCH

Disruptive and rapid change are experienced in HEI through, amongst others, Covid-19, reduced subsidies, increased diversity of students, demand for decolonising the curriculum, increased public scrutiny, increased competitiveness, increased focus on research, increased demand for on-line learning and increased enrolment figures (Altbach et al., 2009; Department of Corporate Governance and Traditional Affairs, 2020; Department of Higher Education and Training, 2020, Friedman & Edigheji, 2006; Jameson, 2012; Kamsteeg & Wels, 2007; Lockett & Mzobe, 2016; Prinsloo, 2016; Shoba, 2020; The Presidency, 2020; Tonini et al., 2016). In addition, recent student and insourced staffing protests at South African HEIs and the Covid-19 pandemic not only influenced the staff and students, but also the public at large in the surrounding areas within which the Universities operate and exist (Department of Corporate

Governance and Traditional Affairs, 2020; Department of Health, 2020; Department of Higher Education and Training, 2020; Duncan, 2016; Nkosi, 2015; Mathiba, 2020; Shoba, 2020).

The introduction of smart phones, Wi-Fi hotspots, uploading on and downloading from iClouds, globalisation, consumerism, changes in information technology and Covid-19 have excelled the dynamic and arguably rapidly changing Higher Education landscape, placing high demands on leaders at all levels (Altbach et al., 2009; Department of Corporate Governance and Traditional Affairs, 2020; Department of Health, 2020; Department of Higher Education and Training, 2020; Friedman & Edigheji, 2006; Hemsall, 2014; Jameson, 2012; Mathiba, 2020; Shoba, 2020; Tonini et al., 2016; Wang & Sedivy-Benton, 2016; Watson & Watson 2013). Christensen and Overdorf (2000) argued that large organisations have not been very good at dealing with major, disruptive changes, because their managers are not good at thinking about the organisational capabilities, which are needed. The managers tend to focus on individual capabilities and not on what the organisation may need (Christensen & Overdorf, 2000). Even though Christensen and Overdorf (2000) discuss managers and not leaders, the researcher is of the opinion that the study can be implied to refer to leaders as well. This is because managers are discussed from the point of their ability to view the organisation as a whole to foresee and adapt to change holistically. Stated differently, leaders' direct groups of individuals toward achieving common goals, which they arguably could not do effectively if they are not able to view the organisation as a whole in order to adapt to the changing environment (Northouse, 2007).

Various factors are necessary to navigate successfully in this dynamic, complex and disruptive world of work with leadership identified as the most important factor, and in particular the need for a different way to lead (George, 2015; Hemsall, 2014; Simpson & French, 2006). Leadership is a process in which leaders influence followers to achieve the organisational goals or a process where one individual influences others to achieve a common goal through their collective effort (Achua & Lussier, 2013; Daft, 2011; Western, 2013; Yukl, 2006). Leadership involves performing certain actions on the one hand (e.g. setting direction) and influencing others (i.e. inspiring and encouraging a group of followers) on the other – it involves not merely getting things done but bringing about change through others (Landy & Conte, 2007). Wang and

Sedivy-Benton (2016) and Jameson (2012) supported this view and state that leaders need to be trustworthy, flexible and able to adapt to the dynamic environment of Higher Education. Hemsall (2014) and Wang and Sedivy-Benton (2016) added that leaders in Higher Education are often promoted to leadership positions because of their specialised knowledge and competence rather than their leadership skills. The aforementioned situation can result in followers being led astray and becoming frustrated (Wang & Sedivy-Benton, 2016).

However, research on leadership in HEIs appears to reject certain aspects as they are construed as attempts to corporatize Universities (Altbach & Petersen, 2007; Altbach et al., 2009; Friedman & Edigheji, 2006). In particular, managerialism, demands efficiency, accountability and quality assurance of qualifications offered are viewed as aspects changing Universities from being institutes of academic freedom (i.e. the right of academics to pursue their research, teaching and publish without fear of punishment, restraint or losing their job) to simply “crunching numbers” and earning income (Altbach & Petersen, 2007; Altbach et al., 2009; Friedman & Edigheji, 2006; Ntshoe, Higgs, Higgs & Wolhuter; 2008). However, the factors that are criticised by these authors are the same factors that Shin and Kehm (2013) argued to be critical in establishing world-class universities, including the preservation of academic freedom. Similarly, Friedman and Edigheji (2006) argue that society demands that HEIs use their resources more carefully (which come from society in the form of state subsidies) and to respond to the needs of society.

While Universities should retain the principles of academic freedom, the current economical, technological, social, political, international and government influences, will require a fundamental change in how they operate in order to remain competitive and relevant (Jameson, 2012; Kimberly & Bouchikhi, 2016; Watson & Watson, 2013). Watson and Watson (2013) support this view and state that HEI will need to bring about systematic change to respond successfully to the global changes, which includes a need for strong leadership.

Furthermore, models of organisational development such as the Burke-Litwin Model, The McKinsey 7S Model and Weisbord’s Six Box Model all have leadership as a key element for implementing and managing change to improve performance within

organisations (French & Bell, 1999; Harvey & Brown, 2001). Arguably, these models are equally applicable to institutions and organisations in all sectors, including HEI. Leadership is therefore a critical competency and process that enables or constrains organisations to adapt, grow and survive within their specific environments (Achua & Lussier, 2013; Daft, 2011; Western, 2013). It is therefore the key element necessary for all organisations and institutions to perform effectively, to remain relevant and to maintain their competitiveness in this ever-changing environment (Achua & Lussier, 2013; Daft, 2011; Drew, 2010; Western, 2013).

Leaders need to be able to adapt, think critically, provide direction, inspire confidence, influence employees, take decisions with limited information, create an engaging workplace, drive innovation and efficiency, protect their brand image and ensure continued growth and sustainability, all during uncertain times, that usually present novel challenges (Achua & Lussier, 2013; Daft, 2011; Drew, 2010; Wang & Sedivy-Benton, 2016; Watson & Watson 2013). Therefore, leaders have a responsibility to set the culture and influence the success of HEIs through their ability to successfully navigate complexity, deal with uncertainty, manage change and drive innovation.

Research on leadership in HEIs appears to focus mainly on the applicability of specific leadership models, leadership development and identifying the leadership capabilities (e.g. transformational leadership) necessary to lead successfully in the current social, economic and political contexts (Albino, 1999; Bodla & Nawas, 2010; Hemsall, 2014; Tonini et al., 2016; Wang & Sedivy-Benton, 2016). However, little research was found that focuses on the identifying the capabilities necessary to lead during rapid change and in disruptive times in HEIs in general and particularly within South African. Several anecdotal accounts amongst academic staff within HEIs argue that leading a university is different from leading an organisation within the public or private sectors (Wang & Sedivy-Benton, 2016).

Research conducted in HEIs by Jameson (2012), Tonini et al. (2016) and Wang and Sedivy-Benton (2016) identified several capabilities that are necessary to lead successfully. Some of the capabilities identified are flexibility, collaboration, tolerance of ambiguity, being a visionary, dealing with complexity and building relationships. While these capabilities are similar, if not the same as the leadership capabilities

identified by Sharma and Kirkman (2015) and Raelin (2016) in other sectors, they have not been directly linked to successful leaders in HEIs, within SA, during times of rapid change and disruption. Stated differently, little research was found that clearly identified leadership capabilities necessary to lead successfully in South African HEIs, especially in times of rapid change and disruption. For example, research on leadership by Geier (2016) in high risk and dangerous work environments, displayed similarities to the concept of leading in times of rapid change and disruption in HEI and other sectors (e.g. magnitude of potential consequences, physical proximity to danger).

Similarly, Bathurst, Jackson and Statler (2010) investigated leadership during times of uncertainty, particularly applying the components of aesthetic leadership to evaluate the leadership success displayed in New Orleans at the time of Hurricane Katrina in 2005. He highlighted that presencing and concretization, backward reflexivity, attention to both form and content and mythmaking are essential to successful leadership in times of uncertainty and crisis. However, they found that these aspects were severely lacking in the handling of the aftermath of Hurricane Katrina (Bathurst, Jackson & Statler, 2010).

Even though the research did not specially focus on Higher Education, it does highlight capabilities necessary to lead successfully in uncertainty and crisis situations. It is the researcher's view that uncertainty and crisis were also present during the recent rapid change and disruptive events in HEIs (e.g. 2015-2016 student protest actions, the Covid-19 pandemic, etc.). Therefore, while previous research may not have been done in HEIs, the impact and consequences of the rapid change and uncertainty of the events were similar. Leaders had to respond to situations without any framework (previous exposure) on how to handle the situation successfully. Furthermore, the intensity and duration of change and disruption were unique.

It is evident that leaders in HEIs are required to lead in a rapidly changing and disruptive environment. This implies that HEIs may have to review the capabilities needed to lead successfully. Identifying the leadership capabilities can assist leaders in South African HEIs to formulate appropriate selection criteria and development interventions to capacitate leaders, to lead successfully during times of rapid change and disruption.

This study will contribute to the body of knowledge on leadership, specifically in South African HEIs. The leadership capabilities identified might also be adaptable for other sectors and/or inspire interventions to capacitate leaders to lead successfully during times of rapid change and disruption.

1.3 PROBLEM STATEMENT

The rapid change and disruptive circumstances within HEI are a relatively new phenomenon (Altbach et al., 2009; Friedman & Edigheji, 2006; Jameson, 2012; Kamsteeg & Wels, 2007; Lockett & Mzobe, 2016; Prinsloo, 2016; Tonini et al., 2016). To this end, little research could be found on leadership within HEIs in general or specifically within South African HEIs during times of rapid change and disruption or the leadership capabilities required to lead in these times. As a result, the limited amount of research provides an opportunity to determine if contemporary leadership capability models are appropriate, if current leadership capabilities and behaviours are sufficient and whether different or additional leadership capabilities are required within SA HEI specifically. The purpose of this study was to identify the leadership capabilities required to lead successfully in rapidly changing and disruptive times within South African HEIs.

The research question was formulated as “What are the leadership capabilities required to lead successfully in South African HEIs during times of rapid change and disruption?”

1.4 RESEARCH OBJECTIVES

1.4.1 General aim

The general aim of the research was to identify the leadership capabilities required to lead successfully in South African HEIs during times of rapid change and disruption.

1.4.2 Specific aims

1.4.2.1 The following aims were formulated for the literature review:

- (1) To conceptualise and contextualise the terms leadership and leadership capabilities within HEIs.
- (2) To conceptualise and contextualise the terms rapid change and disruption within HEIs.
- (3) To investigate leadership capabilities applied in times of rapid change and disruption in HEIs.

1.4.3 Aims for the empirical study

- (1) To identify leadership capabilities needed to lead successfully in South African HEIs during rapid change and disruption.
- (2) To formulate a theory and model of leadership capabilities needed to successfully lead South African HEIs during rapid change and disruption.

1.5 THE PARADIGM PERSPECTIVE

The research falls within the field of Industrial and Organisational Psychology and particularly the sub fields of organisational psychology and personnel psychology. From a meta-theoretical perspective, the study will be approached from a Humanistic and Systemic stance. According to the humanistic approach, individuals strive for continuous growth and meaning as rational, active and unique participants within their environment (Bergh & Geldenhuys, 2013). Growth takes place through their unique experiences and particular positive relations with others (Bergh & Geldenhuys, 2013).

A system is made up of a number of interdependent and interrelated subsystems (including their attributes and relationships) which influences and is influenced by the environment within which it exists (Bergh & Geldenhuys, 2013; Rothman & Cooper, 2008). In addition, a change in one part of the system has an influence on other parts of the system (Bergh & Geldenhuys, 2013; Rothman & Cooper, 2008).

The research will be approached from a Humanistic and Systems stancjamee because leadership is performed by unique individuals who have the freedom of choice on how

and when to apply it, and because they are part of an organisation which is influenced by how they react (Bergh & Geldenhuys, 2013; Rothman & Cooper, 2008). In addition, they are influenced by what happens to their organisation by events in the external environment in which the organisation is situated (Bergh & Geldenhuys, 2013; Rothman & Cooper, 2008).

1.5.1 Industrial and organisational psychology

The field of Industrial and Organisational Psychology refers to the study of human behaviour and cognition within the world of work with the aim to explain, predict and enhance individual employee and organisational performance and success (Bergh & Geldenhuys, 2013; Coetzee & Schreuder, 2010; Landy & Conte, 2007; Rothman & Cooper, 2008). In the process of studying human behaviour in the workplace, many psychological theories, principles and research, from other branches of psychology (e.g. counselling psychology, clinical psychology), are applied to address a concrete problem or issue (Bergh & Geldenhuys, 2013; Coetzee & Schreuder, 2010; Landy & Conte, 2007; Rothman & Cooper, 2008). In addition, Landy and Conte (2007) posit that Industrial Psychology also stretches beyond the workplace when it comes to areas such as employee wellness. In the case of employee wellness, either the “effects” enter the organisation with the employee, due to an issue that originates outside the workplace (e.g. relationship problems) or they enter their employee’s home from the organisation (e.g. effects of patterns of over-commitment, effects role overload).

The study is well placed within the Industrial Psychology field because the identification of leadership capabilities needed to lead successfully in SA HEI have an influence on the individual, the team and the organisation. This influence reaches further than only the success of the organisation but also the wellness, engagement, performance, sustainability and success of the employee. Similarly, the impact could arguably flow outside the organisation to the employee’s family as well as those outside the institution such as society and other stakeholders. This is of particular importance when considering the impact of the 2015 and 2016 student protests relating to free higher education, staff protests relating to the insourcing of previously outsourced functions and the recent outbreak of the Covid-19 pandemic. The protests and Covid-19

pandemic not only influenced the staff and students, but also the public at large in the surrounding areas within which the Universities operate and exist.

1.5.2 Organisation psychology

Organisational Psychology is concerned with the influence of the organisation on the reactions, attitudes and behaviour of its employees, individually, in teams or across the whole organisation (Bergh & Geldenhuys, 2013; Coetzee & Schreuder, 2010; Landy & Conte, 2007; Rothman & Cooper, 2008). Organisations are viewed as dynamic systems where each part affects and is affected by others (Bergh & Geldenhuys, 2013; Coetzee & Schreuder, 2010; Landy & Conte, 2007; Rothman & Cooper, 2008). Rauschenberger and Mellon (2014) state that industrial and organisational psychology involves the application of scientific knowledge and methods of psychology to resolve issues within organisations. Salas, Koslowski and Chen (2017) argue that industrial psychology has improved organisational effectiveness research and discoveries in several areas including recruitment and selection, work motivation and performance management. Lowman (2016) appear to agree with Rauschenberger and Mellon (2014) because he states that consulting psychologists work with teams and individuals within the organisational context to help them to improve the way they work. He argues that consulting psychologists use psychological knowledge and methods to understand what is going on and empowers clients to become more effective (Lowman, 2016). Gelfand, Aycan, Erez and Leung (2017) reviewed the contribution of industrial and organisational psychology over the past 100 years by looking at the amount of research into cross-cultural industrial and organisational psychology that has been published in the Journal of Applied Psychology. They are that this is important given the changing nature of the workplace, globalisation and the different cultures that work together (Gelfand et al., 2017). They discovered that the research into cross-cultural industrial and organisational psychology was low and argue that more research must be done to enhance the understanding of this diverse world of work so that organisational effectiveness can be improved even more (Gelfand et al., 2017). The subfields of organisational psychology include motivation, leadership, group dynamics, work design, organisational culture, organisational design and development, power and decision-making (Bergh & Geldenhuys, 2013; Coetzee & Schreuder, 2010; Landy & Conte, 2007; Rothman & Cooper, 2008).

Organisational psychology focuses on leadership as a key process within any organisation in bringing about change and in improving engagement or enhancing performance (Bergh & Geldenhuys, 2013; Coetzee & Schreuder, 2010; Landy & Conte, 2007; Lowman, 2016; Rothman & Cooper, 2008; Salas, Koslowski & Chen, 2017). Models of organisation effectiveness such as Burke-Litwin Model, The McKinsey 7S Model and Weisbord's Six Box Model concur because they all have leadership as a key element of bringing about change as well as improved performance within organisations (French & Bell, 1999; Harvey & Brown, 2001).

Organisation Psychology is therefore appropriate to this research because identifying the appropriate leadership capabilities will contribute to successfully achieving the strategic goals of the HEI, ensuring the sustainability and enabling the development of sustainable talent to ensure that the right skills are available at the right time and at the right place (Bergh & Geldenhuys, 2013; Coetzee & Schreuder, 2010; Landy & Conte, 2007; Rothman & Cooper, 2008). Understanding the leadership capabilities required to lead successfully during rapid change and disruption could also provide information on areas of employee wellness that need developmental (e.g. resilience, emotional intelligence) (Bergh & Geldenhuys, 2013; Coetzee & Schreuder, 2010; Landy & Conte, 2007; Rothman & Cooper, 2008).

1.5.3 Personnel psychology

Personnel Psychology is concerned with the differences between individuals within the workplace (Bergh & Geldenhuys, 2013; Coetzee & Schreuder, 2010). It involves scientific measuring and prediction in relation to employees within the workplace (Bergh & Geldenhuys, 2013; Coetzee & Schreuder, 2010). The identified differences between individuals are used to make decisions about selection, promotion, placement, training and job design (Bergh & Geldenhuys, 2013; Coetzee & Schreuder, 2010; Ock & Oswald, 2018; Rothman & Cooper, 2008). Furthermore, Xie, Li, Jiang and Kirkman (2019) found that the leader's differentiated relationship with individual employees had a positive effect on employee performance in teams that were more interdependent than in teams that were not. This result arguably relates to a leadership capability that leaders should possess, and be able to apply appropriately, because

it could influence organisational performance (Xie et al., 2019). Hence it is also arguably a capability that could serve as a selection criteria or basis for leadership development (Ock & Oswald, 2018; Xie et al., 2019).

Personnel Psychology is relevant to this study because the capabilities that are identified can be used to design job profiles for leaders in HEIs that contain the appropriate capabilities for each level. While the research aims to identify general leadership capabilities, which are applicable to lead successfully during rapid change and disruption in Higher Education, it is also possible that certain capabilities or combinations of capabilities emerge as being more appropriate to the different levels of leadership than others are. In addition, the capabilities that are identified can be used to select candidates for a specific leadership level (e.g. executive, Senior or Middle level leader), identify or design development programmes and can be used as a criterion to measure leadership performance during times of rapid change and disruption (Bergh & Geldenhuys, 2013; Coetzee & Schreuder, 2010; Ock & Oswald, 2018; Rothman & Cooper, 2008).

1.5.4 Humanism as the psychological paradigm

Humanism focuses on studying individuals as unique beings who are driven and take responsibility to grow and contribute toward realising their full potential – they have free will to set goals and make choices (Bergh & Geldenhuys, 2013; Bergh & Theron, 2009; Hardy, 2016; Masterpasqua, 2016; Meyer, Moore & Viljoen, 1997). Individuals acknowledge that they could be affected by their environment (Bergh & Geldenhuys, 2013; Meyer et al., 1997). Individuals choose freely between options while striving to live fulfilled lives and adapt to situations along the way (Bergh & Geldenhuys, 2013; Meyer et al., 1997). Carl Rogers, for example, believed that individuals are goal directed and can adapt but acknowledged that their environment could influence their progress positively or negatively. Similarly, Abraham Maslow believed that all individuals want to grow to become all that they can be, which ultimately drives their behaviour (Bergh & Geldenhuys, 2013; Meyer et al., 1997). He also acknowledged that one's environment can influence one's attempts to satisfy basic needs (Bergh & Geldenhuys, 2013; Hardy, 2016; Masterpasqua, 2016; Meyer et al., 1997). Humanists therefore study individuals' experience as part of the world within which they exist in

order to understand their behaviour (Bergh & Geldenhuys, 2013; Hardy, 2016; Masterpasqua, 2016; Meyer et al., 1997). Fatemi & Sisemore, 2018) point out that humanists may be limited in what their research finds because their view of humanism is potentially rooted in a Western secular modernity. They argue that incorporating the Islamic psychological perspective on humanism could improve the understanding of other cultural frameworks in an intercultural context (Fatemi and Sisemore, 2018). This study will adopt a Humanistic approach to identify the capabilities required to lead successfully during change and disruption, within HEI, from the perspectives and experiences of individuals who are functioning within that environment, while taking into consideration the influence of environmental variable. The identification of the leadership capabilities will enhance the understanding of what is required to lead successfully during times of rapid change and disruption in South African HEIs.

1.5.5 Systems theory

Systems theory refers to the relationships between objects and their attributes (Bergh & Geldenhuys, 2013; French & Bell, 1999; Katz & Khan, 1966; Von Bertalanffy, 1951). A system is an organised whole made up of interdependent parts with a clear boundary that enables it to be distinguished from its surrounding environment, while interacting and influencing it, and being influenced by it in return (Bergh & Geldenhuys, 2013; French & Bell, 1999; Grisold & Peschl, 2017; Katz & Khan, 1966; Vanderstraeten, 2019; von Bertalanffy, 1951). In other words, the system is open to influence and will be influenced by its surroundings (Bergh & Geldenhuys, 2013; Grothe-Hammer, 2020; French & Bell, 1999; Katz & Khan, 1966; von Bertalanffy, 1951). Grothe-Hammer, (2020) argues that modern systems theory must move beyond the traditional organisation forms and adapt to include modern organisation forms such as digital platforms (e.g. Uber). Furthermore, systems obtain inputs from the environment and transform them into outputs that are then exported to the environment (Katz & Khan, 1966). In addition, within a system, the output achieved is more than what each of the individual parts could have achieved on their own (Cronje, Hugo, Neuland & Van Reenen, 1995; Rothman & Cooper, 2008). Leadership is a central part of most, if not all organisations, which influences all aspects internal to the organisation (e.g. teams, processes, decision-making, employee engagement, performance) as well as external (e.g. services provided to the community, reputation, social responsibility, ability to

attract funding or investment). Systems theory is relevant to this study because successfully leading HEIs during rapid change and disruption not only influences the staff, organisation processes and how work is done, but it also affects institutional reputation, impact on stakeholders and society at large. Competent leaders can potentially have a positive influence on “all parts” of the HEI system.

1.5.6 Meta-theoretical concepts

The following constructs were identified as relevant for this study. In addition, the research investigated and reported on the extent of the relationships between them:

- (1) Leadership in terms of different leadership models, competencies and frameworks for different sectors. Leadership has been defined by various researchers (Achua & Lussier, 2013; Daft 2011; Harvey & Brown, 2001; Landy & Conte, 2007, Rothman & Cooper, 2008, Western, 2013). For the purpose of this research, leadership was defined as a process where individuals or groups are influenced through a relationship with the leader to bring about real change and achieve outcomes through a common purpose, with due consideration for the situation (Achua & Lussier, 2013; Daft 2011; Hughes, Ginnett & Curphy, 2009; Northouse, 2007; Rothman & Cooper, 2008, Western, 2013).

- (2) Management, which refers to a process that establish order and stability through formulating plans and budgets; allocating resources, providing structure, delegates responsibility and staffs the organisation; resolves problems; and monitors results or outputs (Landy & Conte, 2007; Northouse, 2007; Yukl, 2006). Whereas management is concerned with stability and order, leadership is concerned with change and improvement (Landy & Conte, 2007; Northouse, 2007; Yukl, 2006). Leadership is concerned with creating a vision needed to realise organisational change to succeed in future, communicating the vision; and inspiring others to achieve it (Landy & Conte, 2007; Northouse, 2007; Yukl, 2006). This research will focus on leadership, which is an integral part of management, especially when dealing with rapid change and disruption in HEIs in SA (Hempsall, 2014; Jameson, 2012; Landy & Conte, 2007; Northouse, 2007; Wang & Sedivy-Benton, 2016; Watson & Watson 2013; Yukl, 2006).

- (3) Individual, team and organisational performance. This research adopted the definition of performance that refers to the actions or behaviours that are aligned to the organisation's goals, against clear objectives and measures, which are specific, measurable, achievable, relevant and time bound (Achua & Lussier, 2013; Coetzee & Schreuder, 2010; Landy & Conte, 2007; Rothman & Cooper, 2008). Performance is executed at individual, team and organisational level and are influenced by leadership (Achua & Lussier, 2013; French & Bell, 1999; Harvey & Brown, 2001; Landy & Conte, 2008). Furthermore, models of organisation effectiveness such as Burke-Litwin Model, The McKinsey 7S Model and Weisbord's Six Box Model all have leadership as a key element that influences performance at organisation, team and individual level (French & Bell, 1999; Harvey & Brown, 2001). Finally, performance can also be related to organisational success or failure in as far as it is able to successfully respond to rapid change and disruption, which are influenced by leadership capabilities. This research will measure performance in the context of it being an indicator of achieving outcomes coupled to successfully responding to rapid change and disruption, as influenced by the leadership capabilities displayed during such situations.
- (4) Change management and the implications of rapid change and disruption for leadership and the institution. Change management is a systematic and structured approach to ensure that an organisation transforms smoothly and thoroughly so that the benefits of the new vision or changes achieve lasting benefits (Achua & Lussier, 2013; Maartins & Geldenhuys, 2016).
- (5) Disruption and the implications thereof on leadership and the institution. According to Cambridge Dictionary English Dictionary (2019a) disruption means the following: "In business, disruption refers to a radical change in an industry or business strategy, especially involving the introduction of a new product or service that creates a new market". According to Merriam-Webster (2018a), disruption means "to break apart: rupture, to throw into disorder, to interrupt the normal course or unity of".

Even though the concepts motivation, employee engagement, organisational culture, team dynamics and employee wellbeing are accepted at a meta-theoretical level as part of Industrial and Organisational Psychology and are known to be influenced by leadership, and therefore also the extent to which HEI respond to rapid change and disruption, they will not form part of this research (Albino, 1999; Bodla & Nawas, 2010; French & Bell, 1999; Harvey & Brown, 2001; Hemsall, 2014). This view is also supported by Achua and Lussier (2013), Daft (2011), Drew (2010), French and Bell (1999), Harvey and Brown (2001), Jameson (2012), Rothman and Cooper (2008), Tonini et al. (2016), Wang and Sedivy-Benton (2016) and Western (2013). The research focused on identifying the capabilities needed to lead successfully during rapid change or disruption. This means the researcher accepted from the outset that it was possible that the capabilities identified could influence the above-mentioned concepts (i.e. motivation etc.) even though they were not a direct focus of the study. By highlighting the concepts before the start of the research, the researcher was able to be on the lookout for their manifestation and determine if they were directly related to the capabilities required to lead successfully during rapid change or disruption in HEIs.

1.6 THE RESEARCH DESIGN

1.6.1 Research paradigms

Creswell and Plano Clark (2011) state that there are four world views (i.e. paradigms) used in research. These are Postpositivist (focuses on empirical observation and measure of things), Constructivist (focuses on social and historical construction of phenomenon), Transformational or participatory (focuses on collaboration to change the world for the better) and Pragmatic (focus on what works to resolve a problem) (Creswell, 2009; Creswell & Plano Clark, 2011). The study will be approached from an interpretive perspective within the constructivist paradigm. Constructivists seek to understand phenomena from the perspective of the participants' because they describe them based on their interaction with their "world" in a day-to day basis (Creswell, 2009; Creswell & Plano Clark, 2011).

Interpretivism proclaims that there is not one single truth and that reality is created by individuals as they interact with each other and their environment where behaviour is dynamic and constantly changing (Antwi & Hamza, 2015; Bergh & Geldenhuys, 2013; Bryant, 2011; Snyman, 1997; Straus & Corbin, 1990). Interpretivism rejects the purely objective view of positivism that only focus on observable, tangible measures of behaviour because they argue that most of human behaviour is “below the surface” and the positivism approach cannot successfully account for that (Antwi & Hamza, 2015; Bergh & Geldenhuys, 2013; Bryant, 2011; Snyman, 1997; Straus & Corbin, 1990). Interpretivism is concerned with understanding, describing and interpreting the meanings or features of individual behaviour and experiences within their environment instead of attempting to generalize and predict causes and effects (Bordens & Abbott, 2011; Breakwell, Smith & Wright, 2012). Human beings react to their environment based on their perception of their environment (Willis, 2007). Therefore, to understand human behaviour, interpretivism focuses on understanding the worldview and perceptions of the individuals within their environment (Willis, 2007).

Approaching the study from an interpretivist perspective will enable the identification and understanding of the capabilities needed to lead successfully during times of rapid change and disruption in HEI. Furthermore, it will enable the researcher to uncover emerging capabilities required and to uncover subtle combinations and/or variations thereof. This might not be possible if objective approaches are used. Using an interpretivism perspective will allow the researcher an opportunity to immerse himself within the HEI context. In other words, the researcher will use the interpretivism qualitative methods to collect the in-depth information needed to understand, describe and explain individuals' behaviours and intentions, and to analyse and interpret them to formulate appropriate conclusions (Antwi & Hamza, 2015; Bergh & Geldenhuys, 2013; Bryant, 2011; Snyman, 1997; Straus & Corbin, 1990). Interpretivism uses qualitative methods such as interviews, focus groups and observation to understand and interpret human behaviour (Willis, 2007). However, due to the involvement and possible subjectivity of the researcher, questions could arise about the objectivity and generalisability of this research study. These problems occur mostly because of the small sample size used in comparison to positivist approaches where larger sample sizes are involved and because researchers immerse themselves within the

participants' environment to understand the phenomenon (Breakwell et al., 2012; Cozby & Bates, 2015; Creswell & Plano Clark, 2011).

1.7 RESEARCH APPROACH

1.7.1 Phenomenology

Phenomenology falls under the interpretivist perspective, which aims to understand the participant's world through understanding their lived experiences (Gray 2004, Willis, 2007). In phenomenology, the researcher, aims to identify the crux of a phenomenon through the lived experiences and perceptions of the participants in their day-to-day life and environment (Creswell, 2009; Willis, 2007). During the research process, the researcher puts aside his or her knowledge, opinions and experiences of the phenomenon and pays attention only to what is presented by the participants (Creswell, 2009). The researcher does not impose his or her knowledge, opinions or experiences onto the participants lived experiences of that phenomenon (Creswell, 2009).

Snyman (1997) states that pure scientific research methods that apply mathematics and physics are not able to account or measure things that cannot be seen such as the spirit and the mind (Snyman, 1997). Edmund Husserl argued that the naturalistic method of the physical science world could not be applied successfully to non-physical things (King & Horrocks, 2010; Snyman, 1997). He argued that people interpret their environment based on their needs and interests (King & Horrocks, 2010; Snyman, 1997). In other words, people are subjective when they interpret their environment (King & Horrocks, 2010; Snyman, 1997). He introduced the concept of phenomenological reduction which he argues we must use to strip things down to their original or real state, as they exist in the world free from the meanings and interpretations which we place on them (King & Horrocks, 2010; Snyman, 1997). In other words, things are "just there" and exist without our interpretations (King & Horrocks, 2010; Snyman, 1997). Through phenomenological reduction, argues Husserl, we can strip things down to their essence (King & Horrocks, 2010; Snyman, 1997). King and Horrocks (2010) state that existential phenomenologists argue that we can never be free from our interpretations of phenomena because we exist and are

entwined in the world within which they occur. Therefore, we can never be truly objective in getting to the essence of phenomena (King & Horrocks, 2010; Snyman, 1997). Instead, existential phenomenologists are more interested in describing and interpreting the world within which people live (King & Horrocks, 2010). Phenomenologists argue that as people we are always aware (i.e. conscious of what we see and feel towards an object or situation) (King & Horrocks, 2010; Snyman, 1997). According to phenomenologists, in trying to understand and interpret any phenomenon we need to find out what people experienced and how they experienced it (King & Horrocks, 2010; Snyman, 1997). They argue that people always pay attention to what they experience and how they experience it (King & Horrocks, 2010; Snyman, 1997).

In the case of this research, the aim was to identify and understand what participants believe the leadership capabilities are required to lead during rapid change and disruption in South African HEIs and how they experienced them. Furthermore, even though it is not possible to entirely bracket yourself from the preconceptions, experiences and opinions one may have as a researcher of a phenomenon that you are researching, because you are deeply connected to your environment, it is important to identify and declare them upfront (King & Horrocks, 2010; Snyman, 1997). The reason for this is so that as researchers we can report on the participants' lived experiences "as told by them" through their own words while being conscious not to let our "prior knowledge" contaminate their experience (King & Horrocks, 2010; Snyman, 1997). In this research, the researcher declared, reported and remained aware of all his preconceived ideas, experiences, values and knowledge of the phenomenon that was the focus of this research, along with the environment and any other relevant matter that could impact his interpretation, understanding and description of the phenomenon (King & Horrocks, 2010; Snyman, 1997).

1.7.2 Data collection and analysis

Data were gathered from various sources through semi structured interviews, focus groups and literature to answer the research question (Breakwell et al., 2012; Creswell, 1998; Denzin & Lincoln, 1994; Glaser & Holton, 2004). The researcher remained objective to what was happening and did not apply any filters, but rather focussed on

listening to and observing the participants to discover what is really going on (Breakwell et al., 2012; Creswell, 1998; Denzin & Lincoln, 1994; Glaser & Holton, 2004). The data collection phase proceeded through an initial analysis, which gave rise to further data gathering processes (Breakwell et al., 2012; Creswell, 1998; Denzin & Lincoln, 1994; Glaser & Holton, 2004). The researcher gathered and analysed the data, identify themes, collect more data and eventually reduced the number of themes into a smaller number of core or main categories (Breakwell et al., 2012; Creswell, 1998; Creswell 2009; Creswell & Plano Clark, 2011; Denzin & Lincoln, 1994; Glaser & Holton, 2004; King & Horrocks, 2010). The researcher moved back and forth between the data in a continuous process of data collection and analysis until no new insights were obtained – a point of theoretical saturation was reached (Breakwell et al., 2012; Creswell, 1998; Denzin & Lincoln, 1994; Glaser & Holton, 2004). During the data gathering and analysis phase the researcher remained aware that the research question and design may need to be adapted because of the insights gained from the data. In that way the flexibility of the process enabled a rich and wide range of data to be collected so that the phenomenon could be understood and described as fully as possible (Breakwell et al., 2012; Creswell, 1998; Denzin & Lincoln, 1994; Glaser & Holton, 2004).

1.7.2.1 *Open coding and constant comparison*

The researcher used open coding during the analysis phase to label concepts (incidents) that were identified in the text, moving from the start of the first paragraph and proceeding line by line up to the end (Breakwell et al., 2012; Creswell, 1998; Denzin & Lincoln, 1994; Glaser & Holton, 2004). During the process of open coding the researcher constantly looked for, compared and recorded similarities and significant differences (observable and latent) in the data (i.e. incidents) that contain meaning and contributed toward developing, explaining and describing the concepts of the phenomenon (Breakwell et al., 2012; Creswell, 1998; Denzin & Lincoln, 1994; Glaser & Holton, 2004).

The researcher coded many categories that are relevant to explain and understand the data (Breakwell et al., 2012; Creswell, 1998; Denzin & Lincoln, 1994; Glaser & Holton, 2004). At the point of saturation, the researcher summarised the data under the same label into a definition of a concept (i.e. Main theme). The researcher followed a process

of comparing, linking, sorting and describing the relationship between categories so that eventually the number of categories (i.e. Themes) were reduced to only a few core categories (Breakwell et al., 2012; Creswell, 1998; Denzin & Lincoln, 1994; Glaser & Holton, 2004).

The core themes should relate to as many other categories and their elements as possible and account for a large portion of the variation in a pattern of behaviour (Breakwell et al., 2012; Creswell, 1998; Denzin & Lincoln, 1994; Glaser & Holton, 2004).

1.7.2.2 *Memoing and selective coding*

During the process of data analysis, the researcher used memos that are theoretical notes about the data (Breakwell et al., 2012; Creswell, 1998; Denzin & Lincoln, 1994; Glaser & Holton, 2004). Memos were used to note the connections between categories, develop ideas about the categories, present hypotheses about connections between categories and/or their properties (Breakwell et al., 2012; Creswell, 1998; Denzin & Lincoln, 1994; Glaser & Holton, 2004). Writing memos also helped the researcher to identify gaps in existing analyses/literature and possible new related directions related to the phenomenon (Breakwell et al., 2012; Creswell, 1998; Denzin & Lincoln, 1994; Glaser & Holton, 2004). As the researcher proceeded through the data analysis phase, he identified the core category(s) (i.e. Themes). At this point the researcher used selective coding (i.e. a “refining process”) to relate the core category (ies) to other categories, confirming relationships and filling in categories that needed further refinement and development (Breakwell et al., 2012; Creswell, 1998; Denzin & Lincoln, 1994; Glaser & Holton, 2004). Ultimately the researcher was able to propose a model of leadership capabilities for South African HEI.

1.8 ASSUMPTIONS

1.8.1 Epistemological assumption

The word Epistemology comes from the Greek word “episteme”, which means “theoretical knowledge” and “logos” loosely means “study or science of” (Ogbebor,

2011; Willis, 2007). Epistemology is a part of philosophy that focuses on describing, analysing and explaining the origin of knowledge and its value (Ogbebor, 2011; Popper, 2010; Willis, 2007). Epistemology attempts to answer questions such as, how do we know something? How do we generate knowledge that relates to that “something”? How do we disseminate that knowledge? How much do or can we know (Breakwell et al., 2012; Denzin & Lincoln, 2008; Ogbebor, 2011; Popper, 2010; Tarihi & Tarihi, 2016; Willis, 2007). Put differently, Epistemology establishes the criteria that is used to determine what is knowledge, how knowledge originates and how is it disseminated. Popper (2010) differentiates between two views within epistemology. On the one hand, there is epistemological optimism that has a positive view of man in that they can determine the truth and acquire knowledge because either the “truth” will be readily observable for man to see or man can “uncover” the truth (Popper, 2010; Snyman, 1997). On the other hand, epistemological pessimism views man as incapable of determining the truth because of their faults and that the truth is “decided and prescribed” for them by powerful authorities and traditions (Popper, 2010; Snyman, 1997).

Both optimistic and pessimistic views of epistemology have flaws in that both have gaps, which do not adequately address the source of nature or nature of knowledge (Popper, 2010). For example, certain beliefs of those in authority (pessimistic epistemology) could be false or it may be that the truth is not readily available (optimistic epistemology) (Popper, 2010; Snyman, 1997). Within epistemology, there are various theories on how knowledge is acquired or generated (Ogbebor, 2011; Popper, 2010; Snyman, 1997). For example, empiricism believes that knowledge comes from experience gained by using our senses and that we must be able to empirically test (i.e. through careful and thorough observation and experiments) such information for it to qualify as knowledge (Ogbebor, 2011; Popper, 2010; Snyman, 1997). Philosophers such as John Locke, Immanuel Kant, Francis Bacon and David Hume were some of the main proponents of empiricism (Ogbebor, 2011; Popper, 2010; Snyman, 1997). Rationalism, however, purports that the main source of knowledge is human reason, which is gained when certain innate knowledge, with which we are born, is brought to the surface during certain experiences (i.e. either through deduction or intuition) (Ogbebor, 2011; Popper, 2010; Snyman, 1997; Willis, 2007). Philosophers such as René Descartes, Immanuel Kant and Plato were some of

the main proponents of rationalism (Ogbebor, 2011; Popper, 2010; Snyman, 1997; Willis, 2007).

Over time other epistemological theories developed to account for the origin of knowledge and include Naïve realism (or common sense realism which argues that a real world exists independent of our perceptions); Objectivism (people use their senses to gain “raw” knowledge of the external world which is automatically integrated into their perceptions of those objects); Pragmatism (knowledge results from solving problems through applying experimental methods); and phenomenism (physical objects do not exist - we use our senses to form perceptions of phenomena in a logical way that makes sense to us, thus gain knowledge) (Ogbebor, 2011; Popper, 2010; Snyman, 1997; Willis, 2007). It is evident that what constitutes knowledge and how it originates has changed over the centuries (Ogbebor, 2011; Popper, 2010; Snyman, 1997; Willis, 2007). It is also evident that a pure empirical, logical or phenomenism approaches to creating knowledge each have pros and cons depending on the nature of the knowledge or environment in which that knowledge is said to exist.

This research assumed a phenomenism stance in that it focussed on identifying, understanding and explaining the capabilities needed to lead successfully during rapid change and disruption through understanding and interpreting participants’ lived experiences (Willis, 2007).

1.8.2 Ontological assumption

Ontology deals with the nature of reality or being (i.e. what is true or fact) (Denzin & Lincoln, 2008; Willis, 2007). It deals with the most general attributes of beings or things that exist (Denzin & Lincoln, 2008; Willis, 2007). Ontology involves the belief systems that individuals’ use to interpret what constitutes a fact(s) (Milton & Kazmierczak, 2006). During this research, the researcher assumed that there is no single reality (regarding the ideal/correct leadership capabilities required to lead in HEI) that resides in one source, but rather that they are created and interpreted by individuals or groups, within their context (i.e. interpretivist paradigm). Therefore, the researcher identified a leadership model of the capabilities needed to lead successfully in times of rapid change and disruption through interpreting, understanding and describing the

participants' experiences during semi-structured interviews and focus group discussions (Antwi & Hamza, 2015; Bergh & Geldenhuys, 2013; Bryant, 2011; Snyman, 1997; Straus & Corbin, 1990).

1.8.3 Methodological assumptions

The research followed a qualitative approach. During the research, data was gathered through semi structured interviews and focus group discussions. These enabled the researcher to become immersed into the participants' world in order to understand, describe and explain the phenomenon (i.e. leadership capabilities) being studied from their perspective (i.e. the participants) (Bordens & Abbott, 2011; Cozby & Bates, 2015). The assumption was that, from a qualitative perspective, there is more than one reality and therefore more than one leadership capability or combination of leadership capabilities that could influence the ability to lead successfully in South African HEIs during times of rapid change and disruption (Bergh & Geldenhuys, 2013, Snyman, 1997).

1.8.3.1 Grounded theory

Within the qualitative approach there are various methods including case study, grounded theory, content analysis and ethnography (Gray, 2004; Leedy & Ormrod, 2015; Willis 2007). The researcher chose to apply the grounded theory method to this study. In grounded theory the aim is to enhance insight about a phenomenon and the social process related to it by developing a theory which emerges from the data as it is collected (LaRossa, 2005; Heath & Cowley, 2004; Leedy & Ormrod, 2015). Grounded theory allows researchers to discover additional or new insights about a phenomenon particularly when current theories or research about it are insufficient or do not exist (Leedy & Ormrod, 2015, Gray, 2004; Heath & Cowley, 2004; LaRossa, 2005). Grounded theory is applicable to this study because little research could be found about the capabilities needed to lead successfully in South African HEIs during rapid change and disruption.

1.8.4 Axiological assumptions

Axiological assumptions relate to the researcher's worldview or values and how they influence the research being undertaken (Creswell, 2012; SOBT, 2017). The researcher's values or worldview influence the choice of questions, how they are formulated, how data is interpreted and reported (Creswell, 2012; SOBT, 2017). Therefore, the researcher was sensitive to and aware to acknowledge that the research and data collected during the research are value-laden and therefore he reported on their values and biases (Creswell, 2012; SOBT, 2017). The researcher reported values, biases and worldviews and describe their impact on the research.

1.9 RESEARCH METHOD

1.9.1 Literature review strategy

1.9.1.1 Literature review process

A literature review is a structured and systematic process in which the researcher of a topic seeks to find out more about what has already been researched, while enabling them to relate their research to what already exists (Cooper, Booth, Varley-Campbell, Britten & Garside, 2018; Gray, 2004; Leedy & Ormrod, 2015; Onwuegbuzie & Freis, 2016; Snyder, 2019). In other words, it is a systematic process of finding and reviewing all relevant and credible research so that the researcher avoids missing key studies and reduces the risk of bias such as excluding studies which effect the manner in which the current research is approached or structured (Cooper et al., 2018; Mouton, 2016). A comprehensive literature review also enables the researcher to narrow the research topic as they learn more about their topic, provides them with different perspectives on the topic, enables them to explore new methods such as a different sample design which could be used and it allows them to evaluate their results or findings against that which already exists (Cooper et al., 2018; Onwuegbuzie & Freis, 2016).

As a research method, the researcher must be able to explain the literature review according to what was done and why it was done in that way (i.e. it must be defensible, trustworthy), it must follow a structured sequence of steps (i.e. it must be systematic),

every step must be evaluated, and the reason for every decision taken during the process must be recorded (i.e. it must be transparent) (Cooper et al., 2018; Mouton, 2016; Onwuegbuzie & Freis, 2016; Snyder, 2019). Mouton (2016) argues that a good literature review provides a comprehensive and thorough coverage of the main aspects of the study, treats all authors fairly by understanding their work before criticizing it, ensure that it is current (i.e. go back as far as five years), accesses a wide range of literature sources and is well organised and structured.

Cooper et al. (2018), Onwuegbuzie and Freis (2016) and Snyder propose different processes of how to conduct a comprehensive literature review. Table 1.1 below contains the different literature review processes.

Table 1.1

Comparison of different literature review processes

Key stages of literature search (Cooper et al., 2018)	Literature review process (Snyder, 2019)	Comprehensive literature review process (CLR) (Onwuegbuzie & Freis, 2016)
Key stage one: Deciding who should undertake the literature search	Phase 1: Designing the review	Step 1: Exploring beliefs and topics
Key stage two: Determining the aim and purpose of a literature search	Phase 2: Conducting the review	Step 2: Initiating the search
Key stage three: Preparing for the literature search	Phase 3: Analysis	Step 3: Storing and organizing information
Key stage four: Designing the search strategy	Phase 4: Writing the review	Step 4: Selecting/deselecting Information
Key stage five: Determining the process of literature searching and deciding where to search (bibliographic database searching)		Step 5: Expanding the search to include one or more MODES (media, observation(s), documents, expert(s), secondary data)
Key stage six: Determining the process of literature searching and deciding where to search (supplementary search methods)		Step 6: Analyzing and synthesizing Information
Key stage seven: Managing the references		Step 7: Presenting the CLR report
Key stage eight: Documenting the search		

The process proposed by Cooper et al. (2018) is comprehensive and follows eight stages, from the identification of those who will conduct the literature review and follows a logical progression from there to determine the purpose of the literature review ending with documenting the literature review research. Furthermore, the process proposed by Cooper et al. (2016) emerged from their research concerning nine studies

on how to conduct literature reviews that were accessible and prominent within the United Kingdom. Snyder (2019) proposes a four-phase literature review process. However, even though Snyder (2019) explained each of the phases which cover most of the content as discussed in by Cooper et al. (2018), it is possible that the researcher could miss critical sources because Snyder (2019) does not discuss the need to include individuals who have experience in the topic or those who are skilled at doing literature searches (e.g. librarians). Cooper et al. (2018) however do argue for the need to include such relevant experts in your literature search team because it could enhance the quality of your literature review (Cooper et al., 2018). In contrast, Snyder (2019) appears to be silent on that aspect.

Onwuegbuzie and Freis (2016) also propose a comprehensive process similar to Cooper et al. (2018), which is also more comprehensive than Snyder (2019). However, Onwuegbuzie and Freis (2016) emphasise the impact of the researcher's beliefs, culture and values, amongst other factors, on the literature review process as well as the need to analyse and synthesize the information obtained during the literature review, and evaluating the research results or findings against that, whereas Cooper et al. (2018) do not.

1.9.1.2 Literature review process followed by this research

This research followed the CLR process of Cooper et al. (2018) because it appeared to provide a thorough and detailed explanation of each phase of the process, including the need to acknowledge and mitigate potential sources of bias and the need to evaluate the research results or findings against the literature review.

1.9.1.3 Types of literature review process

Apart from the different literature review processes, there are also different types of literature reviews as discussed by of Cooper et al. (2018) and Onwuegbuzie and Freis (2016). The three types of literature reviews are as follows (Cooper et al., 2018; Onwuegbuzie & Freis, 2016):

- (1) Narrative literature review: It is a broad search and critical review of current literature about the topic without integrating the results or findings of quantitative or qualitative research included in the literature review (e.g. general literature review, theoretical literature review) (Cooper et al., 2018; Onwuegbuzie & Freis, 2016). It provides an overview of the research topic as apposed to answering a particular research question (Onwuegbuzie & Freis, 2016).
- (2) Systematic literature review: It is a critical assessment and evaluation of all research that will address a specific topic to answer a particular research question (Cooper et al., 2018; Onwuegbuzie & Freis, 2016). Studies that are included in the literature review are based on clear established criteria, using a transparent research strategy and includes synthesizing of the findings (e.g. meta-analysis, meta-synthesis) (Cooper et al., 2018; Onwuegbuzie & Freis, 2016).
- (3) Integrative literature review: It is the assessment, critique synthesizing of current literature on a research topic that enables new theoretical frameworks and perspectives to emerge (Cooper et al., 2018; Onwuegbuzie & Freis, 2016). It combines the narrative and systematic literature review processes (Cooper et al., 2018; Onwuegbuzie & Freis, 2016).

1.9.1.4 *Type of literature review process followed in this research*

This research adopted a narrative review type of literature review because the aim of was to get an understanding of the current status of research that existed on models of leadership capabilities needed to lead South African HEIs successfully during rapid change and disruption as well as research regarding rapid change and disruption, with specific reference to that which affected South African HEIs. Therefore, a clear understanding of as broad a scope as possible of the relevant literature, as already mentioned, was required to determine what has been done, critically evaluate what has been done and identify the gaps, which in this case was to determine if a model of leadership capabilities required to successfully lead South African HEIs during rapid change and disruption existed. In addition, this research followed a qualitative approach, applying grounded theory to formulate a model of leadership capabilities required to successfully lead South African HEIs during rapid change and disruption.

This research did not undertake or aim to undertake a meta-analysis (i.e. systematic literature review) or to apply the integrative approach with the aim of answering a particular research question (i.e. combination of the systematic and narrative literature types).

1.9.2 Comprehensive literature review conducted in this research

The researcher applied the CLR process of Onwuegbuzie and Freis (2016), which is as follows:

- (1) Step 1: Exploring beliefs and topics: The researcher constantly recognised and acknowledged the impact of his culture, beliefs, experience, preferences and world view in identifying the research discipline, research topic, his approach to conducting the literature review and the selection of sources to include in the literature review (Onwuegbuzie & Freis, 2016). By doing this, the researcher was able to ensure that he eliminated bias as far as possible to ensure that the sources included in the literature review were from as many relevant types of sources as possible and as many relevant subject domains as possible that could provide a comprehensive understanding of what research has already been conducted on the research topic (Mouton, 2016; Onwuegbuzie & Freis, 2016).

- (2) Step 2: Initiating the search: The researcher followed a systematic approach which provided a clear audit trail of what and how the literature was conducted (Onwuegbuzie & Freis, 2016). First potential literature databases were selected from either multidisciplinary (e.g. Academic Search Premier, EBSCOhost), interdisciplinary (e.g. Directory of Open Access Journals) or transdisciplinary data bases which were mainly accessed through the UNISA library database interdisciplinary) (Mouton, 2016; Onwuegbuzie & Freis, 2016). In addition, the researcher conducted searches on the internet using Google and Google Scholar to search for relevant literature (Mouton, 2016; Onwuegbuzie & Freis, 2016). Before starting the search for literature, the researcher first wrote down key terms or phrases (e.g. leadership models, leadership capabilities, disruption affecting South African HEIs) which were used to perform the initial literature

search (Mouton, 2016; Onwuegbuzie & Freis, 2016). Next, using the UNISA library online database or the internet, the researcher would select a potential subject or discipline area that may be relevant to providing research literature relevant to the study and then select an appropriate database(s) from the list that was displayed (Mouton, 2016; Onwuegbuzie & Freis, 2016). Thereafter the researcher would enter one of the terms or phrases mentioned above into the “key words” search field on the database and identify potential journal papers, published books, magazine articles and other potentially relevant sources of literature to be downloaded (Mouton, 2016; Onwuegbuzie & Freis, 2016). In addition, the researcher entered the date range (i.e. not older than five years), type of publication, subject and or specific areas within a discipline if such an options was provided (Mouton, 2016; Onwuegbuzie & Freis, 2016). If the initial search did not produce any results or insufficient results the researcher either amended the words, phrases or terms used, the date range, the discipline(s) or database that was used. The researcher also conducted physical on-site literature searches at various libraries as well as internet searches. The researcher repeated the aforementioned process until potentially relevant literature sources were identified that were relevant to this research (Mouton, 2016; Onwuegbuzie & Freis, 2016).

(3) Step 3: Storing and organizing information: The researcher downloaded the articles onto his laptop and uploaded them into the Mendeley Referencing Software package to enable accurate citing and referencing (Mouton, 2016; Onwuegbuzie & Freis, 2016). The researcher also borrowed several hardcopy and online books from various libraries that were relevant to the research topic (Mouton, 2016; Onwuegbuzie & Freis, 2016). All literature source identified, irrespective of their format, were stored in subject, topic, relevant construct or theme, relevant chapter and or date order to facilitate easy access, review and analysis (Mouton, 2016; Onwuegbuzie & Freis, 2016).

(4) Step 4: Selecting/deselecting Information: The researcher then proceeded to evaluate the literature extracted by reading the abstract to determine whether or not to include or exclude (Mouton, 2016; Onwuegbuzie & Freis, 2016). Thereafter he did a cursory review of the main headings of the article to further

confirm relevance as well as to read the results or findings (Mouton, 2016; Onwuegbuzie & Freis, 2016). If the researcher was satisfied at that stage that the literature source had value it was then read in detail and a summary would be made of the research including key finding or results, research method, constructs described and additional references that could be explored as further literature sources (Mouton, 2016; Onwuegbuzie & Freis, 2016).

(5) Step 5: Expanding the search to include one or more MODES (media, observation(s), documents, expert(s), secondary data): The researcher remained open to the possibility of new literature sources emerging throughout the research process and ensured that they were explored, evaluated and integrated where relevant (Mouton, 2016; Onwuegbuzie & Freis, 2016).

(6) Step 6: Analyzing and synthesizing Information: The researcher proceeded to review, interpret and integrate the literature sources, that had been summarised into the appropriate chapter, section, construct and or theme to form a coherent review of the literature (Mouton, 2016; Onwuegbuzie & Freis, 2016).

(7) Step 7: Presenting the CLR report: The researcher integrated the literature review into this research thesis in support of achieving the research objectives and research question as presented in the previous chapter (Mouton, 2016; Onwuegbuzie & Freis, 2016).

1.9.3 Population

The participants were sampled from the different leadership and non-leadership levels of employees within the 26 public HEIs across SA (i.e. from all levels of leadership and non-leadership academic and professional services employees through stratified random sampling and purposeful sampling). The reason for selecting the sample from the population of South African public HEIs is because all of them have been directly or indirectly influenced by several if not all of the abovementioned rapid changes and disruptions, whereas private South African HEIs, arguably, have not been affected to the same extent (Altbach et al., 2009; Drew, Bawa, 2019; Duncan, 2016; Friedman & Edigheji, 2006; Heyneman, 2013; Jameson, 2012; Kamsteeg & Wels, 2007; Langa,

2017; Lockett & Mzobe, 2016; Nkosi, 2015; Prinsloo, 2016; Shin & Kehm, 2013; Tonini et al., 2016; Watson & Watson, 2013). This means that all academic and professional services executives (e.g. Vice Chancellors, Deputy Vice Chancellors and Rectors, Executive Directors), senior managers (e.g. Deans, Directors), managers (e.g. Academic Leaders, Finance Managers), supervisors (e.g. Principle Administration Officer) and non-leadership employees were eligible to be sampled as participants of the research from all HEI. This approach enhanced the number of leadership capabilities to be identified and provided an in-depth understanding across the employment levels within SA HEI. It furthermore enhanced the trustworthiness of the research results (Gray, 2004).

1.9.4 Sampling procedure

1.9.4.1 Purposeful sampling and stratified random sampling

A combination of purposeful and stratified random sampling techniques were used to achieve representativeness or comparability of the participants from different leadership and non-leadership levels within HEI across South Africa (Bordens & Abbott, 2011; Creswell & Plano Clark, 2008). Purposeful sampling involves selecting participants who are knowledgeable, experienced, willing and available to take part in the research about a specific phenomenon (Bordens & Abbott, 2011; Creswell & Plano Clark, 2008). Purposeful sampling was used to select nine of the 26 public HEIs across South Africa. This means that one HEI will be selected from each of the nine provinces in South Africa to ensure that each province is represented. This study followed a qualitative approach where it is not necessary to include all the HEIs to identify, understand and describe the phenomenon (i.e. leadership capability model) (Creswell & Plano Clark, 2011; Gray, 2004).

Stratified random sampling is a process where participants are randomly selected from different segments of the population, where each person in the segment has an equal chance of being selected (Bordens & Abbott, 2011; Creswell & Plano Clark, 2008). Stratified random sampling is relevant to this research to ensure that leadership capabilities needed to successfully lead SA HEI during rapid change and disruption were comprehensively identified and described through input from all leadership and

non-leadership levels. Once the HEIs have been selected through purposeful sampling, stratified random sampling was used to select participants from the different leadership and non-leadership levels within each of the selected HEIs. In this way, it enabled the researcher to identify and understand the leadership capabilities needed to lead in times of rapid change and disruption, at different levels, across the various HEI in South Africa. After the sample were identified, an in-depth, semi structured, open-ended interview was used to interview the nine Vice Chancellors. Where the Vice Chancellors were not available for a face-to-face interview an electronic copy of the interview questions was sent to them to complete, after confirming with them that they will participate. The same in-depth, semi structured, open-ended interview questionnaire were used to interview senior managers (i.e. Executives, Deans/Head of Schools/Faculties and Directors) of the nine HEI identified through stratified random sampling. Finally, stratified random sampling was used to select focus group participants from middle and junior management (i.e. Operational Managers and Supervisors) and non-leadership employees to get an understanding of the leadership competencies required.

1.9.5 Data collection method

1.9.5.1 Semi—structured interviews and focus groups

A combination of focus group discussions (middle and junior managers and employees) and in-depth, semi structured interviews (based on literature review) with Vice Chancellors and senior leaders were conducted to identify the leadership capabilities required to lead successfully in rapid change and disruption within SA HEI (Bordens & Abbott, 2011; Breakwell et al., 2012; Creswell & Plano Clark, 2008). The researcher obtained written informed consent from participants to record their responses to the interview and focus group questions.

1.9.5.2 Recording of data

All interviews were recorded by means of a digital recorder and transcribed verbatim. Before the start of the interview, the researcher explained the purpose of the research to the participants and clarified any uncertainties that they may have (Bordens &

Abbott, 2011; Breakwell et al., 2012; Creswell, 2012; Creswell & Plano Clark, 2008). During the interview the researcher kept a reflective diary to record observations of participant's behaviour, notes about the context, notes about similarities and contradictions in the answers provided and notes about non-verbal behaviour. In addition, different techniques were used such as paraphrasing, summarising, clarifying and asking different types of questions (e.g. open, probing) to enable to participants to provide as rich a response as possible to the questions (Bordens & Abbott, 2011; Breakwell et al., 2012; Creswell, 2012; Creswell & Plano Clark, 2008).

Before the focus group discussions commenced, the researcher explained the purpose and clarified any matters that might arise. During the focus group discussions, opinions of participants were recorded verbatim (as far as possible) along with the content of the discussion (including vocabulary uses), nonverbal responses, emotional reactions and important aspects of group interaction were recorded (Bordens & Abbott, 2011; Breakwell et al., 2012; Creswell, 2012; Creswell & Plano Clark, 2008).

The researcher digitally recorded the focus group discussions and also keep field notes about the emotions, participant interaction, nonverbal responses and other important aspects that could not be captured through digital recording (Bordens & Abbott, 2011; Breakwell et al., 2012; Creswell, 2012; Creswell & Plano Clark, 2008).

1.9.6 Data analysis

Content analysis was done to identify, code, categorize and elaborate on the primary themes to identify and understand the leadership capabilities (Creswell & Plano Clark, 2008; Strauss & Corbin, 1990). The researcher applied Tesch's (1990) data analysis method. This method includes the following eight steps:

- (1) Step 1: The interviews are digitally recorded and typed up verbatim.
- (2) Step 2: The researcher read all the interview transcripts to get an overall sense of the data and then begin to identify the main topics or themes. This include selecting the data from the most comprehensive interview, which hopefully have the potential to become the main themes.

- (3) Step 3: Different themes are recorded.
- (4) Step 4: Different themes are clustered together, shortened and coded.
- (5) Step 5: Themes that are most different are analysed.
- (6) Step 6: Codes are alphabetised, and abbreviations were made after the final decision.
- (7) Step 7: Themes are grouped, and material are assembled.
- (8) Step 8: Data are recorded and reported.

Through an iterative process, the researcher worked back and forth with the data to identify themes, relationships, discrepancies and frequencies in the data until saturation was reached (the point where no new themes emerge but rather the reoccurrence of themes that have already been identified and described). In addition, the researcher used NVivo, which is a software programme that enables the researcher to analyse qualitative data gathered from interviews and focus groups, to assist with the analysis of the data to simplify the process and for triangulation, which enhanced the quality of the results (Breakwell et al., 2012; Strauss & Corbin, 1990).

1.9.6.1 Theory building

The research aimed to identify, understand, describe and explain the capabilities (including combinations thereof) necessary to lead successfully during rapid change and disruption. This implies developing a theory (and model) that will identify, describe and explain the capabilities needed, the relationship between them and the effect they have on leading successfully during times of rapid change and disruption. The Theory Building Model of Carlile and Christensen (2004) was used in this research to develop the model of capabilities needed to lead successfully in South African HEIs during rapid change and disruption. This Theory Building Model has two main phases, namely the descriptive phase and the prescriptive phase (i.e. the normative phase) (Carlile & Christensen, 2004).

The descriptive phase is the foundation phase and is a prerequisite for the prescriptive or normative phase, which involves research in the field to test the theory developed in the descriptive phase (Carlile & Christensen, 2004). During this phase, the phenomena is observed, constructs relating to the phenomena are developed and categorised, and the relationships between them and the relevant outcome are explored. The outcome of this phase is a model that diagrammatically shows the relationships between categories and the relevant outcome (Carlile & Christensen, 2004). In this research the data was examined to identify the capabilities (i.e. constructs) needed to lead successfully in South African HEIs during rapid change and disruption (i.e. the relevant outcome) (Carlile & Christensen, 2004).

Furthermore, the leadership capabilities (i.e. constructs) were examined and compared to each other and categorised (Carlile & Christensen, 2004). Next, the relationship between the categories of leadership capabilities and the leading successfully during rapid change and disruption (i.e. relevant outcome) in South African HEIs were examined (Carlile & Christensen, 2004). The result of the aforementioned phase was the development of a model that displays the relationships between the leadership capabilities (i.e. the categories) and leading successfully during rapid change and disruption in South African HEIs (i.e. the relevant outcome) (Carlile & Christensen, 2004). This research aimed to identify, understand and describe the capabilities required to lead successfully during rapid change and disruption.

1.10 ENSURING DATA QUALITY

1.10.1 Ethical consideration

Permission was obtained from the registrars, relevant ethical committees and other related structures to conduct the study, prior to commencement. Once permission was obtained, all potential participants were contacted telephonically and/or by e-mail where the context and purpose of the study was explained. Written informed consent was obtained from all participants. All participants who have an e-mail address were sent a written informed consent form. The written informed consent included the purpose and nature of the research, voluntary nature of participation, confirmation of anonymity and confidentiality (including limits to confidentiality), how the results will be

used and how their responses will be stored and secured (Bordens & Abbott, 2011; Breakwell et al., 2012).

All results are stored electronically, for a period of five years, with access by means of a password or in lockable filing cabinets. All paper and pencil data are stored in lockable filing cabinets, for a period of five years, with strict access that will be controlled by the researcher. Care was taken to ensure that a skilled and experienced research assistant transcribed the data. In addition, the research assistant was provided with the purpose of the study and how the various interview and focus group interview guides should be transcribed. The research assistant signed a confidentiality agreement relating to this research (Bordens & Abbott, 2011; Breakwell et al, 2012).

All appropriate HPCSA and institutional ethical and research requirements were adhered to (e.g. professional confidentiality, respect for human rights of others, obtaining informed consent, avoiding harm to participants and respondents, obtaining ethical and gatekeeper approval before starting the research project) (Bordens & Abbott, 2011; Breakwell et al., 2012).

1.10.2 Strategies employed to ensure quality of data

1.10.2.1 General

A thorough literature search was done to ensure a complete and accurate understanding of the constructs and subject to formulate the interview and focus group questions. All questions in the semi-structured interview guide and focus group discussion guide were checked and tested by five purposefully selected participants from the University of KwaZulu-Natal (all professional service employees of different races, gender, leadership and non-leadership roles from middle management to junior employees). They were checked and finally approved by the two academics from UNISA who are supervising this research. Finally, the interview and discussion guides were reviewed and approved by the various gatekeeper of each of the nine HEIs selected to take part in this research before the start of data collection (Bordens & Abbott, 2011; Breakwell et al., 2012). This approach enhanced the face- and construct validity of the research.

After each focus group discussion, a debriefing session was held with the participants to confirm that the researcher has captured the essence of their discussion. Furthermore, during the semi-structured interview and focus group discussion participants were given an opportunity to clarify any questions they may have or questions which they may not have understood. The researcher made constant use of paraphrasing and reflecting back to participants what they said to ensure that the researcher has correctly understood and captured what was said.

Finally, all semi-structured interviews and focus group discussions were recorded using a digital recorder and transcribed verbatim, which enhanced the quality of the data capturing.

1.10.2.2 Ensuring trustworthiness of qualitative data

Krefting (1991) argued that qualitative research is often evaluated against quantitative criteria that are not always applicable. In many cases the aim of qualitative research is to explore and understand rather than to predict or correlate (as is the case in quantitative research). A model of trustworthiness that can be applied to qualitative research to ensure the accuracy and quality of research results is proposed (Krefting, 1991). The model has the following components (Krefting, 1991; Shenton, 2004):

- (1) **Credibility:** Refers to the extent that the research findings are credible by the person or persons from whom the data was obtained or who are familiar with the phenomenon being studied (Krefting, 1991). In other words, did the research measure what it was supposed to (Shenton, 2004)? This implies that the researcher must record and interpret that data with great care and accuracy so that those who provided the data would be able to easily recognise their inputs (Krefting, 1991). In the case of this research, the aim was to identify and understand the different leadership capabilities required to lead successfully during rapid change and disruption in South African HEIs. Therefore, it is accepted that there could be more than “one truth”, that participants could provide more than one leadership capability and that there could be different combinations of leadership capabilities. To this end, data will be obtained from different Universities, from different levels of employees within the Universities, across South Africa will

enhance triangulation that will assist in corroborating the research results (Shenton, 2004). In addition, credibility will be achieved through working back and forth through the data to identify and code themes and categories until data saturation will be achieved (Creswell & Plano Clark, 2008; Shenton, 2004; Strauss & Corbin, 1990). Tesch's (1990) data analysis method was applied during this process to ensure that the credibility is achieved.

- (2) Transferability: Refers to the extent to which the results from the research context and participants can be applied equally to similar contexts beyond the research situation (Krefting, 1991, Shenton, 2004). In qualitative research, unlike positivistic research, it is not possible or necessary to demonstrate that research findings are generalizable because its purpose is to understand and describe phenomenon, and a smaller sample is used (Shenton, 2004). However, if researchers want their findings to be transferable, they must provide as much information as possible so that others will be able to make a reasonable comparison from one context to another (Krefting, 1991, Shenton, 2004). The researcher endeavoured to provide as much information available, as described by the data analysis methods above, to enable others to understand the phenomenon being researched and to enable them to make such comparisons.
- (3) Dependability: Refers to reliability which is concerned with the extent to which the research, if repeated, using the same methods, same context and same respondents, would yield the same results (Krefting, 1991, Shenton, 2004). Qualitative research focuses on the uniqueness of human beings and is concerned with understanding and explaining phenomena, which in most cases, take place in situations where there are many variations (Krefting, 1991, Shenton, 2004). Therefore, variability is expected (Krefting, 1991). To this end any variability, including the sources thereof, will be fully accounted for, recorded and described (Krefting, 1991, Shenton, 2004). In addition, the data gathering, analysis and interpretation methods must be described in full (Krefting, 1991, Shenton, 2004). Following this approach enables future researchers to determine how repeatable the study is (Krefting, 1991). The researcher fully described all methods of data gathering, analysis and interpretation as well as the different sources of variation

in subsequent chapters of this thesis. The data was interrogated until saturation was reached.

- (4) **Confirmability:** Refers to the objectivity of the research (Shenton, 2004). In other words, it is the extent to which the results are free of researcher bias and completely reflect the experiences and ideas of the participants (Shenton, 2004). To ensure confirmability the researcher clearly documented each method used along with the reason why one method was chosen above another, including the advantages and disadvantages of each one (Shenton, 2004). In addition, the researcher provided an audit trail in subsequent chapters that clearly shows how the data was gathered, analysed and checked, at various stages, for accuracy (Shenton, 2004).

In addition, as already mentioned, all responses to semi-structured interviews and focus group discussions were recorded, transcribed verbatim and captured in NVivo for further analysis. The responses from each participant in the focus group interviews were captured “verbatim” by the researcher and the research assistants. All the themes that emerged which might influence the identification, understanding and describing of the leadership capabilities needed to lead successfully in South African HEIs during rapid change and disruption were examined and included for further analysis.

1.11 REPORTING

The researcher used the American Psychological Association 6th Edition (APA) referencing method and wrote the report in an academically format as prescribed by the University of South Africa (UNISA), allowing the possibility of an academic article and possibly further research. The final report is an extensive construction and description of the phenomena being studied from the feelings, voices, meanings and actions of the participants involved in this study (Patton, 2002).

1.11.1 Findings

The findings of the research will be discussed, in relation to the research aims. Specifically, the discussion will focus on the leadership capabilities that were identified

and the extent to which participants believe that different leadership capabilities are required at different leadership levels, in relation to their relevance to lead successfully in rapid change and disruption in South African HEIs.

1.11.2 Conclusions, limitations and recommendations

The conclusions resulting from the research are presented considering the research problem and aims. Finally, appropriate recommendations are made regarding the applications of the findings and possible areas for future research.

1.12 CHAPTER LAYOUT

1.12.1 Chapter 1: Scientific orientation to the research

In this chapter, the background to and motivation for this study are presented, together with a description of the context within which the research occurred. The general and specific aims, paradigm perspective and research design are discussed.

1.12.2 Chapter 2: Leadership and leadership capabilities

In this chapter the concept of leadership, leadership capabilities, leadership theories and models, influence of leadership on organisational performance and dealing with rapid change and disruption, and leadership in higher education are discussed.

1.12.3 Chapter 3: Rapid change and disruption

In this chapter the concepts of change, pace of change and disruption and the impact of rapid change and disruption in Higher Education, along with the implications for leadership are presented.

1.12.4 Chapter 4: Research design

The research approach, research strategy, research methods, research setting,

sampling, data collection methods, recording of data, analysing data, data quality and reporting of results are discussed in this chapter.

1.12.5 Chapter 5: Findings

The results of the qualitative research in relation to the research aims are presented in this chapter.

1.12.6 Chapter 6: Discussion, conclusions and recommendations

In this chapter the results are discussed, conclusions are formulated, and recommendations are presented, as well as the limitations to the research and implications for future research.

1.13 SUMMARY

This chapter served as the introduction to this research which began with the background and motivation for the research. This was followed by the research problem and research objectives. Next, the paradigm perspective, research approach, assumptions and research method were discussed. Ensuring data quality was discussed next and the chapter ended with a summary of the chapter layout. The next chapter will be the start of the literature review on the constructs of leadership and leadership capabilities.

CHAPTER 2: LEADERSHIP AND LEADERSHIP CAPABILITIES

2.1 INTRODUCTION

The previous chapter provided the background and motivation for the research as well as the research problem, the research objectives, research design and methods, ensuring data quality and how the research report would be structured.

In this chapter leadership and leadership capabilities will be highlighted and discussed. More specifically, the chapter will discuss the definition and meaning of leadership, additional factors influencing leadership, leadership theories and models, leadership in South African HEIs, influence of leadership on organisation effectiveness during rapid change and disruption and leadership capabilities.

2.2 MEANING OF LEADERSHIP

The construct leadership can be somewhat baffling because of the variety of definitions, and it is not a physical or tangible object that can be seen or touched. What leadership is also differs from one context to the next and arguably from one culture to the next (Storey, Hartley, Denis, 't Hart & Ulrich, 2017). They argue that the increased interest in leadership is due to various concerns (Storey et al., 2017). The concerns include a perceived shortage of leadership talent, lack of appropriate quality of leadership, misuse of power by leaders, concentration of power (i.e. self-serving leadership) and employeeship (e.g. If employees have negative views about people in authority it could impact on how they view their leaders). Bass and Stogdill (1990) state that leadership has been the focus of research for many years and recently there has been a significant increase in the interest in and study of leadership. They furthermore criticize those called “the know-nothings” who declare that what we know about leadership is not important and they are not interested in finding out (Bass & Stogdill, 1990). Covey (1999), Hughes et al. (2009), Landy and Conte (2007) Northouse (2007) and Yukl (2006) agree on the importance of leadership in enabling organisation and employees to grow, succeed and to be sustainable. Covey (1999) compares leadership to a compass that is built on a set of principles that guide why we do what we do to help leaders navigate their environments.

Northouse (2007, p. 12) puts it this way, “Despite the abundance of writing on the topic, leadership has presented a major challenge to practitioners and researchers interested in understanding the nature of leadership. It is a highly valued phenomenon that is very complex”. Hughes et al. (2009) and Yukl (2006) agree on the complexity of leadership as a construct and posit on the one hand that there can never be one correct definition of leadership as a social construct that covers all the main elements. On the other hand, there is a view that the construct of leadership does not exist because the specific situation and not leadership has far greater influence on the success of the organization than the leader (Hughes et al., 2009; Yukl, 2006).

Furthermore, Van Wart (2004) explains that leadership skills may vary over time as an organization and its environment changes. As a result, leadership models may over generalize to the extent that they are not relevant (or complete enough) for a specific situation because they lack a certain element that is relevant to that specific situation (Van Wart, 2004). It is evident that leadership is a dynamic and complex construct that continuously evolved over time and will continue to do so as the world and the world of work change. This will arguably influence the way leadership is defined and what is expected of leaders. In this research study, the aim was to understand what the capabilities are that are needed to lead successfully during times of rapid change and disruption within HEIs in South Africa.

2.2.1 Defining leadership

Leadership has been defined according to behaviours, traits, situations, exerting influence, style, as a process and as envisioning and inspiring others (Achua & Lussier, 2013; Daft 2011; Harvey & Brown, 2001; Hughes et al., 2009; Landy & Conte, 2007; Northouse, 2007; Rothman & Cooper, 2008; Western, 2013; Yukl, 2006). Northouse (2007, p. 3) defines leadership as “a process whereby an individual influences a group of individuals to achieve a common goal”. Yukl (2006, p. 8) defines leadership as “the process of influencing others to understand and agree about what needs to be done and how to do it, and the process of facilitating individual and collective efforts to accomplish shared objectives”. Hughes et al. (2009, p. 6) define leadership as “the process of influencing an organized group toward accomplishing its goals”.

According to Fiedler (1967), a leader “is the individual in the group”. “Leadership is essentially a relationship involving power and influence. It is, therefore, reasonable to classify situations in terms of how much power and influence the situation gives the leader” (Fiedler, 1972, p. 454). Bass and Stogdill (1990) state that leadership is authoritarian, decisive, and even coercive. To them, the definition of leadership can and will vary depending on the purpose of the definition. For example, defining leadership as a process would be different to defining it in terms of behaviours or personality traits (Bass & Stogdill, 1990).

Northouse (2007) concurs and states that the definition of leadership will vary amongst researchers depending on their area of interest. Bass and Stogdill (1990) offer the following definition of leadership, which is “the interaction among members of a group that initiates and maintains improved expectations and the competence of the group to solve problems or to attain goals” (Bass & Stogdill, 1990, p. 20). Grint, Jones and Holt (2017) define leadership from different perspectives. These include person-based leadership (i.e. your personality or character determines if you are a leader or not), position-based leadership (i.e. your position in the organisation determines if you are a leader or not) and purpose-based leadership (i.e. the purpose you wish to achieve determines whether you are a leader or not) and process-based leadership (i.e. the behavioural skills and interactions that are needed to create a supportive environment for employees to achieve what needs to be done) (Grint et al., 2017). It is evident from the above discussion that there are varying definitions of leadership but despite their differences, they do appear to have certain common components, which will be discussed below.

2.2.2 Essential components in the definition of leadership

The following components are considered essential for defining leadership as they surface throughout literature (Bergh & Theron, 2009; Fiedler, 1967; Hughes et al., 2009; Landy & Conte, 2007; Northouse, 2007; Yukl, 2006):

(1) *Process*

According to the systems theory a process involves receiving inputs and transforming

them into outputs (Invancevich & Matteson, 1996). In leadership, the actions (or inaction) of the leader (i.e. the input) are transformed through interaction (e.g. direction, encouragement, decision-making, empowerment) with employees in a manner that influences their behaviour and what they do (i.e. their output) in a particular situation (Hughes et al., 2009; Invancevich & Matteson, 1996; Northouse, 2007; Yukl, 2006). Leadership as a process is dynamic and the situation or actions of the employees could furthermore affect the actions of the leader (Hughes et al., 2009; Landy & Conte, 2007; Northouse, 2007). Ultimately, the outcome of the leadership process influences the organisation's performance, including successfully implementing change (French & Bell, 1999; Grint et al., 2017; Kotter & Cohen, 2002).

(2) *Goal(s) or purpose*

In exercising leadership, the leader influences an individual or group of individuals to achieve a common goal(s) or purpose (Grint et al., 2017; Hughes et al., 2009; Landy & Conte, 2007; Northouse, 2007; Yukl, 2006). The goal or purpose is the focus and the leader influences and directs all effort and resources towards completing the tasks associated with them (Hughes et al., 2009; Landy & Conte, 2007; Northouse, 2007; Yukl, 2006).

(3) *Situation and context*

Leadership occurs within a particular situation and context, which differ because of the nature of the environment and culture (Hughes et al., 2009; Landy & Conte, 2007; Northouse, 2007; Yukl, 2006). For example, leading in the military is different to leading in the banking sector or in higher education because the nature of the work is different, the culture is different, and the demands of the environment are different. Grobler and Singh (2018), Hughes et al. (2009), Landy and Conte (2007), Northouse (2007) and Yukl (2006) concur and add that certain factors within the context and situation will affect the way the leader reacts (e.g. technology, culture of the region in which leadership is applied).

(4) *Employees*

Leadership implies that there is someone to lead; in other words, employees (Hughes et al., 2009; Landy & Conte, 2007; Northouse, 2007; Yukl, 2006). Leaders affect employees and are affected by them, in turn, during their interaction while striving toward a common purpose (Hughes et al., 2009; Landy & Conte, 2007; Northouse, 2007; Yukl, 2006).

(5) *Relationship, interaction and influence*

Leadership involves a relationship between the leader and employees where the leader influences them to achieve their goals through factors such as power, knowledge, inspiration and providing direction while they interact with each other and their situation (Hughes et al., 2009; Landy & Conte, 2007; Northouse, 2007; Yukl, 2006). The interaction between characteristics of the employees, the circumstances of the situation and the characteristics of the leader affect the relationship and influence these variables within leadership process (Hughes et al., 2009; Landy & Conte, 2007; Northouse, 2007; Yukl, 2006).

For the purpose of this research, leadership is defined as a process where individuals or groups are influenced through a relationship with the leader to bring about real change and achieve outcomes through a common purpose, with due consideration for the context and situation (Achua & Lussier, 2013; Daft 2011; Hughes et al., 2009; Northouse, 2007; Rothman & Cooper, 2008, Western, 2013). The definition recognizes the complexity of the leadership process where the leader affects and is affected by the employees, the situation and what they need to achieve.

2.3 APPROACHES TO LEADERSHIP

Leadership has been studied and explained through different approaches over the past decades from the “great man and great women theories” (Hughes et al., 2009; Landy & Conte, 2007; Northouse, 2007) to the more contemporary approaches such as shared leadership (Bergh & Theron, 2009; Eddy & Van der Linden, 2006; Landy &

Conte, 2007). In other words, the different approaches to leadership aimed to provide insight and understanding to the elements of the construct of leadership.

In this research, the researcher wanted to ensure that the most wholistic approach was applied to ensure that all applicable capabilities needed to successfully lead South African HEIs during rapid change and disruption were identified, which was the aim of this research. Therefore, by understanding all the different approaches that exist for studying leadership, the researcher was able to ensure that the most suitable approach was selected to ensure that the aim of this research was achieved. Table 2.1 contains the different approaches that will be discussed in the paragraphs that follow (Bergh & Theron, 2009; Eddy & Van der Linden, 2006; Hughes et al., 2009; Landy & Conte, 2007; Northouse, 2007).

Table 2.1

Approaches to leadership

Approach	Pros	Cons
Great man and great woman approach	Identifies key characteristics	Unscientific. Does not consider the situation or behaviours
Traits and skills approach	Scientific approach used to identify key traits and skills	Long lists of traits and skills Does not consider situation or behaviours Generated lists of traits and skills
Behaviour approach	Identified behaviours required to be successful	Generated long lists Does not consider situation or traits
Situational approach	Considers impact of situation on leadership style	Does not sufficiently consider the complexity of the situation
Integrated approach	Considers influence of all of the above on leadership style	None

2.3.1 Great man and great woman approach

The “great man and great woman” theories were one of the earliest approaches used to understand the differences between leaders and employees (Hughes et al., 2009; Landy & Conte, 2007; Northouse, 2007). This approach arose because the lives of certain people were studied to find out what made them great leaders (Hughes et al., 2009; Landy & Conte, 2007; Northouse, 2007). The approach focused on identifying the natural or inborn characteristics (i.e. people were born with these characteristics)

that made those being studied great leaders, whether they were politicians, military leaders or business leaders (e.g. Napoleon, Abraham Lincoln, Martin Luther King, Jack Welch) (Hughes et al., 2009; Landy & Conte, 2007; Northouse, 2007). The origin of these characteristics (e.g. optimism, resilience) tended to be the work of historians who investigated these individuals to understand what made them great, and what differentiated them from their employees (Hughes et al., 2009; Landy & Conte, 2007; Northouse, 2007). Stated differently, this approach argued that history as we know it was shaped by the phenomenal leadership of these “few great men and great women” (Judge, Bono, Ilies & Gerhardt, 2002). According to Bass and Stogdill (1990) and Grint et al. (2017), leadership has been researched for many years and stories, myths and legends have been told for centuries about great leaders and what made them great. They add that leadership has been studied, as part of history, from early civilization in countries such as Egypt, Greece and China, to formulate the characteristics of leadership, including the work of Plato and Sun Tsu (Bass & Stogdill, 1990; Grint et al., 2017).

While studying great leaders to identify the characteristics that made them successful can contribute to the understanding of leadership, it does not account for all the factors that contributed to their success (Hughes et al., 2009; Ivancevich & Matteson, 1996; Landy & Conte, 2007; Northouse, 2007). Key attributes that are relevant for successful performance in one situation may not be ineffective in another (Hughes et al., 2009; Ivancevich & Matteson, 1996; Landy & Conte, 2007; Northouse, 2007).

In the Council for Higher Education’s Reflections of South African University Leaders 1984 – 2014 (2016) Professor Brenda Gourelly, with over 20 years’ experience in leading Universities, explains the characteristics of being a successful leader and the behaviours required to lead talented academics. On the one hand, Prof Gourley lists the capacity to listen as a key leadership characteristic and on the other explains the need to display participatory leadership behaviour (Council for Higher Education, 2016). The two concepts are somewhat related but quite different. Being willing to listen may enhance leadership effectiveness but does not necessarily result in participative leadership behaviour, although participative leadership behaviour may be more important for effective leadership.

If researchers only focused on the characteristics of the great man and great woman approach, they may not account for the success of leadership if behaviours or the situations are not considered. Fiedler (1967), Hughes et al. (2009), Northouse (2007), Rothman and Cooper (2008) and Western (2013) concur that characteristics alone are not sufficient to explain leadership.

This research aimed to identify and explain the capabilities needed to lead successfully in times of rapid change and disruption, in South African HEIs. Therefore, the context and situation are as important as the capabilities required because the environment, context and situation may differ thereby rendering the relevant capabilities needed in one context ineffective and redundant in another. If this study only focused on the “great men or great women leaders” it is highly probable that other important factors and capabilities could be excluded. Instead, this study considered more than only the characteristics of “great men and great women leaders” within South African HEIs; it also included factors such as the behaviours and situation.

2.3.2 Trait and skills approaches

While the “great man and great woman” approaches appear to be more unscientific, story-telling or historical reports of what characteristics make good leaders or differentiate leaders from employees, the study of traits can be traced back to the early part of the 20th century (Hughes et al., 2009; Northouse, 2007; Yukl, 2006). A trait refers to an attribute, characteristic or recurring trend that leaders have which employees (non-leaders) do not have (Hughes et al., 2009; Ivancevich & Matteson, 1996; Landy & Conte, 2007; Northouse, 2007; Yukl, 2006).

The leaders’ personality profile is the focus of the trait approach (Bergh & Theron, 2009; Northouse, 2007; Yukl, 2006). While research into personality traits produced lists containing various qualities, such as: intelligence, self-confidence, determination, integrity and sociability (or emotionally intelligent) regularly emerged (Hughes et al., 2009; Ivancevich & Matteson, 1996; Landy & Conte, 2007; Northouse, 2007; Yukl, 2006). Research have reported positive relationships between intelligence, emotional intelligence and personality and effective leadership behaviour (Hughes et al. , 2009; Kirkpatrick & Locke, 1991; Northouse, 2007; Yukl, 2006). Research also resulted in

the formulation of the “Big five” personality traits” namely, extraversion, agreeableness, openness, conscientiousness and neuroticism. These personality traits have been positively related to leadership effectiveness (Hughes et al., 2009; Northouse, 2007).

Similarly, Stumpf and Mullen (1991) discussed leader personality styles in relation to strategic leadership and reported that certain personality styles were more relevant to formulating an effective strategy. They provided an example of a leader who had a strong sense-thinking style who would reject an idea that were not based on facts and that negatively influenced the quality of the leader’s strategy (Stumpf & Mullen, 1991). However, when the leader concerned was made aware of the impact of his style, he became open to other idea which improved the quality of the strategy he developed (Stumpf & Mullen,1991).

Research on traits has provided an understanding of personality’s influence on leadership and identified traits that are positively related to leadership effectiveness (Bergh & Theron, 2009; Hughes et al., 2009; Kirkpatrick & Locke, 1991; Northouse, 2007; Yukl, 2006). For example, Judge et al. (2002) conducted a meta-analysis of 78 studies that investigated the big five personality traits (Extraversion, conscientiousness, openness to experience, neuroticism, and agreeableness) and leadership. They reported that of the “Big five” personality traits, extraversion, conscientiousness, neuroticism, and openness to experience were strongly correlated to leadership whereas agreeableness was only slightly correlated to leadership (Judge et al., 2002). Furthermore, they highlighted that personality traits of sociability, dominance, achievement, and dependability were moderately correlated to leadership (Judge et al., 2002). They posit that extraversion is the most important trait for leadership and leadership effectiveness (Judge et al., 2002). They also reported that extraversion is strongly correlated to the emergence of leaders within a group without a leader, because such individuals will probably assert themselves in group situations (Judge et al., 2002).

In another study Diržytė, Patapas and Smalskys (2013) studied leaders’ personality traits in relation to their constructive thinking, in Lithuanian public organizations. They used the Neuroticism, Extroversion, Openness to Experience - Five Factor Inventory (NEO-FFI) and Constructive Thinking Inventory (CTI) to determine the relationship

between personality traits and constructive thinking (Diržytė et al., 2013). They reported that neuroticism was negatively correlated to constructive thinking whereas extraversion, openness to experience, agreeableness, and conscientiousness were positively related (Diržytė et al., 2013). In other words, personality traits of the leader influenced their constructive thinking, which includes the impact on their work performance and social skills (Diržytė et al., 2013). Catell and Schuerger (2003) state that research using the 16 Personality Factor (16PF) Questionnaire to assess the “Big five” personality traits found that amongst others, positive scale scores relating to extraversion and openness to change were indicators of leadership potential.

In addition, by assessing the degree to which an individual possesses these traits, interventions can be tailored to help develop them, which could contribute to improving leadership effectiveness Catell and Schuerger (2003). For example, Catell and Schuerger (2003) discuss how the results of 16PF assessment, which assess job related big five personality traits (including those needed to be effective leaders), can be used to enhance the quality of selection decisions, which arguably includes the selection of leaders (Catell & Schuerger, 2003). They also provide examples of how the 16PF assessment results can be used to create self-awareness in employees and enable them to work towards improving their work performance (e.g. Performance coaching, executive coaching) (Catell & Schuerger, 2003).

However, the trait approach has several shortfalls which include the following:

- (1) Lack of a specific set of traits that defines effective leadership in all situations.
- (2) It does not consider the effect of leadership traits on relationships between group members and their performance.
- (3) Leadership traits that lead to success in one situation may not be relevant to another and it is difficult to teach most traits (e.g. to teach someone to be more extroverted) (Northouse, 2007; Yukl, 2006).

The skills approach to leadership suggests that effective leaders require certain skills at the lower, middle, and senior levels to be effective, which include interpersonal

relations, problem solving, knowledge, conceptual and technical skills (Northouse, 2007; Yukl, 2006). While the skills approach identified certain skills necessary for leaders to be effective, its weaknesses include that it was similar to the trait approach, the variety of skills appeared to be almost endless, the exact trait(s) related to leadership effectiveness have not been identified, research has produced conflicting results and it did not have strong predictive validity of leadership effectiveness (Judge et al., 2002; Northouse, 2007; Yukl, 2006). Furthermore, apart from traits, behaviour and the situation were found to have considerable influence on leadership effectiveness independent of a leader possessing the relevant traits or skills (Bergh & Theron, 2009; Hughes et al., 2009; Kirkpatrick & Locke, 1991; Northouse, 2007; Yukl, 2006). Stated differently, traits alone are not necessarily enough to be successful as a leader in a stressful situation.

This research aimed to identify the capabilities needed to lead successfully in South African HEIs during rapid change and disruption. Therefore, the context of the situation, characteristics, behaviours and skills were of value as well as the personality traits. The study intended to identify those capabilities (including traits) that were relevant to not just leading in South African HEIs, but in a context within specific situations. Only focussing on the personality traits may not have provided a comprehensive picture of all the leadership capabilities that would be required (i.e. it may exclude critical behaviours).

2.3.3 Behaviour approach

In this approach, the focus was on what leaders do and how they “do” leadership because their behaviour seemed to have a more direct influence on their subordinates (Bergh & Theron, 2009; Hughes et al., 2009; Kirkpatrick & Locke, 1991; Northouse, 2007; Yukl, 2006). Leadership behaviours have been mainly categorised into two areas, namely those that focus on task accomplishment and those that focus on relationships (Bergh & Theron, 2009; Northouse, 2007). Drucker (2006) supports this view stating that executives need to display appropriate human relations and focus on their employees’ strengths (i.e. similar to relationship focused) and make effective decisions, staff the organisation correctly, set priorities and use time correctly (i.e. similar to task focused) to be effective. Similarly, Spears (2004) discusses servant

leadership and describes the characteristics (including behaviours) that are essential to be an effective leader. The behaviours of a servant leader include empathetic listening, persuasion and building community, which could be likened to relationship focused behaviours; and conceptualization, awareness and foresight which could be likened to task focused behaviours (Bergh & Theron, 2009; Hughes et al., 2009; Landy & Conte, 2007; Northouse, 2007; Spears, 2004; Yukl, 2006).

One of the earliest studies on leadership behaviour was conducted by Ohio State University where researchers studied the behaviour of leaders in work settings (Bergh & Theron, 2009; Hughes et al., 2009; Landy & Conte, 2007; Northouse, 2007; Yukl, 2006). The researchers identified two independent leadership behaviours called “initiating structure” and “consideration” (Bergh & Theron, 2009; Hughes et al., 2009; Northouse, 2007; Yukl, 2006). Initiating structure is concerned with leaders emphasizing goals and completing tasks whereas consideration is about leaders being supportive, appreciative, and concerned about their employees (Bergh & Theron, 2009; Hughes et al., 2009; Northouse, 2007; Yukl, 2006). Around the same time as the Ohio State University research, the University of Michigan was also researching leadership behaviour, however they focused on the impact of leadership behaviour on small groups; in other words, how the leaders and groups interacted (Bergh & Theron, 2009; Hughes et al., 2009; Landy & Conte, 2007; Northouse, 2007; Yukl, 2006). The University of Michigan also identified task-focused behaviour and relationship focused behaviour as important leadership behaviours. However, they also discovered that group effectiveness was dependent on the extent to which leaders displayed participative behaviour toward the group (Landy & Conte, 2007; Yukl, 2006).

The behaviour approach to leadership allowed researchers to focus on how leaders behaved, and several questionnaires were developed for that purpose such as the Multi-Factor Leadership Questionnaire, Leadership Grid and Leader Behaviour Questionnaire (Hughes et al., 2009; Landy & Conte, 2007; Northouse, 2007; Yukl, 2006). The aforementioned questionnaires not only helped identify how leaders act but also helped them identify the behaviours needed to be effective or which could derail them, which in turn, provided them with a basis for self-development (Hughes et al., 2009; Landy & Conte, 2007; Northouse, 2007; Yukl, 2006). The behaviour approach has also been used as the basis for creating numerous 360° multi-rater leadership

behaviour questionnaires, leadership development programmes, including mentoring and coaching programmes, across the world (Hughes et al., 2009; Landy & Conte, 2007; Northouse, 2007; Yukl, 2006).

While the behaviour approach had a positive impact on the subject of leadership, it still had several gaps (Hughes et al., 2009; Landy & Conte, 2007; Northouse, 2007; Yukl, 2006). The list of leadership behaviours and models is extensive which hinders research to determine their impact on leadership performance precisely (Northouse, 2007). Furthermore, research did not show a conclusive link between leadership behaviours and production or leadership effectiveness (it had a weak predictive validity) (Ivancevich & Matteson, 1996; Northouse, 2007). Finally, it had the same weakness as the trait theory in that it excluded the impact of the situation or context within which leadership behaviour was exercised (including the impact of follower behaviour), which could influence leadership effectiveness (Hughes et al., 2009; Landy & Conte, 2007; Northouse, 2007; Yukl, 2006). As a result, this approach did not identify the set or most appropriate set of leadership behaviours that would be effective in a specific situation (Hughes et al., 2009; Landy & Conte, 2007; Northouse, 2007; Yukl, 2006).

Behaviours are relevant to this study because they are included along with characteristics, skills and traits as capabilities that would be necessary to lead successfully in South African HEIs during rapid change and disruption. Therefore, the research aimed to also identify the behaviours, as part of the capabilities needed to lead successfully during rapid change and disruption. If behaviours are excluded, it is possible that an essential component of the capabilities required would not be identified. Ultimately that could result in poor selection and development decisions, as well as poor organisational performance when responding to rapid change and disruption.

2.3.4 Situational approach

The situational approach emphasizes that leadership style or behaviour is dependent on the situation (Hughes et al., 2009; Ivancevich & Matteson, 1996; Landy & Conte, 2007; Northouse, 2007; Yukl, 2006). Moreover, the nature and complexity of a situation could neutralize or render ineffective the impact of behaviour, skills or traits (Hughes

et al., 2009; Ivancevich & Matteson, 1996; Northouse, 2007). In other words, the situation determines the appropriate leadership behaviour (style) that should be used to be effective in that situation (Bergh & Theron, 2009; Northouse, 2007). Fiedler (1967) developed the Contingency Leadership Model where he posits that leadership effectiveness in a given situation is dependent on the leader's use of the appropriate style for that situation (Bergh & Theron, 2009; Fielder, 1967; Fiedler, 1972; Ivancevich & Matteson, 1996; Northouse, 2007; Yukl, 2006). According to Fielder (1967), the factors that influence the situation then determine which style should be used are leader-member relations, task structure and position power (Bergh & Theron, 2009; Ivancevich & Matteson, 1996; Northouse, 2007; Yukl, 2006). Fiedler (1967) indicated that leaders were either task oriented or relationship orientated (Bergh & Theron, 2009; Ivancevich & Matteson, 1996; Northouse, 2007; Yukl, 2006). Leaders who are task orientated are concerned with achieving goals whereas leaders who are relationship orientated focus on building relationships (Bergh & Theron, 2009; Ivancevich & Matteson, 1996; Northouse, 2007; Yukl, 2006). According to Fiedler (1967), in situations characterized by good leader-member relations, high task structure and strong positional power of the leader (i.e. favourable situation) a leader will be task focused (Bergh & Theron, 2009; Ivancevich & Matteson, 1996; Northouse, 2007; Yukl, 2006). In a situation where leader-member relations are weak, the task is structured and there is weak positional power (i.e. unfavourable situation) the leader will be more relationship orientated (Bergh & Theron, 2009; Ivancevich & Matteson, 1996; Northouse, 2007; Yukl, 2006).

According to Hersey and Blanchard's situational leadership model, leaders adapt their style according to the degree of confidence and ability of their subordinates (Bergh & Theron, 2009; Ivancevich & Matteson, 1996; Northouse, 2007; Yukl, 2006). The leadership styles are directing, coaching, supporting and delegating (Bergh & Theron, 2009; Ivancevich & Matteson, 1996; Northouse, 2007; Yukl, 2006). If employees are less able (low level of development) and motivated, the leader will use a more task orientated style (i.e. directing or coaching) whereas leaders will use a more relationship-orientated style if employees are more confident and able – high level of development - (i.e. supporting or delegating) (Bergh & Theron, 2009; Ivancevich & Matteson, 1996; Northouse, 2007; Yukl, 2006). Leaders need to assess the situation as well as the level of confidence and ability (i.e. level of development) of their

employees so that they can use the appropriate style (e.g. inexperienced employees performing a task for the first time will require the leader to use a directing style) (Bergh & Theron, 2009; Ivancevich & Matteson, 1996; Northouse, 2007; Yukl, 2006). Vroom and Yetton and later Vroom Yago (Ivancevich & Matteson, 1996) also developed a situation leadership model wherein they state that there is no one correct leadership style for a situation. They argue that leaders must be flexible enough to adapt their style to the situation, in particular the amount of participative decision-making they permit to effectively complete the task(s) in a particular situation (Ivancevich & Matteson, 1996).

Overall, the situation approach to leadership provided focus on the impact of the situation on leadership in the especially the workplace (Bergh & Theron, 2009; Ivancevich & Matteson, 1996; Northouse, 2007; Yukl, 2006). The approach provided insight into which leadership styles were most appropriate to various situations and emphasized the flexibility of the leader to choose a different style for the situation or confidence or ability of the employees (Bergh & Theron, 2009; Ivancevich & Matteson, 1996; Northouse, 2007; Yukl, 2006). The situational approach, and particularly the model developed by Hersey and Blanchard, provided a practical approach, which leaders could use in different situations, which has been used extensively for quite some time (Bergh & Theron, 2009; Ivancevich & Matteson, 1996; Northouse, 2007; Yukl, 2006).

However, the situation approach also has some weaknesses. For instance, Fiedler's Contingency model did not encourage leaders to adapt their style to the situation but proposed that leaders should try to adapt the situation to their style, which is not possible in most cases (Bergh & Theron, 2009; Ivancevich & Matteson, 1996; Northouse, 2007; Yukl, 2006). In addition, there is low research evidence for the predictive validity of the model and the meaning of the variables were ambiguous (Bergh & Theron, 2009; Ivancevich & Matteson, 1996; Northouse, 2007; Yukl, 2006). Furthermore, the model does not explain why some leadership styles are more effective in some situations and not in others (Bergh & Theron, 2009; Ivancevich & Matteson, 1996; Northouse, 2007; Yukl, 2006). In the case of Hersey and Blanchard's model, there is also low research to justify the model and where research has been conducted, it has found contradictory evidence and could not account for the variance

due to differences in demographics such as age and gender (Bergh & Theron, 2009; Ivancevich & Matteson, 1996; Northouse, 2007; Yukl, 2006). The model is also not clear if leaders can or will change their behaviour to fit the follower and it is not clear how willingness or commitment changes in relation to time and leader intervention (Bergh & Theron, 2009; Ivancevich & Matteson, 1996; Northouse, 2007; Yukl, 2006).

The situational approach does not appear to sufficiently consider the complexity, uncertainty or rapid fluctuations of the situation nor other aspects in employees, which are not directly related to their willingness or competence. For example, research has shown that the work environment influences employees' level engagement, which in turn, affects at least the amount of discretionary effort employees put into their work (CEB Global, 2011). Another example is the impact of leadership setting and stating a clear vision and mission in relation to employees' job and the impact they have on employee performance (Stumpf & Mullen, 1991). CEB (2011) and Stumpf and Mullen (1991) support this view in that they respectively showed a positive link between the need for leaders to state a clear vision and mission and employees' level of engagement and performance. Therefore, while the situational approach to leadership has focused the attention on how the situation effects leadership style it is not comprehensive enough to cover other aspects such as those mentioned above (i.e. characteristics, skills, traits or behaviour).

Instead, what was required for this research, was a comprehensive approach that included all the above approaches, along with the situational approach, to ensure that a thorough and complete theory and model of capabilities needed to successfully lead South African HEIs during rapid change and disruption emerged. Therefore, to address the gaps of the situational and other approaches discussed above, a more integrative approach is needed. Lastly, to identify the capability theory and model needed to lead successfully in South African HEIs during rapid change and disruption, this study focused on South African Public HEIs (i.e. the environment and context) that had been affected by rapid change and disruption (i.e. the situation).

2.3.5 Integrative approach to leadership

Yukl (2006) suggests an integrated approach to leadership wherein traits, success

criteria, behaviour, power (e.g. expert, positional or referent), the situation and intervening variables (e.g. follower motivation or skills) interact and influence leadership effectiveness. Leadership behaviour and power are influenced by the interaction between the situation, success criteria, traits and intervening variables (Yukl, 2006). Printy, Marks and Bowers (2009) applied an integrated leadership approach to analyse the influence of a combination of instructional leadership (i.e. development of learner curriculum, instruction and assessment) and transformational leadership (i.e. enhance the level of performance and behaviour by creating and sharing a vision, providing idealised influence, intellectual stimulation, inspirational motivation and individual consideration) elements on schools' performance. They reported that situations where principals applied shared instructional leadership (i.e. principals and teachers developed the learner curriculum, instruction and assessment) and transformational leadership approaches the quality of teaching and learner achievement was high (Printy et al., 2009).

This research followed an integrated approach because it ensures a wholistic view of all relevant factors that can influence leadership. As a result, the situation, characteristics, traits, behaviours and skills were included so that a complete as possible model could be identified, developed and described to explain the capabilities needed to lead successfully in South African HEIs during rapid change and disruption. In other words, it combined all of the approaches to leadership that were discussed above. Apart from the approaches to leadership there are other factors that influence leadership, which will be discussed in the next section.

2.3.6 Additional factors influencing the approach to leadership

Leadership has been the subject of research for many years and will continue to be so because of the variety and the complexity of the concept itself and because of the many factors that influence it, as discussed above. More recently, factors such as women, diversity, culture, change, innovation, globalization, ethics, entrepreneurship, customer care and disruption are increasingly influencing the concept of leadership (Bergh & Theron, 2009; Ivancevich & Matteson, 1996; Northouse, 2007; Yukl, 2006). These factors and the influence thereof on leadership will be elaborated upon in the following paragraphs to attempt the clarification of the concept leadership.

2.3.6.1 Women in leadership

Over the past several years, women have taken up more leadership roles and research has shown that they appear to display a more effective use of transformational and supportive styles (Bergh & Theron, 2009; Eagly, Johannesen-Schmidt & van Engen, 2003; Ivancevich & Matteson, 1996; Northouse, 2007; Yukl, 2006). This tends to support one of the criticisms against the situational approach because it did not take into account the impact of gender when considering leadership effectiveness, which is supported by Northouse (2007).

Even though women are becoming more represented in senior leadership and executive levels research has shown women are still subject to workplace bias and discrimination (Carnes, Devine, Isaac, Manwell, Ford, a Byars-Winston, Fine & Sheridan, 2012; Holder, Jackson & Ponterotto, 2015). For example, Carnes et al. (2012) found that holding workshops on bias literacy helped reduce bias thinking and behaviour (i.e. stemming from unconscious assumptions) to enhance transformation and gender equity academic science, technology, engineering, mathematics, and medicine (STEMM).

In another study, Holder et al. (2015) state that even though women make up around 46,5% of the workforce, Black women only made up 1% of the corporate officers in the workplace had increased. They found that racism, more specifically micro aggressions such as hostile, negative or derogatory comments of any nature were experienced even by Black women in America who hold senior positions in the corporate environment (Holder et al., 2015). The microaggressions had resulted in the aforementioned women feeling frustrated and implementing various strategies to cope, such as religion and spirituality (Holder et al., 2015).

In another study, Toni and Moodly (2019) state that women still only account for 19% of all university Vice Chancellors in South Africa. They found that the pace of transformation in South African higher education is slow and that the cultures are still quite patriarchal (Toni & Moodly, 2019). This situation made it difficult for women to reach the executive leadership levels, especially in the absence of supporting

structures to enable women to progress (Toni & Moodly, 2019). Therefore, this research also considered the factor of women in leadership.

2.3.6.2 Culture and leadership

The leader's culture has been reported to influence the way employees behave within organisations (Ivancevich & Matteson, 1996; Northouse, 2007; Yukl, 2006). Culture is broadly described as the pervasive way things look and are done within an organization, which have worked well enough over time to enable the organisation to respond appropriately to the external environment, and which are taught to everyone who joins the organisation as the right way to do things (Bergh & Theron, 2009; Ivancevich & Matteson, 1996; Northouse, 2007; Yukl, 2006).

Leadership culture originates within a particular organization and affects the organisation culture. The Global Leadership and Organizational Behaviour Effectiveness (GLOBE) studies showed that leaders in different cultures across the world considered different leadership behaviours or combinations of those behaviours to be more important than others (Ivancevich & Matteson, 1996; Northouse, 2007; Yukl, 2006). For example, when comparing Sub-Saharan cultures (which emphasizes the concern for others and community values) to Anglo cultures such as Canada and United States of America (which emphasise rewarding the achievement of group goals), they found that the Sub Saharan cultures preferred a more humane orientated leadership style (i.e. concerned for the family or group above themselves) (Ivancevich & Matteson, 1996; Northouse, 2007; Yukl, 2006). On the other hand, the Anglo cultures emphasized charismatic/value-based leadership (i.e. emphasize performance and articulates and inspires a vision for all to achieve) (Ivancevich & Matteson, 1996; Northouse, 2007; Yukl, 2006).

In these two instances it is possible that when faced with a decision to improve production at a low producing factory, culture would play a big role in the decisions made by leaders who come from either of these cultures. One leader would favour a decision that would do little harm to the employees and their families of the factory, while the other would inspire employees to achieve targets, perhaps including the reduction of staff while improving processes to do more with less. Schein (2004) has a

similar view and provides examples of leadership successes and failures when trying to bring about change in organisations without fully understanding and considering the impact of organization culture. Therefore, this research also considered the factor of culture and leadership.

2.3.6.3 *Ethics and leadership*

Ethics is another aspect that is influencing leadership and entails the result or implications of a leader's decisions and conduct (Northouse, 2007; Yukl, 2006). Leaders are expected to behave in a manner that shows they respect others, serve others, are honest, build the community and serve justice (Northouse, 2007; Yukl, 2006). This means that they should always treat their employees with respect and display and reinforce organizational values because this contributes to the ethical climate within the organization (Northouse, 2007; Yukl, 2006). Eyewitness News (2017) discuss several cases in South Africa where the leadership of large organisations (i.e. ESKOM, TRANSNET, KPMG) were involved in large scale corruption which not only had large implications to the organizations but to the country as a whole due to reputational damage that was caused. Prof Brenda Gourley, a former Vice Chancellor of the University of Natal, states that integrity and trust are no negotiable as a leader as it enables a leader to build confidence in their employees (Council on Higher Education, 2016). Ethics could play a role in the leader's effectiveness and ultimately the overall performance of the organisation.

Plas (1996) state that employees want their organisations to be more people centred where they are treated as "whole" people and where ethics is a key part of organisational life. Plas (1996) reflected on the actions taken by the CEO of Levi Straus to sever ties with certain Chinese suppliers that were implicated in human rights violations of their employees as well as correcting a product advertisement, which first time around inadvertently did not correctly portray the Hispanic culture. The CEO believed that it is important to behave responsibly toward society (Plas, 1996).

In a study by Knoll, Schyns and Petersen (2017) it was reported that leaders' unethical behaviour influences organisational results through follower behaviour in certain situations because they role modelled the leader. It is therefore reasonable to accept

that ethics is an important factor that are not sufficiently covered in existing leadership models and specifically when researching the impact of leadership in times of rapid change and disruption. Zhang, Zhang, Liu, Duan, Xu and Cheung (2019) found that ethical leadership is positively related to employee occupational citizenship behaviour. In other words, the more ethical leaders behave, the employees increasingly display voluntary behaviour that benefits other employees of the organisation (Zhang et al., 2019). Similarly, Ng, Wang, Hsu and Su (2020) found that depending on whether employees perceive their leaders' behaviour to be ethical or not they will either serve and promote their organisation or become dissatisfied and show contempt towards it. Koopman, Scott, Matta, Conlon and Dennerlein (2019) found that employees who perceive their supervisors to be ethical are more trusting and scrutinise their actions less compared to when they do not perceive their supervisors to be ethical. Therefore, this research also considered the factor of ethics and leadership.

2.3.6.4 *Diversity and leadership*

Diversity is a matter that affects the approach to leadership. Leaders deal with a diverse workforce, consisting of employees from different cultural groups, different generations and even different nationalities (Ivancevich & Matteson, 1996; Landy & Conte, 2007; Yukl, 2006). As a result, they need to be aware of cultural differences and how to manage and respond to these differences. This includes the need to create a work environment that embraces diversity and inclusion while eliminating discrimination (Ivancevich & Matteson, 1996; Landy & Conte, 2007; Yukl, 2006). Landy and Conte (2007) states that research has shown that a transformational and charismatic leadership style seems to have a positive impact on performance. Once again, it appears to be clear that if the study of leadership only focuses on the situation, traits or behaviour and not take an integrated approach that would include factors such as diversity, it is quite likely that it will not be able to account for certain deviations. Northouse (2007) and Yukl (2006) confirmed this when they explained the results of the GLOBE studies that showed not only the different cultural dimensions between people from different cultures, but also a diffidence in leadership styles of leaders from those countries, which influence employee performance and leadership effectiveness. Therefore, this research also considered the factor of diversity and leadership.

2.3.6.5 *Shared leadership (distributive leadership) and servant leadership*

The traditional view of leadership generally implies or directly refers to a hierarchical or vertical relationship between leaders and employees where the leader has been appointed or chosen as the formal leader of a team (Berg & Theron, 2009; Karriker, Madden & Katell, 2017). As a result, research has focused on the behaviour, traits, situation and related factors of the individual leader (Pearce & Conger, 2002). Shared leadership views focus on leadership as being a group process and therefore it is shared between members of the team who jointly agree on the goals and that they will influence each other without an appointed leader (Berg & Theron, 2009; Karriker et al., 2017; Pearce & Conger, 2002). In other words, leadership is not concentrated to one specific individual (Berg & Theron, 2009; Karriker et al., 2017; Pearce & Conger, 2002). The effects of shared leadership include empowerment, better quality decisions and improved team cohesion (Karriker et al., 2017). Pearce and Conger (2002) and Karriker et al. (2017) state that shared leadership is common in knowledge sharing economies where information must be shared, and peers influence each other in setting goals and making decisions, including different individuals stepping up to lead the team at different times. It can be viewed as leadership that is jointly performed through the interaction of group members, including formal and informal leaders so that the resultant performance is greater than the sum of the results of individual group members separately (Jones, Harvey, Lefoe & Ryland, 2014).

Jones et al. (2014) state that distributed (shared) leadership is underpinned by three criteria, which are groups or networks of individuals joining their expertise in a focused effort, action and initiative; having access to more than one leader in their network; and widening their network of expertise. By implication, it is therefore also the researcher's view that the group leader could originate outside the group, within its wider network, who could lead the group at a specific point in time in order to achieve a specific group goal. Karriker et al. (2017) support this view and found that teams that apply shared leadership achieved higher financial performance and strategic performance than teams that did not.

An alternate view is servant leadership. Servant leadership emphasizes the importance of serving others, promotion of group decision-making, persuasion and

consensus rather than leaders taking decisions and then passing them down the line (Van Dierendonck & Patterson, 2010). Concern for employees, relationships and encouraging employees to do their best is the primary concern of the servant leader, whose focus is to ensure that the organisation's purpose is to benefit employees and the community (Van Dierendonck & Patterson, 2010). Servant leaders possess several characteristics including listening, empathy, persuasion, conceptualisation, foresight, commitment to growing people and building community, which such leaders use to serve others (Van Dierendonck & Patterson, 2010).

Servant leadership has some similarities to person-centered leadership. Plas (1996) stated that person-centered leaders understand their employees and accommodate their cultural differences, treat their employees as complete individuals (i.e. employees, as they exist inside and outside the workplace) and provided individualised attention. People-centered leaders consider the feelings of employees, treat employees as being on a continuous learning process, ensure that they have the right information and develop those (Plas, 1996).

Person-centered leaders focus on the hearts and minds of their employees as much as they focus on profits and products or services (Plas, 1996). The similarities between servant leadership and person-centered leadership appear to be the focus on empowering and developing employees as part of the organisation while building strong relationships with them, empathy (i.e. understanding and relating to employees who also exist outside the organization) and involving them in decision-making. Both appear to place the employee at the heart of organization goal achievement. As far as shared leadership is concerned, empirical research on the effects on organizational performance seems to be sparse (Jones et al., 2014). Therefore, this research also considered the factor of shared leadership (distributive leadership) and servant leadership.

2.3.6.6 Entrepreneurship, change and innovation

Bergh and Theron (2009) state that entrepreneurs have skills and characteristics which when coupled to leadership are beneficial to organisations because it enables leaders to identify opportunities, organize resources, be flexible, stimulate enthusiasm and

respond creatively. In addition, these leaders drive change and innovation needed for the organisation to succeed and achieve sustainable growth (Bergh & Theron, 2009). Kotter and Cohen (2002) and Hughes et al. (2009) agree that leadership is important to ensure the successful implementation of change. Kotter & Cohen (2002) states that leaders are vital in creating a sense of urgency, setting up the right guiding team, compiling a clear vision for the future and creating and implementing change successfully in organisations. Hughes et al. (2009) and Yukl (2006) state that leaders need to constantly be aware of what is going on in their environment so that they can respond appropriately, even taking the organisation in a new direction.

The various approaches to leadership as well as the emerging topics linked to the construct implies that an integrated approach must be followed when conducting research on the topic. Focusing on only one or a few of the factors will arguably not provide sufficient information to explain or help understand the full impact of leadership in a particular setting (Hughes et al., 2009; Landy & Conte, 2007; Northouse, 2007; Yukl, 2006). Therefore, this research will follow an integrated approach that will include the aforementioned factors, including any new ones that may emerge so that they contribute to identifying the leadership capabilities needed to lead successfully in higher education during rapid change and disruption. Therefore, this research also considered the factors of entrepreneurship, change and innovation.

This section focused on the different approaches to study leadership as well as additional factors that influence leadership. This research followed an integrative approach, inclusive of the additional factors that influence leadership to ensure that a robust lens was used to identify the capabilities needed to successfully lead South African HEIs during rapid change and disruption. The next section will discuss leadership theories and models.

2.4 LEADERSHIP THEORIES AND MODELS

Over the years, researchers have developed various theories and models to explain the approaches described earlier in this chapter. The theories explain leadership according to various facets from situations, abilities possessed by leaders to the maturity or readiness of their employee, which affects how leaders respond (Hughes

et al., 2009; Landy & Conte, 2007; Northouse, 2007; Yukl, 2006). By understanding the various leadership theories that exist, the researcher was able to ensure that this research was comprehensive enough to identify all possible capabilities needed to successfully lead South African HEIs during rapid change and disruption, by applying the different lenses provide by each of the theories from the situation, the leaders' perspective, the perspective of their employees, leadership as a collective effort and or leadership in service of others, for example.

Table 2.2 contains a summary of the various leadership models that will be discussed below, including their core element.

Table 2.2

Leadership theories and models

Leadership model or theory	Core element
Hersey and Blanchard's situational leadership theory	Leaders adjust their style based on the maturity (readiness) of their employees in a given situation
Fiedler's contingency model	Interaction between the favourableness of a situation and the leadership style
Path-goal model	Leader's style adjusted based on the employee maturity in a given situation
Vroom-Jago and Vroom-Yetton model	Leader's decision-making style depends on employee's level of knowledge and experience
Leader-member exchange theory	The impact or influence of the leaders on followers
Team leadership model	Leaders decides whether to intervene or monitor, and if so, whether to intervene internally or externally to the team
Charismatic leadership	Leaders are seen to have exceptional abilities which followers copy
Transformational leadership and full range leadership model	Leaders explain the need and importance of the change, set a compelling vision, communicate it, inspire, development and empower followers
Leadership in sub-Saharan Africa	Importance of understanding leadership within the African context.

2.4.1 Fiedler's contingency model

Fiedler's contingency model suggests that the interaction between the favourableness (i.e. task structure, position power and leader-follower relations) of the situation and the leadership style (i.e. emphasis on follower relationships versus task emphasis) influences the team's performance (Hughes et al., 2009; Landy & Conte, 2007; Northouse, 2007; Yukl, 2006). Leaders must therefore adjust their style (i.e. task focus

versus relationship focus) depending on the situation (i.e. highly structured versus low structured task, good versus poor relationship with follower, strong versus weak leader position power) to be effective (Hughes et al., 2009; Landy & Conte, 2007; Northouse, 2007; Yukl, 2006).

2.4.2 The path-goal model

The path-goal model emphasises the leader's role in motivating and assisting employees to achieve their goals (Hughes et al., 2009; Landy & Conte, 2007; Northouse, 2007; Yukl, 2006). In the path-goal model, leaders help employees overcome barriers to performance, set challenging goals, provide direction and guidance to them, consult with them and reward goal achievement (Hughes et al., 2009; Landy & Conte, 2007; Northouse, 2007; Yukl, 2006).

2.4.3 Hersey and Blanchard's situational leadership theory

Hersey and Blanchard's situational leadership theory states that leaders adjust their style based on the maturity (readiness) of their employees in a given situation (Hughes et al., 2009; Landy & Conte, 2007; Northouse, 2007; Yukl, 2006). Follower maturity (readiness) is determined by a combination of the ability and willingness to perform a specific task or responsibility (Hughes et al., 2009; Landy & Conte, 2007; Northouse, 2007; Yukl, 2006).

Depending on the employees' level of maturity (readiness), the leader will adapt their behaviour to be either more directive (i.e. directing or coaching) or more supportive (i.e. supporting or delegating) (Hughes et al., 2009; Landy & Conte, 2007; Northouse, 2007; Yukl, 2006). For example, a leader whose employees are highly skilled and willing to perform a task will most likely delegate tasks to such employees rather than directing or telling them what to do (Hughes et al., 2009; Landy & Conte, 2007; Northouse, 2007; Yukl, 2006).

2.4.4 The Vroom-Jago and Vroom-Yetton model of leadership

The Vroom-Jago and Vroom-Yetton model of leadership provides a framework of

levels of participation leaders can use when making decisions (Ivancevich & Matterson, 2006; Landy & Conte, 2007). The model considers the extent leaders may apply participative decision making depending on their employees' level of knowledge or experience to make that decision (Ivancevich & Matterson, 2006; Landy & Conte, 2007). There is no one best leadership style for all situations (Ivancevich & Matterson, 2006; Landy & Conte, 2007). For example, if the decision is important and the employees do not have the relevant information or experience, participative decision-making would not be an appropriate approach whereas if the employees had all the information and experience to make the decision, being autocratic would be an inappropriate approach (Ivancevich & Matterson, 2006; Landy & Conte, 2007).

2.4.5 Charismatic leadership

Charismatic leaders are seen by their employees to have exceptional abilities and they display a desire to be like their leader through copying their behaviour (Hughes et al., 2009; Ivancevich & Matterson, 2006; Landy & Conte, 2007; Northouse, 2007; Yukl, 2006). Employees accept the leader's beliefs to be correct, identify with them and commit themselves to achieving the leaders' goals (Hughes et al., 2009; Ivancevich & Matterson, 2006; Landy & Conte, 2007; Northouse, 2007; Yukl, 2006). Charismatic leaders articulate a strong vision with clear goals, display confidence and competence, communicate high expectations, take personal risks, undertake risks, take on risky projects, motivate employees to strive towards achieving the goals and are able to link their goals to the employees' values (Hughes et al., 2009; Ivancevich & Matterson, 2006; Landy & Conte, 2007; Northouse, 2007; Yukl, 2006).

According to Hughes et al. (2009), Northouse (2007) and Yukl (2006) charismatic leaders generally emerge when there is some type of crisis or difficulty and employees look to the leader to resolve that situation. Overall, employees form such a strong identification with the leader and the leader's vision that they desire to please them so that they can receive the leader's approval and praise (Hughes et al., 2009; Ivancevich & Matterson, 2006; Landy & Conte, 2007; Northouse, 2007; Yukl, 2006). One of the main criticisms of charismatic leadership style is that it appears mainly to serve the interests of the leader and not necessarily the wellbeing of the employees; sometimes they even manipulate employees through giving out punishment and reward so that

their goals are attained (Hughes et al., 2009; Ivancevich & Matterson, 2006; Landy & Conte, 2007; Northouse, 2007; Yukl, 2006). Yukl (2006) provides examples of the negative effects that charismatic leadership have on the community, even the world at large. He names, for example, Adolf Hitler under whose leadership the holocaust occurred and David Koresh of Waco, Texas who was the leader of the Branch Davidians, who were involved in a siege with the Bureau of Alcohol, Tobacco, and Firearms (ATF), when they attempted to access their compound to search for illegal weapons. During the siege 76 people died, including David Koresh (Yukl, 2006). Both the aforementioned leaders exhibited charismatic leadership qualities although the consequences of their behaviour were not to the benefit of their employees, the community or the world (Yukl, 2006).

2.4.6 Transformational leadership and the full range leadership model

In an ever-changing world where change and innovation take place at an increasing pace it becomes vital that leaders can provide direction that will enable the organisation to adapt appropriately and with speed (Bass, 2000; Hughes et al., 2009). Bass (2000) and Yukl (2006) point out that organisations need to learn how to adapt to a rapidly changing world and that leadership must adapt as the organisation evolves. Transformational leaders are not satisfied with keeping things as they are; they are focused on bringing about large-scale change to resolve current problems within the system, organisation or society (Bass, 2000; Hughes et al., 2009). Transformational leaders explain the reason and importance of the need to change clearly, set and communicate a compelling vision of the new “end state”, inspire and develop employees, empower employees and appeal to their values so that they go beyond their individual needs to achieve those of the team, organization or society (Bass, 2000; Hughes et al., 2009; Ivancevich & Matterson, 2006; Landy & Conte, 2007). Transformational leadership involves idealised influence where leaders act as strong role models to their employees, they provide inspirational motivation to employees to achieve high standards, intellectual stimulation so that employees understand the problem and are encouraged to look for creative ways to solve it and individual consideration by paying individual attention, support and encourage to each individual based on their needs (Bass, 2000; Hughes et al., 2009; Ivancevich & Matterson, 2006; Landy & Conte, 2007). It therefore seems that Transformational leaders are interested

in getting the best out of the employees and achieving their goals at the same time and not the one at the expense of the other (Hughes et al., 2009; Landy & Conte, 2007; Northouse, 2007; Yukl, 2006).

Transactional leadership, on the other hand, is described as an exchange process where the leader provides either rewards or negative reinforcement to employees when they achieve their goals (Bass, 2000; Hughes et al., 2009; Ivancevich & Matterson, 2006; Landy & Conte, 2007). Transactional leaders clearly explain the type of behaviour that will be rewarded (Bass, 2000; Hughes et al., 2009; Ivancevich & Matterson, 2006; Landy & Conte, 2007). According to Bass (2000), transactional leadership applies contingent reward (e.g. money, favours) to employees who achieve their goals and management by exception when employees do not achieve their goals (i.e. takes corrective action when employees make mistakes or standards are not met) (Bass, 2000; Hughes et al., 2009; Ivancevich & Matterson, 2006; Landy & Conte, 2007). Transactional leadership seems to be more focused on goal achievement than on the empowerment and inspiration of employees.

To be effective leaders however need to apply both transformational and transactional leadership styles (Bass, 2000; Northouse, 2007; Yukl, 2006). Bass (2000) developed the Multifactor Leadership Questionnaire (MLQ) to measure the extent to which leaders were either transformational or transactional and how satisfied employees were with their leaders, and if they believed their leaders were effective (Bass, 2000; Hughes et al., 2009; Landy & Conte, 2007; Northouse, 2007; Yukl, 2006). Bass (2000) included a factor called Laissez faire into the MLQ, which he regarded as a non-leadership factor because the leader essentially did not exercise any leadership functions (Hughes et al., 2009; Landy & Conte, 2007; Northouse, 2007; Yukl, 2006). Therefore, Bass (2000) did not consider Laissez-faire to be a leadership style (Hughes et al., 2009; Landy & Conte, 2007; Northouse, 2007; Yukl, 2006).

According to Bass (2000), leadership behaviour could be explained using the full range leadership model, which ranges from applying no leadership (i.e. Laissez faire) through to applying Transformation leadership styles/activities (Bass, 2000; Hughes et al., 2009; Landy & Conte, 2007; Northouse, 2007; Yukl, 2006). MLQ was used in this study to measure where leaders find themselves in the range of leadership models (Bass,

2000; Hughes et al., 2009; Landy & Conte, 2007; Northouse, 2007; Yukl, 2006). Even though transformational leadership theory has strengths including emphasizing follower needs, values and growth and research evidence to support a positive relationship to follower performance, it also has weaknesses (Northouse, 2007; Yukl, 2006). The weaknesses include the primary focus on the leader without sufficient focus on the impact of the follower on the leader, not determining whether or not the new direction established by the leader is indeed the correct one, how employees react to transformational leaders or adequately explain the strategy development or task related behaviours essential to effective leadership (Northouse, 2007; Yukl, 2006).

2.4.7 Team leadership model

Teams are becoming increasingly important for organizational success whether they are functional teams, cross-functional teams, project teams, executive leadership teams, self-managed teams or virtual teams; and effective leadership influences team performance (French & Bell; 1999; Maartins & Geldenhuys; 2016; Northouse, 2007; Yukl, 2006).

The team leadership model involves firstly a decision by the leader whether to monitor or intervene in the team's functioning. Secondly whether the intervention is task or relationship related and whether the intervention must be internal to the team (i.e. task or relationship) or external to the team within the environment (e.g. networking, getting support for the team) (Northouse, 2007; Yukl, 2006).

Once the leader has decided to intervene internally or externally, he/she must then decide on which specific element to focus (e.g. internally on the team's goals or conflict or externally on promoting the team or networking on its behalf) (Northouse, 2007; Yukl, 2006). The outcome of the leader's actions influences the team's effectiveness which is made up of the team's performance (e.g. quality of decisions and quality of outputs) and team development (i.e. team cohesion) (Northouse, 2007; Yukl, 2006). The model provides a framework for leaders to analyse their team's effectiveness to determine where to intervene to improve team effectiveness (Northouse, 2007; Yukl, 2006). Effective teams have clear goals, adequate resources, the right support and appropriate coaching (Northouse, 2007; Yukl, 2006).

2.4.8 Leader-member exchange theory

Most leadership theories and models tend to focus on leadership from the point of view of the impact or influence that the leader has on the follower (Berg & Theron, 2009; Karriker et al., 2017; Northouse, 2007; Yukl, 2006). The influence of follower behaviour on the leader is not considered (Berg & Theron, 2009; Karriker et al., 2017; Northouse, 2007; Yukl, 2006). The leader-member exchange theory (LMX) describes the relationships that are formed between a leader and each follower, and the impact thereof on the follower, leader, team and organization (Northouse, 2007; Yukl, 2006). Leaders form a dyadic relationship, over time, with the employees in their team, which results in an *in-group* (do more than what is required in their role description) or an *out-group* (only do what is in their formal role description) (Northouse, 2007; Yukl, 2006). Employees become part of the *in-group* based on how hard they work with the leader, how much they are trusted by the leader, how competent they are and how well the leader supports and rewards them (Northouse, 2007; Yukl, 2006). The harder they work, the more they are rewarded by the leader through, for example, receiving more responsibilities, more information, approval or interesting assignments (Northouse, 2007; Yukl, 2006). In return, *in-group* employees work harder, are more committed and even defend the leader's actions and decisions (Northouse, 2007; Yukl, 2006). The *out-group* consists of those employees that only do what is expected of them in terms of their role profile and their leaders respond to them by providing the standard remuneration and benefits (Northouse, 2007; Yukl, 2006). Liao, Wayne, Liden and Meuse (2017) showed that idiosyncratic deals (i.e. negotiated work arrangements between the leader and follower that suite the follower) within the exchange relationship had a positive impact on follower job satisfaction and performance.

To be truly effective, leaders need to have great relationships with all employees, which means they should have high quality exchanges with all employees, including establishing effective networks across the organisation that are beneficial to all (Northouse, 2007; Yukl, 2006). While the LMX theory provides a focus on the relationship between employees and the leader, it does not appear to consider the impact of the situation on the exchange relationship or what the possible impact of perceived leader unfair treatment by the out-group compared to the in-group is or what is perceived as fairness (Northouse, 2007; Yukl, 2006).

2.4.9 Leadership in sub-Saharan Africa

Wanasika, Howell, Littrel and Dorfman (2011) suggest that there have not been a large number of studies on leadership within the African context. The GLOBE studies researched leadership behaviours across different cultures and found that those of sub-Saharan Africa (e.g. humane orientation – consideration of others) are different to those of other cultures, such as Anglo (e.g. performance orientation – rewarding goal achievement) or Eastern Europe (e.g. assertive – encourage forcefulness and toughness) (Ivancevich & Matteson, 1996; Northouse, 2007; Yukl, 2006). Wanasika et al. (2011) found that sub-Saharan Africa countries preferred leaders who displayed charismatic/value-based, Ubuntu, team oriented, participative and humane leadership behaviours. In addition, in sub-Saharan Africa factors such as age and the good of greater community play a role in leadership behaviour because leaders were chosen due to their age (sign of wisdom) and expected to make decisions for the good of the greater community (Wanasika et al., 2011). Spanenberg and Theron (2002) used the Charismatic leadership model of Conger and Canungo (1987) as a basis to develop a unique South African leadership questionnaire. The model used by Spanenberg and Theron (2002) includes factors such as concern for employees' needs, role modelling and showing selfless effort, that are similar to the leadership behaviours identified in the GLOBE studies and research by Wanasika et al. (2011).

In another study, Grobler and Singh (2018) identified a uniquely Southern Africa leadership taxonomy. They were concerned that many leadership models and taxonomies originated from the West, which do not recognize the unique African context or leadership approaches (Grobler & Singh, 2018). Gumede (2017) supports this view and argues that if leadership involves the influence of employees to achieve goals within a situation or context, then current leadership models do not acknowledge the leadership behaviours and styles of great African leaders who lead successfully in the pre-colonialised Africa. For example, Gumede (2017) refers to the Adwa Victory in Ethiopia of 1896 and the 1510 Khoi victory in the now Western Cape where both events required substantial leadership skills to achieve success. Western leadership research and teachings have not included or acknowledged this potential contribution to the field of leadership. Northern cultures tend to emphasise leadership planning and technical

innovation, the West emphasizes action-orientated leadership while the East emphasised leadership perfection and improvement (Grobler & Singh, 2018).

The concept of Ubuntu is at the heart of African culture, which emphasises the importance of the group needs and good relations between the group members as being more important than those of the individual members (Grobler & Singh, 2018). The concept of Ubuntu does not appear to be an important factor in any leadership approaches, which originated from Western, Eastern or Northern cultures (Grobler & Singh, 2018). According to the principles of Ubuntu, leaders are expected to be concerned about the well-being of the community and the importance of participative decision-making, which differs from Western approaches that focus on the individual leader (Grobler & Singh, 2018). Grobler and Singh (2018) used the Management Practices Survey, based on the research of Yukl (2006), to identify a Southern African leadership taxonomy and reported that while the research results supported Yukl's taxonomy, they discovered a meta-category that was unique to Africa. The meta-category focused on participative and democratic leadership behaviours (Grobler & Singh, 2018). Their research supports the GLOBE and other leadership studies, which acknowledge the importance of Ubuntu to understanding leadership within the African context.

However, even though these similarities exist none of the research findings establishes a purely African or South African leadership theory, model or definition of leadership. Rather, they attempt to see which factors of these western models and theories can be applied to Africa or sub-Saharan.

The various models and theories provide valuable lenses through which leadership can be analysed. However, there is still a need for an integrated leadership model that clearly incorporates all aspects of the above models and theories so that the shortages of each could be balanced by the strengths of others. Situational leadership could benefit from a clearly articulated vision and idealized inspiration irrespective of the employees' level of ability or commitment from the transformational leadership model. In the same way the transformational leadership model could benefit from the clear distinction in the situational leadership model that explains the different styles leaders can adopt based on follower ability and willingness in a given situation.

Combining the specific models do not go into the detail of the issues mentioned and therefore creating an integrated model should address these gaps (Printy et al., 2009; Yukl, 2006). Further still, such a leadership model needs to clearly articulate a truly African and South African context through its structure, factors and unique African definition of the concept Leadership. The leadership factors that are unique to leading in HEIs during rapid change and disruption needs to be identified. The implications of the unique South African context and that of HEI were included to establish the leadership capability model for leading South African HEIs during rapid change and disruption.

In this section the various leadership theories were discussed, including leadership in sub-Saharan Africa. This research considered all theories to be of value because each had a unique aspect that contributed to identifying the capabilities needed to lead successfully in South African HEIs during rapid change and disruption. As a result, the risk of creating bias towards one theory above the other and excluding a potentially important leadership capability(ies), was reduced. The next section will discuss leadership in South African HEIs.

2.5 LEADERSHIP IN SOUTH AFRICAN HEIS

HEIs across the world are experiencing dramatic changes in the contexts within which they perform their teaching and research activities. Examples include massification, dwindling budgets, competition for resources, increased demands for free education, competition to remain relevant and having to maintain their international university ranking (Altbach et al., 2009; Areff & Spies, 2018; Friedman & Edigheji, 2006; Jameson, 2012; Shin & Kehm, 2013; Watson & Watson, 2013). In addition, there is a recognition for change in leadership styles that will enable HEIs to respond more effectively and efficiently to the demands of these changes (Altbach et al., 2009; Areff & Spies, 2018; Friedman & Edigheji, 2006; Jameson, 2012; Shin & Kehm, 2013; Watson & Watson, 2013). In their research, Smith and Hughey (2006) state that there is a critical need for leaders in HEIs who can lead in the current turbulent times so that HEIs remain relevant. Even though there is an increased demand for a different type of leadership in HEIs the research relating to a particular model of leadership

capabilities appropriate for HEI in general or to HEIs in South Africa in particular, is rather sparse.

Astin and Astin (2000) argue that it is important for HEI leaders and academics within HEIs who interact with students to model appropriate leadership styles. They argue that it is not only critical for the success of the University within this ever-changing world, but that it is also critical for students developing appropriate leadership styles which they role model from the behaviour displayed by HEI leaders and academics (Astin & Astin, 2000). Students will imitate this behaviour in their world of work. Even though the study was conducted in America, it is relevant to South Africa HEIs as the HEI environment in South Africa is also arguably the first or the last place students get to interact with leaders from whom they will adopt behaviours through role-modelling. They will imitate these learned behaviours when they enter the workplace for the first time.

Astin and Astin (2000) posit that transformational leadership is the appropriate style for HEIs because it will not only enable HEIs to be successful and adapt to change but it will also bring about improved student leadership and academic growth. Leadership is a group process where the group is committed towards achieving a shared purpose, in a collaborative manner and leadership aims to create a supportive environment, where people work in harmony and foster care and shared responsibility among each other (Astin & Astin, 2000). In addition, Astin and Astin (2000) state that to be effective, leadership must involve disagreeing with respect and creating a collaborative learning environment because that will contribute to new solutions and effective functioning.

Bodla and Nawaz (2010) also researched leadership styles applied in public versus private universities using the Transformational leadership model of Bass (2000) and his colleagues. In particular, they used the Full Range Leadership Theory (FRLT) and the Multifactor Leadership Questionnaire (MLQ) to measure individuals' leadership style in relation to the FRLT and found that public HEIs employees preferred transactional leadership compared to private HEIs because of the element of contingent reward (Bodla & Nawaz, 2010). They also concluded that teamwork was more important in HEI than the leadership style (Bodla & Nawaz, 2010).

In another study, Moodly and Toni (2017) researched the characteristics needed by women in HEIs to overcome barriers to advancement into leadership roles. Moodly and Toni (2017) posit the need to reconceptualise leadership alongside the need to decolonize the South African higher education system so that it is more Afrocentric and includes the view of leadership from a female perspective as opposed to the traditional male-orientated view. They argue that to transform HE in SA, the transformational leadership style of Bass and colleagues is appropriate because of the transformation elements of idealized influence, inspirational motivation, intellectual stimulation and individualized consideration which are a move toward a more inclusive, participative and nurturing leadership style (Moodly & Toni, 2017). Their research showed that women seem to possess the nurturing, service orientation and caring traits implicit in the transformational leadership model, which is critical to transforming HEIs (Moodly & Toni, 2017). Furthermore, they emphasise the need to reconceptualise leadership including the need to neutralize the pure masculine view of leadership, which has been inherited from the West, in favour of a blended male-female conceptualization, which they argue is more reflective of the transformational leadership style needed to transform and decolonise HEIs (Moodly & Toni, 2017).

Altbach and Petersen (2007), Altbach et al. (2009) and Friedman and Edigheji (2006) argue against managerialism, the drive for efficiency and accountability in HEIs because they believe it is an attempt to corporatize HEIs. Bolden, Petrov, Gosling and Bryman (2009) appear to be of a similar view and argue that these concepts do not suit HEIs and should not be imposed upon them. They argue that because HEIs generally operate according to collegiality, collaboration and participative decision-making, corporate style of leadership and entrepreneurial approaches go against the aforementioned way HEIs operate and would not benefit them in the current unstable environment where HEIs are expected to do more with less (Bolden, et al, 2009). To them, HEIs should rather develop their own leadership and management approaches, which are more suitable to their environment, even implying that distributive leadership (shared leadership) may be appropriate (Bolden et al., 2009). Jones et al. (2014, p. 603) put it this way “What is needed is a new approach to leadership that goes beyond individual control and management bureaucracy to embrace more sharing and collaboration”.

The HEI context is seen as a complicated, diverse, multi-faceted and complex environment, which requires a type of leadership that will develop Universities and their employees (Jones et al., 2014). Jones et al. (2014) argue that distributive leadership is appropriate to leading in the complex HEI environment because it encourages networking, collaboration, knowledge-sharing employee involvement and views leadership as an activity, not as a role allocated to one individual. They posit that distributed leadership is underpinned by three criteria, which are groups or networks of individuals joining their expertise in a focused effort, action and initiative; having access to more than one leader in their network; and widening their network of expertise (Jones et al., 2014). To them, distributive leadership is very important if you want to bring about transformational change because role-based leadership is generally only focused on achieving the tasks coupled to a particular role (Jones et al., 2014).

Due to the multi-faceted nature of distributive leadership, they argue that it can be applied in HEIs during the current turbulent and uncertain times (Jones et al., 2014). Despite being in favour of distributive leadership they do however agree that more empirical research is needed because current research has been criticised for presuming that employees will share their knowledge or that leaders will give opportunities to employees to lead because that may not be the case in reality (Jones et al., 2014). If distributive leadership is seen as an action “owned by all”, it may create difficulty in holding anyone accountable and to what extent, if things do not go according to plan especially in a team that has an appointed leader. Jones et al. (2014) conclude their research by stating that rather than replacing individual leaders, distributive leadership should focus on linking individual leaders to those experts with whom they need to collaborate. To them it is important to create a culture of leadership, which is based on trust that respects individual expertise, a commitment to change from all employees and an emphasis on collaborative relationships (Jones et al., 2014). Eddy and Van der Linden (2006) argue that shared leadership in HEIs requires that all organization members are responsible to share leadership and that organization success is dependent on follower action, participation and accountability in achieving the strategy.

From the above, it seems acceptable to conclude that there is a definite need for a leadership model that is suited to the complex environment within which South African HEIs operate. While transformational leadership and distributive leadership appear to be the common leadership approaches researched within the HEI context, the results indicate a need for further empirical studies to clearly show or understand their impact on organisational performance in South African HEIs. In addition, the research results do not specifically deal with rapid change and disruption nor do they identify any specific leadership model that is clearly linked to leading successfully in South African HEIs during rapid change and disruption, although they do refer to “turbulent times”.

The most suitable leadership model and associated leadership capabilities needed to successfully lead HEIs during rapid change and disruption will be those that result from an integrated model which identifies the skills, traits, style, behaviours and emerging leadership concepts that are directly related to leading successfully under such circumstances, with due consideration of the situation and context.

This section discussed leadership within South African HEIs and emphasised the need for a comprehensive leadership capability theory and model to enable leaders to successfully lead their HEIs during rapid change and disruption, which was lacking at the time. The next session will discuss influence of leadership on organisational effectiveness, rapid change and disruption.

2.6 INFLUENCE OF LEADERSHIP ON ORGANISATIONAL EFFECTIVENESS, RAPID CHANGE AND DISRUPTION

Organisational effectiveness is determined by the extent to which organisations formulate strategies and goals, organize their resources, adapt and deliver goods and services in response to an ever-changing environment at the place, time, quantity and quality according to customer needs, while ensuring returns to shareholders, sustainability and an engaged workforce (Invancevich & Matteson, 1996; Landy & Conte, 2007; Maartins & Geldenhuys; 2016; Yukl, 2006). Leadership is viewed as being a critical factor to organizational effectiveness and it has been included in various models of organizational effectiveness such as the Burke-Litwin Model of Organisation Performance and Change, the Organisational Efficiency Model of Veldsman, the

McKinsey 7S Model and Weisbord's Six Box Model (French & Bell, 1999; Harvey & Brown, 2001; Maartins & Geldenhuys; 2016;). Leadership effectiveness is the extent to which employees achieve their goals according to the measures that were set, which includes their level of motivation, continued learning, cooperation, cohesion and commitment (Invancevich & Matteson, 1996; Landy & Conte & Conte, 2007; Maartins & Geldenhuys; 2016; Yukl, 2006). Several researchers have studied the impact of leadership effectiveness on organisation effectiveness and performance. Boerner Eusenbeiss and Griesner (2007) investigated the mediating effect of transformational leadership on organizational citizenship behaviour (i.e. additional effort exerted by employees) and employees' debates about task performance, and the impact on the quality of performance. They found that transformational leadership improves organizational citizenship behaviour and employee debates about how to perform their tasks (e.g. resulted improved innovation), which improves their performance quality and therefore, arguably also that of the organization (Boerner et al.,2007).

Metcalfe and Metcalfe (2005) studied the impact of leadership on organizational change and reported that transformational leadership was needed to create a flexible organizational culture that were adaptable, innovative and flexible to change. They developed a leadership model, which has three dimensions namely, leading and developing others, personal qualities and leading the organization, that ultimately is similar to transformational leadership (Metcalfe & Metcalfe, 2005). To them, leading effectively in times of change, requires that leadership must serve others by creating a supportive environment, treat others with dignity, enable employees to think for themselves, enable teamwork through removing barriers and value diversity (Metcalfe & Metcalfe, 2005). Denis, Langley and Cazale (1996) studied the impact of leadership and strategic change within a large public hospital under conditions of ambiguity in authority (i.e. authority is not clear), ambiguous goals (i.e. goal are not clear) and ambiguous technology (i.e. the role of technology is not clear) where there was a need to move from a quantity driven patient care service to a higher quality of patient care. They reported that collaborative and collective leadership, including influencing a variety of individuals with different skills were necessary to bring about the change. Committing, motivating and aligning everyone to a common vision is critical to successfully implementing such change under ambiguous conditions (Denis et al., 1996). In other words, leadership was a critical factor to bring about and manage the

aforementioned change. Beck and Wiersema (2013) reported that organisations differed in performance based on the strategic decisions taken by leaders. Those leaders, who adapted and used organisation resources and capabilities based on their skills, education, support networks and had adaptable mental managerial models and beliefs, tended to be innovative and achieve organisational success and increased performance (Beck & Wiersema, 2013).

It is evident that leadership effectiveness influences organizational effectiveness as well as the organisation's ability to respond effectively to rapid change and disruption. During times of ambiguity and uncertainty within the external environment, that influences the organization, its growth and survival, leadership is viewed as a key factor in helping the organization develop appropriate and timely responses to successfully navigate through these situations. Bennet (2017) is of a similar view and argues that to deal successfully with uncertainty (including disruption) leaders must understand, accept and embrace uncertainty, while they influence others to search for innovative ways or creative solutions to solve novel problems. In addition, having a clear focus, applying effective communication and an adaptive leadership style (i.e. collective or shared leadership) appear to be effective in helping organisations perform successfully during times of uncertainty (Bennet, 2017).

In this section the influence of leadership on organisational effectiveness, rapid change and disruption was discussed and concluded that leadership has a critical influence on all three. The next section will discuss leadership capabilities.

2.7 LEADERSHIP CAPABILITIES

To be effective, leaders need certain competencies and capabilities that will enable them to guide their organisations to successfully achieve their goals and sustain growth (Invancevich & Matteson, 1996; Landy & Conte, 2007; Maartins & Geldenhuys; 2016; Yukl, 2006). A competency is defined as “an important skill that is needed to do a job” (Cambridge Dictionary English Dictionary, 2019b; Hughes et al., 2009). Competencies refer to the knowledge, skills, abilities and other attributes essential for successful job performance and organizational goal achievement (Hughes et al., 2009; Landy & Conte, 2007). A capability is defined as “the power or ability to do something”

(Cambridge Dictionary English Dictionary, 2019b). A capability refers to ability, which is the “raw talent” to do something including intelligence and creativity (Hughes et al., 2009).

Capability also includes skills (Hughes et al., 2009). Whereas it is easier to train skills, it has been shown that abilities are quite hard to change through training (Hughes et al., 2009). Therefore, for this research, leadership capabilities are defined as the abilities leaders need to lead their organisations successfully to ensure organization goals are accomplished and growth is sustained (Hughes et al., 2009; Landy & Conte, 2007, Northouse, 2007). Leadership competencies are the skills knowledge, abilities and other attributes needed to lead their organisations successfully to ensure organization goals are accomplished and growth is sustained (Hughes et al., 2009; Landy & Conte, 2007, Northouse, 2007). The vast amount of research done on the concept of leadership over time has contributed to the range of competencies and capabilities needed to lead effectively. For example, Drucker (2006) believes that leadership competencies needed to be an effective executive are effective time management, focus on results, build on their strengths, focus on a few areas that will lead to excellent results and effective decision-making.

Yukl (2006) present the following leadership competencies necessary to be an effective leader:

- a. High energy levels and stress tolerance
- b. Self confidence
- c. Internal locus of control (i.e. belief that my actions influence in my life and not chance or some unknown force)
- d. Emotional stability and maturity (i.e. have more self-control and are more self-aware of their strengths and weaknesses)
- e. Possess personal integrity
- f. Have a power motivation to influence others
- g. Achievement orientated (i.e. focused on achieving goals and solving problems)
- h. Balance need for affiliation (i.e. must be task and relationship focused so that they can establish effective interpersonal relationships on the one hand to achieve the results but must also be able to take unpopular decisions).

- i. Good technical skills
- j. Good conceptual skills (e.g. judgement, intuition, creativity, logical thinking, deductive reasoning).
- k. Social intelligence (i.e. being able to respond appropriately in a specific situation)
- l. Systems thinking
- m. Ability to learn
- n. Emotional intelligence
- o. Ability to adapt and apply skills to different situations

Mathews (2016) researched global leadership with the aim to derive a model of global leadership. Global leadership differs from domestic leadership because it operates across cultures, across borders, within a highly complex and dynamic context and within a global business environment (Mathews, 2016).

Mathews (2016) identified the following leadership competencies needed for effective global leadership:

- a. Cognitive Abilities/Processes: ability of leaders to think and process complex information to take effective decisions.
- b. Emotional resilience: the ability to understand and manage your own emotions while also being aware of those of others and responding appropriately to them.
- c. Cultural intelligence: being open, aware and understand other cultures to enable one to display culturally appropriate behaviour.
- d. Intrinsic/internal motivation: the way you motivate, regulate and align yourself with the goals that need to be achieved to achieve desired results (i.e. your actions determine the results that you achieve).
- e. Global strategic orientation: the ability to manage internal risks, efficiently manager operations, adapt to a diverse and complex environment, manage interdependencies across companies, achieve global economies of scale in a synergized way and determine where their organisation will focus in the global arena.
- f. Other personality traits: Flexibility, accommodation, risk-taking, openness to experience, self-awareness, maturity, hardiness, courage to take a stand, well-

developed ego and self-concept, optimism and empathy were found to be predictors of effective internal leaders (Jordan & Cartwright, 1998).

- g. Visionary leadership: ability to formulate a vision of a future end-state and effectively articulate and communicate it to employees.
- h. Global mindset: the ability to be open to and interpret what is going on around the world and formulate appropriate plans and take effective decisions that will enable the global leader to effectively deal with an ever-changing environment.

Atkins, Bright, Brunson and Wortham (2013) investigated the leadership qualities needed to be effective leaders to ensure sustainable development. They identified the following leadership qualities:

- a. Life-term learning: being open to lifetime learning and growth.
- b. Empowering: able to give employees responsibility and practice shared leadership.
- c. Adaptable: being flexible and able to adapt to change.
- d. Develop: able to develop future leaders of the organization through for example coaching, training, feedback and communication.
- e. Engagement: leaders must be able to engage in collaborative relationships with other leaders, the task, employees and the organization.
- f. Reflection: leaders must be able to reflect on their performance and adapt where necessary.
- g. Sustain: leaders must be able to motivate and inspire their employees to persevere.
- h. Humility: leaders must be able to be humble and connect with their employees in a way where mistakes are accepted, and ways are found to improve team performance and organizational goals.
- i. Integrity: leaders must be truthful and do what is right.
- j. Practice: leaders must continuously strive for growth and increased performance.

Their research reported that of the ten qualities above engagement, integrity, and humility were identified as being the most significant qualities necessary for effective leadership (Atkins et al., 2013). Smith and Wolverton (2010) investigated a higher

education Leadership Competency (HELC) model and identified the following competencies as being necessary to lead effectively in higher education:

- a. Analytical leadership: leaders must be able to be entrepreneurial, creative, apply strategic thinking, and action orientated.
- b. Communication leadership: leaders must be proficient in written and spoken communication as well as how they present themselves.
- c. Behavioural leadership: leaders must display light-hearted, unselfish behaviour, which focused the people within the organization.
- d. Student affairs leadership: leaders in higher education must be proficient in understanding and dealing with all student issues, including student needs, trends, and legal related implications and matters.
- e. External relations: leaders must be able to form good relations with various stakeholders including funders, media and other interested groups.

Spanenberg and Theron (2002) investigated the development of a uniquely South African leadership questionnaire, which would be relevant in the South African HEI environment because it is characterized by transformation and change. They used the model of Conger and Kanungo (1987) as a basis for their research and went on to compare it to for example the Multi-factor Leadership Questionnaire (MLQ) of Bass and AVALIO (1990) (Spanenberg & Theron, 2002). Based on their comparison of the Conger and Kanungo model to other leadership models and their research they identified the following leadership competencies, which are needed at various stages of the leadership process (Spanenberg & Theron, 2002):

- a. Environmental orientation
 - i. Awareness external environment
 - ii. Awareness internal environment
- b. Vision formulation and sharing
 - i. Developing challenging vision
 - ii. Building trust
 - iii. Articulating vision and enlisting employees

- iv. Conceptualizing strategy

- c. Preparing the organisation for implementing the vision
 - i. Enabling the leader: personal growth
 - ii. Enabling the leader: self -discovery and –management
 - iii. Empowering employees
 - iv. Optimizing structures and processes
 - v. Building culture

- d. Implementing the vision
 - i. Influencing the external environment
 - ii. Honesty and integrity
 - iii. Decisiveness and hardiness
 - iv. Challenging current reality
 - v. Facilitating learning
 - vi. Interpersonal skills
 - vii. Showing concern for others
 - viii. Inspiring people
 - ix. Facilitating interdepartmental co-ordination
 - x. Acting entrepreneurial
 - xi. Developing and implementing performance plans
 - xii. Reviewing performance
 - xiii. Rewarding Performance

Van Wart (2004) proposes a composite model of organisational leadership for the public service where he identifies various traits and behaviours coupled to each phase of the leadership process that are needed to ensure organizational success. The model has relevance beyond the public sector because it contains most leadership process activities and competencies that can be applied in other sectors (Van Wart, 2004). Leaders first assess the organization, environment and constraints, and then set goals and priorities (Van Wart, 2004). Thereafter, leaders act related to the task, people and organization (Van Wart, 2004). Finally, leaders evaluate their performance along with

that of the organization (Van Wart, 2004). During each phase of the process, leaders need the following competencies, traits and behaviours to ensure successful performance (Van Wart, 2004):

a. Traits and skills

- i. Appealing personal style
- ii. Self confidence
- iii. Decisiveness
- iv. Resilience
- v. Flexibility
- vi. Energy
- vii. Willingness to assume responsibility
- viii. Need for achievement
- ix. Fairness, integrity, honesty
- x. Drive for excellence
- xi. Service motivation and customer service orientation
- xii. Emotional maturity
- xiii. Technical skills
- xiv. Communication
- xv. Influencing and negotiating/power
- xvi. Continual learning

b. Leadership behaviours

- i. Assessment and evaluation functions: require task monitoring, task assessing, consulting and environmental scanning behaviours.
- ii. Formulation and planning functions: require operations planning, planning and staff organizing and strategic planning behaviours.
- iii. Implementation functions: require role clarification and objective setting, informing, delegating, development, motivating, team building and management, network and collaborating, general management and vision and mission articulation behaviours.

- iv. Change management functions: require problem solving, innovation and creativity, conflict management, decision making and change management behaviours.

Dunn, Lafferty and Alford (2012) proposed a competency model for global leadership. Even though the focus is on the global environment, the conditions with which global leaders must contend are similar to those of leaders within South African HEIs and include ambiguity, volatility, uncertainty and complexity, which makes this competency model relevant (Dunn et al., 2012). They propose a Global Leadership Model (GLM) that has four domains necessary to lead successfully globally and each domain is connected to relevant leadership intelligences within the Global Competency Index (GLI) (Dunn, Lafferty & Alford, 2012). The domains in the GLM are tasks (leader's ability to inspire and guide employees to achieve the required output), relationships (leader's ability to successfully form and maintain various relationships necessary for organizational change and success), awareness (leader's ability to self-reflect and be open to feedback and criticism so that they can learn and grow) and purpose (the leader's ability to formulate and inspire people to transcend their own purpose to one that is for "the greater" good of the organization and society as a whole) (Dunn et al., 2012).

Dunn et al. (2012) propose the following leadership intelligences, contained in the GCI, that are necessary for successful global leadership:

- a. Intellectual Intelligence: needed to cope with the complex task demands.
- b. Emotional intelligence: needed to recognize, understand and manage their own and other individuals' emotional states, to behave in an appropriate manner.
- c. Cultural intelligence: needed to understand and respond appropriately to individuals from different cultures.
- d. Metacognitive, existential and moral intelligence: needed to be able to understand yourself, focus on matters concerning humanity and the concern for rules and behaviours contribute to leaders being self-aware and striving for behaviour that will motivate excellence in all stakeholders.

Tonini et al. (2016) investigated a hybrid leadership model to develop leaders in Nanyang Technological University (NTU) in order to transform it into a research-intensive University. The programme was called the Nanyang Technological University Learning Academy and the outcome of the research resulted in a transformational type leadership framework that aimed to develop the following traits, skills and themes necessary to be a successful leader (Tonini et al., 2016):

a. Leadership skills

- i. Listening
- ii. Patience
- iii. Empathy
- iv. Socialization
- v. Communication
- vi. Diplomacy
- vii. Tenacity
- viii. Knowledge
- ix. Negotiation
- x. Motivational prowess

b. Themes to be a successful leader

- i. Becoming an academic leader
- ii. Managing change
- iii. Communications
- iv. Problem-solving
- v. Conflict management
- vi. Meeting diverse expectations of leadership and staff
- vii. Using data for decision-making
- viii. Developing relationships
- ix. Communicate visions and goals
- x. Motivate teams

Saville and Holdsworth Limited (SHL) has also developed a model of Corporate Leadership based on vast research, which combines transformational and transactional leadership elements (Bartram & Ilke, 2011). Leadership and management competencies are critical to leadership success because whereas leadership focuses on change, innovation inspiration, intellectual stimulation, management is concerned with keeping the current system running efficiently and effectively (Bartram & Ilke, 2011). Therefore, SHL Corporate Leadership Model sets out transactional and transformational behaviours needed to successfully perform the key leadership functions of developing a vision, sharing goals, gaining support and delivering success (Bartram & Ilke, 2011). The SHL Corporate Leadership Model considers the impact of dealing with uncertainty and change, adaptability, context, cultural fit, impact of leadership on the organisation including stakeholders (i.e. what leaders do) and risk factors through which leadership could negatively influence the organization (e.g. developing the wrong vision, not effectively communicating the goals) (Bartram & Ilke, 2011). The model recognizes the importance of leader aptitude and abilities, personality, motives and values, interests, knowledge and skills experience and qualifications because all have been shown to influence leadership and organizational success or failure (Bartram & Ilke, 2011).

The SHL Corporate Leadership Model below has been widely researched and contains the following competencies linked to each of the four leadership functions needed to lead successfully (Bartram & Ilke, 2011), displayed in Table 2.3 below.

Table 2.3

Competencies Linked to Leadership Functions Needed to Lead Successfully

Functions	Competencies	
	Transactional focus	Transformational focus
1. Developing the Vision: The strategy domain	Analysing and Interpreting	Creating and Conceptualising
2. Sharing the Goals: The communication domain	Adapting and Coping	Interacting and Presenting
3. Gaining Support: The people domain	Supporting and Cooperating	Leading and Deciding
4. Delivering Success: The operational domain	Organizing and Executing	Enterprising and Performing

The Council on Higher Education published a book called “Reflections of South African university leaders 1981 to 2014”. While the book involves the reflection of past Vice Chancellor and Principle, Vice Chancellors or Deputy Vice Chancellors of South African universities during the aforementioned period, it also includes their reflection about what they believed are the capabilities such leaders need to be successful (i.e. individuals who held positions such as the ones they did) (Council on Higher Education, 2016). Below are the leadership capabilities according to what some of those university leaders believed they should be.

a. *Professor Stuart Saunders (Vice Chancellor of the University of Cape Town from 1981 to 1996)*

To him, vigour, having a vision, anticipating change, hard work, participation, communication (i.e. be well-informed), respect and serving others (pay attention to others’ needs) are important leadership capabilities (Council on Higher Education, 2016).

b. *Professor Brenda Gourley (Vice Chancellor of the University of Natal from 1994 to 2001 and Vice Chancellor of the Open University in the United Kingdom from 2002 to 2009) (Council on Higher Education, 2016).*

According to Professor Gourley the capabilities needed by Vice Chancellors of South African HEIs are integrity, courage, optimism, self-reflection, capacity to listen, discipline, compassion, decisiveness, ability to compromise, sense of humour and composure (Council on Higher Education, 2016).

c. *Professor Brian Figaji (Principle and Vice Chancellor of the Cape Peninsula Technikon from 1994 to 2004)*

Professor Figaji stated that Respect, being able to delegate, financial management, consistency, visible presence, encouraging innovation and have clear but firm rules of engagement are the capabilities that leaders require (Council on Higher Education, 2016).

d. *Professor Rolf Stumpf (Vice Chancellor and Principle of University of Port Elizabeth from 2002 to 2007 at which time it had become the Nelson Mandela University)*

According to Professor Stumpf, leaders must be able to set a compelling vision, have a moral and ethical framework, remain steadfast on course, balance managerialism with collegial management, develop sound organisational plans, policies, systems and structure (Council on Higher Education, 2016).

e. *Professor Lineo Vuyisa Mazwi-Tanga (Vice Chancellor of the Cape Peninsula University of Technology from 2006 to 2013)*

Professor Mazwi-Tanga indicated that strategic planning, integrity of leadership, learning from others and relationship with key stakeholders (e.g. Department of Higher Education and Training, university council) are important leadership capabilities to lead successfully (Council on Higher Education, 2016).

For organisations to achieve their goals, remain competitive and ensure continued growth and sustainability, it is essential that leaders have the appropriate competencies that are relevant to their context and situation. Even though none of the above competency and capability models emerged or were researched in the context of South African HEIs, it is evident that to be successful in all sectors, including higher education, during rapid change and disruption leaders need to possess appropriate cognitive abilities to effectively assess their environment, organization and situation to formulate an appropriate vision and strategy. Furthermore, even though the abovementioned past Vice Chancellor and Principle, Vice Chancellors or Deputy Vice Chancellors of South African universities did not appear to serve during times of rapid change or disruption they also identified competencies needed to be a successful leader in South African HEIs. In other words, leaders need to be able to clearly articulate their vision and goals, obtain support and buy-in, motivate and develop employees and other stakeholders and ensure that they deliver results. All these require leaders to possess communication, influencing and interpersonal skills.

Leaders need to be able to deal with uncertainty, constant change and disruption,

which suggests that they need to have appropriate personality traits, motives, values, emotional intelligence and display appropriate behaviour to ensure the success of their organisations. In addition, they also require certain skills and experience, which will enhance their effectiveness even further. Furthermore, the while the capabilities indicated by the past university leaders, as discussed in Council on Higher Education (2016), none of the leaders clearly and directly identify and link the capabilities required to successfully lead South African HEIs during rapid change and disruption. It can be argued however, that some of the capabilities stated in Council on Higher Education (2016) by Professor Mazwi-Tanga, for example, can be implied to be relevant when one considers his discussion of the merger of the Cape Peninsula University of Technology with the Cape Technikon which occurred in 2005 (Council on Higher Education, 2016), because that may be interpreted as a rapid change and disruption. However, Council on Higher Education (2016) did not specifically deal directly with the influence of rapid change and disruption on South African HEIs nor the capabilities required to successfully lead them during such times.

HEIs in South Africa are experiencing rapid change and disruption and therefore a combination of transactional and transformational leadership competencies, for example as discussed by Bartram and Ilke (2011), Smith and Wolverton (2010), Spanenberg and Theron (2002) and Van Wart (2004), may arguably be the relevant capabilities needed to successfully lead HEIs during such situations. In addition, if one considers research into the Sub-Saharan Africa leadership cultures and application of distributive leadership in the higher education context, competencies relating to each one should also be included in a leadership capability model needed to lead successfully in South African HEIs during rapid change and disruption (Bolden et al., 2009; Grobler & Singh, 2018; Gumede, 2017; Jones et al., 2014).

This section discussed various leadership capability models and frameworks. However, none of them focussed specifically on those capabilities needed to successfully lead South African HEIs during rapid change and disruption.

2.8 SUMMARY

In this chapter, the definition of leadership was explored along with the components

that are generally found in most definitions of leadership. A definition of leadership adopted for this research was also presented. The different approaches to leadership (e.g. trait, situational, behaviour) were also discussed as well as additional factors that influence leadership such as diversity, women in leadership and ethics. Furthermore, various leadership models were discussed such as transformational leadership. Leadership in Africa and South African HEIs and the influence of leadership on organisational effectiveness, rapid change and disruption were also discussed. The chapter concluded with a discussion on leadership capabilities, including current models that exist and insights from past leaders of South African HEIs. The next chapter will discuss the definition, causes and implications of rapid change and disruption globally, within Africa, South Africa, South African HEIs and leaders within South African HEIs.

CHAPTER 3: RAPID CHANGE AND DISRUPTION

3.1 INTRODUCTION

In the previous chapter the construct of leadership was defined along with the various approaches to study leadership, the different leadership models that exist, the influence of leadership on organisational effectiveness, rapid change and disruption, and various leadership capabilities. This chapter will discuss the concepts of rapid change and disruptions and the implications for leadership and identified appropriate leadership capabilities needed to successfully deal with rapid change and disruption within South African HEIs.

3.2 DEFINING RAPID CHANGE AND DISRUPTION

3.2.1 Meaning of rapid change

The word “change” means to replace either with something different or with something new, to modify, revise or restructure (Collins dictionary, 2018; Longman Dictionary of Contemporary English, 2017). Examples include changing your clothes, your views about a particular event or changing the way you perform certain tasks (Collins dictionary, 2018). According to the Oxford learner dictionary (2018), the word “change” means to become or make different (Oxford learner dictionary, 2018). The word “change” also means to stop having one state, position, attitude or direction and start having another (Oxford learner dictionary, 2018). The word “change” originates from the Latin word “cambire”, which means; “barter” (Oxford learner dictionaries, 2018). Synonyms for the word change include, innovation, transformation, modification, reform and adjust (Collins dictionary, 2018). According to Kirkpatrick & Kirkpatrick, (2006), the word “change” can also mean alter, change in attitude or change in behaviour. Tjeldvoll (2011) appears to also view change from an institutional point of view. However, his research focusses on change leadership at a time when global Higher Education needs to change the way knowledge is produced (i.e. research, teaching and service) to remain competitive and relevant in a world which is driven by the power of knowledge (Tjeldvoll, 2011). Riedy (2016) researched change from the perspective of climate change because of human activities such as burning fossil fuels

(e.g. coal) and clearing forests. The actions cause greenhouse gases such as carbon dioxide and methane to be released into the atmosphere (Riedy, 2016). The release of greenhouse gases into the atmosphere allows radiation in from the sun, which raises the earth's average temperature (Riedy, 2016). Touseau and Le Sommer (2019) view change in relation to how the automation of agriculture, coupled with the development of the "Internet of Things" have created opportunities to improve agricultural practices. They showed through a four-month experiment that the use of sensors and agribots within the "Internet of Things" could improve agricultural practices even in rural areas here connectivity was intermittent (Touseau & Le Sommer, 2019). In Loomis and Rodriguez (2009) the word "change" is used in the context of institutional change where methods of production, prices, reorganisation of information and rise in output are changed in response to a changing Christian Higher Education sector in America. According to them, the changes within the American Christian Higher Education sector could result in the creation of new opportunities in the market and the elimination of others (Loomis & Rodriguez, 2009). The latter means that leaders of Christian Higher Education institutions will need to think about how they go about changing their institutions to remain relevant, deliver high quality, affordable education while generating new ideas and knowledge (Loomis & Rodriguez, 2009).

The South African Human Rights Commission (SAHRC) investigated the extent to which South African HEIs had made progress regarding racial integration and transformation since the dawn of the new democracy in South Africa on 27 April 1994 (South African Human Rights Commission, 2015). In particular, the SAHRC wanted to establish if South African HEIs had transformed sufficiently regarding factors including race, gender, language, culture, disability and if any there were any factors that hindered transformation (South African Human Rights Commission, 2015). In the aforementioned context, "change" could be viewed as transformation that was needed to remove previous inequalities, discrimination, exclusion and marginalisation which had existed in South African HEIs (SAHRC, 2015). Du Preez, Simmonds and Verhoef (2016) conducted a meta-study of the trends researched on the transformation in South African Higher Education. They found that transformation of the curriculum, the structure of higher education, equity in higher education, access to higher education, community engagement, teaching and learning and policies were the main areas that

the research focused (Du Preez et al., 2016). According to them “change” refers to transformation and evolution in South African higher education (Du Preez et al., 2016).

The word “rapid” originates from the Latin word “rapidus” which means, “tearing away” and from “rapere” which means to seize (Collins dictionary, 2018). Synonyms for the word “rapid” include sudden, prompt, speedy and precipitate (Collins dictionary, 2018). According to the Oxford learner dictionary (2018), the word “rapid” means that something is happening in a short period of time or is done or happening very quickly. A rapid change is one that happens very quickly and that is different or new from that which existed before the change (Collins dictionary, 2018).

Harris (2018) researched the impact of the volume and speed of human movement (e.g. globalisation, increased urbanisation) on the spread of diseases. In the context of that research, “rapid” appears to refer to the speed at which the increase and volume of human movement has occurred and the impact thereof on the speed at which diseases spread, undetected, worldwide (e.g. flu viruses) (Harris, 2018). In a study by De Bruyne and Gerritse (2018) on the future of work and the future workplace, they viewed “rapid” as the speed at which technology, digitisation and automation and the market will influence the nature of work and the future workplace. Their findings show that the future workplace will need to support functions to be more agile and able to accommodate the environmental changes to survive and grow (De Bruyne & Gerritse, 2018).

According to Hornsby and Osman (2014) they view “rapid” in terms of the speed in which massification (i.e. large class teaching) has emerged in HEIs and the potential impact thereof on the quality of student learning. To them, while massification does offer several challenges, it also offers opportunities to deal with large classes while exploring ways to improve the student experience (Hornsby & Osman, 2014). Mather and Jarosz (2017) researched the use of “Big Data” in sociology research and view the term “rapid” from the viewpoint of the rapid increase in sources of data available for sociological research.

For this research, rapid change was defined as any situation that required organisations and/or individuals to suddenly think, behave and perform in a way that

was significantly different or new compared to the way they used to.

3.2.2 Meaning of disruption

The word “disruption” originates from the Latin word “*disruptionem*” (Dictionary.com, 2018). As a noun of action, that stems from “*disrumpere*”, which means to "break apart, split, shatter or break to pieces (Dictionary.com, 2018). Whether disruption is an event, a system, or a process it prevents things from continuing in the way they were or from operating in a normal way, as they used to (Dictionary.com, 2018). From a business perspective, disruption refers to for example, a radical change in industry or business strategy that could involve the introduction of a new product or service that creates a new market (Dictionary.com, 2018). According the Oxford learner dictionaries (2018), disruption refers to a situation where it is difficult for something to continue in the normal way. In other words, disruption is an act of preventing something from continuing in the way it used to (Oxford learner dictionaries, 2018).

According to Merriam-Webster (2018a), disruption means to break apart (i.e. to rupture), to throw into disorder, interrupt the normal course or to disrupt an industry with new technology. Disruption also means the existence of problems that prevent things from continuing in the usual way (Longman Dictionary of Contemporary English, 2017). Synonyms for the word disruption include disturbance, disorder, confusion, upset, disorganise, dislocate and interference (Collins dictionary, 2018; Merriam-Webster, 2018b).

The word “disruption” has several meanings depending on the context. According to Chung, Tse and Choi (2015) disruption, in the context of express logistics, is viewed as any delay or cancellation that can have a negative impact on the efficiency of air transport. Burggraef, Wagner, Dannapfel and Vierschilling (2019) view disruption as any unintentional event that has a negative impact on the normal assembly process of a manufacturer, which need to be countered or prevented. Research conducted by Finzi (2018) into the characteristics needed by CEOs to ensure their companies were “undisruptable” viewed disruption as an infrequent yet radical change to the existing dominant business model. Rasool, Koomsap, Asfar and Panezai (2018) propose a framework that will help organisations develop their own disruptive innovations rather than waiting to respond to new disruptive innovations. To them, “disruption” is viewed

from the perspective of disruptive innovation where organisations use developing technologies to introduce new features that make products more attractive, eventually displacing competitors who have been in the market for a while (Rasool et al.,2018). According to Kaivo-oja and Lauraeus (2017), disruption refers to disruptive technologies which have a major effect how people live, work and how organisations operate. To them disruption also refers to disruptive innovations which start off being offered at a lower quality and cost, but which eventually improve and compete in the upper end of the market to eventually replace established competitors (Kaivo-oja & Lauraeus, 2017). To Bolland (2018) the word disruption happens suddenly, cause organisation strategies to become obsolete, effect the whole organisation, are largely external, are irregular and replace previous combinations of capital and labour with new ones.

Rajasingham (2011) researched the new challenges facing universities in an internet driven global environment. To her, disruption is viewed from the impact of dramatically changing technology infrastructures (e.g. internet, virtual reality and artificial intelligence) and socio-economic demands on what is taught and how it is taught (Rajasingham, 2011). The challenge for Universities will be how to teach learners to solve problems, apply knowledge, communicate and collaborate, using the internet within a globalised world where knowledge is the most important factor (Rajasingham, 2011). Rambe (2012) views disruption according to new technologies that disrupt higher education where academics use technology or technological tools in new ways that allow phenomena to be viewed from different perspectives. To Rambe (2012), disruptive technologies (e.g. social media) allow academics to adapt their way of teaching when conveying complex concepts.

From the discussion above, it is the researcher's view that disruption implies a situation where current knowledge and "know-how" will not be enough to resolve the matter at hand; it will require a new way of thinking, acting and behaving which was not required in the past. For the purpose of this research, disruption was defined as any situation that significantly affected organisational efficiency, performance and sustainability in that it required a new way of doing and thinking because current knowledge, methods, products and/or services were obsolete or vastly ineffective.

In this section the definitions for rapid change and disruption were discussed, and a

final definition for each was formulated and accepted. The next section will discuss the causes of rapid change and disruption.

3.3 CAUSES AND IMPLICATIONS OF RAPID CHANGE AND DISRUPTION

3.3.1 Causes of rapid change

During the last two decades, and in particular the last few years, the speed and extent of change has increased dramatically due to globalisation, the perception of disappearing boundaries of time and space, fast-growing cloud computing, ever-changing market places, digital media, mobile devices, climate change, knowledge-based economies and Covid-19 (Fleischmann, 2013; Geldenhuys & Veldsman, 2011; Kotter, 2014; Mtshali & Iyamu, 2013; Ottinger, 2012; Voelpel, Leibold & Mahmoud, 2004; Woldegiorgis, Jonck & Goujon, 2015).

In addition, integration (i.e. the origin of organisations such as the European Union and the North American Free Trade Agreement (NAFTA - an agreement among the United States, Canada and Mexico) designed to remove tariff barriers between the member countries of these respective organisations) has also effected globalisation, the manner in which countries trade with each other, a need for higher skills levels and life-long learning (Geldenhuys & Veldsman, 2011; Kotter, 2014; Ottinger, 2012; Voelpel et al., 2004; Woldegiorgis et al., 2015) Woldegiorgis et al. (2015) concur and add that that globalisation has increased the mobility of ideas and academics across the world. Globalisation had also provided opportunities to collaborate globally to address issues facing higher education such as quality, relevance and recognition of qualifications among nations (Woldegiorgis et al., 2015).

Additional changes include the advancement of on-line communications, disruptive technologies, increases in capital flows and business alliances, advances in on-line media and social media platforms and the internet, large-scale expansion in the knowledge economy, mass digitisation and knowledge-building by organisations (e.g. Google and Wikipedia) (Ahn, Adamson & Dornbusch, 2004; Reilly, 2012). These changes have also brought about changes in the world of work in that diversity is becoming an essential part of talent management strategies, employees are

demanding more work-life balance, increased need for development and the need to be more technology competent (Gratton, 2017; Geldenhuys & Veldsman, 2011; Roche, 2015). For example, Igun (2011) states that the revolution caused by developments in information communication technology (ICT) has created a digital divide between countries and communities who have access to such technology and those who have no or very little access. Countries need to close this divide because having accurate information when you need it is important to efficiency and increasing skills (Igun, 2011). Furthermore, ICT is crucial for libraries and universities in Africa to access, share and distribute information as well as to conduct research and teach and collaborate with users and/or students, worldwide, without leaving their location (Igun, 2011).

The impact of globalisation along with disappearing borders have caused Europe, for example, to focus on the impact of increased migration on the ability of its social welfare and education systems to cope with the influx, and whether the labour market can absorb the “newcomers” (Geldenhuys & Veldsman, 2011; Gratton, 2017; Roche, 2015). Global issues brought along crises in major economies, high unemployment, water shortages, global warming, extreme weather events, global governance failure, food crises, failure of major financial mechanisms or institutions, and political and social instability. These issues have prompted the need for global cooperation and governance by forming institutions such as the United Nations, G20 (or Group of Twenty - an international forum for the governments and central bank governors of twenty countries from across the world), International Monetary Fund, North Atlantic Treaty Organisation) (Nychyk, 2014)

These changes have also influenced the structure of tasks, processes, methods, designs or relationships of organisations in such that some have adopted virtual teams where employees across the world may never meet in person although they regularly interact through on-line (i.e. emails), other communication platforms (i.e. Facebook) and established networks (Khan & Azmi, 2005; Kotter, 2014; Voelpel et al., 2004;). The amount, speed and nature of technological changes and globalisation have resulted in the term “VUCA environment” which describes a volatile, uncertain, complex, and ambiguous environment that is unpredictable and ever-changing (Hurth, 2017). The changing external environment is further affected by changes in world politics such as

the end of the Cold War, increasing deregulation, increasing collaboration with developing economies and expanding regional economic integration. These changes have resulted in an interconnected and interdependent global village where mobility of information, global work force and manufacturing capacity have grown exponentially, which have reduced the entry barriers for small companies to operate globally (Voelpel et al., 2004). Flanagan (2012) states that higher education now, more than ever, is being scrutinised more closely, costs are rising, and potential disruptions threaten from all directions. To her, this means that University leaders will need to design new business models which creates value, while placing students at the centre of what they do (Flanagan, 2012).

Browne and Shen (2017) concur but emphasise the negative impact that rising costs of higher education, increased student enrolments, advancement of technology, increased privatisation of higher education and insufficient government revenue have on access to quality higher education in the Caribbean. Marginson (2006) researched the impact of global competition amongst universities. He found that there are inequalities between the developed and developing nations in that the more developed nations (which have a strong higher education delivery capacity – they export it) benefit more whereas the developing nations (which do not have a strong higher education capacity and tend to import it) did not (Marginson, 2006). He concluded that while higher education and research are vital to building a country, they will continue to be constraining factors in developing countries if the lack of capacity is not addressed through policy amendments in a time where foreign aid is declining (Marginson, 2006).

Coates and Mahat (2014) state that higher education is being reshaped through various forces including increasing costs, increased privatisation and pressure to be transparent about their activities and performance standards. To them higher education requires a new way of thinking, which focuses on innovation (Coates & Mahat, 2014). They add that the new higher education environment also requires a “specialised workforce” and new ways of doing things including governance and knowledge (Coates & Mahat, 2014).

Mitchell (2015) argues that higher education is not going to be affected by radical change because the higher education model is sound, and it does not necessarily face

the same forces as other industries. To him, the demand for access remains a primary concern (Mitchell, 2015). A higher education degree increases, amongst other things, an individual's work prospects, and a large part of the population want a university degree (Mitchell, 2015). This situation creates pressure for Universities to grant access to as many people as possible, and to obtain funds to cover the increased enrolment (Mitchell, 2015). He acknowledges the impact of digitisation, globalisation, increasing cost of higher education and the many access issues, but believes that it is the success of higher education that is the problem (Mitchell, 2015). To him, universities have skilled academics and have a good reputation, which would allow them to deal with the changes because they have dealt with changes for many years (Mitchell, 2015). It is rather the success of the higher education system that is the problem (Mitchell, 2015). The more successful universities become, the more likely is there to be a larger amount of money within the system (Mitchell, 2015). As a result, many organisations emerge on the edges of the system that have or want to access (and obtain) the students' money in the Universities (Mitchell, 2015). He argues further that the drive for Universities to become more financially self-sufficient (e.g. third-stream income from international student fees) and financially successful, may cause their goal to change to profit and not education, potentially risking the quality of higher education (Mitchell, 2015).

Mitchell (2015) appeared to be the only researcher that argued that Higher Education will not or has not been affected by rapid change. In contrast, researchers such as Browne and Shen (2017), Coates and Mahat (2014), Flanagan (2012), Marginson (2006) cited above and researchers such as Bawa (2019) and Davids (2016) cited below, amongst others, disagree. Therefore, it is the researcher's view that it would be safe to conclude that Higher Education has been affected in some way by the rapid changes presented above.

Within South African HEIs the causes of rapid change are the significant decrease in government subsidies, increased demands for Higher Education Institutions (HEI) to be fully accountable to the public, increased emphasis on ethics in Higher Education, increased enrolment rates, massification, increased internationalisation, increased focus on research, increased running costs and the announcement on 16 December 2017 that the Government will provide free higher education to all University and TVET

students from South African households with a combined annual income of less than R350 000.00 (Altbach et al., 2009; Areff & Spies, 2018; Bawa, 2019; Davids, 2016; Friedman & Edigheji, 2006; Jameson, 2012; Servamus, 2016).

Additional causes of rapid change within South African HEIs include the demand to provide education that increases graduates' employability, the expectation of HEI to reclaim their role as leaders of innovation and research in society, increased global competitiveness in higher education and the need to become entrepreneurs in creating "third-stream income" (Bawa, 2019; Friedman & Edigheji, 2006; Jameson, 2012; Mampane, Omidere & Aluko, 2018; Mitchell, 2015; Shrivastava & Shrivastava, 2014; Tonini et al., 2016). Lastly, new challenges have emerged such as the insourcing of previously outsourced services such as cleaning, transport, catering, security and ground-keeping services at the University of Cape Town, University of KwaZulu-Natal, University of Pretoria and Cape Peninsula University of Technology and the decolonisation of the curriculum (Kamsteeg & Wels, 2007; Langa, 2017; Lockett & Mzobe, 2016; Pennington, Mokose, Smith & Kawanu, 2017; Prinsloo, 2016). Scott (2018) researched the topic of student success in South African higher education. He argues that student success (i.e. completion of studies embarked upon) must be at the heart of all HEIs in South Africa, but according to him it is not (Scott, 2018). To him, that situation needs to change (Scott, 2018). He states that only 7% of African and Coloured students are succeeding in completing their studies, which then neutralises the effect of increased access for all to Higher Education (Scott, 2018). To him, the current design of the whole South African HEI system is not delivering on its mandate to produce highly skilled and educated graduates for the South African economy (Scott, 2018). While several factors affect student success including schooling and socio-economic factors, he argues that curriculum content and orientation (e.g. what is taught, why and how it is taught), the way the curriculum is delivered (e.g. tutorials, workshops, online resources) and the curriculum framework (e.g. entry and exit levels, the formal duration) have a huge impact on the success or failure of students (Scott, 2018). Unless the relevant political and other stakeholders commit to implementing a broad strategy that prioritises student success, the required level of transformation and number of skilled graduates in South African higher education will not be achieved (Scott, 2018). He argues that South African higher education needs to review the

curriculum content and orientation, curriculum delivery and the curriculum framework to enhance student success (Scott, 2018).

Ramrathan (2016) appears to have a similar view Scott (2018) about the need for South African higher education to review its curriculum in order to improve the graduation rate. As with Scott (2018), he also believes that low graduation rates reduce the positive strides made in transforming higher education despite increased access (Ramrathan, 2016). The reason, he asserts, is that transformation in higher education appears to be chasing numbers alone without addressing the deep social matters such as being taught in your own language or acknowledgement of indigenous knowledge and practices, which influence graduation rates (Ramrathan, 2016). To him change is needed to improve the graduation rates (Ramrathan, 2016). He states that while access to higher education in South Africa has increased since 1994, not much has changed in the South African higher education over the past century despite major social, political and economic changes in the country (Ramrathan, 2016).

Bazana and Mogotsi (2017), Davids (2016); Heleta (2016) and Mahabeer (2018) concur that the South African higher education system needs to be transformed as set out in the White Paper 3 (Department of Education, 1997), the Higher Education Act, as amended (Republic of South Africa, 1997) and the South African National Plan for Higher Education (Ministry of Education, 2001). To them the current higher education system in South Africa does not bridge the gap created by the poor quality of schooling (which affects student dropout rates), access to financial means or the increased cost of higher education. Furthermore, the current higher education system appears to still be deeply rooted in Western methodology and teaching methods (Bazana & Mogotsi, 2017; Mahabeer, 2018). As a result, Black students are arguably required to think and view the world from a Western perspective, while disregarding African views (which are viewed as being inferior), thus affecting their academic performance and causing them to question their identity because they find it difficult to fit in within their culture on the one hand and within particularly historically White HEIs on the other (Bazana & Mogotsi, 2017; Mampane et al., 2018). It currently also does not appear to be relevant to the students' social context nor sufficiently industry related whereas it should be (Bazana & Mogotsi, 2017; Davids, 2016; Mampane et al., 2018),

Bawa (2019), Langa (2017) and Pennington et al., (2017) appear to have similar findings and add that a lack of management responsiveness, unwillingness to respond and the excessive use of force exacerbated matters which resulted in unprecedented levels of violence. Furthermore, Bawa (2019) and Langa (2017) state that internal governance issues such as over involvement of some councils obstructed the University Executive from dealing effectively with issues. In addition, competition amongst the various student bodies to be or already part of the Student Representative Council (SRC) and the political agendas and actions of some political parties, in particular the ruling party (the announcement of free education as mentioned above by African National Congress – ANC) complicated the ability of Universities to resolve the various issues linked to the protest action (Bawa, 2019; Langa, 2017). Similarly, the political affiliation of the various student bodies that were members of the SRC (e.g. the Economic Freedom Fighters, the ANC Youth League and the South African Students Congress – SASCO) enhanced the political link even further because it appeared as if the philosophies of those “parent political organisations” were entering into the HEI arena with the aim of achieving their political agendas and advancement rather than purely addressing student issues (Langa, 2017).

It is evident from the above that the nature, magnitude and pace of change has had far-reaching effects on countries across the world including South Africa as well as the South African HEIs, which is the focus of this study. Geldenhuys and Veldsman (2011) argue that the current turbulent times may cause existing approaches to improve organisational effectiveness to be ineffective. More specifically, they argue that the use of Western, Anglo-Saxon management practices to improve organisations within an Afro-Centric culture may not be appropriate if applied “as is” because of the different contexts, cultures and approaches to leadership and management (Geldenhuys & Veldsman, 2011). They argue that to be effective, it is necessary to adapt management tools that are developed in the rest of the world for use in Afro-Centric organisations (Geldenhuys & Veldsman, 2011).

The effect of the above-mentioned changes on South African HEIs has brought about the need to start reviewing current curriculum and methods of teaching (Davids, 2016; Langa, 2017; Mahabeer, 2018) and ensuring that indigenous knowledge is also included in curriculums so that higher education is context (i.e. locally) and

internationally relevant (Heleta, 2016; Mampane et al., 2018; Mheta, Lungu & Govender, 2018). Furthermore, Bazana and Mogotsi (2017) appear to hold a similar view and argue that HEIs, particularly Historically White Universities (HWU) such as Stellenbosch and Potchefstroom Universities), need to change their cultures to become welcoming, inclusive, accepting of and provide support to Black students so that they can integrate successfully. To them, there are currently many practices and policies (e.g. language, culture, perpetuation of the perception of an “inferior black race” or for being stupid as a result of their accent when speaking English) in these HWUs that could cause black students to lose their identity because they take on a White identity in an attempt to fit in (Bazana & Mogotsi, 2017; Steyn, Harris & Hartell, 2014). Research has shown that not doing so could cause adjustment problems for black students and contribute to reduced performance and low through-put (Bazana & Mogotsi, 2017; Cornell, Ratele & Kessi, 2016; Steyn et al., 2014). Additional matters requiring the attention of HEIs are insourcing of previously outsourced employees (e.g. University of Cape Town), increased safety and security of students on campus, implementation of the government announcement of free education and the introduction of learning methods that harness new technologies, the internet and information technologies to deliver higher education (Bawa, 2019; Davids, 2016; Fox, 2019; Heleta, 2016; Langa, 2017; Marshall, 2010; Mheta et al., 2018; Pennington et al., 2017; Mtshali & Iyamu, 2013; Salmon, 2019; Zhamanov, Yoo, Sakhiyeva & Zhaparov, 2018).

From the above it is also evident that university leaders need to be more engaging and responsive when dealing with student demands (Langa, 2017). The research found that several leaders were perceived to be aloof and insensitive during the “Fees Must Fall” protests, which placed extra strain and tension on an already precarious situation (Langa, 2017). Furthermore, the research above high-lighted the unpreparedness of higher education institutions, in general and the higher education leaders in particular, to deal with the ferocity with which the student presented their demands, often resorting to interdicts and deployment of the South African Police Services (SAPS) and Private Security Companies which escalated the level of violence, brutality and damage to University property to a point that has not been experienced before, nor were they equipped to deal with.

According to Bawa (2019) there was crucial moment in the protest action and disruptions of October 2016, when HEIs across South Africa were all affected by the threat of closure or actual closure and felt abandoned by everyone including the Government, SAPS, political parties and parents. During the protests, many Universities also had to reschedule their academic calendar because their campuses were unstable, or climate was unsuitable to continue with lectures or examinations (Bawa, 2019). The changes relating to insourcing and free education also placed increased financial constraints on HEI running costs and infrastructure because the increase in enrolment numbers and staff in many cases rendered either current facilities, accommodation or finances insufficient to cover these increases (Bawa, 2019; Langa, 2017).

The increased use of information technologies is also becoming more important in addressing some of the above transformational challenges (Jaffer, Ng'ambi & Czerniewicz, 2007). Several studies have also been conducted on the use and adoption of new information technologies for teaching and learning within South African HEIs (Cilliers, Chinyamurindi & Viljoen, 2017, Hough & Neuland, 2013; Kruger & Bester, 2014; McNaught & Amory, 2006; Mushi, Hoskins & Bell, 2011; Naidoo & Raju, 2012; Ng'ambi, Brown, Bozalek, Gachago & Wood, 2016; Jaffer et al., 2007; Nkonki & Ntlabathi, 2016).

While several studies have shown the benefits of using information technologies such as software, the internet and social media (e.g. Facebook) to improve the quality and delivery of higher education several have identified various challenges that need to be addressed in order for the use of information technology to be successfully implemented to enhance teaching and learning (e.g. Cilliers et al., 2017; Hough, 2012; Hough & Neuland, 2013; Kruger & Bester, 2014; Mushi et al., 2011; Ng'ambi et al., 2016; Nkonki & Ntlabathi, 2016). The challenges that need to be addressed include bridging the difference in experience and exposure to using information technology between advantaged and disadvantaged students, willingness and confidence of academics to adopt the use of Information technology, clear governance policy on the use of information technology and information security, maintaining the quality standards of higher education, ensuring the necessary funds and infrastructure are available and ensuring that all academics are aware and trained to use the information

technology (Mushi et al., 2011; Ng'ambi et al., 2016; Nkonki & Ntlabathi, 2016). Mushi et al. (2011) and Jaffer et al. (2007) emphasise that the main reason for using information technology in higher education must be based on educational reasons and not technological reasons. In other words, information technology must enhance the learning experience in a way that the research by Jaffer et al. (2007) suggested where the use of interactive MS Excel spreadsheets was used to improve the economic and mathematical skills literacy amongst previously disadvantaged students.

While the above research reflects the rapid changes and their impact on the broader world, Africa, South African and particularly South African HEIs, very little research could be found which clearly identifies the leadership capabilities needed to successfully lead South African HEIs during such times. Arntzen (2016), Beattie, Thornton, Laden and Brackett (2013) and Tjeldvoll (2011) researched the impact of changes taking place within the higher education landscape and the impact on University leaders. Beattie et al. (2013) indicate that some of the leaders' action have unintended consequences because they do not have experience or training required to lead during such changing times. They conclude that it is important for leaders to anticipate and plan for such unintended consequences and that they should develop the relevant skills and knowledge (Beattie et al., 2013). However, while they indicate a few areas of knowledge which leaders need to acquire (e.g. organisational theory and leadership) they do not clearly identify what are the specific leadership capabilities required (Beattie et al., 2013). Similarly, while Tjeldvoll (2011) argues that Western Universities should consider applying the Confucian dimension which includes three particular values that could be of value to the Western HEI leaders because of the positive impact they have had for HEI leaders in East Asia (i.e. deep respect for education, accept competition as something normal, acceptance of social hierarchy), they do not identify the capabilities required to lead successfully in an ever changing and increasingly competitive HEI environment.

Arntzen (2016) discusses the changing nature of the role of Dean which has now become increasingly more complex and demanding, particularly from a leading and managing point of view. Even though he indicates that Deans should have skills such as commitment to life-long learning, explaining the consequences of legislation changes to employees, embrace the changing higher education space, think ahead

and be knowledgeable of and efficient in management, be able to influence and be able to link administrative tasks to academic activities, he does not clearly indicate if these are required specifically to lead successfully during times of rapid changes and disruption Arntzen (2016). He concludes by recommending that selection criteria and additional education may be needed to prepare Deans for their roles, however he does not mention the exact capabilities that may be required (Arntzen, 2016). Within South Africa, Herbst and Conradie (2011) studied self-perceptions of leadership effectiveness in South Africa using the Transformational Leadership Model. However, their study was focussed on the accuracy of leader versus observer reports on their leadership effectiveness (Herbst & Conradie, 2011). Although they conclude that leaders who have a lower view of their leadership effectiveness are seen more positively by others as compared to leaders who have a higher view of themselves, they do not identify which leadership capabilities are required to lead successfully during rapid change and disruption.

Similarly, Cronje and Bitzer (2019) investigated the case for South Africa private university Campus Managers to have a distributive leadership style. They argue that this leadership style is necessary in a higher education environment that is characterised by massification, information technology changes and new methods of teaching to ensure a learning vision and strategy that will inspire and develop the academics they lead (Cronje & Bitzer, 2019). While they do identify some capabilities needed to be successful (i.e. be sensitive to context, social engineering, creation of an enabling environment, providing challenging tasks, provide development opportunities). However, they do not appear to clearly identify what distributive leadership capabilities are needed to lead successfully in times of rapid change and disruption within South African HEIs (Cronje & Bitzer, 2019).

Other researchers have also studied leadership such as Zuber-skerrit (2007) who researched the development of leaders in South African HEIs by applying an action-based learning and research (ALAR) model because it includes self-reflection, feedback and coaching while performing in the “real world”. While he concluded that ALAR model proved beneficial to developing leaders in South African HEIs he did not clearly identify what capabilities are needed to lead successfully in times of rapid change and disruption within South African HEIs. Other authors have also studied

leadership within South African HEIs. These include Herbst (2007) who researched the need for leaders in South African HEIs to have a high level of emotional intelligence and Ngcamu and Teferra (2015) who focussed on the influence of leadership during and after a merger and transformation of the Durban University of Technology. It also includes Williams and Gardener (2012) who argue the need for servant leadership at the University of South Africa (UNISA) at a time when there is a demand to provide education to many previously disadvantaged learners and Zulu (2011) who investigated the appropriateness of women's leadership and management skills to be a successful academic leader in South Africa and the United Kingdom.

While these studies do identify certain leadership capabilities (e.g. emotional intelligence, listening, being inclusive, finding solutions, participative management style, empathy, communication, collaboration) which are relevant to the rapidly changing South African HEI environment, none of them seem to have approached their research from immersing themselves into the participants' world and ask them to identify in their own words what they believe are the important leadership capabilities (Herbst, 2007; Ngcamu & Teferra, 2015; Williams & Gardener, 2012; Zulu, 2011). The result is that they have applied pre-existing models which may not include all the potential leadership capabilities needed to lead successfully in in South African HEIs nor did their research appear to explicitly focus on the disruptions facing South African HEIs.

3.3.2 Implications of rapid change

Rapid change has occurred in several areas including economic, technological, social, legal, information technology, climate (e.g. weather patterns); and the world of work. These rapid changes arguably mean that continents, countries, governments, economic sectors, organisations and individuals need to adapt their policies, structures and procedure in order to survive and grow. The following section will discuss the implications of climate change, global warming, changes in information technology, changes in organisation structures and resulting changes in the world of work globally, in South Africa and within South African HEIs.

3.3.2.1 *Climate change and global warming*

Climate changes such as significant changes in daily temperature and rainfall, poor water quality and drought have occurred over the past few decades, which have been linked to human activity such as rising carbon emissions, urbanisation, pollution and land usage (Ummenhofer & Meehl, 2017). The increase of wildfires in Western USA due to drought, the negative impact of temperature increases on the reef ecosystems in Western Australia and the rise in the deaths of whales, birds and sea lion in the North Pacific in recent years have all been partly attributed to human interaction with their environment (Ummenhofer & Meehl, 2017).

Bertrand (2010), Perez-Valls, Cepdes-Lorente and Moreno-Garcia (2016) and Sarkar (2016) argue that the increase in population accompanied by an increase use of fossil fuels and various other human activities have resulted in Global Warming, which has increased the melting rate of glaciers, a rise in ocean temperatures, large-scale storms, drought, change in animal behaviour and deaths. These events have influenced climate change and are expected to pose a threat to food security (i.e. supply, quality, accessibility and increased food prices) if they remain unchecked, especially in the light of an expected population increase by 2050 (Benamati & Lederer, 2010; Sarkar, 2016). Igbokwe-Ibeto (2019) argues that despite Nigeria's abundant agricultural resources, they have become a major food importer because, amongst other factors, the current policies and practices are not effective in dealing with the negative effects caused by climate change and global warming. He concludes that to effectively mitigate the effects of climate change, government needs to partner with other stakeholders and implement plans that will address food security and human development within the country (Igbokwe-Ibeto, 2019).

Nyamwanza and Kujinga (2016) also state that there is a need to review current approaches to effectively mitigate the impact of climate change, specifically water management in Sub-Saharan Africa where global temperatures continue to increase due to Greenhouse Gas Emissions. To them, water supply management is a complex matter that involves cooperation across borders, with government, municipalities, rural communities and other stakeholders (Nyamwanza & Kujinga, 2016). The complexity of the various parties' contexts including, communication challenges, power relations,

political influence and unclear roles and responsibilities which places the effective management of available water resources at risk (Nyamwanza & Kujinga, 2016). To mitigate this, they propose a more that the current management system be revised and changed to one that is more flexible, innovative and proactive (Nyamwanza & Kujinga, 2016).

South Africa has not escaped the influence of climate change and global warming. Karimu and TeiMensah (2015) found that in Sub-Saharan countries such as South Africa and Zimbabwe climate change, through temperature shock variations, increases electricity consumption which requires the development of alternate energy sources to meet the demand and sustain economic growth. Tibesigwa, Visser and Turpie (2016) argue that climate change has had a severe negative impact on the water supply which is threatening commercial and rural farmers. Their research indicates that because South Africa's economy is heavily dependent on agricultural exports from commercial farms and those farms which specialize in a specific crop are more vulnerable to the impact of decreased water supply than those who farm mixed crops (Tibesigwa et al., 2016). To them, farm management, alternate water supply methods, technology and crop insurance could help mitigate the risk (Tibesigwa et al., 2016).

Researchers have argued in favour of using media and communication processes (e.g. theatre, digital media to increase awareness within South Africa of climate change (Smith, 2013) and improving the green procurement procedures and processes in metropolitan municipalities within South Africa so that they purchase supplies that have been produced through environmentally friendly methods (Agyepong & Nhamo, 2017). Santhia, Shackleton and Pereira (2018), investigated the extent to which the Integrated Development Plans of six District Municipalities in the Eastern Cape contained goals to address adaptation required to mitigate the effects of climate change in the Eastern cape, given its varying temperatures and rainfall. Furthermore, these plans are key to addressing social and economic needs of particularly the vulnerable and more marginalised communities within these districts (Santhia et al., 2018), They reported that overall, all the District Integrated Development Plans were either vague regarding objectives to be achieved or funding required, or they did contain any goals relating to climate change and mitigating the impact thereof on the people of the district (Santhia et al., 2018). In addition, they reported little or no alignment between the district

municipality goals and those of the local municipalities and conclude that it is vital that the district municipalities address these issues in order to contribute to mitigate the effects of climate change on the communities within their area of responsibility (Santhia et al., 2018).

Organisations such as the Intergovernmental Panel on Climate Change, the Food and Agriculture Organization of the United Nations and the United Nations Framework Convention on Climate Change have been established to provide policies and regulations that govern the impact of global warming on the environment (Sarkar, 2016). Failure to take drastic steps to safeguard the environment during this time of rapid worldwide population growth will not only endanger the food global food security, but arguably life as we know it including the world of work. By implication Africa, that includes South Africa and HEIs that operate within the environment could therefore be forced to review how their operations effect the environment and or alter to their research focus to contribute to climate change. Ummenhofer and Meehl (2017) and Sarkar (2016) concur and add that other factors such as using alternate sources of renewable energy, better waste management and increased investment to preserve the environment are essential to food security and wellbeing of the global population.

Lemma, Feedman, Mlilo and Park (2017) state that climate change has the potential to cause tremendous harm to the world economy and population health. Their research focused on organisations' corporate carbon risk, voluntary disclosure and cost of capital within South Africa (Lemma et al., 2017). They found that organisations who voluntarily disclose their carbon risk experience lower overall cost of capital. They argue that because of the potential reduction of capital cost due to voluntary carbon disclosure, policy makers could use that fact as an incentive to convince organisations to do so (Lemma et al., 2017).

3.3.2.2 *Information technology*

Apart from the impact of environmental changes, change in information technology is influencing the nature of customer service in various service industries such as banking, education, tourism, finance and insurance (Meigounpoory, Rezvani & Afshar, 2015). They argue that the banking sector in particular need to develop a service

innovation model so that they can respond effectively to the changing needs of a rapidly growing sector (Meigounpoory et al., 2015). Benamati and Lederer (2010) state that information technology will continue to change at an alarming rate and will become a major challenge for organisations who can either respond to the changes imposed due to problems that arise in their environment or they can develop a proactive strategy so that they can react before being forced to.

In addition, it will also become necessary to understand and predict the impact of these changes before they have been implemented (Marshall, 2010). Either way the rate of change in the information technology domain will increasingly require organisations to cope in a way that they can successfully respond to such changes (Benamati & Lederer, 2010). Prisecaru (2017) argues that while the fourth industrial revolution is paused to make things faster and arguably better, we need to consider the potential social impact that could be caused by job losses and job obsolescence as new jobs emerge. Furthermore, one should consider whether the income inequality gap will widen because richer economies may be better positioned to benefit from the fourth industrial revolution whereas poorer economies may not (Prisecaru, 2017). By implication, it may mean that HEI institutions may not be able to use such technologies to enhance the quality of higher education because their economy cannot afford it.

Benamati and Lederer (2010) argue that the rapid rise in digital technology has had a significant impact on the generation and dissemination of knowledge within Higher Education because it has not kept up with the change as far as it affects the design and delivery of “portable” education. They argue further that while the developed world has easy access to higher education through digital technology, a large part of the world – the developing world – does not (Benamati & Lederer, 2010). Furthermore, the digital revolution has the potential to transform the traditional “bricks-mortar-and paper” University into a virtual classroom, based on distance learning (less need for physical on-campus presence) because the current infrastructure may not be able to cope with the rise in massification (Benamati & Lederer, 2010).

3.3.2.3 *Influence of technology changes in South Africa*

The global changes in technology have also impacted various sectors in South Africa

including medical, legal, food and beverage, retail, media, marketing, government services, entrepreneurs, sociology and mobile communications (Alexander, Jansen van Vuuren, Hermanus, Dassah & Mason, 2016; Bernstein, Besser, Maidment & Swanepoel, 2018; Carew, 2014; Chisa & Hoskins, 2016; Chiumbu, 2014; Duffett & Wakeham, 2015; Rodny-Gumede, 2017, Ledimo & Martins, 2015; Mosweu & Mosweu, 2018; Steyn, 2018; Ronquest-Ross, Vink & Sigge, 2018; Sutherland, 2015).

Within the South African food and beverage sector, new technologies in automation of manufacturing, process and quality control, warehousing and packaging have resulted in new food products, improved quality and safety and improved product shelf life (Ronquest-Ross et al., 2018). Entrepreneurs in South Africa are more and more realising the benefits of information and communication technology (ICT) to the growth and survival of their business (Steyn, 2018). As a result, entrepreneurs are taking various steps such as accessing specialist ICT consultants who can help them to become more ICT literate and to install and update ICT systems that are relevant to their needs (Steyn, 2018).

Within the South African retail sector, the impact of constant global innovations in technology will bring about significant changes in the distribution, marketing, operations, skills, services and business intelligence needed of the sector to remain competitive, in particular the use of e-Retail to facilitate sales (Alexander et al., 2016). However, while the need to implement technological changes required for e-Retail in South Africa is acknowledged, there still appears to be a lack of confidence and readiness (i.e. business and technology) in certain areas within the sector (Alexander et al., 2016). The South African retail sector will therefore need to drive a change agenda and focus on research and development on e-Retail if it wants to remain competitive in the global market (Alexander et al., 2016).

Within the South African Public Service, there is an increased awareness, commitment and management support to use innovative technologies to improve the quality-of-service delivery (Ledimo & Martins, 2015). Similarly, the South African judicial system has implemented electronic records management to record, track, retrieve and safeguard court records, which has reduced tampering and increase the speed at which records can be accessed (Mosweu & Mosweu, 2018). The advent of Social

Media has also had an impact on the way Journalism and Marketing are conducted. In marketing, for example, the advent of social media platforms such as Facebook and Mxit has forced organisations to rethink the way in which they communicate their product and service offerings to Millennials (Duffett & Wakeham, 2015).

Millennials spend a lot of time accessing social media using, amongst others, their smart phones and become uninterested quite quickly with ICT applications that are not interactive (Duffett & Wakeham, 2015). Therefore, organisations need to consider offering a variety of ICT platforms and applications to market their products, which attract and retain millennials' attention, if they want to retain them (e.g. offer games, on-line promotional items) (Duffett & Wakeham, 2015).

In South African journalism, social media has become a channel to reach wider audiences, provide a platform for people to engage in public debates, offer a platform for alternative opinions and a tool to facilitate social change (Rodny-Gumede, 2017). These are not always possible with the traditional forms of media (e.g. Television, Newspapers) that are subject to political influence, such as under the apartheid government in South Africa (Rodny-Gumede, 2017). Similarly, community radio stations are now using social media such as Facebook, Twitter and YouTube to reach their audiences who are tuning in to them using their smartphones (Chiumbu, 2014). As a result, community radio stations are now transcending the traditional "brick and mortar" structures, community and even national borders and are experiencing ever increasing listenership (Chiumbu, 2014).

A further impact of the changes brought about by social media is that existing policies and regulations, as in the case of community radio, may need to be revised to adequately address issues such as protection of information or the definition of what is a community in this new context (Chiumbu, 2014). In journalism, the traditional news media can enhance the standard of communications on social media by applying the existing quality control measures, where appropriate (Rodny-Gumede, 2017).

3.3.2.4 Influence of technology changes in South Africa HEIs

South African HEIs, and South African education in general, have been affected by

global changes in technology and information technology in the way that it is adopted and used to conduct research and structure, manage academic library services, deliver and assess teaching and learning in the twenty first century (Adam, Blewett & Wassermann, 2015; Basitere & Ivala, 2017; Du Plessis & Mabunda, 2016; Mudaly, Pithouse-Morgan, van Laren, Singh, & Mitchell, 2015; Naidoo, Rugbeer & Rugbeer, 2013, Ojo & Adu, 2018, Waghid, Waghid & Waghid, 2019).

Digital and Information technologies such as Facebook, Clicker technology and Wiley Plus web-based homework system were found to improve the academic performance amongst first year Chemical Engineering students at a University of Technology who obtained less than 50% in mathematics and science during their final grade 12 exams (Basitere & Ivala, 2017). The study found that using these technologies to improve the students' marks on mathematics and Science enhanced their participation in discussions about the learning material, interaction between students, understanding of the subject matter and academic performance (Basitere & Ivala, 2017).

Another technological advancement that is being increasingly adopted by South African HEIs is the use of cloud computing (Adam et al., 2015). Cloud computing consists of various information technology applications (computer software programmes), platforms and infrastructures that connect and/or deliver various sources of information, service providers, technologies, services and/or users anywhere, on demand (Adam et al., 2015). Even though there are varying degrees of adoption of cloud computing (e.g. due to digital divide between rich and poor students as a result of the cost of new technological devices) and various challenges (e.g. poor network coverage, high cost of broad band and data, cost of buying and learning to use equipment that can access cloud information) there are still many advantages (Adam et al., 2015). The advantages include data analysis capabilities for research, reduced costs, students can learn remotely, students can learn how to use these technologies in preparation for the world of work which is becoming more and more reliant on cloud computing (Adam et al., 2015). They found that students adopt cloud computing beyond the academic use and use it even more in their personal lives (e.g. Facebook and Twitter) (Adam et al., 2015). However, Adam et al. (2015) are of the view that despite the increased adoption of the use of cloud computing in South African HEIs, more should be done to encourage, develop and use this technology to share

content, back up data, assign task, submit assignments and conduct assessments. They conclude by recommending that South African HEIs should consider developing a cloud solution for Higher Education that could benefit all role-players; and even reconsider the teaching paradigm because of the impact of cloud computing (Adam et al., 2015).

Waghid et al. (2019) concur and add that due to the rapid advancement of the fourth industrial revolution, South African HEIs are under increasing pressure to ensure that graduates are equipped to function effectively in this “new” environment. As a result, university teachers and students need to be equipped to use the relevant technologies required for Higher Education and South African to be able to compete globally (Waghid et al., 2019). They argue further that graduates need to be introduced to the skills, knowledge and attitudes needed to succeed in this new technological environment (Waghid et al., 2019). Naidoo et al. (2013) state that children have grown up with technology and particularly the Generation Z children (i.e. born in the 1990s to date) are able to adapt to new technology (e.g. Worldwide Web, mobile phones) and are far more interested and engage with this new technology as opposed to the more traditional teaching methods. They state that the digital technologies enable children to interact in the learning process while, amongst others, developing their reading, thinking and problem-solving skills (Naidoo et al., 2013). They add that the new technologies enable learning to be structured and delivered in a way that educates and entertains, for example by using computerised games or roleplays, which enhances thinking, sharing of information, integration of information and learning (Naidoo et al., 2013). They conclude that using technology will improve the quality of teaching and learning because of their ability to access and present information to learners, creating an interactive learning experience (e.g. Blackboard which is a web-based interactive software application used in education, mobile phones).

Furthermore, government commitment and actions are needed to address the costs of mobile devices and improve the overall effectiveness of especially the poorer and dysfunctional schools. It can therefore be implied, that improving the quality of education through the use of information technologies could lead to the improvement of school results, which can improve the chances of success once these learners enter

the higher education environment where many are currently being seen to be unprepared (Basitere & Ivala, 2017; Naidoo et al., 2013; Waghid et al., 2019).

Mudaly et al. (2015) and Ojo and Adu (2018) appear to have similar views and add that social media and digital technologies have become increasingly important to improve the quality of teaching (e.g. teaching Science at school) because information can be accessed and shared more easily, can cater for a variety of learning styles, enhances learner responsiveness and interaction with content and can reduce costs of accessing such information. Once again, the role of government is emphasised in raising awareness and improving the use of information technologies amongst teachers and learners (Mudaly, et al, 2015; Ojo & Adu, 2018).

3.3.2.5 *Structure of organisations*

Another factor being affected by rapid technological change is the structure of organisations, which need to be flexible enough to respond to ever-changing customer needs (Benamati & Lederer, 2010; DeFillippi, 2002). Organisation structure refers to the way people and functions are arranged into clearly defined areas and work units, levels of work, roles, level of responsibility and authority, decision making, and relationships needed to successfully implement the organisation's strategy and goals (Maartins & Geldehuys, 2016; Veldsman, 2015).

To be able to respond effectively, organisations are structuring themselves around self-organised teams, virtual teams or project teams where individuals will need to get used to changing teams quite often, be able to work collaboratively, establish broad networks of individuals and organisations that can be accessed to deliver work in this new type of structure, and collaborate large distances from each other while using various electronic communications media to interact (DeFillippi, 2002).

There is a shift towards individuals taking responsibility to equip themselves with the skills needed for this "new" world of work and they would arguably become more involved with making their own career choices, which would suit their needs, including choices about compensation and benefits (DeFillippi, 2002). As a result, Human Resource Management will also need to change the way it manages talent, recruits,

delivers training, manages compensation and benefits, communicates, transfers knowledge and enables teams to establish common procedures and mental models of how to operate and manage and reward performance (DeFillippi, 2002).

Changes in the socio-economic environments of countries such as Slovenia, the Czech Republic, Slovakia, Hungary, Poland, Romania and Bulgaria had an impact on the citizens experience of work-life-balance satisfaction, work-life conflict and work-life enrichment all of which effect the individual's overall satisfaction when they transitioned from a socialism to capitalism (Trefalt, Drnovs̃ek, Svetina-Nabergoj & Adles̃ic̃, 2013). The change in the socio-economic system was accompanied by a decline in previous state subsidies for support such as child-care, full paid paternity leave, full paid maternity leave and moderate child health care costs, which not put pressure on citizens newly implemented market related salaries, but also on their work-life balance satisfaction work-life conflict and work-life enrichment which had a negative influence on families (Trefalt et al., 2013).

3.3.2.6 Change in organisation structures within South Africa

The impact of climate change, globalisation, Web 2.0, social media, digital technologies, artificial intelligence, increased automation, changing customer needs and expectations, increased need to collaborate across boundaries, the need to be more agile and a changing workforce that is more connected and values social participation has impacted the way organisations are being structured to enable them to adapt and respond during times of increasingly rapid change and uncertainty (Bailey, Reeves, Whitaker & Hutchinson, 2019; Bortolot, 2014; Cianni & Steckler, 2017; Deloitte, 2017; Heaphy, Byron, Ballinger, Gittell, Leana & Sluss, 2018; Hester, Hutchins & Burke-Smalley, 2016; Moore, 2016; Popescu, Ilie & Iacob, 2017).

In order to be more responsive and agile in the current dynamic global world organisations will adopt more agile structures, employ "hot seat" and remote working which does not require employees to be on-site at their employer all the time, increased focus on customers service, increased use of project-based work and short-term contract workers (Bailey et al., 2019; Bortolot, 2014; Cianni & Steckler, 2017; Deloitte, 2017, 2017; Heaphy et al., 2018; Hester et al., 2016; Magalhaes, 2018; Moore, 2016;

Popescu et al., 2017). Furthermore, increased use of virtual teams across the world whose composition could change from one task to the next, increased use of artificial intelligence combined with human beings that will change the structure of many jobs (e.g. use of robotics in manufacturing to perform work previously done by humans) and the emergence are expected to increase (Bailey et al., 2019; Bortolot, 2014; Cianni & Steckler, 2017; Deloitte, 2017, 2017; Heaphy et al., 2018; Hester et al., 2016; Moore, 2016; Popescu et al., 2017). New jobs and work processes will emerge which involve the use of artificial intelligence, hierarchical structures will be replaced by networks of empowered teams and organisations will need to redesign their learning and development functions to use the new technologies such as various on-line learning platforms and mobile phones to impart new skills to employees at a faster rate (Deloitte, 2017; Hester et al., 2016; Moore, 2016; Popescu et al., 2017).

South Africa, as part of the global village is also increasingly feeling the effects of the changes in technology, globalisation, global economy, the fourth industrial revolution, climate change, digitisation and changing customer expectations. As a result, South African Civil Engineering organisations are finding new ways to collaborate, organise themselves and use new technologies (e.g. precast processes, mechanisation, mobile technologies) to create the relevant infrastructure required to provide basic essentials such as water to communities (Jerling, 2016). The future workplace is becoming increasingly diverse where the needs of the different generations are increasing impacting on employee satisfaction and retention, which require organisations to adjust their work environments to retain employees (Heyns & Kerr, 2018). For example, millennials and generation Xers prefer flexibility and to be included in all aspects of the organisation business, millennials are constantly connected to the internet of things and prefer to communicate through mobile phones and other mobile devices, always being connected in “real time” and can multitask (Heyns & Kerr, 2018). The implications are that South African organisations will need to create environments that are engaging, provide flexible work arrangements, provide stimulating work and facilitate meaningful discussions that enhance employee growth (Heyns & Kerr, 2018). The use of Collaborative Robots (Cobots) will become more widespread within the South African manufacturing industry and employees will increasingly interact with them as team mates rather than another tool (Calitz, Poisat & Cullen, 2017). Apart from adapting organisation structures, job design and workspaces, organisations will also

need to manage the introduction of the Cobots to ensure adoption as well as to train on employees on how to cooperate with them to perform their tasks (Calitz et al., 2017). The rise of the digital age also means that employees will require new and/or different sets of competencies such as those that will be required by administrative professionals within this new world (Venter, Herbst & Iwu, 2019).

With the rise in the importance of customer experience that has arisen from the emergence of various applications on the internet and mobile devices to deliver products and services, administrative professionals are required to not only to be organised and analytical they are now required to be flexible, emotionally intelligent and able to function in a virtual world, amongst others (Venter et al., 2019). This means that organisations need to relook at the design of administrative jobs, recruitment and selection processes and the methods used to develop administrative professionals to ensure they remain relevant and deliver the required service in this digital environment (Venter et al., 2019). Van den Berg (2018) argues that for graduates to function in the new world of work within this digital environment where organisations need to be agile, more responsive, more creative where boundaries are often not clear, HEIs will need to teach them the skills that are applicable. She found that amongst others digital skills, cross-disciplinary skills, communication, collaboration, problem solving, critical thinking, innovation, creativity, emotional intelligence and cultural competency were needed to succeed in a digital world by knowledge workers and the teaching and learning environment (Van den Berg, 2018). Veldsman (2015) appears to concur with all the points and states that for organisations to be future fit they must be designed so that they include their contextual realities (i.e. what is happening in their environment) within their design so that they can respond to it (Veldsman, 2015). Organisations also must ensure that their design captures the needs of their various stakeholders, it must embed partnering and innovativeness as a critical ability to unlock potential, learning and wealth and it must enable global and local responsiveness (Veldsman, 2015). Their design must also enable a virtual presence to deliver any time, anyhow, for anyone and at any place (Veldsman, 2015).

3.3.2.7 Change in the structure of South African HEIs

Prior to the birth of the South African democracy on 27 April 1994 Higher Education

under the apartheid government allocated education resources based on race (Mabokela & Mlambo, 2017). The various laws in force before then, such as the Extension of University Education Act 45 of 1959 prohibited the historically White universities from admitting African, Coloured or Indian students and established separate universities for these students (e.g. university of Fort Hare for Xhosa speaking students only and University of Durban-Westville for Indians) (Mabokela & Mlambo, 2017). Even though there was some progress with the 1983 University Amendment Act, which allowed access of African, Coloured and Indian students to historically White Universities, barriers such as language remained because Afrikaans-speaking Universities did not change the curriculum language to accommodate these students (Mabokela & Mlambo, 2017). After the 1994 elections, there was an increased focus to transform South African Higher Education to overcome the inefficiencies and inequalities of the past and to provide students with the skills and innovation to enable them to participate successfully in a global environment that is underpinned by rapidly changing and advancing technologies (Department of Education, 1997, Mabokela & Mlambo, 2017).

Unfortunately, the Education White Paper 3 did not set out a clear plan of how the Higher Education landscape would be transformed (Mabokela & Mlambo, 2017). Therefore, the South African National Plan for Higher Education (Ministry of Education, 2001) was published in 2001 which established a National Working Group along with principles, guidelines, process and who would be required to serve as members of the National Working Group (Ministry of Education, 2001). Part of the National Plan for Higher Education involved reducing the number of Higher Education Institutions, improve access and equity amongst staff and student, ensure quality qualifications, good governance and ensure quality and efficient goals for graduation and retention rates (Ministry of Education, 2001). As an outcome, the 36 Higher Education Institutions were reduced to 23 institutions (11 Traditional Universities, six Universities of Technology and six comprehensive universities (combination of universities and technikons)) (Jansen, 2004; Mabokela & Mlambo, 2017).

Apart from the structural reorganisation of South African Higher education institutions, the South African National Plan for Higher Education also wanted to ensure quality education that would ensure our graduates could take part successfully in our economy

so that we can compete globally and remain up to date with technological and other advances (Ministry of Education, 2001). As a result, the Government introduced several new policies that placed new demands on Universities (Jansen, 2004). These include the need to structure qualifications according to the guidelines in the National Qualifications Framework, quality assurance mechanisms and a new subsidy formula which would be advantageous to some disciplines and not to others (e.g. Social Sciences and Humanities generally suffer because some programmes are not economically viable) (Jansen, 2004; Ntshoe, Higgs, Higgs & Wolhuter, 2008).

The increase in Government intervention into Higher Education meant that Universities which were once quite autonomous in terms of setting up their curricula, appointing their Deans according to their own processes, admitting students based on their own policies, managing their faculties and institutions based on how they perceived was best for their academic endeavour (Jansen, 2004; Ntshoe et al., 2008).

The Minister of Higher Education can intervene and remove a Head of a university or place them under administration if there is enough reason to do so. Furthermore, Universities and their management teams were now accountable to their Councils and the Department of Higher Education to formulate strategies and budgets which clearly set out what they are going to achieve, how they are going to measure it and by when. Furthermore, administrative functions (e.g. finance, planning, human resources, quality assurance) had to be decentralised to faculty and department level) which was not previously the case (Jansen, 2004). Councils also became more involved in the management of institutions (Jansen, 2004; Ntshoe et al., 2008).

Ntshoe et al. (2008) argue that the changes in South African HEIs is because of globalisation which has brought about increased competition in the sector and the resulting adoption of market-economy based practices which emphasise efficiency and standardisation. They argue further that consequently, South African HEIs have now implemented “new managerialism” which is imposing methods such as finance management and cost centres, performance management, monitoring of efficiencies and effectiveness and increased levels of scrutiny (Ntshoe et al., 2008). To them the result has been a significant increase in the academics’ workload due to increased enrolment rates, increased administration load and they are expected to take on

management roles (Ntshoe et al., 2008). The impact of this increased workload has had a negative impact on their morale, research productivity and teaching (Ntshoe et al., 2008). They also state that the increased measurement of academic performance and the need for them to source additional funding is causing competition amongst academics which could be destructive (Ntshoe et al., 2008).

The rise of the number of private higher education institutions in South Africa which offer, even though on a smaller scale, similar programmes as the public HEIs and the emergence of the internet of things and mobile devices that improve access to students are having an impact on public universities who now have to compete for resources and students (Jansen, 2004; Waghid et al., 2019).

Another matter that has become an imperative especially since the hashtag “Fees Must Fall” protests of 2015 and 2016 has been the drive to decolonise the curriculum. Even though this matter is provided for in the Education White Paper 3 and the National Plan for Higher Education of 2001, little progress has been made (Department of Education, 1997; Mabokela & Mlambo, 2017; Ministry of Education, 2001; Zembylas, 2018). The call to decolonise the curriculum aims to ensure that indigenous knowledge, teaching and research practices and knowledge generation processes be acknowledged and integrated into the western-generated Higher Education system, which exists within South Africa (Zembylas, 2018).

Currently, Western and Eurocentric based models of Higher Education permeate the South African higher education landscape and does not easily recognise or accept indigenous knowledge or practices, nor does it acknowledge the impact of poverty for instance on the readiness of previously disadvantaged students who wish to access higher education (Zembylas, 2018). It also does not recognise the impact of the pervasive of English language on the performance of non-English (or non-Afrikaans) speaking students (Zembylas, 2018).

Furthermore, Mabokela and Mlambo (2017) argue that while a lot has been done to transform South African HEIs, issues of staff representation at all levels (particularly in academia and at middle to senior management level), representation, retention and graduation rates of African students, inadequate funding and the difficulty to

successfully integrate into particularly the Historically White Universities remain challenges which need to be addressed. Luvalo (2019) argues that for South African Higher Education to transform it will require that the HEIs will need to change their cultures through reviewing their norms, beliefs, values, language and symbols because some HEI cultures are currently resisting transformation. Low level of representation of Africans in management levels and in academic roles and the fact that few HEIs had change strategies and plans in place to drive transformation are cited as examples of the resistance and slow pace of change, which need to be addressed (Luvalo (2019). From the knowledge creation standpoint, the current environment requires that South African HEIs, along with other HEIs in the world, adopt a more collaborative, interdisciplinary and problem-solving approach that is more in tune with society at large or wherein they exist (Zuber-skerrit, 2007).

From the above it is clear that the structure (including processes and policies) of South African HEIs have changed and will continue to change as the influence of amongst others government policy, legislation, globalisation, the fourth industrial revolution, social changes, economic and financial pressures increasingly change the environment in which they function.

The implications of the effects of all the above changes on organisations, including HEIs in South Africa, means that leaders must take decisions on how to respond to the changes and implement them (Herbst & Conradie, 2011; Zuber-skerrit, 2007). The researcher is of the view that the above rapid changes will potentially affect leaders of South African HEIs in how they structure their qualifications and research, the manner in which they structure their institutions, the way in which higher education is delivered, and or how community engagement is undertaken as a result. Zuber-skerrit (2007) argues further that leaders will need new leadership skills because many are not prepared to operate successfully in this new rapidly changing world, which includes the adoption a more flexible and proactive approach to strategic management. In addition, Zube-skerrit (2007) found that leadership development that combines Action Learning and Action Research which is learning through taking action and then reflecting on the results with the traditional Academic learning improves the skills of those who attended the programme because they are able to learn from their mistakes and from others.

To further illustrate the changing role of leaders in South African HEIs, Rudhumbu (2014) states that the role of academic middle managers in Higher Education has changed significantly over the past few decades. This is because they are now playing a more critical role in changing education and curriculum (Rudhumbu, 2014). Academic middle managers are now involved in providing inputs into the overall strategy, are required to interpret and implement the strategy, drive the performance of their units, are required to be proponents for and drive the implementation of change within their HEIs that enable them to be more flexible and responsive to their changing environment (Rudhumbu, 2014).

During this time of rapid change within South African HEI the pace of change and transformation has been slow according to Jansen (2004), Luvalo (2019) and Mabokela and Mlambo (2017). To them this is due to various reasons including different forms of resistance, lack of resources and in effective policies (Jansen, 2004); Luvalo, 2019; Mabokela & Mlambo, 2017). Perhaps the reason may be, as argued by Lu and Xie (2014), due to decision makers being either risk averse, focussing on potential losses rather than the gains associated with change (i.e. maintain the status quo) whereas others focus on the gains or advantages.

The researcher agrees with Lu and Xie (2014) that change is going to happen irrespective of whether leaders are risk averse or not; what is critical is how and when they choose to respond to the rapid changing environment because that will determine whether their organisations at least survive or develop into industry leaders. Bennet (2017) indicates that even though leaders must understand and make sense of organisational change, including the fact that they may be negatively affected by it, they still remain responsible for leading others during that unstable period.

The above sections respectively discussed the various rapid changes that have affected the world, Africa, South Africa and South African HEIs, as well as their implications. The next section will discuss the causes and implications of disruption.

3.3.3 Causes and implications of disruption

As a reminder, this research has defined disruption as any situation that significantly

affected organisational efficiency, performance and sustainability in that it required a new way of doing and thinking because current knowledge, methods, products and/or services were obsolete or vastly ineffective. To this end, Christensen (1997) states that large successful organisations such as the retail giant Sears Roebuck failed to acknowledge and adapt to the rise of discount retailing, home centres and cheaper ways of marketing, which resulted in its demise. IBM and Hewlett-Packard were two other organisations that did not adapt to changes, this time in the computer-manufacturing sector, where the focus shifted to minicomputers and personal desktop computers respectively and they were overtaken by companies such as Apple (Christensen, 1997). Nokia was one of the original giants in the mobile telephone industry but did not pay attention to the rise of the “smart phone” and now they are no longer the “powerhouse” in the mobile telephone industry whereas Apple did and is now one of the leaders in smart phone technology (Block, 2016; Christensen,1997; Denning, 2016).

The reason, according to Christensen (1997) and Denning (2016), was that the aforementioned organisations used sustained technologies (i.e. methods, techniques and processes to produce, sell and deliver products and services to customers) to improve well-known existing products and services, based on their knowledge over time of what their customers want (Christensen,1997; Denning, 2016). However, these large existing organisations did not see the value in responding to the disruptive technology; they followed good management practices and listened to their customers and they only invested in those innovations that would guarantee high returns for their investors (Christensen,1997; Denning, 2016). Disruptive technology is something that is offered to the market, which is significantly different to what is currently available (e.g. making all your travel bookings through on-line airline websites such as Kulula rather than using a travel agency or booking transport using Uber rather than calling a taxi company), is cheaper, simpler and often more convenient (Christensen,1997; Denning, 2016).

In other words, the disruptive technology offers something that is totally different to what is currently offered by the established organisations in that market, which is simpler, often more convenient, does not perform well early on nor does it bring in good returns on the initial investment (Christensen,1997; Denning, 2016). Therefore, the

established organisations do not believe the new product or service is a threat or worth investing in or changing the operations to focus on the new service or product (Christensen,1997; Denning, 2016). Instead, they choose to improve their current products or services, concentrating on the upper end of their current market, to the extent that the supply of these products is far more than the demand and contain features that customers do not find useful in relation to the increase in cost (Christensen,1997; Denning, 2016). However, the services or products coupled to the disruptive technology are steadily improved over time and become more appealing to the customers who now buy the disruptive technology (Christensen,1997; Denning, 2016).

Before the existing organisations could respond or choose to respond, the new organisations in the market had captured their customers and had become a force to be reckoned with at least (e.g. Uber versus traditional taxi cabs) or at most the market leader (e.g. Apple iPod versus the Sony Walkman) (Christensen,1997; Denning, 2016). Block (2016), Christensen (1997) and Denning (2016) state that to be successful in a disruptive world organisation cannot respond in the way they used to in the past because not only could they miss out on an extremely lucrative investment opportunity, but they could also end up being obsolete in the very market they once dominated.

3.3.3.1 Causes of disruption

According to Gupta (2018) there are four kinds of disruption. One is ecological disruption, which is caused by increased demands for land and water although their supply is limited, increased demands for minerals and metals essential for our basic needs but which are in limited supply and increasing greenhouse gases emissions into the atmosphere (Gupta, 2018). The second disruption is technological disruption, which relates to the speed at which new technologies are discovered and developed (e.g. biotechnologies, information technologies, financial technologies, network economy) (Block, 2016; Gupta, 2018). Another disruption is economic disruption, which according to Gupta (2018) could be the result of growing accumulation of capital being invested in the scarce land, water, minerals, metals and technologies which could lead to for example land grabbing, greater capital accumulation, monopolies or

even tax evasion. According to Gupta (2018), those who have the capital resources could cause economic disruption because they are able to acquire scarce resources and acquire further wealth, thus reducing the availability of such resources to those who do not have the required capital resources, causing an imbalance (Gupta, 2018). Social disruption is the last kind of disruption and results from the impact of factors such as climate change, new technologies, internet or land grabbing that reduce either employment opportunities or livelihood of people (Gupta, 2018, Smith, 2013).

Christensen, Raynor and McDonald (2015) and Skjølsvik and Perner (2019) posit that disruption is a process that occurs in areas of technology, products and services and business models (i.e. software based such as using artificial intelligence, platform based which use virtual websites to interact with customers and infrastructure based such as technology used to offer services). Initially, a cheaper and “good enough” alternative to what currently exists in the market, is offered to consumers (Christensen, Raynor & McDonald, 2015). While current organisations maintain their existing client base by improving the current offerings and adjusting the way they are offered, the “disruptors” gradually attract more and more of the existing organisations’ customers until they displace or replace them because of the value of what they offer and how they offer it (e.g. ease of access, support, utilisation of services) (Christensen, Raynor & McDonald, 2015; Skjølsvik & Perner, 2019). Rose (2016), however criticises Christensen’s theory of disruption because it appears dated (i.e. not much had changed since Christensen introduced it 20 years ago). Rose (2016) argues that disruption is not only a strictly narrow and linear process because other factors such as the structuring an organisation around teams versus an integrated product line, financial aspects or ineffective executives have resulted in some companies not being able to succeed with new innovations.

In the realm of technical disruption, the internet and digitisation are causing competencies to become obsolete within the newspaper industry because the old mechanical methods and machine methods are being replaced by digital technology (Gupta, 2018; Karimi & Walter, 2015). As a result, the way newspaper companies print and distribute the news and how and where it is accessed is changing (e.g. through various platforms on the internet and social media) (Karimi & Walter, 2015). As a further consequence, traditional business models of newspapers are being significantly

disrupted and changing in the light of the impact of digitalisation and the internet (Karimi & Walter, 2015). Hurth (2017) describes a volatile, uncertain, complex and ambiguous environment (i.e. VUCA) caused by several factors including rapid advancement of technology, globalisation and fragmentation (of identities, systems, preferences).

According to Block (2016) and Biber, Light, Ruhl and Salzman (2017) the rise, scale and speed of advances of Information and Communication Technology (ICT) and innovations such as the internet, smartphone, tablet, skype, social networks and twitter, have enabled the world to communicate across time and structural boundaries. The aforementioned has caused disruption in several areas such as financial markets and the elimination of transaction costs between consumers on service providers (Biber et al., 2017). For example, Woo (2007) discusses the increasing discontent by various countries with the current World Trade Organisation System because increased globalisation and advances in in technology (i.e. labour-saving technologies) have increased job obsolescence and income redistribution. Advances in answering machines have reduced the need for secretaries because recorded messages can be converted to e-mails and sent to the caller, offshore call centres are established in foreign countries due to lower wages (Woo, 2007). Biber et al. (2017), Sood and Tellis (2011) and Bolden and O'Regan (2016) agree and add that the elimination of transaction costs between service providers and customers, the rise of the platform of the platform economy such as Air Bed and Breakfast (Air B&B) (i.e. booking and paying for accommodation using the internet) and the Uber transport service have caused significant changes in the world.

The obsolescence of certain jobs, organisation structures and technology on the one hand and creating new markets, with new products and new customers on the other, are some of the changes relating to technological advancement (Biber et al., 2017; Sood & Tellis, 2011; Bolden & O'Regan, 2016). Janice Kapner, Senior Vice President Corporate Communications of T-Mobile (a mobile telephone carrier service provider in USA) put it as follows (Czarnecki, 2016, p.3):

“We’re going to fight for our customers and do things people normally wouldn’t think a carrier would do”...“The key is to pay attention to what is and isn’t

working for consumers". They hate the carriers, so if we want to succeed, we can't be them". "And we can't forget that".

In other words, the increased disruption brought about by digitisation will arguably force organisations to do things differently if they want to attract or retain customers to ensure their success.

The financial and insurance industries have also been affected by disruption emanating from technology innovation and designed new services that meet the consumers' needs (Giles, 2016; Gomber, Kauffman, Parker & Weber, 2018). For example, financial services have changed their business models to extend services to customers beyond the physical branch (e.g. on-line banking) and beyond normal banking business hours (Gomber et al., 2018). In the global insurance industry, the advent of peer-to-peer business models means that customers and insurance companies can now contact each other directly, without the need for an intermediary (Giles, 2016). This means that unless the intermediaries change their way of working or service offering, they will become obsolete.

HEIs, learners and employers have also been affected by the disruption of the digital age (Smith, 2017). Ever increasing costs, new ways of learning as a result of digitalisation and student population changes have caused HEIs to reconsider their physical footprint, budgets and their academic offering (Smith, 2017). The changes include new methods of programme delivery, the rise of "online social learning" where learning occurs on social platforms (e.g. the rise of Massive Open Online Course (MOOCs)) and the reduction of on-campus facilities to deliver education (Gore, 2014; Morris, 2016; Purcell, 2014; Smith, 2017).

Various types and causes of disruption across the world have had significant effects globally, regionally and locally across all sectors of the economy including HEIs and in South Africa. The rate, diversity and amount of disruption have impacted on organisation structures, job obsolescence, markets, products, services (including higher education) and consumer behaviour (including student behaviour and needs). More importantly, it seems that disruption is going to become the order of the day as technology advances even further, economies become pressurised to deliver more to

the poorer populations of the world, declining natural resources and the drive towards a green economy. All these factors will arguably place greater demands on HEIs to provide graduates that can find solutions to the effects of these disruptions. This arguably means that leaders in HEI must not only themselves lead their institutions in times of disruption but also become innovative in the way they produce graduates that will help the world of work anticipate and counter the effects of disruption.

Adam et al. (2015) state that it is critical for South African HEIs to implement new technologies (e.g. emergence of cloud computing) to improve research (e.g. data analysis), teaching and learning. They posit that certain cloud functions such as e-mails, multi-media technologies (e.g. YouTube) and storage capabilities can be used for teaching and learning because it has several advantages including remote access to learning material and exposing students now to engage with these technologies in preparation for their entry into the workplace (Adam et al., 2015).

Ng'ambi, et al. (2016) highlighted that students are increasingly gaining access to and engaging with smart phones along with a variety of applications which has resulted in a higher rate of students being connected to the internet than before. Additionally, the emergence of the wireless and mobile technologies has changed learning and knowledge production to become more collaborative and interactive (Ng'ambi et al., 2016). However, Ng'ambi et al. (2016) state that unequal resource allocations to poor and rural communities, a wider delivery mechanism of Higher Education to reach more students and how to respond to an increasing need for on-line learning are some of the factors that South African HEIs will need to address to improve their efficiency using technology.

Jaffer et al. (2007) applied information technology to develop mathematical skills and academic literacy course in economics in large student classes at UCT and found that they improved learning amongst participating students. Hough and Neuland (2013) state that new information technologies will allow improve the delivery of Higher Education in South Africa. However, HEIs will need to investigate the viability of the new technologies, academics will constantly need to determine how curricula can be adapted to take advantage of these new technologies to create a stimulating learning environment and students will select HEIs based on their abilities to use technologies

to enhance their studies (Hough & Neuland, 2013, Naidoo et al., 2013; Takavarasha, Cilliers & Chinyamurindi, 2017).

At the end of 2019 a new disruption in the form of the Covid-19 pandemic emerged and spread quickly across 213 countries across several regions including Africa, America, Asia and Europe (Department of Health, 2020; WHO, 2020). More specifically it impacted South Africa to the extent that a nationwide lockdown was implemented from midnight 26 March to 30 April 2020 to prepare the country to reduce the spread and impact of the pandemic (Department of Corporate Governance and Traditional Affairs, 2020; Department of Health, 2020, The Presidency, 2020).

The nationwide lockdown included the closure of all South African HEIs, including their residences (Department of Higher Education and Training, 2020). All HEIs were expected to review their operations and the way in which they could deliver academic content for the remainder of the year (Department of Higher Education and Training, 2020). The HEIs needed to consider a range of factors including converting academic programmes and assessments to online platforms, access to on-line learning for previously disadvantaged students, student familiarity with the internet and the concepts of on-line learning and which programmes can be delivered remotely through online technology (Department of Higher Education and Training, 2020; Mathiba, 2020; Shoba, 2020).

3.3.3.2 Implications of disruption

The causes of disruption discussed above have had several implications, especially when considering the advances in digitisation, rise of the platform economy, other new technologies and globalisation.

a. Policy and regulations

One area affected is that of current policy and regulations (Biber et al., 2017). Developments such as Uber, Air Bed and Breakfast (Air B&B) and Teslar electric vehicles have provided challenges to existing policy and regulations within their industries because the nature of their product or service does not fit in with the

current regulations and policies (Biber et al., 2017). Biber et al. (2017) argues that regulators would need to think about ways to design policies and regulations that support rather than restrict innovation and innovative organisations going forward. The current rise of the use of drones in private and commercial settings is another area where current policies and regulations have not yet adjusted fast enough in this regard, when considering aviation safety, privacy and security at large (Marcontell & Douglas, 2018).

b. Organisational changes

Gomber et al. (2018) argues that the financial services industry is also adapting to changing customer needs because of advances in digital technology because they are increasingly using on-line banking products and service. The implication is that organisational structures, facilities and employees must adjust to deliver this new type of customer service (Gomber et al., 2018).

c. New products and services

Kaivo-oja and Lauraeus (2017) state that disruptive technologies (i.e. mobile internet, cloud technology and 3D printing) have changed patterns of consumption, given rise to a new type of entrepreneurship and have resulted in many new products and services. In other words, disruptions drive organisations to reflect on where they are and what they need to do to adapt to the new environment. Doing things in the same way will not yield the same results but could rather result in failure. Block (2016) agrees and states that disruption stimulates an evolutionary creative process within organisations where knowledge-sharing and social interaction is key to creating an innovative culture.

Christensen (1997) and Denning (2016) state that some very successful companies failed because they followed management techniques, organisation structures and used capabilities that made them successful in the past, but which do not work in dealing with the disruptive technological change. They argue that the managers of those companies need to recognise that those capabilities were only applicable to and successful in certain conditions, which are different from

those needed in dealing successfully with technological disruption (Christensen, 1997; Denning; 2016).

d. Group development

Another area that is affected by disruptive technologies is group development (Garfield & Dennis, 2012). Garfield and Dennis (2012) argue that the introduction of new technology (e.g. a collaborative technology such as e-mails, video conferencing) influences how group development occurs because different groups and individuals have their own routines, which govern the way they do things and interact. When a collaborative technology is introduced, that connects different individuals or groups to form a group or new group, their existing routines may be disrupted if they are different (Garfield & Dennis, 2012). The group will therefore first need to agree on how to integrate the new technology into the group before they can start working (Garfield & Dennis, 2012).

e. Digital competence

In a study by Gartner (2018), they reported that 578 CEOs agreed on the disruptive impact of digitisation and the need to become digitally competent in order to remain competitive. However, 501 organisations believed that they were not yet ready for the digital challenge because they did not have the required digital skills. What is needed are leaders who drive network performance where the leader does not have all the answers but develops a collaborative model that enhances relationships, promotes collaboration, enables collaborative development, fosters peer recognition, encourages peer to peer coaching and makes it easier for everyone to work together (Gartner, 2018).

f. South African HEIs

Within the higher education sector, disruptive technology, changing funding models and changing student expectations have caused HEIs to be more attentive to the student experience, become more focused on their brand image, reconsider traditional programme delivery methods, and necessitated changes to the way

things were done in general to remain relevant (Morris, 2016; Purcell, 2014). Therefore, innovation to the structure, content, and assessment of the curriculum has become critical (Morris, 2016; Purcell, 2014). The researcher is also of the view that within HEIs and HEIs in South Africa specifically, the rise of MOOCs, reduced funding, increased student expectations and the way the content of qualifications are delivered and accredited may necessitate the review of current regulations, content practices and structures for delivering Higher Education (Gore, 2014; Morris, 2016; Purcell, 2014; Smith, 2017). The aforementioned is particularly important to ensure adequate quality control and delivery of relevant and affordable qualifications to the nation.

From a systems perspective it is evident that disruptions in the broader world such as changing customer expectations, changing service delivery models, technological advances (which include digitalisation and the internet), globalisation, climatization and the rise in the platform economy have implications for all organisations in all sectors especially if they want to grow and succeed. The way organisations are structured, the skills and talent required, their systems and technology, the access and interaction with and to clients and their ability to contribute to local and international stakeholders will be critical to their success. Above all, the ability of leaders to define and implement a vision and strategy to enable them to successfully respond to this ambiguous and ever-changing environment will be critical. Research by Hurth (2017) and Gartner (2018) appear to be of a similar view and state that organisations are under pressure to relook at how they are perceived and must follow an integrated system view to ensure that they provide value to society and to the shareholders.

HEIs in South Africa also exist within this ever-changing and disruptive environment and will therefore need to review their service offering and structure to remain relevant, a view which is supported by several researchers (Altbach et al., 2009; Friedman & Edigheji, 2006; Jameson, 2012; Kimberly & Bouchikhi, 2016; Tonini et al., 2016; Watson & Watson, 2013). It is therefore evident that organisations will need significant leadership capabilities to design a vision and strategy that will enable them to succeed in this disruptive, VUCA environment, which includes leaders in South African HEIs. What is also evident is that current

leadership capabilities may not be relevant to succeed in a VUCA environment, including within higher education, however current research does not appear to have identified capabilities that are most relevant for success in disruptive times.

Overall, rapid change and disruption have created a VUCA world wherein all organisations, including HEIs in South Africa must constantly assess, predict, prepare and adjust to remain relevant and successful. Leadership is a critical element in providing direction and creating a collaborative and flexible organisation that can successfully respond during such times. Therefore, having the appropriate capabilities to lead successfully in South African HEIs in rapid change and disruption arguably becomes a necessity rather than an optional extra.

In his article, “Disrupting ourselves: the problem in higher education”, Bass (2012) states that higher education needs to put the student at the centre of learning and drive participative learning. The reasons, he argues, are that much learning takes place informally through the internet, students need to learn to practice the discipline knowledge and it is necessary from early in their studies to think critically about problems in their domain of study (Bass, 2012). He adds that students can use new technologies such as Twitter, blogs and Wikis can enable students to collaborate in critical thinking (Bass, 2012). He concludes that higher education managers must guide and reshape curricula so that learning experiences bridge the classroom and external environment to enhance experiential learning (Bass, 2012).

The above sections respectively discussed the various disruptions that have affected the world, Africa, South Africa and South African HEIs, as well as their implications.

3.4 SUMMARY

In the context of this research, rapid change was defined as any situation that required organisations to suddenly think, behave and perform in a way that was significantly different or new compared to the way they used to. Disruption was defined as any situation that significantly affected organisational efficiency, performance and sustainability in that it required a new way of doing and thinking because current

knowledge, methods, products and/or services were obsolete or vastly ineffective. The difference between the two concepts is that rapid change may not necessarily cause disruption even though it may require a totally different way of doing things whereas disruption, which is not always rapid, does disrupt the environment in which it occurs even it is only after some time (Bass, 2012; Christensen, 1997).

What is important is that rapid changes and disruptions have impacted all sectors and parts of the world including Africa, South Africa, higher education and South African HEIs. What is equally important is the impact of changes within the South African political arena, economy, social demands, technology, climate changes and changes in higher education which require leaders in higher education to implement radically different ways to conceptualise, deliver and manage their institutions. Jansen (2004) concur that South African HEIs have made progress but need to do a lot more if they want to transform and remain competitive. From a transformation perspective, the South African Human Rights Commission report on transformation with South African HEIs found that there has not been much progress in the past 20 years (South African Human Rights Commission, 2016). They too state that HEIs need to do things differently and take action that will transform South African HEIs (South African Human Rights Commission, 2016).

The successful implementation of change and transformation is dependant to a large extent on leadership to understand and articulate the need for and direction of the change, facilitate the formulation of the goals and plan, communication and obtaining buy-in for the change, implementing and driving the change and evaluating and rewarding progress made in achieving the change objectives (Kaplan & Norton, 2001; Kotter & Cohen, 2002; Maartins & Geldenhuys, 2016). This arguably implies that leaders will require certain competencies to implement the change successfully. In the case of dealing with rapid change and disruption, these competencies may differ even more given the speed with which they can occur along with the impact. A further implication is that leaders within South African higher education will need to possess the competencies to lead successfully in times of rapid change and disruption. This becomes arguably of significant importance in a time when leaders within SA HEIs are grappling with wanting to maintain their academic autonomy versus being forced to adopt a managerialism, capitalism-based practices where they are now required to

plan, budget, measure, report and account for how they lead their institutions (Jansen, 2004; Mabokela & Mlambo, 2017; Ntshoe et al., 2008; Zembylas, 2018). Even though the change to the way HEIs and the curricula are formulated and managed has been around since the start of 2003, there is still evidence that leaders in HEIs are grappling with the transition (Jansen, 2004; Mabokela & Mlambo, 2017; Ntshoe et al., 2008; Zembylas, 2018).

While a few studies were found on leadership capabilities required to lead in SA HEIs (Herbst, 2007; Ngcamu & Teferra, 2015; Williams & Gardener, 2012 & Zulu, 2011), none were found that directly and specifically focus on the leadership capabilities required to lead successfully in SA HEIs during rapid change and disruption. Therefore, this study aimed to do develop a capability theory and model for leaders in SA HEIs.

CHAPTER 4: RESEARCH DESIGN AND METHODOLOGY

4.1 INTRODUCTION

The preceding chapters set out the background and purpose of this research along with a detailed explanation of key concepts which are leadership, rapid change and disruption within SA HEIs, in an ever changing and dynamic global environment. The aim being to establish a leadership capability theory and model to lead successfully within SA HEIs during rapid change and disruption. In this chapter, the ontology, epistemology, theoretical paradigms, research methodology, research design, research methods, instruments, data collection (i.e. analysing, capturing, process, reason for data collection procedure), data quality (e.g. issues, reliability, validity, objectivity) and reporting of results are discussed (Creswell, 2009; Gray, 2004; Mouton & Marais, 1992; Mouton, 2016).

4.2 ASSUMPTIONS

4.2.1 Ontological assumption

Ontology is concerned with our beliefs about things that exist within the world (i.e. reality), expressing the form, nature and structure of what we know about reality while using certain rules or specifications to clarify and understand the meaning of that information – to put things into categories (Antwi & Hamza, 2015; Bailey, 2007; Gray, 2004; King & Horrocks, 2010; Potter, 2017). Ontology is concerned whether things exist and whether they exist apart from and independent of our perceptions of them; in other words what is the nature of what we call “reality” (Creswell & Plano Clark, 2011; King & Horrocks, 2010; Potter, 2017).

4.2.2 Ontological assumptions

The various ontological assumptions are discussed below.

4.2.2.1 *Objectivism*

Objectivists argue that reality exists independently from any social construction (Bailey, 2004; Gray, 2004). In other words, reality exists “no matter what” and is independent from any meaning or interpretation which could be subjectively constructed or imposed onto it, and which can be objectively measured (Bailey, 2004; Gray, 2004). Objectivists strive to provide objective, unbiased knowledge which has not been influenced by the researcher in any way (King & Horrocks, 2010).

4.2.2.2 *Social constructivism*

Social Constructivists argue that individuals want to understand the world in which they exist (Creswell, 2009; Gray, 2004). As a result, individuals develop meaning about their experiences within the world they live and work; their context (Creswell, 2009; Gray, 2004). In other words, they construct their reality from the experiences they gather while interacting with others and the environment in which they work and live (Antwi & Hamza, 2015; Creswell, 2009; Gray, 2004, Potter, 2017). For example, the concept of a manager has evolved over time and was constructed through individuals' views of what a manager is and does (Creswell, 2009; Gray, 2004; Maylor & Blackmon, 2005). The aim then, of the researcher is to make sense of and understand the phenomenon being studied through the views of the participants (Antwi & Hamza, 2015; Creswell, 2009; Gray, 2004; Maylor & Blackmon, 2005). Therefore, they do not start with a theory but generate or develop a theory from interpreting the provided to them by the participants, while remaining unobtrusive and neutral (Antwi & Hamza, 2015; Creswell, 2009; Gray, 2004; Maylor & Blackmon, 2005).

Pauw (1997) argues that researchers in human sciences (e.g. Physics) need to understand the rules and context of their domain as well as those of the participants involved in the phenomenon under investigation. One cannot simply observe it from the outside; the researcher must be “inside the situation” to investigate it (Pauw, 1997).

4.2.2.3 *Subjectivism*

Subjectivists construct meaning from what they perceive to be real and impose it onto the object (Feast & Melles, 2010; Gray, 2004). There is no interplay between what an individual perceives to be real and the true reality (Feast & Melles, 2010; Gray, 2004). Furthermore, dreams and religious beliefs, for example, form the basis of their perceptions (Feast & Melles, 2010; Gray, 2004). As a result, what the person perceives is what is accepted as being real (Feast & Melles, 2010; Gray, 2004).

4.2.3 Ontological paradigm followed in this research

The aim of this research was to identify the capabilities needed to lead successfully in South African HEIs during times of rapid change and disruption. At present little research could be found that clearly identifies the capabilities needed to lead successfully in South African HEIs during times of rapid change and disruption.

In order to achieve the research aim, the researcher adopted a social constructivist paradigm in order to immerse himself into participant's "world in which they work" to identify, understand and describe the capabilities needed to lead successfully in South African HEIs during times of rapid change and disruption, through their eyes – their lived experience in their context (i.e. reality) (Antwi & Hamza, 2015; Creswell, 2009; Gray, 2004; Maylor & Blackmon, 2005; Pauw, 1997). Following an objectivist or subjectivist paradigm would not enable the participants' lived experience to be recorded as because objectivists look "objectively from the outside in" and believe that there is an objective - hard reality external to everything else (Bailey, 2004; Gray, 2004). That would mean that the researcher would not have been able to immerse himself into "their world". On the other hand, subjectivists impose meaning onto the phenomenon (Bailey, 2004; Feast & Melles, 2010; Gray, 2004).

In the case of subjectivism, the researcher would by implication impose his meaning of leadership capabilities, based on his beliefs, religion and so forth, onto the phenomenon. Both of those paradigms would therefore not allow the lived experience to emerge (Antwi & Hamza, 2015; Creswell, 2009; Gray, 2004; Maylor & Blackmon, 2005). Nor would they arguably enable a variety of diverse narrative experiences of

that reality to emerge (i.e. more than one reality) from the different research participants, which would enable the researcher to make meaningful connections in identifying the leadership capabilities required (King & Horrocks, 2010; Pauw, 1997).

4.2.4 Axiological assumptions

Axiology has to do with basic beliefs, values and ethics and how they influence the research process (Bailey, 2007; Denzin & Lincoln, 2008; Denzin & Lincoln, 2018). Creswell & Plano Clark (2011) argue that values play different roles depending on the worldview adopted for the research project. For example, in research that adopts a postpositivist worldview, values are unbiased – there is one reality, and researchers implement checks to eliminate bias (Creswell & Plano Clark; 2011). However, if research adopts a participatory worldview where reality is negotiated within a political context and values negotiated (Creswell & Plano Clark; 2011). According to Tucker (2018) the value of something has to do with the intrinsic and non-intrinsic value which individuals attach to it (e.g. someone feels happy because of their friendship with another, sense of satisfaction because you own a rare painting).

Hatzimoysis (1997) argues that the value we attach to something is attributed to the natural characteristics of that thing and the sentiments which those characteristics stimulate within us. The result is that we make judgements about those things and our values are expressed through our attitudes towards those things (Hatzimoysis, 1997). Bailey (2007) and Creswell (2011) appear to concur with Hatzimoysis (1997) and Tucker (2018) because they show how values adopted by different worldviews show what is of value to them as evidenced by the different methodologies and ontologies, for example (e.g. Postpositivist adopt an unbiased approach and believe in a single reality while following a deductive methodology whereas pragmatists believe in single and multiple realities and adopt a biased and unbiased view and combine qualitative and quantitative methodologies).

The researcher's values or worldview influence the choice of questions, how they are formulated, how data is interpreted and reported (Creswell, 2012; SOBT, 2017). Therefore, this researcher acknowledged that the choice of worldview influenced the choice of research design and methodology, data collection process and techniques,

data collected and data analysis (Creswell, 2012; SOBT, 2017). As a result of the research being value-laden the researcher reported his values, biases and worldviews, and described their impact on the research (Creswell, 2012; SOBT, 2017).

4.3 EPISTEMOLOGICAL ASSUMPTION

Epistemology is concerned with the study of human knowledge; what it means to know “something” – a search for the truth that is certain and unquestionable (Mouton, 2016; Mouton & Marias, 1992). It focusses on how we know what reality is and what knowledge is and is not considered as valid, reliable and enough “evidence” of that reality (i.e. truthful knowledge) (Feast & Melles, 2010; Gray, 2004; Maylor & Blackmon, 2005; Mouton & Marias, 1992; Willis, 2007).

4.3.1 World views

Within epistemology there are various world views, positions, perspectives or dimensions that have emerged regarding the “search for the truth” (Gray, 2004; Maylor & Blackmon, 2005; Willis, 2007; Mouton & Marias, 1992). The world views (positions, perspectives or dimensions) are as follows:

4.3.1.1 Positivism and post positivism

According to positivism, what we consider to be reality is a result of what we can see, taste, hear, smell and touch through our senses (Gray, 2004; Maylor & Blackmon, 2005; Willis, 2007; Mouton & Marias, 1992; Mouton, 2016; Potter, 2017). Knowledge is gained through scientific observation based on empirical enquiry using traditional, objective scientific methods which can be empirically tested and verified, based on the natural sciences (i.e. knowledge was produce by accumulating observable and verifiable facts or truths such as size, shape) (Creswell, 2009; Gray, 2004; Maylor & Blackmon, 2005; Willis, 2007; Mouton & Marias, 1992; Mouton, 2016). Positivist researchers see themselves external to the world and observe the world objectively through focusing on the facts and formulating and testing hypothesis (i.e. deductive) (Gray, 2004; Creswell, 2009; Mouton, 2016, Potter, 2017). Positivists adopt an objectivist epistemological view in that they saw reality there as being external and

objective to themselves (Gray, 2004; Creswell, 2009; Snyman, 1997). Positivists followed the strict laws of enquiry used by the natural sciences when studying the social sciences to generate knowledge (Gray, 2004; Willis, 2007). However, even when operating according to strict positive laws of enquiry, positivists could still not explain matters such as black holes and subatomic particles in space which cannot be directly observed. To positivists, researching social phenomena can be done using the same strict laws and objective methods used when studying the natural sciences (Ma, 2015). Thus, the problem with positivism was that scientific research could not account for that which could not be empirically observed and verified through the senses (e.g. black holes in space) (Gray, 2004; Faure & Venter, 1997; Hwang, 2019).

Post positivists argued that we cannot be completely sure about our knowledge when we study human behaviour and actions; the absolute truth (Creswell, 2009; Gray, 2004). A researcher had to become actively involved in criticising, constructing and validating of a theory developed to explain an observed phenomenon. Simply relying on passive observation of the facts was not enough (Creswell, 2009; Gray, 2004; Hwang, 2019). Post positivists were interested in identifying and assessing the causes that influence the results (Creswell, 2009; Gray, 2004; Hwang, 2019). Post positivists do not agree with the positivists' view that social reality is objective, independent, rational, impersonal and so forth. They focus on identifying and evaluating the causes that influence to results (Creswell, 2009). Post positivists argue that human societies have unique characteristics such as rules, norms, symbols and values, which are constructed by them and are different from those of nature (Ma, 2015). Furthermore, these rules, norms, values and symbols have many layers and can change or be challenged (Ma, 2015). Therefore, post positivists start with developing a theory about a phenomenon and then apply strict laws, methods, numerical measures and methods to collect data to confirm or reject their theory (Creswell, 2009; Gray, 2004).

Popper (2010) argued that one cannot prove theories to be true; one can only prove them to be false (Gray, 2004; Faure & Venter, 1997). This meant that by testing a theory through observation they were either proved to be false or they resulted in new laws, which had not yet been disproved (Gray, 2004; Snyman, 1997). Finding the absolute truth is not possible (Creswell, 2009).

4.3.1.2 *Interpretivism*

Interpretivism is concerned with understanding and explaining how people experience the world in their day-to-day lives (Bailey, 2007; Creswell, 2009; King & Horrocks, 2010). Individuals' meanings are usually because of their interaction and experience with the others within their world (e.g. their culture and norms; their history) which influence them (Bailey, 2007; Creswell, 2009; King & Horrocks, 2010). Interpretivists believe that there is more than one reality which is created by individuals as they interact with others and their environment (Bailey, 2007). The researcher therefore focuses on understanding the meanings, beliefs, feelings, social environment, relationships and mechanisms individuals use to make sense of the world in which they live and work (i.e. their social world) (Bailey, 2007; Creswell, 2009; King & Horrocks, 2010, Willis, 2007). By doing so the researcher is better able to make sense of the individual's world (Creswell, 2009). The following are examples of approaches within interpretivism (Gray, 2004):

- (1) Phenomenology (i.e. understanding individuals' lived experiences by being immersed in their world).
- (2) Hermeneutics (i.e. interpretation of texts and social actions).
- (3) Naturalistic Inquiry (i.e. drawing inferences which are used to describe individual to cases by understanding them within their environment) are examples of the interpretivism.

4.3.1.3 *Critical inquiry*

Researchers who follow the critical enquiry perspective focus on questioning values, assumptions and important social issues that influence and marginalise individuals, and advocate on their behalf (Bailey, 2007; Creswell, 2009, Creswell & Plano Clark, 2011; Gray, 2004). Factors such as inequality, oppression and domination have affected the individuals' lives and have been shaped by political, social, economic, historical and/or cultural factors (Bailey, 2007; Creswell, 2009, Gray, 2004). These researchers focus on working with the participants to create a picture of their social

situation so that the researcher can advocate for change to improve their lives (i.e. they construct a picture of the participants' currently reality with the aim to guide appropriate action to improve the situation) (Bailey, 2007; Creswell, 2009, Creswell & Plano Clark, 2011; Gray, 2004).

4.3.1.4 *Pragmatism*

Pragmatists are interested in studying the consequences (i.e. that which is experienced – reality) of interactions between individuals and their environment, context or situation (Creswell, 2009; Denzin & Lincoln, 2018; Tebes, 2012). To them everyone's experience (i.e. consequences - reality) may be different because we don't all interact with the environment in the same way (Creswell, 2009; Tebes, 2012). Researchers who follow the pragmatist perspective focus on understanding the factors that influence human behaviour within a situation or context (e.g. political, social, historical), which results their experiences (Creswell, 2009; Tebes, 2012). To pragmatists, knowledge is created in specific situations and there is an external world which is independent of our mind even though we perceive it within our minds (Creswell, 2009; Tebes, 2012). They argue that knowledge is created because of those experiences (i.e. consequences) which influence individuals to act more effectively in future (Tebes, 2012). Pragmatists argue that it is not possible for research to achieve "objective or absolute truth" because of different situations and the different experiences by different people in those situations (Creswell, 2009; Tebes, 2012).

4.3.1.5 *Epistemological perspective followed in this research*

In this study, the researcher followed a phenomenological approach, within the interpretive epistemological perspective. Adopting a phenomenological approach, within the interpretive epistemological perspective enabled the researcher to immerse himself into the participants world of work (i.e. their environment) to identify, understand, interpret and describe what they believe are the capabilities needed to lead successfully within South African HEIs during rapid change and disruption (Bailey, 2007; Creswell, 2009; Gray, 2004; King & Horrocks, 2010). In this way the researcher was able to concentrate on understanding participants' meanings, beliefs, feelings, social environment, relationships and mechanisms used to make sense of what they

believed those capabilities should be in the “world in which they live and work”, which was their specific South African HEI (Bailey, 2007; Creswell, 2009; Gray, 2004; King & Horrocks, 2010).

Using a positivistic or post positivistic research perspective would not enable the identification, understanding and description of the capabilities required to lead successfully during rapid change and disruption in South African HEIs (Gray, 2004; Creswell, 2009; Hwang, 2019). Nor would the researcher be able to immerse himself into the participants’ world to understand the phenomenon from the “inside”. That is because positivistic or post positivistic research perspective focusses observing from the “outside in”, identifying and evaluating the causes of the outcome or results according to strict rules and formulating theories and hypothesis which can be falsified (i.e. identifying and evaluating the causes of the leadership capabilities required) (Gray, 2004; Creswell, 2009; Hwang, 2019, Ma, 2015).

In this research the focus is not on the causes of the phenomenon but on identifying, understanding and describing the phenomenon itself through the participant’s lived experiences (i.e. leadership capabilities required to lead successfully in South African HEIs during times of rapid change and disruption) (Bailey, 2007; Creswell, 2009; King & Horrocks, 2010). Similarly following a critical inquiry or pragmatist perspective would not enable the identification, understanding and description of the capabilities required to lead successfully during rapid change and disruption in South African HEIs (Bailey, 2007; Creswell, 2009, Creswell & Plano Clark, 2011; Denzin & Lincoln, 2018; Gray, 2004; Tebes, 2012). This is because critical inquiry focuses on the social situation of marginalised groups with the aim of advocating for the betterment of their situation and pragmatism focuses on understanding the factors that resulted in the participants experience (Bailey, 2007; Creswell, 2009, Creswell & Plano Clark, 2011; Denzin & Lincoln, 2018; Gray, 2004; Tebes, 2012). Once again both perspectives’ aims are not the focus of this research.

This research did not only focus on marginalised groups or only on the factors that resulted in the participants’ experience. However, the researcher did encounter both though by immersing himself into their world; their lived experience to identify,

understand and describe the capabilities required to lead successfully during rapid change and disruption in South African HEIs.

4.4 RESEARCH DESIGN AND METHODOLOGY

4.4.1 Research design

Empirical knowledge is that which we gain through our senses of touch, taste, hearing, smell and seeing while interacting with the world around us (i.e. a result of the activities of people and organisations which relate to the real world) (Maylor & Blackmon, 2005; Passer, 2017). Gray (2004), Creswell (2009), Maylor and Blackmon (2005) and Mouton (2016) describe several types of empirical studies including ethnographic research (i.e. observation, case studies), participatory action research, surveys, comparative, cross-cultural and cross-national studies, experimental designs, mixed methods, natural experimental designs, content analysis and methodological studies as methods to collect empirical data.

This research project followed a participative action research design to identify, understand and describe the leadership capabilities required to lead in South African HEIs during times of rapid change and disruption (Mouton, 2016). This design allowed the researcher to be part of the participants' world of work and for them to express their views on the leadership capabilities required without the researcher placing his subjective interpretations and views onto them (Mouton, 2016). The research design followed a qualitative approach using semi structured interviews and focus groups to gather the data (Creswell, 2009; Gray, 2004; Maylor & Blackmon, 2005).

4.5 RESEARCH METHODOLOGY

4.5.1 Types of research methodology

There are generally three methodologies associated to conducting research namely, qualitative, quantitative and mixed methods (Creswell, 2009). Quantitative research is concerned with "testing theories" about the relation between variables which are measured using numbers so that the relationship between them can be analysed and

described using numerical data and numerical analytical procedures (Creswell, 2009; Passer, 2017). Quantitative methodologies are focussed on producing generalisations and predictions (i.e. they use deductive reasoning) that can be applied to other situations or people (Leedy & Ormrod, 2015).

Qualitative research is concerned with non-statistical analysis of data through understanding and exploring the relations: it is focussed on achieving a better understanding, which could include building a theory from the bottom up (Denzin & Lincoln, 2018; Leedy & Ormrod, 2015; Passer, 2017). The researcher extracts general themes from the data that has been collected and then makes interpretations about the data (they use inductive reasoning) (Creswell, 2009; Leedy & Ormrod, 2015; Passer, 2017). The mixed method approach combines the strengths of quantitative and qualitative methodologies to collect and analyse data to investigating a research problem so that the overall outcome is greater than if the study were only qualitative or quantitative (i.e. it provides a holistic approach) (Creswell, 2009; Creswell & Plano Clark, 2011; Passer, 2017). The mixed methods approach enables the simultaneous identification, understanding and description of phenomena on the one hand and the objective measurement and analysis while using one of the mixed methods strategies (i.e. using qualitative and quantitative methods at the same time, quantitative first or qualitative first) (Creswell, 2009; Creswell & Plano Clark, 2011; Leedy & Ormrod, 2015). Furthermore, where quantitative research may be concerned with cause-and-effect relationships, qualitative research is concerned with exploring, verifying, developing theories, identifying problems and/or evaluating phenomena (Leedy & Ormrod, 2015). The qualitative approach includes various methodologies including hermeneutics, storytelling, heuristic inquiry, case study and grounded theory (Gray, 2004; Leedy & Ormrod, 2015; Willis 2007).

Some of the more frequently used methodologies are discussed below (Gray, 2004; Leedy & Ormrod, 2015).

4.5.1.1 Case study

Using the case method, the researcher studies a certain situation, event, individual or group to contribute to the understanding of that phenomenon in relation to the context

in which it exists (Gray, 2004, Leedy & Ormrod, 2015; Willis, 2007). Furthermore, case studies concentrate on a specific context and involve the collection of various sources of information including observations, interviews and audio-visual material (Leedy & Ormrod, 2015; Willis, 2007). According to Leedy and Ormrod (2015), the case study method is appropriate when the researcher would like to discover more about a phenomenon that is not well known or understood, or where you wish to understand a change over time as a result of a particular programme that has been implemented.

4.5.1.2 *Ethnography*

In ethnographic research, the researcher concentrates on studying the culture of a group from the inside their context (Gray, 2004, Leedy & Ormrod, 2015; Willis, 2007). The researcher concentrates on group members' behaviour in relation to each other (e.g. language, how they interact) to identify various aspects of the culture including values, norms, beliefs, social structures) (Leedy & Ormrod, 2015). Gray (2004) states that researchers who use ethnography focus on the language used within a certain culture. Gray (2004) adds that in ethnography, observation is the main source used to collect data, which is usually conducted at certain sites, with as many possible participants as possible. The researcher establishes trust relationship with the participants so that they behave as naturally as possible as they interact within their environment (Gray, 2004). Therefore, as Leedy and Ormrod (2015) argue, ethnography is an effective way to obtain insight and understand the intricacy of certain group.

4.5.1.3 *Phenomenology*

In phenomenology, the focus is on individuals' interpretations or perceptions of what a certain event or situation means to them, irrespective of how it exists outside of them (Leedy & Ormrod, 2015). Phenomenology therefore aims to understand the participant's world through understanding their lived experiences (Gray 2004, Willis, 2007). The researcher aims to identify the crux of a phenomenon through exploring the lived experiences and perceptions of the participants in their day-to-day life and environment (Creswell, 2009; Willis, 2007). During the research, researchers do not impose their knowledge, opinions or experiences onto the participants' lived

experiences of that phenomenon (Creswell, 2009). Instead, the researcher continuously tries to suspend or withhold their prior knowledge or experience while conducting data collection (Leedy & Ormrod, 2015). Furthermore, phenomenological researchers collect rich data while trying to understand what is going on in the participants' environment in relation to the phenomenon being studied (Gray, 2004). Phenomenologists argue that as people we are always aware (i.e. conscious of what we see and feel towards an object or situation) (King & Horrocks, 2010; Snyman, 1997). According to them, in trying to understand and interpret any phenomenon, we need to find out what people experienced and how they experienced it (King & Horrocks, 2010; Snyman, 1997). They argue that people always pay attention to what they experience and how they experience it (King & Horrocks, 2010; Snyman, 1997). Finally, phenomenological research is also inductive because contributes to the construction of models and theories that will enhance the understanding of the phenomenon from the rich data they obtain from the participants (Gray, 2004).

4.5.1.4 *Grounded theory*

In grounded theory research the aim is to enhance insight about a phenomenon and the social process related to it by developing a theory which emerges from the data as it is collected (Heath & Cowley, 2004; LaRossa, 2005; Leedy & Ormrod, 2015). In other words, the researcher starts with the data and a theory which aims to explain the phenomenon and related social process, emerges during the process of collecting and analysing the data (Gray, 2004; Leedy & Ormrod, 2015; Maylor & Blackmon, 2005; Willis, 2007). Grounded theory allows researchers to discover additional or new insights about a phenomenon particularly when current theories or research about it are insufficient or do not exist (Heath & Cowley, 2004; LaRossa, 2005; Leedy & Ormrod, 2015; Gray, 2004).

Grounded theory is inductive because concepts and theory emerge from the data as the researcher constantly moves back and forth in the data (Heath & Cowley, 2004; Lawrence & Tar, 2013). As such, it is an iterative process, where the researcher makes constant comparisons across all insights that emerge and constantly asks questions about the data during the collection and analysis of the data (Heath & Cowley, 2004; Lawrence & Tar, 2013). Importantly, all concepts and theory which emerge must be

backed up by data that can verify them (Eisenhardt 1989; Glaser, 1978; Glaser & Strauss, 1967; Gray, 2004; Lawrence & Tar, 2013; Willis; 2007). Furthermore, while it is important for the researcher to have sufficient knowledge of the discipline within which the phenomena are located, they must guard against being so caught up in the literature that it prevents them from allowing the theory to emerge from the data and impose a theoretical model from the literature onto it instead (Gray, 2004; Lawrence & Tar, 2013).

Strauss (1987) argues that the personal experience of the researcher about the phenomenon being researched, as well the influence that literature may have on them, may be useful to the researcher because they could help them clarify concepts and contribute to their hypothesizing about the phenomenon. However, Becker (1993) and Lawrence and Tar (2013) emphasise that researchers must think beyond the literature and remain open and flexible to how the context of the phenomenon being studied is given meaning and interpreted by the participants in that context. In other words, researchers must work with participants to ensure that the data they collect captures their lived experiences of their world, as expressed by them (Becker, 1993, Chiovitti & Piran, 2003; Gray, 2004; Leedy & Ormrod, 2015). The researcher must examine the data (i.e. participant lived experiences) for the theory around that phenomenon to emerge and develop – the theory is grounded in the data (Becker, 1993, Chiovitti & Piran, 2003; Gray, 2004; Leedy & Ormrod, 2015; Willis, 2007). Chiovitti and Piran (2003) suggest several ways in which researchers using grounded theory can improve the credibility of their research, including the following:

- (1) The participants should guide the research process.
- (2) The actual words spoken by participants must be used in the theory that is developed.
- (3) The researcher's own views, thoughts and insights regarding the phenomenon must be constantly tracked, checked, reviewed, and explained.

In grounded theory, the researcher gathers and analyses data systematically (i.e. they are intertwined) with data analysis commencing almost straight away (Gray, 2004;

Lawrence & Tar, 2013; Leedy & Ormrod, 2015). Almost straight away researchers formulate certain concepts from the data, which they use to classify or group future data that is collected (Heath & Cowley, 2004; LaRossa, 2005; Lawrence & Tar, 2013; Leedy & Ormrod, 2015). Data collection continues until data saturation of that category is reached (i.e. the point at which any further data collection will provide little or no further new insights about the concepts in that category – no further indicators of the category are found) (Heath & Cowley, 2004; LaRossa, 2005; Lawrence & Tar, 2013; Leedy & Ormrod, 2015). Grounded theory researchers follow a process of coding where they closely examine and constantly compare the data (i.e. similarities and differences either sentences by sentence or data segments of between 50 to 100 words) and then categorise and name them (i.e. the data is split up into smaller bits) (Heath & Cowley, 2004; LaRossa, 2005; Lawrence & Tar, 2013; Leedy & Ormrod, 2015). The former process is called open coding (Gray, 2004; Heath & Cowley, 2004; Lawrence & Tar, 2013; Leedy & Ormrod, 2015; Maylor & Blackmon, 2005). The categories are then examined to determine the relationships, interactions and actions between the categories which results in the description of their properties, conditions and dimensions (Gray, 2004; Heath & Cowley, 2004; Lawrence & Tar, 2013; Leedy & Ormrod, 2015). This process is called axial coding (Gray, 2004; Heath & Cowley, 2004; Lawrence & Tar, 2013; Leedy & Ormrod, 2015; Maylor & Blackmon, 2005).

The third step in the coding process is called selective coding (Gray, 2004; Heath & Cowley, 2004; Lawrence & Tar, 2013; Leedy & Ormrod, 2015). In selective coding the researcher identifies the core category from the data which is used to formulate a theory that will describe the phenomenon being researched through relating and validating it to the other categories (i.e. a theory emerges that aims to describe the participants' lived experience about the phenomenon) (Corbin & Strauss, 1998; Gray, 2004; Heath & Cowley, 2004; Lawrence & Tar, 2013; Leedy & Ormrod, 2015).

4.5.1.5 *Content analysis*

Content analysis is a systematic process of objectively analysing different types of content contained by the data, usually communication between individuals in the form of text (e.g. interview transcripts, human interactions) (Gray, 2004; Leedy & Ormrod, 2015; Passer, 2017). The purpose is to identify patterns, themes, categories or areas

of bias within the data (i.e. text) so that inferences can be drawn in relation to the research question and phenomenon being researched (Gray, 2004; Leedy & Ormrod, 2015).

To ensure that the process is as objective as possible, researchers must form selection criteria or characteristics that will be used to identify and categorize the data (Gray, 2004; Leedy & Ormrod, 2015). Once researchers have identified the respective text that must be analysed and established the selection criteria, they identify and define the categories in detail that will be used to analyse the data (Gray, 2004; Leedy & Ormrod, 2015). Common classes (i.e. categories such as age, gender, race) is the first category to which researchers can link or compare the data (Gray, 2004; Leedy & Ormrod, 2015). Next, researchers also identify special classes which are the labels groups use to differentiate, for example, between events or individuals (e.g. special types of language used by certain groups that is unique to them such as doctors, teachers) (Gray, 2004; Leedy & Ormrod, 2015). Finally, researchers identify theoretical classes which could emerge during data analysis that provide key links and patterns between the categories (Gray, 2004; Leedy & Ormrod, 2015).

Once the categories have been established, the researcher examines the data for evidence of each category – they analyse the data (Leedy & Ormrod, 2015). For example, King and Horrocks (2010) state that analysing the content of interviews can identify experiences or themes that are common within and across interviews. During the data analysis process, the researcher groups and summarises the content, clarifies any content that is ambiguous and structures the content in a way that it describes key characteristics of or dimensions of the data (i.e. text) in more detail (Gray, 2004; Leedy & Ormrod, 2015).

4.5.2 The research methodology of this study: Grounded theory in qualitative research

This study followed a grounded theory qualitative research design methodology because the aim was to identify, understand and describe a theory and model of the capabilities needed to lead successfully within South African HEIs during rapid change and disruption (Heath & Cowley, 2004; LaRossa, 2005; Lawrence & Tar, 2013; Leedy

& Ormrod, 2015; Passer, 2017). Furthermore, as already discussed, little or no existing research could be found in which a theory or model of capabilities needed to successfully lead South African HEIs was presented. Therefore, a grounded theory research design was chosen for this research because it allowed additional and or new insights about a phenomenon to emerge, particularly when current theories or research about it were insufficient or did not exist (Creswell, 2009; Creswell & Plano Clark, 2011; Leedy & Ormrod, 2015; Passer, 2017). In other words, a set of leadership capabilities required to lead successfully within South African HEIs during rapid change and disruption could not be found. Grounded theory is relevant to this research because it aims to expand and/or develop a theory about a phenomenon where little or no theory or literature exists (Gray, 2004; Heath & Cowley, 2004; LaRossa, 2005; Leedy & Ormrod, 2015). In the case of this research no leadership capability theory or capability models could be found that portrays the capabilities needed to lead successfully in South African HEIs during rapid change and disruption.

Furthermore, this research was not focussed on measuring the strength to which these capabilities may or may not have been displayed, the impact on the outcomes from being displayed or absent nor any correlation between their presence or absence and the results achieved during rapid change and disruption. All of those could form the basis of future studies. A grounded theory qualitative research methodology was chosen and applied because it enabled the researcher to seek, identify, understand and describe the leadership capabilities that were required to lead successfully in South African HEIs during rapid change and disruption. It allowed the researcher to develop a theory and model by immersing himself in the participants' world, albeit momentarily, so that they could explain and give meaning to what they experience on a daily basis regarding the leadership capabilities they experience, the impact thereof and what they believe they should be (Denzin & Lincoln, 2018; Heath & Cowley, 2004; LaRossa, 2005; Lawrence & Tar, 2013; Leedy & Ormrod, 2015).

4.5.3 Population and sample

For researchers to answer their research question or hypothesis it is necessary to identify the participants, units, or elements that will provide the data for that purpose (Creswell & Plano Clark, 2011). In research, population refers to all the possible

participants, events, things, units or elements who possess characteristics of the social world and phenomena that the researcher wishes to study (Christensen, 1997; Creswell, 2009; Creswell & Plano Clark, 2011; King & Horrocks, 2010; Leedy & Ormrod, 2015; Silvia & Cotter, 2021; Maylor & Blackmon, 2005; Passer, 2017). In this research, the phenomenon was the leadership capabilities needed to lead successfully during times of rapid change and disruption within South African public HEIs. The reason for selecting the sample from the population of South African public HEIs is because all of them have been directly or indirectly influenced by several if not all of the rapid changes and disruptions, as discussed in the previous chapter, whereas private South African HEIs have arguably not been affected to the same extent. The population, therefore, was all current employees (i.e. leadership, non-leadership, academic and professional services such as Information Technology, Corporate Relations, Risk Management Services) of the South African public HEIs, who had at least six months service. Furthermore, the demographic characteristics of sample also included all races, gender, people with disability, ages from 18 to beyond 60 years old and, permanent and fixed term employees.

In many cases researchers select a representative sample of the population which contains all the essential characteristics similar or identical to the population that are relevant to the study (Christensen, 1997; Creswell, 2009; Creswell & Plano Clark, 2011; Maylor & Blackmon, 2005; Urban & van Eeden-Moorefield, 2018). The former is especially important in quantitative research where the researchers intend to generalise their research results to the broader research population (Maylor & Blackmon, 2005; Urban & van Eeden-Moorefield, 2018).

In qualitative research the researcher does not aim to achieve the same generalisation as with quantitative research and therefore does not need to apply sampling strategies that produce statically representative samples (King & Horrocks, 2010; Urban & van Eeden-Moorefield, 2018). Instead, qualitative researchers select a sample that is similar to the social context and phenomena which the research wants to study (King & Horrocks, 2010; Silvia & Cotter, 2021; Urban & van Eeden-Moorefield, 2018). Doing so should arguably enable the researcher to understand the research problem and question and enhance the trustworthiness of the research (Creswell, 2009, Gray, 2004, King & Horrocks, 2010). Denzin and Lincoln (2018) refer to the concept of triangulation

where the researcher investigates various data sources at different times, places and persons. In this research, triangulation was achieved because the sample, came from leaders and non-leaders from the sampled South African HEIs, different levels of leaders, across different provinces, from different races and genders and from academics and professional service staff (Denzin & Lincoln, 2018). As a result, this research was able to obtain a range of different perspectives, from the sampled participants, regarding what they believed were the capabilities needed to lead South African HEIs during rapid change and disruption (Denzin & Lincoln, 2018). A lack of resources, time and size of the population are often reasons why samples are chosen (Gray, 2004).

A sample is selected from a sample frame which is a list of the whole population that possess characteristics of the social world and phenomena that is relevant to the study (King & Horrocks, 2010; Leedy & Ormrod, 2015; Passer, 2017; Maylor & Blackmon, 2005; Okazaki & Sue, 2016; Urban & van Eeden-Moorefield, 2018; Wengraf, 2002). In this research, the sample was selected from the sample frame of employees of the 26 public HEIs in South Africa (with at least six months service) which had been affected by rapid change and disruption (Gray, 2004; Maylor & Blackmon, 2005; Okazaki & Sue, 2016; Passer, 2017; Wengraf, 2002).

4.5.3.1 *Sampling methods*

Sampling methods refer to the strategy, process or approaches the researcher uses to select the sample from the population relevant to the research objectives (Gentles, Charles, Ploeg, & McKibbon, 2015; Gray, 2004; Leedy & Ormrod, 2015; Maylor & Blackmon, 2005; Okazaki & Sue, 2016; Urban & van Eeden-Moorefield, 2018). The main categories of sampling are probability sampling and non-probability sampling (Christensen, 1997; Leedy & Ormrod, 2015; Maylor & Blackmon, 2005; Wengraf, 2002).

The aim of probability sampling is to ensure that the sample is representative of the population and that each member or unit of the population has an equal chance of being selected (Christensen, 1997; Leedy & Ormrod, 2015; Maylor & Blackmon, 2005).

The following probability sampling techniques can be used (Christensen, 1997; Gray, 2004; Leedy & Ormrod, 2015; Maylor & Blackmon, 2005):

- (1) Simple random sampling means that researchers select any number of units or members from the population such that each has an equal chance of being selected. If they have a population of 200 employees and wish to randomly select a 10% sample (i.e. sample size of 20) to administer a survey regarding their eating habits, they could start by assigning each one a unique number. Then, using either a computer programme designed to randomly select numbers from a list of random numbers or using a pen and paper version, the researcher goes about randomly selecting the sample of twenty.
- (2) If researchers used systematic sampling, they may decide to select every tenth employee instead of assigning them unique numbers followed by random selection.
- (3) Stratified random sampling is used when the population is made up of different units, members or events and the researcher wants to ensure that they are proportionately represented in the sample. In this instance they would identify the different strata and apply random sampling to each “strata” within their own sampling frame to ensure that they were proportionately represented in the sample.
- (4) Cluster sampling is used where researchers have a large population spread over a wide area or the population is diverse, and they are only interested in certain part(s) (or cluster(s)). In that case the researcher then randomly selects the cluster(s) and those members, units or events within the cluster(s) become the sample.

In non-probability sampling it is possible that some units, members or events may be selected such that there will be more of them in the sample than others (Christensen, 1997; Leedy & Ormrod, 2015; Maylor & Blackmon, 2005). The researcher cannot predict or ensure that each part of the population will be represented or have an equal chance of being selected for the sample (Christensen, 1997; Leedy & Ormrod, 2015;

Maylor & Blackmon, 2005). The following non-probability sampling techniques can be used (Bailey, 2007; Christensen, 1997; Gray, 2004; Leedy & Ormrod, 2015; Maylor & Blackmon, 2005):

- (1) Convenient sampling is where the researcher selects a sample from those which are available and accessible.
- (2) Volunteer sampling occurs when the researcher advertises in newspapers, for example, for volunteers to come forward to be part of the sample.
- (3) Snowball sampling happens where initial members of a small sample identify or recommend others whom they know in the population to the researcher who can then include them into the sample.
- (4) Quota sampling is where the researcher selects the sample in the same proportions to which they exist in the population, until the desired sample size is reached, but not in a random manner.
- (5) Purposive sampling involves a situation where the sample is chosen for a specific purpose, using one or more criteria to provide a sample that is seen to be representative of the population.

4.5.3.2 *Sampling method for this research*

The researcher used a combination of purposeful, convenient and stratified random sampling in this study (i.e. probability and non-probability sampling) (Gray, 2004; Leedy & Ormrod, 2015; Maylor & Blackmon, 2005). Purposeful sampling was used to select the initial sample of one public HEI from each of the nine provinces within South Africa, across the different types of HEIs (e.g. conventional English university such as University of Cape Town, conventional Afrikaans University such as Stellenbosch University, university of technology such as Durban University of Technology, merged university such as University of KwaZulu-Natal and a Distance learning University such as UNISA). Doing so would provide opportunity for wide and diverse perspectives and understanding to be obtained of the leadership capabilities required to lead successfully in South African HEIs during rapid change and disruption. Convenient

sampling was applied in cases where the original HEIs that were selected declined to take part in the research. Below is the list of HEIs that were selected using purposeful sampling:

- (1) Western Cape: University of Cape Town (UCT).
- (2) Gauteng: University of South Africa (UNISA.)
- (3) Free state: University of Free state (UFS).
- (4) Eastern Cape: Nelson Mandela University (NMU).
- (5) Northern Cape: Sol Plaatjie University (SPU).
- (6) Limpopo: University of Limpopo (UL).
- (7) Mpumalanga: University of Mpumalanga (UM).
- (8) North West: North West University (NWU).
- (9) KwaZulu Natal: University of KwaZulu-Natal (UKZN).

Once the selected sample had been finalised the researcher followed the various procedures to obtain gatekeeper clearance from each of the HEIs in the sample. Unfortunately, NWU and the UM declined to participate. Therefore, convenient sampling was used to replace them. The University of Stellenbosch (US - Western Cape) and Mangosuthu University of Technology (MUT – KwaZulu-Natal) were conveniently selected and accepted the request to participate in the research. As a result, North West and Mpumalanga were not represented in the sample. After the sample of HEIs had been selected, the researcher obtained gate keeper clearance from each of HEIs as well as a list of all their permanent and fixed term employees (i.e. their sampling frames) (Gray, 2004; Leedy & Ormrod, 2015; Maylor & Blackmon, 2005).

The researcher decided to use stratified random sampling, despite this being a qualitative study, to enhance chances of the sample being representative of the population and to enhance the trustworthiness of the findings and conclusions (Gray, 2004; Maylor & Blackmon, 2005). Furthermore, obtaining multiple perspectives (e.g. from different HEIs, academics, professional services) it enabled the data to be triangulated and differing viewpoints to emerge (Wengraf, 2002). Using the employee name lists provided, the researcher applied stratified random sampling to select a

diverse, yet representative sample from the population of each HEI in the sample based on the following criteria (King & Horrocks, 2010):

- (1) All currently serving fixed term and permanent staff between the ages of 18 and 65 (with at least six months service at their HEI or in their current position).
- (2) Academic and professional services staff.
- (3) All leadership and non-leadership levels.
- (4) All genders, races and ethnicities.
- (5) Able-bodied people and people living with disabilities.

4.5.3.3 *Sample size*

Sample size refers to the number of participants you need to include in your research (Christensen, 1997). Leedy and Ormrod (2015) and Christensen (1997) argue that obtaining a larger sample is usually better. Leedy and Ormrod (2015) argue that the size of the sample depends on how alike or different the members of the population are relevant to the characteristics that are important to the research (Leedy & Ormrod, 2015). The more alike the members of the population are the smaller the sample that is needed and vice versa (Leedy & Ormrod, 2015). Bailey (2007) and Creswell and Plano Clark (2011) appear to agree and state that qualitative researchers generally select a small sample that will be able to provide in-depth information that is relevant to the research topic. The quantitative researcher focuses on being able to generalise the research results and conclusions to the population relevant to the study (King & Horrocks, 2010; Maylor & Blackmon, 2005). Therefore, it is important for the researcher to obtain a statistically representative and large enough sample of the population they intend to study (King & Horrocks, 2010; Okazaki & Sue, 2016; Urban & van Eeden-Moorefield, 2018). However, in qualitative research, the researcher is normally interested in describing one or more features of a large population and therefore they aim to obtain a sample that relates to the population and phenomenon being researched (Gray, 2004; King & Horrocks, 2010; Leedy & Ormrod, 2015; Okazaki & Sue, 2016; Silvia & Cotter, 2021; Urban & van Eeden-Moorefield, 2018).

In phenomenological research, as is the case of this study, the researcher is focussed on understanding the lived experience of individuals which involves interacting with

them directly through interviews (group or individual) (de Roest, 2015; Gentles et al., 2015; Gray, 2004; King & Horrocks, 2010; Willis, 2007). Creswell and Plano Clark (2011) add that qualitative researchers sometimes use maximal variation sampling where the sample selected consists of diverse members who are assumed to hold different opinions on the phenomenon that is being studied. King and Horrocks (2010) state that qualitative researchers prefer participants who have a range of differing opinions about the research phenomenon that will enhance the understanding of it and the difference between the opinions. Furthermore, Dworkin (2012) argues that qualitative researchers focus on reaching “saturation or data saturation”; the point at which no new insights, properties or relevant data emerge.

Ultimately the researcher aims to obtain an in-depth and rich understanding of the phenomenon or understanding of the meaning of a specific issue (Bailey, 2007; Creswell, 2009; Creswell, & Plano Clark, 2011; Dworkin, 2012). As a result, the size of a qualitative sample is smaller than that required for quantitative research (Creswell, & Plano, 2011; Dworkin, 2012; King & Horrocks, 2010). Christensen (1997) also argues that the researcher must balance the size of the sample against the cost of time and money and the quality of the results or findings.

While there are guidelines on how to determine appropriate sample sizes for quantitative research there appears to be different views about what constitutes the minimum sample size for qualitative research (Bailey, 2007; Dworkin, 2012). For example, Creswell and Plano Clark (2011) state that a sample size for qualitative research should be between one or two for narrative studies, 20 to 30 for grounded theory studies and four to ten for case study research. Dworkin (2012) states that the Archive of Sexual behaviour have agreed that qualitative researchers who use in-depth interviews must use a sample size of 25 to 30 participants. Gentles et al. (2015) argue that in phenomenological research the individual is the only source of data and therefore sampling is about selecting people. Furthermore, they present a sample size of between < 10 and >30 participants for phenomenological research (Gentles et al., 2015).

This research applied a minimum sample size of at least 20% of all employees of each of the selected HEIs in the sample. From a stratified random sampling point of view,

the researcher first calculated 20% of each stratum in whole numbers (i.e. the sample size for each stratum). Then, he divided the population size (e.g. 100) by sample size (e.g. 20) to determine the interval at which members would be selected for the sample (e.g. select every fifth individual to be a participant in the research sample). Once that was done, the researcher allocated a number from one to five to each potential participant in each stratum, only using their employee numbers that were contained in the sampled HEIs' employee lists (i.e. sampling frame). Using only employee numbers reduced the risk of bias of any form on the part of the researcher when selecting the sample. Finally, starting from the top of the list, the researcher systematically selected every fifth member of a particular stratum until he reached the required sample size, to be part of the sample (Bailey, 2007). This was done to enhance the probability of obtaining a rich, diverse and in-depth identification and understanding of the research phenomenon (i.e. capabilities needed to lead successfully in South African HEIs during rapid change and disruption) that can be regarded as trustworthy (Bailey, 2007; Gray, 2004; King & Horrocks, 2010).

4.5.3.4 *Sampling challenges*

While sampling aims to obtain a certain number of members of a particular population to either generalise the research results related to the research problem or to understand and explain a certain phenomenon, there are certain challenges that can affect the quality of the sample and the subsequent research results, findings and/or conclusions (Gray, 2004; Leedy & Ormrod, 2015; Maylor & Blackmon, 2005). According to Bailey (2007), Gray (2004), Leedy & Ormrod (2015) and Maylor & Blackmon (2005) the following challenges impact the quality of the sample:

- (1) Sampling bias or sampling error occurs when a certain group or groups of the population are excluded, underrepresented or overrepresented, which can also result in the sample being too big or too small. In each case there is a risk that the research results may not contain all the relevant data to ensure generalisability of the research results or a rich understanding and description of the research phenomenon.

- (2) Nonresponse rate is a situation where members of the selected sample (even if the sample is free from error or bias) do not participate in the research and their responses are therefore excluded from the research. Depending on how big or small the non-response rate is, this could create skew the research results or findings in favour of one direction versus another, and therefore cause inaccurate or incomplete results.

4.5.3.5 *Sampling challenges in this research and how they were addressed*

Even though the researcher applied purposeful and stratified randomised sampling techniques to select the sample he predicts that there was a certain amount of sampling error in certain of the populations and samples. All HEIs in the sample were contacted to provide employee lists of all their employees (including e-mail addresses and telephone numbers) from which the sample could be selected. However, not all the employees had email addresses or contact telephone numbers so that they could be invited to take part. Furthermore, in some cases, as reported by the relevant HEI contact person, employees' names had been omitted because they had only recently joined the HEI and their names had not yet been captured onto the employee list at the time it was generated.

The researcher used e-mails to contact the employees in the sample to invite them to take part in the research. As a way of ensuring a high response rate, he also followed up with each potential participant in the sample, at least twice, through mainly e-mails and where possible by telephone. However, some institutions did not allow for reminder e-mails to be sent to employees who had been invited to take part in the research project, even though some had automatic out of office replies stating that they would return at a future date which was before the invitation response return date. which also had the potential to create sample error or bias.

Overall, the response rate from the samples of the various HEIs sample was low. In several cases the response rate was as low as 1,6% of the sample (i.e. five responses out of a sample of 305). Therefore, the responses of those who did not arrive after confirming they would or those who simply did not take part were not obtained or considered in the data collection process, potentially affecting the research findings

(Leedy & Ormrod, 2015). The researcher in most cases selected a sample double to what the actual required size was to reduce the impact of sample bias and non-response. The exact nature of the population size, sample size and response rates are provided in Chapter 5.

4.6 RESEARCH DATA COLLECTION METHODS

Qualitative research has various research methods than can be used to collect data about the phenomena including observations, interviews (unstructured, semi-structured and structured), audio visual materials and written documents (Bailey, 2007; Creswell, 2009; Leedy & Ormrod, 2015; Maylor & Blackmon, 2005; Mouton, 2016). According to Bailey (2007), Creswell (2009) and Denzin and Lincoln (2018) researchers who use the interpretive perspective (paradigm or worldview) generally use semi-structured or unstructured interviews because it enables them to gain an understanding of the participants' lived experience in their day-to-day lives. Mouton (2016) emphasises the need for researchers to be aware of and counter various errors that can occur in data collection including interviewer bias, research expectancy effect, non-response, social desirability affects and participants providing responses they believe the researcher would like to hear.

4.6.1 Research method used in this study: Semi-structured interviews and focus groups

The researcher made use of semi-structured interviews and focus groups to collect the data for this study. The same semi structured interview guide was used for the individual semi-structured interviews and focus groups because the research was focused on determining the participants' view of what they believed were the capabilities needed to lead successfully within South African HEIs during rapid change and disruption. In addition, following a semi-structured interview approach also gave participants flexibility to provide additional information relating to their "lived experience" within South African HEIs, which would not take place in a structured interview, thus potentially enhancing understanding their context as well as their proposed leadership capabilities (Gray, 2004; King & Horrocks, 2010; Willis, 2007). In

this research, semi-structured interviews and focus groups were used to collect the research data over the period 1 May to 31 October 2019.

4.6.1.1 Semi-structured interviews

According to Wengraf (2002) interviews in the context of scientific research are called research interviews because like scientific research, they aim to get a better understanding of reality – to get detailed and in-depth knowledge about the reality. In other words, to get information directly related to the research topic (Bailey, 2007). Wengraf (2002) argues that semi-structured interviews are designed to include a number of questions that have been compiled in advance, but which are flexible enough so that additional questions can be asked during the interview, based on the participant's responses, which cannot be planned in advance. Interviews (arguably including semi-structured interviews) enable participants to provide historical information while placing the control of the line of questioning in the hands of the researcher (Creswell, 2009; Denzin & Lincoln, 2018). The semi-structured interview guide contains the main areas which the researcher wishes to cover although it is flexible enough to allow the participants to lead the interview into unexpected directions (King & Horrocks, 2010). In this way the researcher was able to adapt, respond and explore the phenomenon being researched (King & Horrocks, 2010). The following were used to ensure a successful semi-structured interview in this research (Bailey, 2007; Creswell, 2009; Gray, 2004; King & Horrocks, 2010; Leedy & Ormrod, 2015; Maylor & Blackmon, 2005; Mouton, 2016; Passer, 2017):

- (1) All semi-structured interviews followed the same interview guide that contained an introduction about the nature and aim of the research, instructions at the start, questions and finally a message of thanks to the participants at the end.
- (2) Questions were grouped into topics and subtopics and opened questions were asked before closed questions to reduce their possible effect.
- (3) The more general questions were put before the more specific questions.

- (4) Any personally sensitive questions were placed after those that are less sensitive.
- (5) The initial questions in the interview guide were strongly related to the research topic to motivate participants to respond.
- (6) Background and demographic questions were included to enable detailed data analysis of the participant sample (i.e. race, gender, age, occupation, occupational level, disability status, academic and professional service).
- (7) Questions were included that focussed on participants' opinions, experience, behaviour, values, feelings and senses.
- (8) The researcher avoided asking leading questions, long and complex questions or multiple questions in the same question.
- (9) All interview questions were linked back and aligned to the research question.
- (10) Consideration was given to the potential impact that the cultural backgrounds and difference of participants and the researcher remained sensitive to how the questions were formulated and asked.
- (11) A suitable location (i.e. comfortable, free from disturbance and noise, easy to find) was identified for each interview, which was agreed in advance with all participants.
- (12) Written permission was obtained from all participants.
- (13) Rapport was established and maintained with all participants and the researcher.
- (14) The researcher intervened where needed to keep the participants on track, concluded the interview and thanked participants for their contribution and time at the end of the interview.

- (15) The researcher remained non-judgemental to all responses, observed his and participants non-verbal behaviour, was sensitive to potential status differences by respecting those differentials and ensuring that he knew his research topic and procedures, and responded appropriately to reduce any possible impact on the interview.
- (16) Responses were recorded verbatim in writing and on audiotape, as spoken by participants.
- (17) Unplanned probing questions were asked where it was necessary to clarify responses provided by participants.
- (18) The researcher, as far as possible, confirmed with all participants that he had correctly understood and captured their responses.
- (19) All interviews were conducted face-to-face at a location that was free from disturbance and agreed to beforehand with the participant.
- (20) Telephone or skype was used, with prior agreement and arrangement with participants, in cases where a face-to-face interview was not possible. In such cases all equipment was setup and tested beforehand and all informed consent protocols were adhered to and repeated before the interview began.

4.6.1.2 *Advantages of semi-structured interviews*

The advantages of interviews include the following (Bailey, 2007; Creswell, 2009; Denzin & Lincoln, 2018; Gray, 2004; King & Horrocks, 2010; Passer, 2017):

- (1) Interviews can be used when participants cannot be observed in their “environment”.
- (2) Participants can provide historical information.
- (3) Enables the interviewer to maintain control of the questioning.

- (4) Higher response rates than telephone or mail surveys.
- (5) Interviewer can establish better rapport with participants.
- (6) Interviews ensure the questions are posed in the same order to all participants.
- (7) The interviewer can observe and hear participants verbal and facial responses to the questions posed.
- (8) Allows the interviewer to ask probing questions to clarify the participants' responses.
- (9) Participants can immediately clarify meanings with the interviewer.
- (10) Interviews are essential in phenomenological research where it is important for participants to provide their views and/or expand their answers to explore, describe and/or explain concepts or events (i.e. phenomena).
- (11) Interviews provide a richness of data.

4.6.1.3 *Disadvantages of semi-structured interviews*

The disadvantages of interviews include the following (Bailey, 2007; Creswell, 2009; Gray, 2004; King & Horrocks, 2010; Maylor & Blackmon, 2005; Passer, 2017):

- (1) Interviews can consume a lot of time and money to prepare and complete, including data analysis.
- (2) The responses are filtered through the views of the participants.
- (3) Information is provided in a place which may not be the participants natural environment.

- (4) The researcher's presence may influence the participant's responses due to power relations (e.g. interviewer characteristics such as race, age, gender) and that the researcher leads and directs the interview.
- (5) Not all participants are able to express themselves in the same way.
- (6) Interview questions read by the interviewer may contain complicated items or several options from which to choose, which may be difficult for participants to remember.
- (7) Interviewees may have conflicting viewpoints and chose which one to present depending on who they speak to.
- (8) In telephone and Skype interviews, technology may cause the problems with reception; and establishing the same quality of rapport as with face-to-face interviews may not always be possible.

The researcher ensured as far as possible that he prepared himself thoroughly before each interview, remained aware of the impact of his dress, verbal and non-verbal communication, openness and warmth and remained sensitive to and adapted his approach in the interview to ensure that the above disadvantages were absent or at least minimised as far as possible (King & Horrocks, 2010).

4.6.1.4 *Focus groups*

Focus groups are a type of group interview where several participants can be interviewed simultaneously, which reduces costs and non-responses (Gray, 2004). A focus group is a qualitative research technique used by researchers to collect information about a research topic through interacting with a group of participants who have similar characteristics (i.e. in the case of this research they were employees and managers within South African HEIs) (de Roest, 2015; King & Horrocks, 2010).

The researcher assumes the role of moderator and directs and encourages participants to provide a variety of responses through facilitating a structured

discussion (i.e. chooses the topic and questions but remains flexible for open ended discussion) (de Roest, 2015; King & Horrocks, 2010, Passer, 2017). The interaction of participants stimulates a variety of views and opinions that would arguably otherwise remain unknown (de Roest, 2015). The recommended focus group size is between five and ten participants to ensure that the discussion can be managed and sustained (King & Horrocks, 2010). If the group is more than 10 it may be difficult to control the discussion and if it is smaller than six it may be difficult to keep the discussion going (King & Horrocks, 2010). The following criteria were used to ensure that focus groups were conducted successfully (de Roest, 2015; King & Horrocks, 2010):

- (1) Focus group size was limited to a maximum of 10 participants and where any group was below six participants they were combined with another group, still ensuring that the size did not exceed ten participants.
- (2) The researcher welcomed all participants, explained the nature of the research, explained their role as participants, explained the duration of the focus groups, explained the written informed consent form and gave them opportunity to complete them, explained his role, obtained their consent to record the discussion, and explained confidentiality and anonymity and how they would be assured.
- (3) The researcher also explained the format of the session which would follow a semi-structured approach using a list of pre-planned questions as a guide.
- (4) The researcher invited questions from participants to clarify any matter that needed additional explanation.
- (5) The researcher facilitated the group discussion and ensured that all participants were encouraged to provide their views and opinions to the discussion. In other words, he paid attention to non-verbal cues and group dynamics, established and maintained rapport, probed and prompted effectively, used non-reflective listening such as nodding of the head, used reflective listening such as asking participants to clarify where necessary, facilitated two-way communication and regulated the flow of the discussion.

- (6) The researcher, as far as possible, confirmed with all participants that he had correctly understood and captured their responses.
- (7) Time was allowed to debrief all participants which included answering any additional questions, providing clarity on any issue, providing information about receiving a copy of the research upon completion of the study, confirming that they were in a safe emotional space at the end of the focus group and providing them with the researcher's contact details in case had they further related questions at a later date.
- (8) Skype was used, with prior agreement and arrangement with participants, in cases where a face-to-face focus group was not possible. In such cases all equipment was setup and tested beforehand and all informed consent protocols were adhered to and repeated before the interview began.

The following are advantages of focus groups (de Roest, 2015; King & Horrocks, 2010; Leedy & Ormrod, 2015):

- (1) Emphasises the participants' understanding.
- (2) Encourages communication and a range and variety of understanding from participants about a topic.
- (3) Can encourage discussion about embarrassing subjects.
- (4) Participants feel comfortable sharing their feelings and views with each other.
- (5) Explores differences, conflicts and arguments between participants to identify the cause and reason behind each which people use to influence each other.
- (6) Can encourage participants to remember certain information and stimulate discussion and expand on opinions.
- (7) Provides opportunity for participants to clarify, expand, and provide examples.
- (8) Provides opportunity to produce knowledge through cooperation with others.

(9) They can save time and resources.

The following are disadvantages of using focus groups (de Roest, 2015; King & Horrocks, 2010):

- (1) Participants could potentially influence each other about what they say.
- (2) Participants may respond in a way they believe the facilitator expects.
- (3) Participants' responses may be similar to someone they like.
- (4) Participants may respond in a way that corresponds to perceived group standards.
- (5) Relation between the facilitator and participants such as perceived expert knowledge of the facilitator or power relations between participants, may cause participants to feel intimidated and not contribute.
- (6) Focus groups are not considered suitable for gathering information of a personal, sensitive topics or intimate experiences.
- (7) When using Skype for a focus group there may be problems with reception; and establishing the same quality of rapport as with face-to-face interviews may not always be possible.

To ensure that the focus groups were successful, the researcher applied the criteria mentioned above as well as the following (de Roest, 2015; Fowler & Mangione, 1990):

- (1) All questions were compiled into a focus group discussion guide beforehand.
- (2) The researcher ensured that he was thoroughly prepared before the start of each focus group.
- (3) Questions were read exactly as they were worded.

- (4) All participants were encouraged to contribute, and care was taken to ensure enough 'air-time' was given to everyone even those who struggled to articulate themselves so that their input could be heard and included.
- (5) The researcher reassured participants of measures taken to ensure confidentiality and anonymity and obtained their commitment to the same criteria towards each other as participants, before the focus group commenced.
- (6) The researcher was sensitive to creating and maintaining a conducive and nonthreatening setting for the duration of all focus groups.
- (7) The researcher focussed on remaining interpersonally neutral with each participant.
- (8) The researcher also conducted several focus groups which enabled him to compare the first focus group's responses and effects to confirm or contest them.

4.6.2 Semi-structured interview and focus group discussion guides used in this research

A semi-structured interview guide and focus group discussion guide were compiled after an extensive literature review during which time no interview guide or questions could be found that could be used to identify the capabilities required to lead successfully in South African HEIs during rapid change and disruption (Wengraf, 2002). The researcher used a combination of focus group discussions (for middle and junior managers and employees) and in-depth, semi structured interviews with Vice Chancellors or Rectors and senior leaders to identify the leadership capabilities required to lead successfully in rapid change and disruption within South African HEIs. The researcher had all questions in the semi-structured interview guide and focus group discussion guide checked and tested by five purposefully selected participants from the University of KwaZulu-Natal (all professional service employees of different races, gender, leadership and non-leadership roles from middle management to junior employees). In addition, two academics from UNISA who supervised the research also checked and finally approved them. Finally, the interview and discussion guides were

also reviewed and approved by each gatekeeper of the nine HEIs selected to take part in this research before they were used in the field. The semi-structured interview guide and focus group guide contained the questions which covered the following factors that were relevant to this study:

- (1) Introduction, nature and purpose of the study.
- (2) Confidentiality, anonymity and the voluntary nature of participation.
- (3) Opportunity for the participant to provide their understanding of leadership, leadership capabilities, rapid change and disruption which are the key components of this research.
- (4) Participant's view about the rapid change and disruption which had affected their HEI.
- (5) Participant's view of the impact of the rapid change and disruption on their HEI, themselves as individuals and as employees or managers within the HEI.
- (6) The participant's role and responsibility in dealing with the rapid change and disruption that affected their HEI.
- (7) How their HEI and themselves cope with the rapid change and disruption.
- (8) The role they played in dealing successfully with the rapid change and disruption within their HEIs.
- (9) The capabilities displayed and not displayed by them and other leaders that affected their HEI's results of dealing with the rapid change and disruption.
- (10) Opportunity for participants to identify the capabilities which they believe are necessary to lead successfully in South African HEIs during rapid change in disruption.

- (11) Opportunity for participants to state if different capabilities are necessary to lead successfully at the different levels of leadership in South African HEIs during rapid change in disruption, including what these should be.
- (12) Opportunity for participants to provide general comments related to the research topic.

A total of 44 semi-structured interviews were conducted. The duration of each semi-structured interviews ranged from 25 to 81 minutes, with a mean duration of 47 minutes. Furthermore, a total of 11 focus groups were conducted. The duration of each focus group ranged from 27 to 88 minutes, with a mean duration of 64 minutes. A copy of the semi-structured interview guide and the focus group discussion guide are used in this research to collect data attached as Appendix A, and B, respectively.

4.6.2.1 Fieldwork

Fieldwork is the process where the researcher spends a period of time in the participant's natural environment gathering data to identify, understand and explain the phenomenon that is the focus of the research (Leedy & Ormrod, 2015; Willis, 2007). According to Peacock, Park and Mauchline (2011) fieldwork consists of three phases. Firstly, before the fieldwork which includes planning the fieldwork, deciding what data to collect, deciding on the goals of the fieldwork, plan for the unexpected, set out a timetable of what needs to happen and when, assign roles and responsibilities if working in a group, arranging of logistics, permissions and obtaining and testing equipment required (Peacock et al., 2011). Next, once the researcher has commenced the fieldwork, they must keep track of progress made on tasks against the timetable, deal with unexpected events, constantly communicate with other researchers (where applicable, maintain ethical conduct and inform participants and other relevant parties if anything changes (Peacock et al., 2011). Finally, once the researcher has completed the fieldwork, they must write up their field notes and check logistics, equipment and any other matters that need to be in place for subsequent fieldwork (Peacock et al., 2011).

Bailey (2007), King and Horrocks (2010) and Wengraf (2002) appear to have a similar view to Peacock et al. (2011) in that they describe the process of conducting fieldwork from the perspective of preparing and conducting interviews and observations as part of qualitative research (Bailey, 2007; King & Horrocks, 2010). To them, preparing refers to the process of selecting what type of method to use (e.g. interview, observation, group interview) and gaining entry which involves to getting approval from various gatekeepers within the institution where the research will take place (Bailey, 2007; King & Horrocks, 2010). Next is the actual entry into the field (i.e. participants environment) where the researcher enters the specific research environment for the first time, settles in and gets accustomed to how things work in that environment, and prepares to apply the preferred research method (e.g. interview, observation, group interview) (Bailey, 2007; King & Horrocks, 2010). The research method is then applied to collect the data (e.g. interview, observation, group interview) while ensuring rapport is established, all ethical practices are adhered to (e.g. Informed consent, courtesy, sensitivity in handling certain topics and establishment of trust) and concluding the data collection (Bailey, 2007; King & Horrocks, 2010).

During the data collection process, the researcher makes extensive field notes about interactions and observations in the field which assist the researcher during the data analysis phase (Bailey, 2007; King & Horrocks, 2010). The researcher eventually concludes and leaves the field which includes thanking the participants at the end of the data collection process and providing more details about the research (Bailey, 2007; King & Horrocks, 2010).

In this research, the researcher decided that semi-structured interviews and focus groups would be used to collect the data (Gray, 2004). Thereafter the researcher piloted and obtained approval for semi-structured interview and focus group discussion guides that were designed (Gray, 2004; Wengraf, 2002). Next, the researcher obtained gatekeeper clearance from the nine public HEIs and then proceeded to contact potential participants via e-mail which included an explanation about the purpose and nature of the research as well as informed consent (Bailey, 2007; Gray, 2004).

The researcher then confirmed the final number of participants based on the confirmations received and arranged, materials and equipment required and the

venues for the semi-structured interviews and focus groups prior to entering the respective research sites (i.e. HEI campuses) (Wengraf, 2002). Furthermore, the suitable venues (i.e. comfortable and free from disturbance), dates and times of all semi-structured interviews and focus groups were communicated to all participants prior to entering the respective HEIs (Bailey, 2007; Gray, 2004; King & Horrocks, 2010; Wengraf, 2002). The former actions were all part of gaining entry and planning for before commencing with the fieldwork (Bailey, 2007; King & Horrocks, 2010; Peacock et al., 2011).

Next, the researcher proceeded to enter the respective HEIs to conduct the research. On arrival at the respective HEIs, the researcher proceeded to conduct the semi-structured interviews and focus groups respectively, according to the schedule that was agreed beforehand with the participants. The researcher ensured that upon meeting each participant rapport was established, all ethical protocols were strictly followed, that the nature and purpose of the research were explained as well as a brief explanation of the method that would be used (i.e. semi-structured interview or focus group) (Bailey, 2007; Gray, 2004). During the data collection, the researcher remained aware of and sensitive to the participant's behaviour and adjusted accordingly to retain participants involvement and maintaining research rigour (Bailey, 2007; King & Horrocks, 2010).

At the end of the data collection process, the researcher checked if there were any questions that the participants had and enquired as to how they were feeling to ensure that they were in a "safe psychological space" and that the interview finishes on a positive note (Bailey, 2007; Wengraf, 2002). The researcher also explained the next steps which included transcribing the audio recordings and processing the research data. Finally, the researcher concluded the data collection process by thanking the participants for their contribution and confirmed that a copy of the research results will be made available to them once it had been completed (Bailey, 2007; Gray, 2004; King & Horrocks, 2010; Wengraf, 2002).

4.6.2.2 *The researcher*

The researcher is an important tool in the qualitative research process who is involved

with the participants and their experience (Creswell, 2009; Leedy & Ormrod, 2015). The researcher enters the research field to collect the data and is responsible for making important decisions constantly throughout the research process, including what data to collect, how it should be collected, how it should be analysed and what methodologies to use (Leedy & Ormrod, 2015).

In this study the researcher was the primarily responsible for planning and conducting the research as well as taking all the decisions relating to the study (Creswell, 2009; Leedy & Ormrod, 2015). The researcher used semi-structured interviews and focus group discussions that contained open-ended questions to collect the data. Where necessary, the researcher used paraphrasing, reflection, prompting and probing question techniques to enhance data collection (Bailey, 2007; Wengraf, 2002). During data collection the researcher did the following

- (1) Played an active and vital role in the whole research process. Specifically, the researcher conducted the semi-structured interviews and focus groups. The researcher also noted observations and made field notes after the interviews and focus groups that contributed to enhancing the richness of the data. By being immersed in the participants' environment the researcher was able to gather data that captured the meaning and interpretation of the research phenomenon (i.e. leadership capabilities needed to lead successfully in South African HEIs during repaid change and disruption) as expressed by the participants (Creswell, 2009; Gray, 2004; Willis, 2007).
- (2) The researcher established rapport and created an environment where the participants felt comfortable to contribute to the data collection process. The researcher provided an opportunity for and encouraged all participants to contribute their experiences to the process. King and Horrocks (2010) argue that because the participant is a key element of the interview, it is important that the interviewer establish trust with them so that they are comfortable to share their inputs with you.
- (3) During the data gathering process the researcher encountered participants who tended to say a lot when answering the semi-structured interview questions or

dominated focus group discussions. In the case of the semi-structured interviews the researcher intervened only when it appeared as if the response was not in relevant to the question or if the response appeared to be repeating what had already been said, just in a different way. The researcher either thanked the participant for their input and requested permission to move on the next question when the responses were not adding anything new or politely high-lighted the fact that the answer was going off topic. In that case, the researcher requested the participant to answer in relation to the question being asked, while offering them an opportunity to add that matter at the end during the “General Question”, if they still wanted to add anything. If any participant appeared to dominate focus group discussions, the researcher thanked them for their contribution and politely asked them to allow others an opportunity to provide their input (King & Horrocks, 2010).

- (4) The researcher also paid attention to those participants that did not say much by either remaining quiet when they answered with short responses or probed to obtain further information that would enhance understanding or provide context to the response (King & Horrocks, 2010). In focus groups, the researcher encouraged all participants to contribute and explained that inputs from all participants were valued. In addition, the researcher remained alert to and observed the quieter participants and actively drew them in by either requesting other participants' permission to allow those who have not contributed to add to the conversation or directly approached quieter participants and asked them if they had any to add their views (King & Horrocks, 2010).
- (5) The researcher answered all questions raised by the participants relating to the research and provided other relevant information to them including the next steps (e.g. transcribing the data, analysing the data and reporting the findings, confirming that the research results will be made available to them).
- (6) The researcher played a critical role during collecting and analysing the data through constantly evaluating and comparing the interpretations, meaning and perceptions provided by the participants in relation to their lived experience of the phenomenon (i.e. as contained in their responses).

4.6.3 Potential sources of bias

Heath and Cowley (2004), Leedy and Ormrod (2010) and Willis (2002) argue that qualitative research is subjective and that it rejects the view that the researcher can remain neutral. They argue that the researcher's beliefs, values, expectations and/or prior knowledge of the topic will influence the research in a variety of ways including what to study, the methods they will use and who to include in the study (Heath & Cowley, 2004; Leedy & Ormrod, 2010; Willis, 2002). They state that the qualitative researcher must declare and explain their bias to those who will read their research (Heath & Cowley, 2004; Leedy & Ormrod, 2010; Willis, 2002). The following were potential sources of bias in this research:

- (1) Purposeful and convenient sampling: The potential of bias exists because the researcher used purposeful and convenient sampling to select one public HEI from each of the nine provinces to take part in the research. By doing so the researcher included some and excluded others from taking part in the study (Leedy & Ormrod, 2015; Maylor & Blackmon, 2005; Passer, 2017) sampled. In an attempt to reduce the impact of the sampling bias, the researcher ensured that at least one type of HEI was included. The researcher also ensured that all employees of the sampled HEIs, with at least six months service, were eligible to be selected through stratified random sampling to take part (i.e. all races, genders, occupations, people with disability and ages). Furthermore, once the sample had been selected the researcher contacted all participants via e-mail and invited them to take part in the study, without prejudice and the right to accept or decline the invitation to take part (Leedy & Ormrod, 2015; Maylor & Blackmon, 2005; Passer, 2017).
- (2) Interviewer bias (i.e. interviewer affect) is another potential source of bias (Gray, 2004, Passer, 2017). It deals with the effect that the interviewer has on participants (Passer, 2017). It includes factors such as race, gender, age, whether the researcher asks the questions in the same way, facial expressions and with the same tone of voice (Gray, 2004, Passer, 2017). In this study, the researcher ensured that the questions were asked strictly according to how they were written and sequenced on the interview guide, whether semi-structured interview or focus group. Furthermore, the researcher remained aware and sensitive to the

participant differences including race, gender, level of employee, tone of voice and body language displayed, as far as possible, to ensure consistency and reduce interviewer affect (Gray, 2004; Passer, 2017).

- (3) Response bias occurs when participants provide answers which are inaccurate. This could be due to various reasons including that they have not thought about the topic, they are influenced by recent events, they answer what they believe you would like to hear, or they answer in a way that create a favourable impression (Gray, 2004; Wengraf, 2002). The researcher acknowledges the fact that the recent events at participating HEIs, which were a combination of disruption and rapid change (i.e. student and/or staff protests affecting participating HEIs from 2015 to 2019), could have influenced their responses. The researcher also acknowledges that it is possible that their responses had some influence on the research findings (Gray, 2004; Leedy & Ormrod, 2015; Wengraf, 2002).
- (4) Heath and Cowley (2004) and Leedy and Ormrod (2015) argue that the researcher's perspective, experience and knowledge of the research topic, as well as their general beliefs, could influence to focus on certain elements and ignore others and draw certain conclusions at the expense of others. In this study, the researcher acknowledges that working for a South African HEI and has been present during the rapid changes and disruptions from 2015 to 2019.
- (5) The researcher also acknowledges working in different sectors prior to joining higher education where the environment and culture were different to that of higher education. Furthermore, the researcher acknowledges being familiar with the research field. As a result, the researcher acknowledges that the prior knowledge of the topic, prior work experience outside higher education and being present during the events from 2015 to 2019 may have influenced interactions with the participants (Gray, 2004; Heath & Cowley, 2004; Leedy & Ormrod, 2015). The researcher also acknowledges that they may have also had some effect on the research findings. To reduce the potential effect of this bias, the researcher made use of self-disclosure. Furthermore, the researcher also suspended beliefs, knowledge and thoughts about the topic and previous experiences. To reduce their potential affect even further, the researcher openly demonstrated reflexivity by reporting on the influence of prior knowledge, experiences could potentially

influence the findings and demonstrated data triangulation and trustworthiness (Bailey, 2007; King & Horrocks, 2010).

- (6) Another potential source of bias the way the researcher reports on the research (Gray, 2004; Leedy & Ormrod, 2015). Researchers need to ensure that all data that is collected is included in the research report (i.e. whether it supports the research question or not) (Gray, 2004; Leedy & Ormrod, 2015). Additionally, researchers must acknowledge all sources, avoid plagiarism, ensure all copy-write protocols have been observed and documented, ensure confidentiality and anonymity of participants is maintained, describing limitations to the study and those respondents who dropped out (Gray, 2004; Leedy & Ormrod, 2015). In this research, the researcher applied the principles of trustworthiness, including triangulation to ensure that all data that was collected was included in the study and has been securely stored so that it can be audited at any stage (Gray, 2004; Leedy & Ormrod, 2015). The researcher acknowledged all literature sources and applied all ethical standards pertaining to research, including those applicable to report writing (Gray, 2004; Leedy & Ormrod, 2015). Finally, the limitations will be described in the concluding chapter.

4.6.4 Recording of semi-structured interviews and focus group discussions

Recording participant responses is important in qualitative research to ensure that the researcher have captured the exact and accurate wording without the interpretation or editing of the researcher as well as observations of participant behaviour (Creswell, 2009; King & Horrocks, 2010). The former is especially important in phenomenological research where the aim is to understand the participant's world view according to them (King & Horrocks, 2010).

Records were kept through written notes and/or audio recordings taken during the semi-structured interview or focus group discussion (King & Horrocks, 2010). It is important to explain to participants that the researcher will be taking notes that will be used to extract data for the research and to approval to audio record their responses before the researcher begins (King & Horrocks, 2010). If they do not give permission to do an audio recording extra care will need to be taken to take down as complete

and accurate notes as possible of the semi-structured interview or focus group (King & Horrocks, 2010).

The observations, notes taken and/or audio recordings are used during the data analysis phase to extract information that will be used to produce the findings, conclusion and recommendations (King & Horrocks, 2010). Even though recording enables the researcher to use the information as a reference point later in the focus group or interview to clarify points made or probe further, there are several drawbacks (King & Horrocks, 2010). Taking notes for example may raise suspicion or anger in certain participants, some participants may decline to give permission for audio recordings and/or participants may want to provide the facilitator with the “correct information they want” because the interview or focus group discussion is being recorded (King & Horrocks, 2010).

To overcome these potential risks the researcher explained that all notes and/or audio recordings would be anonymous, kept secure through password protection or locked in a cabinet that can only be accessed by the researcher and informed consent was obtained from all participants before any interview or focus group commenced (King & Horrocks, 2010).

In addition, all participants were made aware that the researcher needed them to provide a complete description of their perspective and experience, in their own words, in relation to the semi structured interview or focus group question guides (King & Horrocks, 2010). Finally, the researcher treated all participants in a non-judgemental way, ensured that he maintained attention and reflected their responses back them or probed their responses to ensure correct understanding, where needed (King & Horrocks, 2010).

4.6.4.1 Type of questions during semi-structured interviews and focus group

There are various types of questions that can be included in semi-structured interviews and focus groups. There are background questions, experience and behaviour questions, opinion questions, feeling questions, knowledge questions and sensory questions (King & Horrocks, 2015). These questions are aimed at providing information

about the characteristics of the participant, their thoughts about a phenomenon, how they experienced and behaved in or towards a situation or phenomenon, how they feel, their knowledge of a phenomenon and what they saw or heard in respect of the phenomenon (King & Horrocks, 2015). In this research, the researcher included questions that covered all of these types of questions so that a rich and in-depth description of the phenomenon could emerge.

A combination of open and closed questions can be used to collect data (Bailey, 2007; Creswell & Plano Clark, 2011; Maylor & Blackmon, 2005; Wengraf, 2002). Open ended questions allow participants to provide extensive information because it does not restrict them. For example, *“What do you understand by the term leadership?”* In contrast, closed questions restrict the amount of information participants can share and contain a predetermined range of possible responses or categories (e.g. the question can only be answered by selecting either yes or no or one age range out of a possible of three options) (Bailey, 2007; Creswell & Plano Clark, 2011; Wengraf, 2002). In this research the researcher asked mainly open-ended questions so that participants could share the opinions, views, knowledge and interpretations of the phenomenon without restrictions (Bailey, 2007; Creswell & Plano Clark, 2011; Wengraf, 2002). Closed questions were only used when a limited response was required (Bailey, 2007; Creswell & Plano Clark, 2011; Wengraf, 2002).

Introductory questions (i.e. general, non-threatening) were used at the start of the semi-structured interviews and focus groups to ease the participants into the session (King & Horrocks, 2010). The researcher asked included introductory questions that were part of the approved semi-structured interview and focus group guides. The researcher used follow up questions to obtain more detailed information about the topic (Bailey, 2007; Horrocks, 2010). Probing questions were used when the researcher needed clarity on the participants previous answer or to obtain a better understanding of the topic (Bailey, 2007; Horrocks, 2010).

The researcher asked direct questions where specific or more personal information was required (Wengraf, 2002). Indirect questions were asked when participants had to provide information about what they believed the capabilities should be if leaders were to be successful at leading during rapid change and disruption in South African HEIs

(Wengraf, 2002). For example, *“Considering your answer to the previous question, should they respond in the same way if the same situation occurs again? Could you please explain your answer?”* This question aimed at encouraging participants to identify how they believe leaders should react or what capabilities they should display to lead successfully, after having reflected on their answer to the previous question which related to how the leaders had reacted in a specific situation.

In cases where the researcher wanted to ensure that the participant’s response was correctly interpreted, interpretive questions were asked (Wengraf, 2002). For example, *“Did I understand you correctly when you said...?”*

4.6.4.2. Data recording instruments

The researcher used various methods to record the semi-structured interviews and focus groups, with the informed consent of the participants, to ensure that a complete and accurate record was generated (Creswell, 2009; Gray, 2004; King & Horrocks, 2010, Leedy & Ormrod, 2015).

Therefore, the researcher personally made audio recordings of each semi-structured interview and focus group. Accurate field notes were also made during each one regarding that which was observed (e.g. participants’ behaviour, mood, body language, interview setting), interactions (i.e. conversations that occur) and what was said (i.e. Answers to the interview questions and any relevant comments made after the formal interview has ended) (Bailey, 2007; Creswell, 2009; Gray, 2004; King & Horrocks, 2010, Leedy & Ormrod, 2015; Ritchie, Lewis, Nichols & Ormston, 2014). By making audio recordings, the researcher was able to collect rich data which enabled important information that was said “verbatim, capturing the language used by the participants”, to be found when the data was analysed (King & Horrocks, 2010; Ritchie et al., 2014).

The transcripts of the audio recordings were used to for the following reasons (King & Horrocks, 2010, Wengraf, 2002):

- (1) Compare and determine if there were any gaps between the data generated

from the semi-structured interviews and that from the focus group discussions, which influenced decisions about further data gathering so achieve theoretical data saturation.

- (2) Interpret the participants' emotions during the semi-structured interviews and focus groups discussions by listening analysing their tone of voice, pauses and emphasis on certain words.
- (3) Identify and resolve any gaps in the data collection to ensure that accurate, quality and thorough data is available to compile the theoretical model.

4.6.4.3 Transcription of the digital recordings

The recordings of the semi-structured interviews and focus groups with participants were transcribed verbatim. The transcription of the first semi-structured interview was typed as follows: The first line started with Individual Semi-Structured Interview (ISSI) 1.1 and the second with ISSI 1.2, etc. During the semi-structured interview with the second participant, the first typed line started with ISSI 2.1 and the second with ISSI 2.2, etc. By numbering each line of the transcription, it made it easier for the researcher to locate certain phrases or statements during the data analysis because when the researcher had to return to the typed interviews, the specific statement could easily be found (Tesch, 1990; Wengraf, 2002).

The individual interviews were typed up as contained in Table 4.1 and 4.2 below.

Table 4.1

Extract of transcription of individual semi-structured interview
Individual semi-structured interview with University 1

ISSI 7.1	The other element in my head is that's probably, uhm, where there's
ISSI 7.2	leadership capabilities?
ISSI 7.3	Participant 7: Oh, goodness, gracious, me. [laughing] Ja, I think, maybe,
ISSI 7.4	Researcher: What is your understanding by the term leadership and
ISSI 7.5	maybe I would love to see people showing direction. Call it strategy, if
ISSI 7.6	you want to. Uhm, so that, that's probably the one element in my head.

ISSI 7.7	some, some element of that to get what should be done. So, get the
ISSI 7.8	main business done. Uhm, so there's some leadership around that to, to
ISSI 7.9	not let peripheral stuff get, uh, in the way that you sort of focussed, that,
ISSI 7.10	I think it needs a little bit of, requires some leadership to, to help in that
ISSI 7.11	regard. [deep breath] But that is part of a very quick answer that I,
ISSI 7.12	[laughing], there might be other things.
ISS I 7.13	Researcher: So, that's in terms of what you see leadership. What would
ISSI 7.14	you say are some of the capabilities that one needs, uh, what do you
ISSI 7.15	understand by leadership capabilities then?

Table 4. 2

Extract of transcription of individual semi-structured interview
Individual semi-structured interview with University 2

ISSI 11.1	Researcher: In your own words, what would you say is your
ISS 11.2	understanding of the terms, leadership and then leadership capabilities?
ISSI 11.3	Participant 11: In the context of a university, that is firstly, your academic
ISSI 11.4	leadership. You can't be a university responsible for, uh, academic
ISSI 11.5	programmes and staff, and not have the academic capabilities.
ISSI 11.6	Leadership capabilities is to have the competency to lead any kind of
ISSI 11.7	organisation, understanding the context of that organisation where you are, and to have
ISSI 11.8	a vision where you can lead that organisation. And I hope there's no right or wrong
ISSI 11.9	answer [laughing].
ISSI 11.10	Researcher: In your own words, what do you understand by the terms rapid change
ISSI 11.11	and disruption?
ISSI 11.12	Participant 11: Rapid change reflects within the transformation agenda of us as a
ISSI 11.13	country. Where there are certain perspectives and perceptions, one dimensional, that
ISSI 11.14	needs to change towards a multicultural dimension [sic] and that rapid change we've
ISSI 11.15	experienced through the mergers. Uhm, it was combining different contexts,
ISSI 11.16	backgrounds, languages, cultures, uhm, programme mix, programme qualification mix,
ISSI 11.17	into a new entity. Uh, that I believe is rapid change. Disruption is a negative connotation
ISSI 11.18	in terms of a current paradigm in which we as a country are which is infused by political
ISSI 11.19	agendas.

4.7 DATA ANALYSIS

4.7.1 Data analysis methods

Data analysis is concerned with trying to understand, make sense and reduce vast

amounts of data that has been collected during the collection phase into manageable parts that will hopefully result in new knowledge (Bailey, 2007; Creswell, 2009; Creswell & Plano Clark, 2011; Gray, 2004; Mouton, 2016). Within qualitative research, data analysis is considered to be a constant process of moving back and forth between the data, in an iterative process, to identify the main themes that will enable the researcher to create a meaningful “picture” about the phenomenon and its context (Creswell & Plano Clark, 2011; Denzin & Lincoln, 2018; King & Horrocks, 2010; Leedy & Ormrod, 2015).

The researcher applied content analysis to analyse the data (Bailey, 2007; Creswell, 2009; Gray, 2004; King & Horrocks, 2010; Leedy & Ormrod, 2015). Content analysis was done to identify, code, categorize or group, describe and elaborate each unit of data and group them into themes in order to identify, describe and understand the leadership capabilities (Creswell 2009; Creswell & Plano Clark, 2011; Gray, 2004; King & Horrocks, 2010). In general, the following process is followed when analysing the content of qualitative data by constantly moving backwards and forwards through the data until no new insights emerge (Creswell 2009; Creswell, 2009; Gray, 2004; King & Horrocks, 2010; Leedy & Ormrod, 2015):

- (1) Transform the data into a usable form and organise it (e.g. transcribe audio recordings of interviews, type up field notes so that they are easier to analyse).
- (2) Conduct an initial reading of all the data so that you obtain a broad view of the meaning.
- (3) Identify initial categories of data that may be useful in coding the data.
- (4) Follow the process of coding the data by arranging the data into parts or units of text and assigning those parts or units a label (i.e. naming them). The data includes parts or units such as sentences, paragraphs, instances or phrases which regularly recur across participants or which have significance to the phenomenon being researched and/or a description of its context (i.e. the setting where the phenomenon is experienced). The coding process also involves being able to look out for and identify important patterns and relationships between the codes, comparing the codes and identifying exceptions and contradictions amongst them. The coding process continues,

and the researcher reduces the number of codes to a smaller number of themes, which are a broader “category” into which codes are grouped. Creswell (2009) states that researchers must only create codes based on information that emerges from the data, use a predetermined set of codes against which data is matched or to use a combination of both coding techniques.

- (5) Decide how the themes will be presented and discussed in the research report.
- (6) Make an interpretation of the data in relation to the research question which could include the researcher’s understanding and experiences of the phenomenon. Alternatively, it could involve generating meaning from comparing the research findings to other theories and research that may already exist. This process means that the researcher must package everything to form a connected whole and summarize so that it forms a logical and cohesive whole (including visible representations such as tables, graphs and diagrams).

4.7.1.1 *Data analysis technique for this research*

The researcher applied Tesch’s (1990) data analysis method. This method includes the following eight steps:

- (1) Step 1: The tape or digitally recorded interviews were transcribed verbatim.
- (2) Step 2: The researcher read all the interview transcripts to get an overall sense of the data and began identifying the main topics or themes. Part of the process included selecting one interview (i.e. the most comprehensive one) and analysing its data because it had potential to generate the main topics or themes.
- (3) Step 3: After reading several transcripts, the researcher made a list of the different topics (themes). Next, similar topics (themes) were clustered together.
- (4) Step 4: The researcher returned to the data and applied the list of themes or topics to the data. First, the themes or topics were abbreviated as codes. Next, the codes were applied to the data by writing the code next to the appropriate segments

within the transcripts. In the process, the researcher tested this preliminary list of codes to determine if any new codes emerged.

- (5) Step 5: The researcher searched for the most descriptive wording for the themes or topics turned them into categories. The researcher then reduced the number of categories by grouping topics that were similar to each other.
- (6) Step 6: The abbreviation for each category was finalised and the codes were placed in alphabetical order.
- (7) Step 7: Data belonging to each category, were grouped together and the researcher performed a preliminary analysis.
- (8) Step 8: Data was recorded and reported.

Through an iterative process, the researcher worked back and forth with the data to identify themes, relationships, discrepancies and frequencies in the data until saturation was reached (the point where no new themes emerge but rather the reoccurrence of themes that have already been identified and described) (Dworkin; 2012; King & Horrocks, 2010). In addition, the researcher used NVivo (i.e. a software programme used to analyse qualitative research data such as interviews and focus groups) to assist with the analysis of the data to simplify the process and for triangulation, which enhanced the quality of the results (Breakwell et al., 2012; Strauss & Corbin, 1990).

4.7.1.2 *The process of building theory*

The research aimed to identify, understand, describe and explain the capabilities (including combinations thereof) necessary to lead successfully during rapid change and disruption. This implies developing a theory and model that will identify, describe and explain the capabilities needed, the relationship between them and their impact on leading successfully during times of rapid change and disruption.

A theory is a structured set of explicit statements, concepts, thoughts or assumptions

that aim to explain a phenomenon, including how and why they relate to each other (Leedy & Ormrod, 2015; Passer, 2017). Carlile and Christensen (2008) and Christensen (2006) view theory as a framework which researchers create to help understand a phenomenon. In this research, the researcher used the Theory Building Model of Carlile and Christensen (2004) to develop a theory of leadership capabilities required to lead successfully during times of rapid change and disruption in South African HEIs. The Theory Building Model has two main phases, namely the descriptive phase and the prescriptive phase (i.e. the normative phase) (Carlile & Christensen, 2004; Carlile & Christensen, 2008; Christensen, 2006). The descriptive phase is the foundation phase and is a prerequisite for the prescriptive or normative phase, which involves research in the field to test the theory developed in the descriptive phase (Carlile & Christensen, 2008; Christensen, 2006). Each phase follows the steps below (Carlile & Christensen, 2004; Carlile & Christensen, 2008; Christensen, 2006):

- (1) Step 1 Observation: The researcher completes a comprehensive and thorough observation of the phenomena and then meticulously describes and measures what they discover (Carlile & Christensen, 2004; Carlile & Christensen, 2008; Christensen, 2006). During this step, the researcher usually develops constructs (i.e. an explanation of something that cannot be seen) which helps to understand the phenomena and how they work (Carlile & Christensen, 2008; Christensen, 2006). In this research, the researcher collected the data in the descriptive phase through semi-structured interviews, focus groups and field notes of observations and interactions, and used coding to form the appropriate themes (i.e. the constructs) (Bailey, 2007; Carlile & Christensen, 2004; Carlile & Christensen, 2008; Christensen, 2006; Creswell, 2009; Gray, 2004; Heath & Cowley, 2004; King & Horrocks, 2010; LaRossa, 2005; Leedy & Ormrod, 2015; Ritchie et al., 2014).
- (2) Step 2 Classification: The researcher now classifies the constructs into categories (i.e. the attributes of the phenomenon) (Carlile & Christensen, 2004; Carlile & Christensen, 2008). The aim of categorisation is to organize the constructs that make up a phenomenon into frameworks or typologies (Carlile & Christensen, 2004). During categorisation in this research, the researcher examined the similarities and differences between the constructs and classified them into categories of leadership capabilities (including the size thereof), and examined the

possible relationships between them (Carlile & Christensen, 2004; Carlile & Christensen, 2008; Christensen, 2006).

- (3) Step 3 Defining Relationships: The last step in the descriptive phase is to explore the relationships between the categories of the phenomena and the outcome of interest (Carlile & Christensen's, 2004). This includes identifying and exploring what differences between the categories and the size of those differences, correspond most strongly with the outcome(s) that are relevant to the research (Carlile & Christensen, 2004; Carlile & Christensen, 2008; Christensen, 2006). In this step, the researcher explored the relationships between the categories of leadership capabilities and the success of leading during times of rapid change and disruption (i.e. the relevant outcome). It also entailed identifying and exploring the size of similarities and differences between the leadership capabilities (i.e. categories) in order to determine which of them are most strongly with leading successfully in South African HEIs, during rapid change and disruption (Carlile & Christensen, 2004; Carlile & Christensen, 2008; Christensen, 2006). The result of the aforementioned phase was a model that displayed the relationships (i.e. Associations) between the leadership capabilities (i.e. the categories) and leading successfully during rapid change and disruption in South African HEIs (i.e. the relevant outcome) (Carlile & Christensen, 2004; Carlile & Christensen, 2008; Christensen, 2006). Furthermore, the descriptive phase is inductive because it enabled the researcher to reduce the multitude of data into model that captures and explains the capabilities needed to lead successfully in South African HEIs during rapid change and disruption (Carlile & Christensen, 2004; Carlile & Christensen, 2008; Christensen, 2006). Carlile and Christensen (2008) and Christensen (2006) state that the descriptive theory can be improved by starting the process again from the "top down" to determine whether the correlations exist between the categories and relevant outcomes in a different set of data (i.e. deductive) (i.e. they make statements of correlation). At that point, the researcher was only able to approximate (i.e. hypothesise) what categories are best associated with the relevant outcome because the model has not been objectively tested at that point (Carlile & Christensen, 2004).

The value of a theory is the degree to which it is truly predictive (Carlile & Christensen,

2008; Christensen, 2006). To determine this, the descriptive theory must transition to become a predictive theory (i.e. normative theory) through being successfully applied during well planned field research, in “real time” (i.e. It must demonstrate external validity) (Carlile & Christensen, 2008; Christensen, 2006). In the case of this research, the researcher only completed the descriptive phase because the research followed a qualitative approach with the aim to identify, understand and describe. Therefore, the researcher was only able to approximate what leadership capabilities are best associated with leading successfully during rapid change and disruption because the model had not been objectively tested at that point (Carlile & Christensen, 2004). The descriptive phase can form part of further research which will be discussed in the final chapter.

Figure 1 below shows the Theory Building Model of Carlile and Christensen (2004).

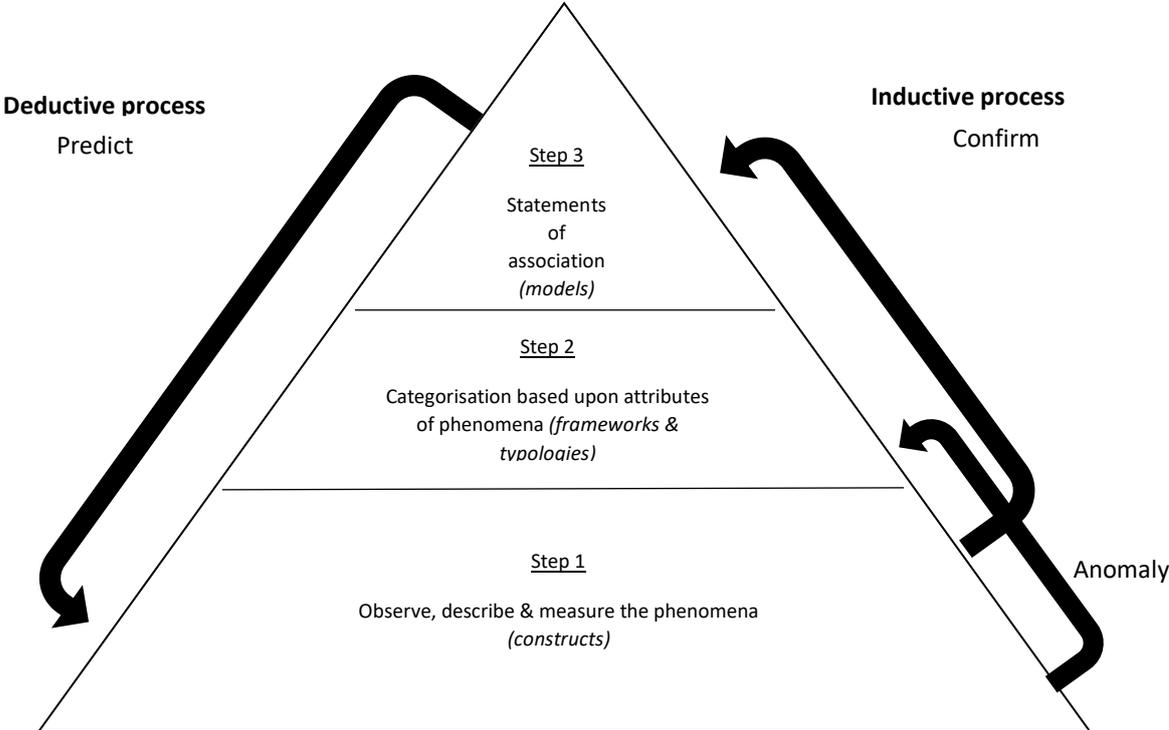


Figure 4.1. The process of building theory, indicating the different phases and what takes place in each one (Carlile & Christensen, 2004, p.5).

4.8 ENSURING DATA QUALITY

4.8.1 Ethical considerations

4.8.1.1 *Ethical consideration in research*

In research, ethics refers to the way researchers conduct themselves in relation to the participants, society, the scientific discipline and/or others affected by the research (Creswell, 2009; Gray, 2004; King & Horrocks, 2010; Mouton, 2016). In other words, it is about respecting those involved and affected by the research (Passer, 2017). Researchers must show how their research will benefit broader society, the organisation and/or the participants, while ensuring the principle of “causing no harm” and not exposing participants to physical or psychological risks (Christensen, 1997; Creswell, 2009; Leedy & Ormrod, 2015; Maylor & Blackmon, 2005). Creswell (2009) states that researchers need to develop the trust of their participants, protect them and conduct their research with integrity. Implicitly, Creswell (2009) also appears to agree with the notion of “causing no harm”.

King and Horrocks (2010) state that qualitative researchers must act responsibly and remain aware of how their research will be read, interpreted and applied. They add that researchers must show respect for research participants, take care to ensure that they are not harmed and ensure that the research treats those involved fairly (i.e. not burdening one group over another) (King & Horrocks, 2010). Various institutions have developed research governance policies, guidelines or principles relating to the ethical conduct of research (Bailey, 2007; King & Horrocks, 2010; Leedy & Ormrod, 2015; Passer, 2017). The various codes of ethics for conducting research contain the following standards or criteria (Christensen, 1997; Gray, 2004; Health Professionals Council of South Africa, 2006; King & Horrocks, 2010; Leedy & Ormrod, 2015; Maylor & Blackmon, 2005; Mouton; 2016; Passer, 2017):

- (1) Obtain written informed consent from participants before the research begins which includes the following:
 - (a) Nature and aim of the research.

- (b) Name and contact details of the researcher.
- (c) The organisation who is sponsoring the research.
- (d) The kind of information that will be gathered.
- (e) What will be required of participants?
- (f) Who are the participants and how were they selected?
- (g) How time will be required from participants.
- (h) Participation is voluntary and you may withdraw at any time.
- (i) Benefits of the research and potential risks of participating.
- (j) Answering all questions will be voluntary.
- (k) Who will have access to the data that is collected – process to ensure confidentiality?
- (l) Measures to ensure anonymity of participants.
- (m) Names and contact details of those who can answer any related questions that may arise.
- (n) Place to sign and date.

(2) Avoiding deception unless there is no other way to answer the research question.

(3) Protection of participants.

(4) Approval from the organisation to conduct research within the organisation before the research begins.

(5) Offering inducements to recruit participants.

(6) Right of participants to withdraw at any time.

(7) Debriefing participants after the data has been collected.

(8) Making detailed information about the study available once it has been completed (i.e. publishing the research results).

Ethical guidelines have been established for the writing up and reporting of research results which are as follows (Bailey, 2007; Gray, 2004; Health Professionals Council

of South Africa, 2006; King & Horrocks, 2010; Leedy & Ormrod, 2015; Maylor & Blackmon, 2005; Mouton; 2016; Passer, 2017):

- (1) True, accurate and unbiased interpretation and writing up and publication of research results.
- (2) Ensure research report and results are their own and free from plagiarism.
- (3) Ensure objectivity in research by complying with all relevant research skills and refrain from falsifying data.
- (4) Ensure vulnerable groups is treated sensitively and justly (e.g. young children, people with mental impairments).
- (5) Mention any biases (including personal bias) that were identified and participants who dropped out of the study.
- (6) Explain and describe the data analysis procedures that were used.
- (7) Refrain from making false statements or trying to deceive others when presenting or publishing your research.
- (8) Ensure that confidentiality and anonymity are maintained when writing up the research report.
- (9) Researchers must take responsibility for their research findings and as such need to consider the consequences that may arise from publishing their research. This implies researchers need to be aware of they write and the language they use – be sensitive.
- (10) All semi-structured interviews and focus groups that were done via telephone or Skype were done in venues that were private, free from disturbance and with prior arrangement and agreement with the participants. Furthermore, all informed consent protocols were followed as mentioned above.

4.8.2 Ethical consideration in applied in this research

In this study, the researcher obtained gatekeeper approval from the nine HEIs sampled prior to the start of the research. Even though the researcher followed the unique gatekeeper application process of each university “to the letter”, two of the initial HEIs sampled (UM and NWU) declined to participate in the study. The reasons were, respectively, being a relatively new university (i.e. UM) and concerns about the impact of the Protection of Personal Information (POPI), Act 4 of 2013 that aims to protect the individual’s right to privacy (i.e. NWU), on the ability of HEIs to give out email and general biographical details (e.g. age, gender, race) of staff to researchers without the employee’s knowledge. While the researcher did contact the responsible individuals at each of the universities to understand how the application could be improved so that the concerns raised could be addressed, this was not successful because the response provided by them did not result in such an opportunity being provided. In addition, the researcher ensured that all ethical measures, including obtaining written informed consent and securing of research data as already discussed, were followed strictly to safeguard them and their HEIs, according to the Protection of Private Information Act (Bailey, 2007; Gray, 2004; Health Professionals Council of South Africa, 2006; King & Horrocks, 2010; Leedy & Ormrod, 2015; Maylor & Blackmon, 2005; Mouton; 2016; Passer, 2017). The researcher met these requirements in every application, even those that were rejected as mentioned above. As a result, two additional universities were approached and granted gatekeeper approval to be part of the study. The universities were SPU and US. In general, the gatekeeper application process required the researcher to provide a detailed account of how each of the above ethical considerations would be dealt with to ensure that the research would be conducted in a credible manner, of benefit to those who participated and/or were affected by the research and did not harm the participants in any way.

Once gatekeeper approval had been obtained, all sampled participants who were identified were contacted telephonically and/or by e-mail, by the researcher or by the relevant individuals who were responsible to do so in the different sampled HEIs. Every sampled participant was sent a detailed informed consent form which addressed the criteria mentioned in the ethical considerations discussed above (Bailey, 2007; Gray, 2004; Health Professionals Council of South Africa, 2006; King & Horrocks, 2010;

Leedy & Ormrod, 2015; Maylor & Blackmon, 2005; Mouton; 2016; Passer, 2017). The information contained in the written informed consent form included the nature of the study, the context, the purpose of the study, matters relating to anonymity and confidentiality, benefits and risks associated with the study, nature of their participation, any incentives for taking part in the study, voluntary nature of their participation, time required and contact details of the researcher. The written informed consent forms used for the semi-structured interviews and focus groups are attached as Appendix C and D respectively.

All results have been stored electronically, for a period of five years, with access by means of a password and in lockable filing cabinets. All paper and pencil data have been stored in lockable filing cabinets, for a period of five years, with strict access that will be controlled by the researcher. The researcher was the only interviewer/ facilitator and he ensured that he was thorough and sensitive in applying his skills in facilitating focus group and conducting individual semi-structured interviews. The research assistant who transcribed the data also signed confidentiality agreement which also clearly addresses the confidentiality criteria already discussed above (Bailey, 2007; Gray, 2004; Department of Health, 2006; King & Horrocks, 2010; Leedy & Ormrod, 2015; Maylor & Blackmon, 2005; Mouton; 2016; Passer, 2017). Furthermore, the researcher followed and applied all appropriate HPCSA (e.g. professional confidentiality, respect for human rights of others, obtaining informed consent, avoiding harm to participants) and institutional ethical and research requirements (e.g. obtaining ethical and gatekeeper approval before starting the research project) were adhered to (Department of Health, 2006).

Before the start of each semi-structured interview and the focus group discussion the researcher made sure that he had receive each participant's signed informed consent form. He also explained the details of the informed consent form and answered any related questions. After the semi-structured interview or focus group had been completed, he provided a more in-depth context and nature of the study, explained how the research findings will be made available and answered any further related questions. Finally, the researcher debriefed all participants in terms of how they felt at the end of the interview or focus group and offered options of further support and debriefing if they later felt that it was necessary. The researcher was not aware of nor

was he requested to provide such support as a result of participants being part of this research (Bailey, 2007; Gray, 2004; King & Horrocks, 2010; Leedy & Ormrod, 2015; Maylor & Blackmon, 2005; Mouton; 2016; Passer, 2017; Department of Health, 2006).

In conducting the research design, data collecting, data analysis, writing the research dissertation including discussing the data, making findings, drawing conclusions and proposing recommendations the researcher took every care to follow the guidelines relating to the conduct of fair, accurate, honest and credible research (Gray, 2004; King & Horrocks, 2010; Leedy & Ormrod, 2015; Maylor & Blackmon, 2005; Mouton; 2016; Passer, 2017; Department of Health, 2006).

4.8.2.1 *Strategies employed to ensure quality of data*

In quantitative research reliability (i.e. how accurately one can replicate the research results by conducting the study again) and validity (i.e. does the study measure what it claims to measure) are important when evaluating the quality of research (Christensen, 1997; Gray, 2004; King & Horrocks, 2010; Maylor & Blackmon, 2005; Passer, 2017). Creswell (2009) states that in qualitative research validity refers to the steps that researchers take to ensure the accuracy of their findings. To him, reliability in qualitative research refers to the consistency of the approach when applied by other researchers and other research studies (Creswell, 2009).

To enhance the quality of data in this study, the researcher conducted a thorough literature search to ensure a complete and accurate understanding of the constructs and subject to formulate the interview and focus group questions. As discussed above, all the questions in the semi-structured interview guide and focus group discussion guide were checked and tested by five purposefully selected participants from the University of KwaZulu-Natal. Furthermore, two academics from UNISA who supervised the research also checked and finally approved them. (Bailey, 2007; King & Horrocks, 2010; Leedy & Ormrod, 2015; Passer, 2017). The latter approach enhanced face and construct validity. Bailey (2007) argues that qualitative researchers replace validity with trustworthiness which involves making sure that their research is credible, transferable, dependable and can be confirmed.

4.8.2.2 *Ensuring trustworthiness of qualitative data*

For research to be considered trustworthy it must meet the criteria which are discussed in more detail below (Bailey, 2007; Creswell, 2009; Gray, 2004; King & Horrocks, 2010):

- (1) **Credibility:** Refers to the degree to which the interpretation of those who took part in the research agree with that of the researcher. Ensuring that transcripts are free from errors, constantly checking that the codes used do not change in meaning, checking of research data by participants and peers, and triangulation (i.e. using multiple methods of data gathering, multiple data types, multiple data sources) are some of the ways that researchers can enhance the credibility of their research (Bailey, 2007; Creswell, 2009; Gray, 2004; King & Horrocks, 2010). In other words, did the research measure what it was supposed to (Shenton, 2004)? This means that the researcher must record and interpret that data with great care and accuracy so that those who provided the data would be able to easily recognise their inputs (Krefting, 1991). In the case of this research, the aim was to identify and understand the different leadership capabilities required to lead successfully during rapid change and disruption. It was therefore accepted that there was more than “one truth”, that participants could provide more than one leadership capability and that there are possibly different combinations of leadership capabilities. To this end, data was obtained from different Universities, from different levels of employees within the Universities, across South Africa that resulted in triangulation that assisted in corroborating the research results (Shenton, 2004). In addition, credibility was achieved through working back and forth through the data to identify and code themes and categories until data saturation had been achieved (Creswell & Plano Clark, 2008; Shenton, 2004; Strauss & Corbin, 1990). Finally, the researcher checked the transcripts of the recordings against the typed-up version and field notes of each interview and focus group to confirm completeness and accuracy. Tesch’s (1990) data analysis method was applied during this process to ensure that the credibility was achieved.
- (2) **Transferability** is the degree to which the research findings can be transferred from one context or situation to the next, apart from the current research situation. In

qualitative research the purpose is to understand and describe phenomenon, unlike positivistic research, where it is possible or necessary to demonstrate that research findings are generalizable. Therefore, using quantitative criteria to evaluate qualitative data is not always appropriate. To achieve a high degree of transferability in qualitative research, the researcher must provide enough detail about the research situation or context so that a reader can determine the extent to which it is applicable to his/her context thus, transferrable or not. In this study, the researcher strived to provide as much information available, as described by the data analysis methods above, to enable others to understand the phenomenon being researched and to enable them to make such comparisons.

- (3) Dependability: Refers to reliability which is concerned with the extent to which the research, if repeated, using the same methods, same context and same participants, would yield the same results (Krefting, 1991, Shenton, 2004). Qualitative research focuses on the uniqueness of human beings and is concerned with understanding and explaining phenomena, which in most cases, take place in situations where there are many variations (Krefting, 1991, Shenton, 2004). Therefore, variability is expected (Krefting, 1991). To this end any and all variability, including the sources thereof, need to be fully accounted for, recorded and described (Krefting, 1991, Shenton, 2004). In addition, the data gathering, analysis and interpretation methods must be described and full (Krefting, 1991, Shenton, 2004). This includes a reflection of the researcher's potential influence on the research process and findings. Following this approach enables future researchers to determine how repeatable the study is (Krefting, 1991). The researcher has fully described all methods of data gathering, analysis and interpretation as well as the different sources of variation in subsequent chapters of this thesis. The data was interrogated until saturation was reached.
- (4) Confirmability: Refers to the objectivity of the research (Shenton, 2004). In other words, it is the extent to which the results are free of researcher bias and completely reflect the experiences and ideas of the participants (Shenton, 2004). It is the process by which the researcher clearly articulates the data collection and analysis processes which resulted in their research findings (i.e. a clear audit trail through the research data and the researchers' interpretations). Bailey (2007) and

King and Horrocks (2010) state that qualitative researchers acknowledge that their presence in the research process renders it highly unlikely that objectivity would be achieved (i.e. researcher's background, values, culture can influence how he or she interprets the data). Leedy and Ormrod, (2015) state that qualitative researchers must try and achieve a fair balance and completeness of their research to ensure that their findings are defensible. They also confirm that researchers must clearly record and motivate every step in their data analysis process, including the documenting their reflection of their biases. To ensure confirmability, the researcher clearly documented each method used along with the reason why one method was chosen above another, including the advantages and disadvantages of each one (Shenton, 2004). In addition, the researcher has provided an audit trail in subsequent chapters that clearly shows how the data was gathered, analysed and checked, at various stages, for accuracy (Shenton, 2004).

A copy of a transcript of a semi-structured interview and focus group discussion are available upon request, on condition all confidentiality and anonymity procedures set out in this research are adhered to. In addition, all responses to interviews were recorded, transcribed verbatim and captured in NVivo (i.e. computer software programme used to analyse qualitative data) for further analysis. The responses from each participant in the focus group interviews was captured" verbatim" by research assistant. All the themes that emerged during the qualitative phase that might have an impact on the performance were examined and included for further analysis.

4.9 REPORTING OF RESULTS

4.9.1 General approach to reporting

The final research report is an extensive construction and description of the phenomena being studied from the opinions, views, feelings, dialogue, meanings and actions of the participants involved in this study, including an extensive literature review (Bailey, 2007; Creswell, 2009; Gray, 2004). The researcher used the APA 6th edition Referencing method and wrote the report in an academic format as prescribed by the University of South Africa (UNISA), while using a clear, simple and succinct writing style, hopefully allowing the possibility of an academic article and further research.

Furthermore, the researcher endeavoured to provide a logical structure and flow that clearly links all parts of the research report into a cohesive whole while providing appropriate and enough evidence to support the findings (Mouton, 2016).

4.9.2 Findings

The chapter starts with the description of the population, sample and response rates. Then the process and method of collecting and analysing the results and the detailed results themselves will be presented, while ensuring that confidentiality and anonymity are maintained (Gray, 2004; Mouton, 2016). The main themes, patterns and divergent views will also be presented along with an interpretation of the results (Creswell, 2009, Mouton, 2016). The discussion will include a description of any bias and errors encountered and what was done to minimise their impact.

4.9.3 Discussion

The findings of the research will be discussed in relation to the research question and research aims, including any opposing views and incidental findings. The findings will also be discussed in relation to appropriate current research that is relevant to this research to confirm the findings, highlight any limitations and/or identify potential areas for future research.

4.9.4 Conclusions, limitations and recommendations

The conclusions resulting from the research will be presented considering the research question and aims (i.e. the capabilities necessary to lead in South African HEIs during rapid change and disruption). Appropriate recommendations will be made regarding the applications of the findings and possible areas for future research. Finally, the limitations to this study will be presented along with their implications.

CHAPTER 5: FINDINGS

5.1 INTRODUCTION

The previous chapter discussed the ontology, epistemology, theoretical paradigms, research methodology, research design, research methods, data collection data quality and how the results would be reported. This chapter will describe the results that were obtained to identify the leadership capabilities needed to lead successfully in South African HEIs during rapid change and disruption. This chapter will begin with a description of the population and sample, challenges experienced with the sample and the impact on the results. A detailed description of the results will be presented in this chapter, followed by the identification of the key codes and categories of leadership capabilities required to lead during rapid change and disruption.

5.2 CONTEXT OF THIS RESEARCH

The preceding chapters explained that this research was conducted within South African public HEIs. The aim of the research was to identify, understand and describe the leadership capabilities required to lead successfully in SA HEIs during times of rapid change and disruption.

5.3 POPULATION AND SAMPLE

A combination of purposeful and convenient sampling was used to select a sample of South African public HEIs to take part in the research (Creswell, 2009; Gray, 2004). Overall, nine of the 26 South African public HEIs were sampled (35% of public HEIs in South Africa), spread over seven out of the nine provinces (excluding Mpumalanga and North West Provinces). There are three types of Universities in South Africa (Bunting & Cloete, 2010). The three types are as follows (Bunting & Cloete, 2010):

- (1) The university (i.e. traditional university) that offers a variety of undergraduate degrees such as Bachelor of Arts and Bachelor of Science and postgraduate degrees such as honours masters and doctoral degrees in various fields.

(2) The university of technology which offers mainly career-focused undergraduate diplomas, Bachelor of Technology degrees and a limited range of masters and doctoral degrees.

(3) The comprehensive university that offers programmes that are presented by a traditional university and by a university of technology.

Table 5.1 below contains a summary of the type and name(s) of universities that were sampled to participate in this research.

Table 5.1

Sampled Higher Education Institutions (HEI)

Name	Type	Province	Comment
University of KwaZulu-Natal	Traditional university	KwaZulu-Natal (KZN)	Full participation
University of Cape Town	Traditional university (English)	Western Cape (WC)	Full participation
University of Limpopo	Traditional university	Limpopo (LIM)	Full participation
University of Freestate	Traditional university (Afrikaans)	Freestate (FS)	Full participation
University of South Africa	Comprehensive University	Gauteng (G)	Only distance learning university
Mangosuthu University of Technology	University of Technology	KwaZulu-Natal (KZN)	Full participation
Nelson Mandela University	Comprehensive University	Eastern Cape (EC)	Full participation
Stellenbosch University	Traditional university	Western Cape (WC)	Conveniently selected to replace North West University
Sol Plaatje University	Traditional university	Northern Cape (NC)	Conveniently selected to replace Mpumalanga
North West University	Traditional university	North West (NW)	Declined to participate (POPI Act)
University of Mpumalanga	Traditional university	Mpumalanga (MP)	Declined to participate (Too new)

The sample therefore contained at least one HEI (i.e. University) from each of the different types of public HEIs in South Africa. Of the initial nine HEIs that were

purposefully selected so that each province would be represented, two declined to take part. The University of North West was concerned about the impact of the Protection of Personal Information Act (POPI) if they provided the researcher with employee details without their permission and University of Mpumalanga believed they were too new to contribute. This occurred despite the researcher having explained in detail the measures he had taken to obtain written informed consent and the measures to safeguard all research data, as discussed in the previous chapter, which were accepted by all other HEIs who took part in this research.

Table 5.1 illustrates the HEIs that were sampled, including the two that were originally selected but declined to take part.

5.3.1 Population and sample per HEI

The sample and information for each of the participating HEIs were obtained from the relevant responsible person for managing employee data at the respective HEIs. To have a sample that will contribute to the trustworthiness of the results (transferability, dependability, confirmability, credibility), all HEIs were requested to provide a list of employees containing the following personal details (Gray, 2004; Willis, 2007; Silvia & Cotter, 2021; Urban & van Eeden-Moorefield, 2018):

- (1) Names and surname.
- (2) Position occupied.
- (3) The level, grade or rank of the position and of the employee.
- (4) Whether the position is academic (e.g. Dean, professor, lecturer) or professional service (e.g. Finance, risk management services, campus management services, student services).
- (5) Race.
- (6) Gender.
- (7) Whether or not the employee is a person living with a permanent disability.
- (8) Age group.
- (9) E-mail address.

All the above information has been included in the Protection of Personal Information (POPI), Act 4 of 2013 that aims to protect the individual's right to privacy (South Africa. The Presidency, 2013). As a result, the various HEIs did not provide all the information due to their different interpretations of the Act.

One HEI even insisted and instructed the researcher to send them the names and e-mail addresses of the sample that the researcher had selected from their population, because they would communicate with the participants. The researcher was advised that the reason for that decision was that the HEI receives numerous requests for their employees to be part of research studies, which tends to overwhelm them at times. Therefore, the researcher was not authorised to communicate directly with the sampled participants even though he had been granted gatekeeper clearance. In the former situation, the researcher formulated the e-mail message for each stratum that had been sampled and attached all relevant documentation, after which the researcher sent it to the HEI for distribution. The HEI confirmed that the invitations had been communicated.

Unfortunately, the researcher was not allowed to send any reminders once the original invitation was released, which arguably had a significant impact on the response rate from that HEI.

5.3.2 Population of sampled HEIs by level

Table 5.2 below shows a summary of the population for the sampled HEIs according to the various broad occupational levels. The population totalled 20 739 potential participants.

Table 5.2

Population of sampled HEIs by level

HEI Level	UNISA (G)	UFS (FS)	UKZN (KZN)	NMU (EC)	UCT (WC)	UL (LIM)	SPU (NC)	US (WC)	MUT (KZN)
VC	1	1	1	1	1	1	1	1	1
Executive	24	4	12	22	11	11	8	21	5

Senior leaders	40	131	59	53	69	55	4	96	20
Managers	405	381	197	213	367	68	22		28
Employees	3310	1921	3915	1519	4673	1215	384	246	1221
Total	3780	2438	4184	1808	5121	1350	419	364	1275

5.3.3 Population of sampled HEIs per function

The population were divided between academic and professional service functions, based on the information received from the participating HEIs. Table 5.3 below reflects the number of potential participants in the population for academics and professional services. In general, academics formed 31,82% (i.e. 6599) of the population compared to 68,18% (i.e. 14 140) for professional services. Stated differently, there were 2,14 (or two) potential professional service participants for each potential academic participant.

Table 5.3

Population of sampled HEIs according to function

HEI Function	UNISA (G)	UFS (FS)	UKZN (KZN)	NMU (EC)	UCT (WC)	UL (LIM)	SPU (NC)	US (WC)	MUT (KZN)
Academic	1539	608	1267	626	1286	617	133	269	254
Professional service	2241	1830	2917	1182	3835	733	286	95	1021
Total	3780	2438	4184	1808	5121	1350	419	364	1275

5.3.4 Sample per level

Even though the research followed a qualitative approach, a sample size of at least 15% was applied in most samples to produce a reasonable response rate that would contribute to the trustworthiness of the results (transferability, dependability, confirmability, credibility) (Gray, 2004; Urban & van Eeden-Moorefield, 2018; Willis, 2007). A total of 4630 employees were selected from the population to serve as the sample for this research study (22,33% of the population). Table 5.4 below presents the sample by HEI and occupational level.

Table 5.4

Sampled participants by level

HEI Level	UNISA (G)	UFS (FS)	UKZN (KZN)	NMU (EC)	UCT (WC)	UL (LIM)	SPU (NC)	US (WC)	MUT (KZN)
VC	1	1	1	1	1	1	1	1	1

Executive	24	4	12	5	11	11	8	21	5
Senior leaders	40	26	39	10	39	19	4	48	16
Managers	222	93	88	42	183	35	22		28
Employees	300	385	774	297	920	304	96	82	408
Total	587	509	914	355	1154	370	131	152	458

5.3.5 Sample per function

The sample comprised of 1454 (31,40%) academics and 3176 (68,60%) professional service employees across the sampled HEIs. The proportion of academic participants to professional services in the sample is similar to the proportions in the population. Table 5.5 below contains a breakdown of the sample according to HEI and function.

Table 5.5

Sampled participants by function

HEI Function	UNISA (G)	UFS (FS)	UKZN (KZN)	NMU (EC)	UCT (WC)	UL (LIM)	SPU (NC)	US (WC)	MUT (KZN)
Academic	168	174	270	67	368	168	36	104	99
Professional service	419	335	644	288	786	202	95	48	359
Total	587	509	914	355	1154	370	131	152	458

5.3.6 Population and sample by race, gender and people living with a disability

It was not possible to report on the race, gender or people living with disability because several of the sampled HEIs did not provide that information, due to the protection of private information (POPI Act) as discussed in par 5.3.1 above. The research however did not investigate or differentiate between these biographical variables and therefore the omission of this information is not problematic.

5.3.7 Sample response rate by HEI and occupational level

A total of 80 participants from the selected sample agreed to and completed either the focus group or semi-structured interview. Of the 80 participants, a total of 69 (86,25%) were from the various leadership levels and a total of 11 (13,75%) were from the non-leadership levels. Furthermore, of the nine HEIs sampled, only two Vice Chancellors took part (22%).

The sample response rate is sufficient for this research because it is a qualitative study where the aim is to identify and describe phenomena, which in this case were leadership capabilities needed to lead successfully in South African HEIs during rapid change and disruption. The sample response rate used in this research is supported by Bailey (2007), Creswell and Plano Clark (2011), Dworkin (2012), Gray (2004) and King & Horrocks (2010) as discussed in section 4.5.3.3 of Chapter 4.

Table 5.6 below presents the participants by HEI and occupational level.

Table 5.6

Sample response rate by HEI and level

HEI Level	UNISA (G)	UFS (FS)	UKZN (KZN)	NMU (EC)	UCT (WC)	UL (LIM)	SPU (NC)	US (WC)	MUT (KZN)
VC							1		1
Executive	4	2	2	1		2	6	2	
Senior leaders	4	6	4	2		1		6	
Managers	7	3	4	2	3	0	1	3	2
Employees	1	4	1	1	1	2			1
Total	16	15	11	6	4	5	8	11	4

5.3.8 Sample response rate by HEI and function

Of the 80 participants who took part in the research, 26 (32.50%) were from the academic function and 54 (67.50%) were from the professional services function. Table 5.7 below shows the participants by HEI and function. The percentage of academics and professional services of the response rate is similar to the that of the sample and population, describe above.

Table 5.7

Sample response rate by HEI and function

HEI Function	UNISA (G)	UFS (FS)	UKZN (KZN)	NMU (EC)	UCT (WC)	UL (LIM)	SPU (NC)	US (WC)	MUT (KZN)
Academic	2	8	5	4		2	1	1	3
Professional service	14	7	6	2	4	3	7	10	1
Total	16	15	11	6	4	5	8	11	4

5.3.9 Sample response rate by HEI, gender, race and people with disability

Of the 80 participants who took part in the research, Africans (A) were 25% (20), Coloureds (C) were 11,25% (9), Indians (I) were 12,50% (10) and Whites (W) were 51,25% (41). In addition, there was almost an equal amount of male and female participants who took part in the research study. Of the participants who took part, 41 (51,25%) were Males and 39 (48,75%) were females. Only one participant was a person living with a disability (1%).

Unfortunately, due to the varying information provided by the different HEIs about their individual employee populations, as previously discussed, the researcher was not able to include the race, gender and people with disability information as part of the descriptive statistics relating to the research population and sample. Therefore, the researcher could also not describe the participants who took part in the research study in terms of their race, gender and PWD, in relation to population or sample. Table 5.8 below presents the distribution of participants who took part in the research by HEI, race, gender and people living with a disability (PWD).

Table 5.8

Sample response rate by HEI, gender, race and people with disability

HEI	Race and gender				Male				Female				PWD
	A	C	I	W	A	C	I	W	WF				
UNISA (G)	4			1	4		1	5	1				
UFS (FS)			1	7		1		6					
UKZN (KZN)	3	1	3	2		1	1						
NMU (EC)	1			2	1	1		1					
UCT (WC)						2		2					
UL (LIM)	2						1	2					
Sol Plaatje (NC)	1		2	2		2		1					
US (WC)	2			4		1		4					
MUT (KZN)	1		1	1	1								
Total	14	1	7	19	6	8	3	21	1				

5.3.10 Sample response rate by HEI and age group

The researcher used three age groups for the research namely less than 35 years of age, 35 to 55 years of age and above 55 years of age. A total of nine participants (11,25%) were below 35 years of age, 40 (50%) were between 35 and 55 years of age

and 31 (38,37%) were above 55 years of age. Overall, most participants in the study were 35 years of age and older (83,37%). Unfortunately, due to the varying information provided by the different HEIs about their individual employee populations, as previously discussed, the researcher was not able to include the age group information as part of the descriptive statistics relating to the research population and sample. Therefore, the researcher could also not describe the participants who took part in the research study in terms of their age, in relation to population or sample from which they were selected.

Table 5.9 below contains the age breakdown for each participating HEI.

Table 5.9

Age breakdown for each participating HEI

HEI Age group	UNISA (G)	UFS (FS)	UKZN (KZN)	NMU (EC)	UCT (WC)	UL (LIM)	SPU (NC)	US (WC)	MUT (KZN)
<35		4				1	2	1	1
35-55	9	7	8	4	3	1		7	1
>55	7	4	3	2	1	3	6	3	2
Total	16	15	11	6	4	5	8	11	4

5.3.11 Sampling challenges

Even though the researcher applied purposeful and stratified randomised sampling techniques to select the sample, he posits that there was a certain amount of sampling error in certain of the populations and samples because not all participants invited to take part responded. All HEIs in the sample were contacted to provide employee lists of all their employees (including e-mail addresses and telephone numbers) from which the sample could be selected. However, not all the employees had email addresses or contact telephone numbers so that they could be invited to take part. Furthermore, in some cases, as reported by the relevant HEI contact person, employees' names had been omitted because they had only recently joined the HEI and their names had not yet been captured onto the employee list at the time it was generated.

The researcher used e-mails to contact the employees in the sample to invite them to take part in the research. As a way of ensuring a high response rate, he also followed up with each potential participant in the sample, at least twice, through mainly e-mails

and where possible by telephone. However, some institutions did not allow for reminder e-mails to be sent to employees who had been invited to take part in the research project, even though some had automatic out of office replies stating that they would return at a future date, which was before the invitation response return date. which also had the potential to create sample error or bias. Overall, the response rate from the samples of the various HEIs was low. In several cases the response rate was as low as 1,6% of the sample (i.e. five responses out of a sample of 305). Therefore, the responses of those who did not arrive after confirming they would, or those who simply did not take part, were not obtained or considered in the data collection process, potentially affecting the research findings (Leedy & Ormrod, 2015). Those who did participate answered all interview or focus group questions openly and candidly which resulted in a large and rich set of data.

5.4 DATA COLLECTION METHODS

In the previous chapter it was reported that semi-structured interviews and focus groups would be used as methods to collect the data. Semi-structured interviews were held to collect the data from Executives (e.g. Vice Chancellor, Deputy Vice Chancellor, Executive Directors) and senior leaders (e.g. Deans, Directors). Focus groups were used to collect the data from managers (e.g. Academic Leaders, Module Leaders, Finance Managers) and non-leadership employees (e.g. Security Officers, Groundsmen, Lecturers). The reason was that there are less Executives and Senior Leaders in comparison to Managers and non- leadership level employees. Therefore, to enhance efficiency, the researcher used focus groups as a method to interview several managers and non-leadership level employees simultaneously. A total of 44 semi-structured interviews and 11 focus groups were conducted to collect the data. Of the participants, 44 (55%) took part in semi-structured interviews and 36 (45%) took part in focus group discussions. Table 5.10 below presents a summary of the participants by level and method of data collection.

Table 5.10

Method of data collection by level of participants

Level Method	Executive	Senior leaders	Managers	Non-leadership
Semi-structured interview	20	24		

Focus group			23	13
Total	20	24	23	13

Of the participants, 26 (32,5%) were academics and 54 (67,5%) were from the professional services. Table 5.11 presents the total participants by function and method of data collection

Table 5.11

Method of data collection by function of participants

Function	Method	Semi-structured interview	Focus group
Academic		13	13
Professional service		31	23
Total		44	36

5.5 THE MAIN THEMES DISCUSSED IN THE INTERVIEWS

The following main themes emerged from the participants' responses to the previously stated questions. The researcher conducted thematic data analysis and independent coding by applying a grounded theory approach to establish emerging themes. The themes and subthemes emanating from this study are included in Annexure E. The following main themes emerged:

Theme 1: Perceptions of leadership and leadership capabilities.

Theme 2: Perceptions of rapid change and disruption.

Theme 3: Perceptions of coping mechanisms to overcome rapid change and disruption.

Theme 4: Perceptions of leadership capabilities needed to successfully lead South African universities during rapid change and disruption.

The researcher will indicate when a main theme meets the objectives of the study. In the following section, each of the main themes and subtheme with the associated categories will be presented and confirmed by using excerpts taken from the

transcripts of the interviews. The identified themes, subthemes and categories are then compared to available literature.

5.5.1 Theme 1: Perceptions of leadership and leadership capabilities

The responses to the following questions originated and developed the theme of perceptions of leadership and leadership capabilities:

5.5.1.1 The main and probing questions

- (1) In your own words, explain what you understand by leadership and leadership capabilities.
- (2) In your own words, explain what capabilities did you display that you believe contributed to the university successfully dealing with the rapid change and disruption?
- (3) According to you, what capabilities did other university leaders display that you believe contributed to the university successfully dealing with the rapid change and disruption?
- (4) According to you, what capabilities did other university leaders display that you believe contributed to the university unsuccessfully dealing with the rapid change and disruption?
- (5) According to you, what capabilities did you display that you believe contributed to the university unsuccessfully dealing with the rapid change and disruption?
- (6) According to you, what leadership capabilities were not displayed by you which you believe could have improved the way the rapid change and disruption were handled?

(7) According to you, what leadership capabilities were not displayed by other university leaders which you believe could have improved the way the rapid change and disruption were handled?

5.5.1.2 *Subthemes*

The theme developed into the following sub themes:

- (1) Subtheme 1.1: Definition of leadership
- (2) Subtheme 1.2: Definition of leadership capabilities

5.5.1.3 *Subtheme 1.1: Definition of leadership*

a. Definition of leadership

The researcher selected one of the 55 transcripts from the semi-structured interviews and focus group audio recordings. The researcher then worked back and forth through the data, sentence by sentence, to firstly allocate codes to the text and secondly compile an initial list of codes that was used as a baseline. Next, the researcher went through the same transcript for a second time to refine the initial list of codes. The researcher then went through each of the remaining 54 transcripts (covering the remaining 79 participants) and coded each one, while updating and refining the list along the way.

A thorough analysis of the research data did not result in the identification of comprehensive definition for leadership. Instead, the analysis of the data revealed several common reoccurring codes (i.e. terms, words or sentences that referred to elements of leadership). These codes were then grouped into categories and used to formulate the definition of leadership. Table 5.12 below contains the most common codes and categories that emerged from the data.

Table 5.12

Examples of codes and categories used to formulate the definition of leadership

Verbatim evidence	Code	Category
<p>Participants believed that leadership must also be forward looking to predicate what lies ahead and plan accordingly. Below are some examples.</p> <p>Being able to chart a new way for the faculty...somebody who is futuristic who looks at the future, looking at what would happen or what is likely to happen (Participant 33) ...leadership is more engaging and having foresight or a view of the next three generations (Participant 47). ...must recognise the positives and the negatives and look forward and try and learn how to mitigate the negative and understand the reasons (Participant 40). ...it also requires you to know your context well and where it is going (Participant 38). ...be able to foresee and analyse scenarios (Participant 43). ...more visionary – forward looking beyond the routine of the day (Participant 6) ...to provide a vision of the institution to where it's heading (Participant 3).</p>	<p>Anticipating what lies ahead</p>	<p>Foresight</p>
<p>Most participants stated that leadership included providing direction to the organisation or group of where they needed to go. Below are a few examples.</p> <p>... at a more strategic, uh, and visionary level that is to, to be forward looking; to ensure that you're taking an organisation, or whatever it is that you're leading, forward... (Participant 1) ...leadership is about providing some formal for high level guidance to people you work with and they understand your procedures, policies of the institutions, and how they can be able to operationalize the objective of the institution... (Participant 2) ...understanding the context of that organisation where you are, and to have a vision where you can lead that organisation... (Participant 11). The person who leads and guides a team – provides direction (Participant 52) ...it can, actually, just, uh, you know, uh, manifest itself, uh, by way of, uh, providing guidance, directions, uh, to a, an individual, a group of individuals in the attainment of a specific, uh, objective... (Participant 26)</p>	<p>Guidance and direction</p>	<p>Provide direction</p>
<p>Most participants also stated that leadership includes a having a vision or end state of where you want the be in future. Below are a few examples.</p> <p>Leadership ... It's about having vision for, uhm, an end state, or, or, uhm, a goal or an outcome... (Participant 28) Leadership is the ability to create a common vision and direction towards a common goal, and, uh, ja... (Participant 31) ...lead in a direction by negotiating, influencing them, and convincing, negotiating with teams to achieve the vision (Participant 40) ...The leader is a visionary...it is about the ability to make you believe what you cannot see (Participant 17). ...to provide vision to the institution to where it is heading... (Participant 3)</p>	<p>Vision</p>	
<p>The participants stated that leadership also involves compiling a clear picture of the goals and objectives – a</p>	<p>Strategic planning</p>	

strategy – which needs to be achieved. Below are some examples.

Is to show me direction and to define the direction. The leader must clarify the objectives to be achieved (Participant 23)

It is the ability to work with people, to lead people in a particular strategic direction (Participant 4)

Showing the way...Leading towards achieving the vision and mission of the university... (Participant 5)

The person at the forefront of leading the plan of the unit...leading the unit towards the goals of the plan...is expected to deliver the broader aims of the organisation... (Participant 17).

Being able to understand what must be done and share that with your assistants (Participant 20) ...Process of developing and designing a strategy and ensure they are operationalised at all levels of the institution (Participant 25)

Many participants also stated that leadership involves taking people with you or long with you when striving towards the vision. Below are a few examples.

...some people are authoritative, and some are team workers. Mine is teamworking; taking people along takes you a long way. (Participant 14)

It is about taking people with you to accept the vision. Leadership is also about the ability to implement not by himself but a balance between yourself and others (Participant 10)

It's about having vision for, uhm, an end state, or, or, uhm, a goal or an outcome and being able to empower the people around you, and take them along with you on this journey (Participant 28)

Taking an organisation or group forward with you. That is very important towards addressing the mission, challenges and business ideals of an organisation so that everyone is productive (Participant 22)

Most participants stated that leadership involves getting buy-in from followers to achieve the objectives and facilitating their growth and development through supporting, empowering and giving them opportunity to do so. Below are some examples.

The leader facilitates growth and development amongst team members...and gives them space to work (Participant 5) ...creating a space that those you lead can attain self-actualisation and do their best (Participant 41)

It is the possibility to get involved in an organisation, or a group of people in such a way that you can develop them in a positive way...also empowering them to become better equipped... (Participant 13)

...ability to lead others; giving them direction; helping them think what they have not thought of (Participant 45)

...use all your ability to build teams and align to what the organisation wants you to meet in a time and space (Participant 40) ...providing support and being their advocate and to provide feedback to them from senior management (Participant 44).

Working with others

Teamwork

Supporting, empowering and developing followers

Influencing

<p>It is about getting people to do what they must do because they want to; not because they have to (Participant 42) ...not to make people listen to you but to lead by example and influence them to follow you (Participant 48) The leader is expected to deliver on the broader objectives of the organisation and get buy-in (Participant 17) It is about taking people with you to accept the vision (Participant 10) ...ability to motivate others to participate in their job (Participant 49) ...the ability to influence others in a specific cause and time (Participant 15) ...leadership is not positional...it's to motivate people to move to a different place (Participant 46)</p>	<p>Getting buy-in</p>	
<p>Many participants were of the view that leadership must also be concerned with creating the right atmosphere, climate or space for followers to perform their work. Below are some examples.</p> <p>...it is about setting the right culture (Participant 19) ...personal attributes may not be enough...having values, showing empathy and building trust relationships with those you lead is very important (Participant 50) ...creates a space for dialogue...open communication (Participant 17) ...It's about creating a space that those you lead can attain self-actualisation (Participant 41) ...Ability to engage at an operational level. To set the principles and values tone of the institution – things that regulate our behaviour when rules can't or don't apply. It is about living the values (Participant 47) To lead people in a particular strategic direction...to instil values and inspire behaviour (Participant 43).</p>	<p>Creating the right atmosphere</p>	<p>Conducive environment</p>
<p>...to lead in a direction and negotiate and influence them and convince and negotiate with teams to achieve the vision (Participant 40). ...providing feedback to them from senior management (Participant 44). ...is the ability to engage at operational level...to set the principles and tone of the institution...it's more about engaging (Participant 47). ...you take responsibility of guiding the process of engagement in the division you work (Participant 53).</p>	<p>Providing information and feedback</p>	<p>Communication</p>
<p>...Providing answers; letting people know what is going on (Participant 5). ...creates a space for dialogue – open communication (Participant 17). ...being able to understand what must be done and sharing that with your assistants (Participant 20). ...previously there was no communication or direction. Now there is communication (Participant 64).</p>	<p>Open communication</p>	

<p>...to take charge and make decisions and to get staff to work towards a common goal (Participant 55).</p> <p>...leadership involves ensuring the achievement of the vision and mission of the university (Participant 5)</p> <p>...is the person providing direction and leading the way by example (Participant 23).</p> <p>Where you are put at a place where you are expected to lead; to be a torchbearer to achieve the vision of the institution (Participant 56).</p> <p>...have the trust and confidence from others to take responsibility for their decisions...must work with accountability – cannot shirk the responsibility (Participant 14)</p> <p>...by virtue of the statute you must lead certain sections supported by middle managers (Participant 57).</p>	<p>Accountability and responsibility</p>	<p>Trustworthy</p>
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b. Discussion of the codes and themes regarding the definition of leadership

The most common codes that emerged from the data (i.e. evidence) and presented in Table 5.12 above were anticipating what lies ahead, guidance and direction, vision, strategic planning, working with others, supporting, empowering and developing followers, getting buy-in, creating the right atmosphere, providing information and feedback, communication and accountability and responsibility. The codes were then grouped in categories based on their similarity or fit, to enable a coherent definition of leadership to emerge. The following categories emerged, as reflected in Table 5.12 above:

- (1) Foresight (i.e. anticipating what lies ahead).
- (2) Provide direction (i.e. guidance and direction, vision, strategic planning).
- (3) Teamwork (i.e. working with others).
- (4) Influencing (i.e. getting buy-in, supporting, empowering and developing followers).
- (5) Communication (i.e. providing information and feedback, communication).
- (6) Conducive environment (i.e. creating the right atmosphere).
- (7) Trustworthy (i.e. accountability and responsibility).

The responses confirmed that the participants understood the concept of leadership and thus provided sufficient motivation to continue their participation. The results further confirmed the views of various authors:

- (1) Yukl (2006, p8), as discussed in section 2.2.1 of Chapter 2, defines leadership as “the process of influencing others to understand and agree about needs to be done and how to do it, and the process of facilitating individual and collective efforts to accomplish shared objectives”. The categories that emerged from this research which were used to formulate the definition of leadership are almost identical to those contained in the definition of Yukl (2006), as discussed in sections 2.2.1 and 2.2.2 of Chapter 2. In particular, foresight, provide direction, teamwork and influencing can be likened to the action of deciding what and how things should be done, influencing others to understand, and facilitate individual and collective efforts to achieve shared objectives as stated by Yukl (2006) (as discussed in sections 2.2.1 and 2.2.2 of Chapter 2). Yukl (2006), however, does not directly emphasise trustworthiness, communication or conducive environment as elements of the definition of leadership although one could deduce that they are implied where he states, “...and the process of facilitating collective efforts to accomplish shared objectives” (Yukl, 2006, p. 8), as discussed in sections 2.2.1 and 2.2.2 of Chapter 2.
- (2) Northouse (2007), as discussed in sections 2.2.1 and 2.2.2 of Chapter 2, offers a more generic definition for leadership by defining leadership as “a process whereby an individual influences a group to achieve a common goal”. The categories of influencing, teamwork and provide direction that emerged from this research were the same as those that are contained in the definition by Northouse (2007), as discussed in sections 2.2.1 and 2.2.2 of Chapter 2. However, the definition of Northouse (2007) does not appear to deal directly or indirectly with trustworthiness, conducive environment, foresight, whereas the categories that emerged from this research does, as discussed in sections 2.2.1 and 2.2.2 of Chapter 2. Hughes et al. (2009, p. 6) offer a similar definition as Northouse (2007) where they emphasise leadership as a process of influencing an organised group toward achieving its goals, as discussed in sections 2.2.1 and 2.2.2 of Chapter 2.

However, they also do not appear to address aspects of trustworthiness, conducive environment, foresight or teamwork, whereas this research does.

(3) Ivancevich and Matteson (1996, p.412) define leadership as “Influence in an organisational setting or situation, the effects of which are meaningful and have a distinct impact on, and facilitate the achievement of, challenging organisationally relevant goals”, as discussed in sections 2.2.1 and 2.2.2 of Chapter 2. The categories and definition of leadership that emerged from this research are similar to Ivancevich and Matteson (1996) with respect to providing direction and influencing others to achieve the organisational goals, as discussed in sections 2.2.1 and 2.2.2 of Chapter 2. It can also be argued that their definition implies communication and working with others because influence arguably involves communication of sorts and an organisation can be likened to a large team. However, they do not include trustworthiness, conducive environment or foresight in their definition whereas these categories emerged as being part of a definition of leadership in this research.

(4) Grint et al. (2017) discussed leadership from different perspectives. Of particular relevance to this research is their perspective of position-based and purpose-based leadership and process-based leadership, as discussed in sections 2.2.1 and 2.2.2 of Chapter 2. Person-based and purpose-based leadership indicate that the person’s position or purpose determines if they are a leader or not and are arguably similar to categories of providing direction and influencing which emerged from this research (Grint et al., 2017), as discussed in sections 2.2.1 and 2.2.2 of Chapter 2. The perspective of process-based leadership was similar to the categories of conducive environment, influencing and trustworthiness that emerged from this research because they appear to focus on behaviours and interaction needed to create a supportive environment that will enable employees to perform as required (Grint et al., 2017), as discussed in sections 2.2.1 and 2.2.2 of Chapter 2. However, Grint et al. (2017) do not appear to address the categories of foresight or teamwork that emerged from this research.

The above categories as presented in Table 5.12, which already been discussed above, were used to formulate the following definition of leadership for this study:

"Leadership is the action of a trustworthy person who applies foresight to provide direction to the organisation and influences followers to successfully reach the end state through teamwork, within a conducive environment".

The above definition is consistent with the literature because it contains similar elements to the definitions found in the literature, including being similar to the definition that was adopted in Chapter 2 of this research, as part of the literature review. Specifically, the definition adopted in Chapter 2 defined leadership as a "Process where individuals or groups are influenced through a relationship with the leader to bring about real change and achieve outcomes through a common purpose, with due consideration for the context and situation".

In other words, the definition that emerged from this research acknowledges that leadership as a process as indicated by Hughes et al. (2009), Invancevich and Matteson (1996), Northouse (2007) and Yukl (2006) (i.e. leadership is the action of a trustworthy person who applies foresight to provide direction to the organisation), as discussed in sections 2.2.1 and 2.2.2 of Chapter 2. The definition also acknowledges that leadership involves the achievement of a goal(s) or purpose (i.e. to successfully reach the end state), within a situation or context (i.e. rapidly changing and disruptive South African HEI environment), it involves leading others (i.e. influence followers) and it involves a relationship, interaction or influence between the leader and followers (i.e. influences followers to successfully reach the end state through teamwork, within a conducive environment) as indicated by Hughes et al. (2009), Invancevich and Matteson (1996), Landy and Conte (2007), Northouse (2007) and Yukl (2006) (as discussed in sections 2.2.1 and 2.2.2 of Chapter 2).

The definition that emerged from this research is also similar in many aspects to existing definitions in literature, already discussed above, such as Yukl (2006, p8) who defines leadership as "the process of influencing others to understand and agree about needs to be done and how to do it, and the process of facilitating individual and collective efforts to accomplish shared objectives" and Ivancevich and Matteson (1996, p.412) who define leadership as "Influence in an organisational setting or situation, the effects of which are meaningful and have a distinct impact on, and facilitate the achievement of, challenging organisationally relevant goals" (as discussed in sections

2.2.1 and 2.2.2 of Chapter 2). In addition, as already discussed above, many of the elements contained in the definition that emerged from this research are present in existing definitions of literature, while some elements are different.

However, the definition for leadership that emerged from this research is also unique or different because it originated within the South African HEI environment as part of this research, which aimed to determine the capabilities required to lead successfully during rapid change and disruption within South African HEIs. In other words, it relates to a specific situation and context of rapid change and disruption within South African HEIs. In contrast the definitions by Hughes et al. (2009), Invancevich and Matteson (1996), Landy and Conte (2007), Northouse (2007) and Yukl (2006) appear to be applicable to more than one context or situation, even though some researchers such as Bergh and Theron (2009), Fiedler (1967), Fiedler (1972) and Blanchard (2019) acknowledge the impact of the situation on leadership in general (as discussed in sections 2.2.1 and 2.2.2 of Chapter 2).

c. Alternate definition of leadership

Apart from the abovementioned common codes and categories that were extracted from the data, there were less-common codes and categories that emerged which could lead to the formulation of an alternate leadership definition. The less-common codes and categories that emerged indicated that leadership was either something that you are born with, a position that one occupies, power and authority that one has, takes place within a specific context or situation, is not management or it is an ability or characteristic.

Arguably and by implication, the alternate codes and categories could suggest that, to be a leader or not, is dependent on the extent to which you are born with leadership, occupy a position or the context or situation that you are in. In other words, unless these conditions are met a person will not be seen as a leader or could not lead. Table 5. 13 contains examples of the evidence which supports the emergence of the codes and categories that emerged and were used to formulate the alternate definition of leadership.

Table 5.13

Examples of evidence of the codes and categories that can lead to an alternate definition of leadership

Verbatim evidence	Code	Category
I believe that, that, uhm, I don't know if it's genetics or personality, but there's people that I think are just natural leaders (Participant 9). ...I would say, uhm, again, you cannot be trained to be a leader... it's a natural ability or attribute, that many leaders have (Participant 10).	You are born with leadership	In-born
It is a position to take charge and make decisions to get staff to work to a common goal (Participant 55). It is the ability stand up and take charge... it is a position of power and a position of authority (Participant 34). I think it's very important, in a leadership position, to take control of your unit and to do proper planning (Participant 9).	Leadership is power and authority	Power and authority
...put in a position to take responsibility of guiding the process of engagement in the division you work (Participant 53). ...It depends on the position in the organisation...may be at a more operational level than taking strategic decisions...by virtue of the statute you must lead certain sections supported by middle management (Participant 57). ... it is a position of power and a position of authority (Participant 34).	Leadership is positional	
...in Higher Education it is academic leadership; you need to have the academic background (Participant 11). Leadership depends on the context; it is about creating space that those you lead can attain self-actualisation... (Participant 41). ...means, being able to, chart new pathways, you know, for the faculty...it means, you know, being able to innovate... (Participant 33).	Leadership depends on the context or situation	Context and situational dependant
It is a set of attributes that allows a person to persuade and influence (Participant 58). ...ability to motivate others to participate to do their work (Participant 49) ...the ability to work with people and lead people in a specific strategic direction... (Participant 43). ...it is the ability to lead others; to give direction (Participant 45) ...leadership, it's more of a noun, ...that describes, a, uhm, characteristic (Participant 26).	Leadership is an ability or characteristic	Ability
I think, leadership, for me, is not necessarily linked to management, but it is anybody that can play a leading role in any situation (Participant 8). Leadership entails being able to, uh, go beyond typical management of planning, organising, and directing... (Participant 28). There's a clear distinction between management...leadership, you no longer have your own interest and your own career development...You are then responsible for the development of other people, and...the designated responsibilities of your office (Participant 29). There is a difference between leadership and management; leadership is based on ability – it is not positional (Participant 19).	Leadership versus management	Leadership versus management

Due to the emergence of the few alternate codes and categories relating to the term leadership described above, the researcher formulated two definitions for term leadership. The first definition of leadership for this study was based on the most common codes and categories that were extracted from the data and has been discussed above.

The second definition of leadership for this study, based on the few codes and categories relating to the term of leadership which were extracted from the data, reads as follows:

“Leadership is the application of in-born attributes by a person in a position to exercise power and authority, within a context and/or situation, to achieve the objectives by ensuring followers do their work.”

The second definition of leadership is consistent with various research in the literature such as Hughes et al. (2009), Landy and Conte (2007) and Northouse (2007) who discuss the “great man and great woman” theories of leadership where the in-born characteristics of great leaders were studied to understand what made them successful, as discussed in section 2.3.1 of Chapter 2. The second definition of leadership also confirms that leadership is the exercise of power and authority within a context or situation to ensure followers achieve their objectives and do their work as stated by Bass and Stogdill (1990), Fiedler (1972), Grobler and Singh (2018), Hughes et al. (2009), Landy and Conte (2007), Northouse (2007) and Yukl (2006), as discussed in section 2.3.4 of Chapter 2. Specifically, Fiedler (1967) views leadership as a relationship which depends on the use of influence and power, as discussed in section 2.3.4 of Chapter 2.

Bass and Stogdill (1990) seem to support Fielder (1967) and state that leadership is authoritarian and coercive, as discussed in section 2.3.4 of Chapter 2. Grint et al. (2017) argue that position-based leadership refers to a person being seen as a leader from the perspective of the position that they occupy (which could also be interpreted to involve the exercise of power and authority), as discussed in section 2.3.4 of Chapter 2.

c. Definition adopted from findings of this research

For this research, the researcher has formulated and adopted the definition of leadership that was based on the most common occurring codes and categories extracted from the data, which were presented in Table 5.12 and already discussed above. Therefore, the final definition which was formulated and adopted for this research is as follows:

” Leadership is the action of a trustworthy person who applies foresight to provide direction to the organisation and influences followers to successfully reach the end state through teamwork, within a conducive environment”.

5.5.1.4 Subtheme 1.2 Definition of leadership capabilities

a. Definition of leadership capabilities

During the process of analysing the research data, codes and categories emerged which the researcher could use to formulate the definition of leadership capabilities. Two contrasting lists of codes and categories emerged. The first list revealed that leadership capabilities were the tools, things, abilities, attributes, qualities, capabilities, skills, capacity, aptitude, knowledge and/or characteristics that a person must possess to lead successfully in a leadership role, within a specific situation. This list contained the most common occurring codes and categories extracted from the research data.

Table 5.14 below contains some examples of the evidence of the most common codes and categories that were used to formulate the definition of leadership capabilities.

Table 5.14

<i>Verbatim evidence</i>	<i>Code</i>	<i>Category</i>
The skills to get them to achieve or do those goals (Participants 42 and 63) The skills or qualities you need to possess to lead...to take the project forward (Participants 17, 29 and 43).	Leadership capabilities as skills, knowledge and qualities needed	Capabilities

It is the attributes of a leader that research has shown leaders have shown (Participants 14, 15 and 34)	Leadership capabilities as attributes and abilities needed
Showing the right type of aptitude or stuff to be a leader (Participants 44, 49 and 65)	Leadership capabilities as capacity/capability and aptitude needed
The things or characteristics leaders should have to lead (Participants 45, 58, and 64)	Leadership capabilities as things or characteristics
...will be the competencies that are required by the leader to perform the role in which they are placed (Participants 2, 11, 60 and 61)	Leadership capabilities as competencies needed
...requires various leadership tools to lead successfully; not your specialist tools (Participants 35 and 66)	Leadership capabilities as tools needed
In higher education it is a deep understanding of the academic project...academic freedom (Participant 47). In Higher Education it is about possessing a strong embeddedness in Higher Education...possessing a post graduate diploma or experience as a lecturer (Participant 22). ...we say this person has that le-leadership capability, you know, has a capacity, you know, some kind of insight to come up with solutions to, complex or challenging situations (Participant 33). Competency to lead any organisation – understand the context (Participant 11). Tools and abilities to achieve these goals, and leadership depends on the context or situation (Participant 63)	Situational requirements

b. Discussion of the codes and themes regarding the definition of leadership capabilities

The evidence contained in the codes and categories that emerged from this research, as presented in Table 5.14 above, describe leadership capabilities as tools, things, abilities, attributes, qualities, capabilities, skills, capacity, aptitude, knowledge and/or characteristics that a person must possess to lead successfully in a leadership role, within a specific situation. The codes and categories in Table 5.14 are consistent with the literature which defines leadership capabilities as the power, ability, basic or raw talent, including skills, needed to do something or perform a job successfully (Cambridge Dictionary English Dictionary, 2019b; Hughes et al., 2009; Landy & Conte, 2007), as discussed in section 2.7 of Chapter 2. Furthermore, the literature indicates that to be effective or successful, leaders require certain competencies (i.e. knowledge, skills, abilities and other attributes) and capabilities to successfully guide their organisations to achieve goals and sustain growth (i.e. in other words to perform successfully as a leader) (Hughes et al., 2009; Invancevich & Matteson, 1996; Landy &

Conte & Conte, 2007; Maartins & Geldenhuys; 2016; Yukl, 2006), as discussed in section 2.7 of Chapter 2.

From the literature review, this research adapted and adopted a definition for leadership capabilities which defines them as the abilities and competencies leaders need to lead their organisations successfully to ensure organisation goals are accomplished and growth is sustained (Hughes et al., 2009; Landy & Conte, 2007, Northouse, 2007), as discussed in section 2.7 of Chapter 2.

The second list of codes and categories that emerged from the research data revealed that leadership capabilities are the natural abilities which individuals are born with and that you cannot train for them. Table 5. 15 below contains examples of the evidence of the codes and categories used to define leadership capability in terms of in-born ability.

Table 5.15

Examples of evidence of codes and categories for the alternate definition of leadership capabilities

Verbatim evidence	Code	Category
I would say, you cannot be trained to be a leader...it's a natural ability that, or attribute, that many leaders have (Participant 10). Leaders are born...some say you can be made into one if you have the basics... (Participant 57)	Leadership capabilities are in-born	In-born ability

The code and category presented in Table 5.15 above is similar to what Hughes et al, (2009) view, who state that a capability refers to ability, which is the “raw talent” to do something including intelligence and creativity, as discussed in section 2.7 of Chapter 2. The code and category in Table 5.15 are also similar to the great man and women theory of leadership which state that leadership is in-born (Hughes et al., 2009; Landy & Conte, 2007; Northouse, 2007), as discussed in section 2.7 of Chapter 2. While the above codes and categories provide an alternate definition of the term leadership capabilities (i.e. leadership capabilities are in-born), they were in the minority. The most common codes and categories that emerged revealed that leadership capability refers to skills, competencies or characteristics that an individual must possess to lead

successfully in a context and or situation. Therefore, the definition for leadership capabilities adopted by the researcher for this study, was formulated from the most common codes and categories that emerged from the data, and reads as follows:

“Leadership capabilities are the abilities and competencies (i.e. knowledge, skills, abilities and attributes) needed, by the occupant of a leadership role, to be successful at achieving the goals and objectives within a given context and/or situation”.

5.5.2 Theme 2: Perceptions of rapid change and disruption

The responses to the following questions during the focus group interviews and individual interviews were used to develop theme 2, perceptions of rapid change and disruption.

5.5.2.1 Subthemes

The following subthemes discussed were developed:

- (1) In your own words, explain what you understand by “rapid change” and “disruption”, within the context of Higher Education?
- (2) In your own words could you please describe to me what rapid change and disruption have affected your university over the past two to three years?
- (3) In your own words, could you please explain what the impact of the rapid change and disruption was on your university?
- (4) In your own words, could you please explain what the impact of the rapid change and disruption was on you and on your role as leader within the university?

The following subthemes were developed from this theme:

- (1) Subtheme 2.1: Definition of rapid change.

(2) Subtheme 2.2: Definition of disruption.

(3) Subtheme 2.3: Perceptions of the impact of rapid change and disruption on South African HEI and their leaders.

5.5.2.2 *Definition of rapid change and disruption*

a. Subtheme 2.1: Definition of rapid change

i. Definition of rapid change

During the analysis of the data, codes and categories also emerged that were used to formulate the definition of the term rapid change. The codes that emerged were unexpected or surprise events, unplanned for events, events not prepared for, forced upon you, change the way things are done or the direction, frequency of change, no time to breath or think, at speed, quick or fast paced event and sudden event. The codes were reduced, where possible, by combining those that belonged together into categories. The most common occurring categories that emerged were unexpected, involuntary, fast-paced, new ways of working and frequent.

Table 5.16 below contains examples of evidence of the codes and categories that emerged from the research.

Table 5.16

Examples of the codes and categories to formulate the definition of rapid change

Verbatim evidence	Code	Category
Can be a surprise – sometimes with a pre-warning (Participant 5) Change that is not expected; happens at the spur of the moment. You are not prepared for it (Participant 15). It is faster than expected change (Participant 23) It's a rupture of some sorts – it is not expected (Participant 66).	Unexpected or surprise event	Unexpected
It is change that is unlikely to be predicted. That doesn't mean you don't have the capacity to respond (participant 1) ...it's a change that would happen without any planning. It's something that would happen overnight (Participant 30)	Unplanned for event	

<p>It is quick, it is constant change. You have not prepared for it, predicted it or planned for it. It is totally unexpected and causes uncertainty (Participant 63).</p>		
<p>It is something that you are not prepared for (Participant 5). It is a change that you are not prepared to confront – it happens suddenly (Participant 44) Change that is forced on you. It comes quickly, and you don't have time to think or prepare for it. You are forced to change (Participant 53).</p>	<p>Event not prepared for</p>	
<p>We don't have a lot of rapid change in Higher Education in...external factors such as political figures in authority create rapid change...the Council and political leaders forced us to insource staff (Participant 9). Government policies drive rapid change in teaching and learning and research (Participant 20). It can be forced on you; I don't like it (Participant 42). It is a decision that must be implemented different from what they have been doing for a while (Participant 59) It is continuously happening. You need to offset the change because you don't have time. If you don't change it may be the end of your company (Participant 55).</p>	<p>Forced upon you</p>	<p>Involuntary</p>
<p>...Ja, so, that is, uhm, rather response to, uhm, new technologies; response to new, uh, socio-economic situation... So, there's a lot of change... that influences the way that our agricultural faculty needs to approach technologies (Participant 10). ... reflects within the transformation agenda of us as a country. Where there are certain perspectives and perceptions, one dimensional, that needs to change towards a multicultural dimension... (Participant 11) ...it is when you have been doing things in a certain way and external or internal influences cause you to do things differently (Participants 3 and 33). It is a definite feature of our era. It defines the environment in which we live. The changes are more rapid, surprising and disruptive or it then becomes disruptive (Participants 8,19, 34, 58). It is a decision that must be implemented different from what they have been doing for a while (Participant 59).</p>	<p>Change the way things are done or the direction</p>	<p>New ways of working</p>
<p>Everything is changing all the time; it can cause disruption (Participant 19). Faster than expected change and an increased frequency of change (Participant 23). It is the notion that we no longer live in an era of stability...the successes of yesterday and those formulas won't work in future. Technology changes at a high rate and more frequently (Participant 62). Rapid change is quick and constant...(Participant 63).</p>	<p>Frequency of change</p>	<p>Frequent</p>
<p>...It often happens in the context of acute pressure (Participant 17). It follows in a really rapid sequence of events with no room to pause or breathe under normal circumstances and there are a number of different contributing factors which make it complex (Participant 38). Change that is forced on you. It comes quickly and you don't have time to think or prepare for it. You are forced to change (Participant 53).</p>	<p>No time to breath or think</p>	<p>Fast-paced</p>
<p>It is the type of expectations of staff and industry such as dealing with the student body, changing economic climate or global expectations (Participant 7).</p>	<p>At speed, quick or fast paced event</p>	

<p>It is quick. It is change that happens at a very fast pace (Participant 45). Something that starts to change and picking up a faster pace (Participant 52). It is a change that is coming at unexpected speed (Participant 56).</p>	
<p>When a certain equilibrium of understanding among people suddenly becomes totally new and, and there's a total new understanding of the world around them (Participant 13). You are suddenly required to work in a different way and the context may be very different (Participant 60). You wake up one morning to "Fees Must Fall", design a new curriculum and needing resources such as a stadium – it requires rapid action (Participant 65). It is a sudden change from the norm, and you do something else from your day-to-day tasks (Participant 66).</p>	Sudden event

ii. *Discussion of the codes and themes regarding the definition of rapid change*

Rapid change that was formulated from the above categories for this study is as follows: "Rapid change is any change that is involuntary, unexpected, occurs frequently and at a fast pace, which results in new ways of doing things to ensure relevance and sustainability".

According to the literature reviewed in this research, rapid change was described as the speed at which organisations, situations or environments change, including replacing existing things with new things, doing things differently and/or the scale at which change takes place (De Bruyne & Gerritse, 2018; Du Preez et al., 2016; Harris, 2018; Hornsby & Osman, 2014; Kirkpatrick & Kirkpatrick, 2006; Longman Dictionary of Contemporary English, 2017; Loomis & Rodriguez, 2009; Mather & Jarosz, 2017; Riedy, 2016; Tjeldvoll, 2011; Touseau & Le Sommer, 2019) (as discussed in section 3.2.1 of Chapter 3).

However, while existing literature often explained rapid change in terms of change that had taken place in certain environments such as in De Bruyne and Gerritse, 2018, Du Preez et al. (2016), Harris (2018) and Hornsby and Osman (2014) no formal and comprehensive definition for rapid change could be found other than synonyms for the word rapid and change within mainstream dictionaries (e.g. Collins dictionary, 2018) as discussed in section 3.2.1 of Chapter 3. For example, in research by De Bruyne and Gerritse (2018) on the future of work and the future workplace, they viewed "rapid" as the speed at which technology, digitisation and automation and the market will

influence the nature of work and the future workplace, as discussed in section 3.2.1 of Chapter 3. In another study, Harris (2018) researched the impact the volume and speed of human movement (e.g. globalisation, increased urbanisation) on the spread of diseases, as discussed in section 3.2.1 of Chapter 3. In that context “rapid” appears to refer to the speed at which the increase and volume of human movement has occurred and the impact thereof on the speed at which diseases spread, undetected, worldwide (e.g. flu viruses) (Harris, 2018), as discussed in section 3.2.1 of Chapter 3.

In addition, Du Preez et al. (2016) conducted a meta-study of the trends researched on the transformation in South African Higher Education, as discussed in section 3.2.1 of Chapter 3. According to them “change” refers to transformation and evolution in South African higher education (Du Preez et al., 2016), as discussed in section 3.2.1 of Chapter 3. Riedy (2016) researched change from the perspective of climate change because of human activities such as burning fossil fuels (e.g. coal) and clearing forests, as discussed in section 3.2.1 of Chapter 3. Finally, Touseau and Le Sommer (2019) view change in relation to how the automation of agriculture, coupled with the development of the “Internet of Things” have created opportunities to improve agricultural practices, as discussed in section 3.2.1 of Chapter 3.

From the research in the literature discussed above it is evident that rapid change does not appear to have been defined as a generic concept. Furthermore, the definition that emerged for rapid change from this research confirms most of the elements of rapid change as stated by various researchers in the literature. More specifically, the definition that emerged from this research confirms that change implies doing things differently or doing different things, that it happens quickly and that it can be large scale changes (Du Preez et al., 2016; Harris, 2018; Riedy, 2016; SAHRC, 2015; Tjeldvoll, 2011; Touseau & Le Sommer, 2019), as discussed in section 3.2.1 of Chapter 3. However, the definition that emerged from this research is unique because it appears to be the first that captures the essence of what rapid change is all about namely, it is any change that is involuntary, unexpected, occurs frequently and at a fast pace which results in new ways of doing things to ensure relevance and sustainability.

iii. Discussion of the codes and themes regarding an alternate definition of rapid change

Apart from the codes and categories that were presented in Table 5.16 and discussed above, a few codes and categories emerged which are different to those described above. These codes and categories suggest that rapid change is planned, and one can respond to it. Table 5.17 below contains examples of the codes and categories.

Table 5.17

Examples of the codes and categories to formulate an alternate definition of rapid change

Verbatim evidence	Code	Category
Rapid change, that one, is planned, and it requires leadership and management (Participant 35)	It is planned	Planned
... is about change that is unlikely to be predicted. That doesn't mean you don't have the capacity to respond, because your training should allow you to deal with that... (Participant 1). Rapid change is also something that, you would have, probably, an opportunity to react to (Participant 28). Rapid change, I think, for me, has a greater element of control and, and shaping, someone's hand is shaping it, uhm, and directing it (Participant 29).	Can respond to it	Ability to respond

The alternate definition for rapid change in this study, based on the above codes and categories, is as follows: "Rapid change is a change that is planned and to which you are able to respond".

All the literature reviewed as part of this research, discussed above and in Chapter 3, do not directly indicate that one can plan for or respond to rapid change. On the contrary, literature seems to imply that one could be caught off guard by rapid change. For example, Fleischmann (2013), Geldenhuys and Veldsman (2011), Kotter (2014), Mtshali and Iyamu (2013), Ottinger (2012), Voelpel et al. (2004) and Woldegiorgis et al. (2015) found that over the past few years the speed and extent of change has increased dramatically due to globalisation, the perception of disappearing boundaries of time and space, fast-growing cloud computing, ever-changing market places, digital media, mobile devices, climate change, knowledge-based economies and Covid-19 (as discussed in section 3.2.1 of Chapter 3). From their perspective it does not seem like it was possible for organisations to plan or respond to rapid change, which is

different from the categories presented in Table 5.17 (as discussed in section 3.2.1 of Chapter 3).

In addition, Bawa (2019), Langa (2017) and Pennington et al. (2017), for example, argue that leaders in South African HEIs have not been responsive to the rapid changes affecting their institutions, as discussed in section 3.2.1 of Chapter 3. In another example, Scott (2018) researched student success in South African higher education and argued that student success must be at the heart of all HEIs in South Africa, because currently it is not (as discussed in section 3.2.1 of Chapter 3). Arntzen (2016), Beattie et al. (2013) and Tjeldvoll (2011) also indicated that South African HEI leaders need to respond to the rapid changes and such leaders need a range of skills and capabilities to deal with this rapid change (as discussed in section 3.2.1 of Chapter 3). By implication, this could mean that the South African HEI leaders currently do not have these skills and therefore cannot effectively plan for or respond to rapid change.

Therefore, overall, the existing literature seems to differ with the categories presented in Table 5.17 that state that rapid change can be planned for and responded to.

iv. Final definition of rapid change adopted by this research

This research has adopted the definition for rapid change that is based on the most common codes and categories, as well as the confirmation of certain of its elements as already discussed above, which reads as follows: “Rapid change is change that is involuntary, unexpected, occurs frequently and at a fast pace which results in new ways of doing things

5.5.2.3 Subtheme 2.2: Definition of disruption

a. Definition of disruption

Further analysis of the research data resulted in the emergence of codes and categories that were used to formulate the definition for the term disruption. The codes that emerged were reduced to the following categories namely, unexpected, involuntary, fast-paced, revolutionary new way of working and far-reaching

consequences. Table 5.18 below contains examples of evidence of the codes and categories that emerged.

Table 5.18

Examples of the codes and categories to formulate the definition of disruption

Verbatim evidence	Code	Category
<p>Suddenly there is an issue that completely changes your plans and you can't do your day to day work (Participant 40). Change that is not anticipated or prepared for and change the way we work. The changes come unexpectedly (Participant 43). Something unforeseen and happens when you least expect it (Participant 52).</p>	Unexpected or surprise event	Unexpected
<p>Change which is unlikely to be predicted (Participant 6). You think everything is okay but then without warning you get stopped; an unexpected interference into a normal system (Participant 15). It is an unplanned change which is not fully communicated (Participants 5 and 55). It occurs suddenly. You don't plan for it and you are not sure how it will turn up (Participant 69).</p>	Unplanned for event	
<p>An internal or external force that overrides any existing strategies. It catches us off guard; we can't effectively deal with it (Participant 25). Change you think you are ready for, but you are not (Participant 48). You are forced to make those changes due to unforeseen reasons... (Participant 67). You have certain plans and then suddenly there are issues that completely change your plans that you can't do your day to day work (Participant 40).</p>	Event not prepared for	
<p>The existing system is forced to a halt. It is stopped to be reviewed (Participant 17). It is where people try to throw a spanner in the works; it disrupts the environment (Participant 49). It is an action of forcing or stopping something by force. Also forcing other issues to be implemented by force (Participant 53). Forced to make these changes due to unforeseen reasons (Participant 67).</p>	Forced upon you	Involuntary
<p>Disruptive change is the one that comes from outside...it's a change that actually doesn't care whether you're ready for it; it's just happening. You must just adapt to it, for your own good... (Participant 31). A change with a negative connotation, for example protest action, to get what I want whether it is good or not. I want the implementation of change (Participant 57). It is re-writing the rules of the game. Individuals, organisations and countries can no longer claim the success of yesterday with those formulas. Those formulas won't work in future. You have to be conscious to not fall into the trap of being too big to fail (Participant 62).</p>	Will happen regardless	
<p>Disruption, I think, is also that this change is continuing. So, you never feel as if you're catching up with the change. So, I think that is the disruption; it keeps on changing day by day (Participant 8). It is bad planning. It's a chaotic state which we are in most of the time (Participant 23). It is chaos; a storm within an organisational space such as student protests for #Feesmustfall (Participants 45 and 58).</p>	No time to breath or think	Fast-paced

<p>It is unexpected and happens quickly (Participant 45). Deliberately used or instituted to change the path of something; to speed up the energy of doing something else (participant 63). ...You need to react to it in a short space of time (Participant 66). Disruption is change that is happening at an exponential rate. How do you grow your value proposition at an increasing rate (Participant 68)?</p>	<p>At speed, quick or fast paced event</p>	
<p>...and such a disruption also has the implication to then affect your culture and climate in your institution (Participant 9). ...it disrupts the culture and norms (Participant 44).</p>	<p>Disrupts culture</p>	<p>Far-reaching consequences</p>
<p>Disruption is a negative connotation in terms of a current paradigm in which we as a country are which is infused by political agendas (Participant 11). ...Things change too fast which does not go well for staff morale (Participant 19). It takes people out of their comfort zones; outside the structure and policy that you were used to (Participant 44).</p>	<p>Discomfort, concern and uncertainty</p>	
<p>It's all about disruptive technologies. If you don't know how to deal in a research environment with, disruptive technologies, you will end up, getting far behind, and this is where this fourth industrial revolution is (Participant 10). We need to look at our offering and say are we relevant in 20 years from now? These jobs may not exist (Participant 19). Some kind of really new approach which turned the sector or field on its head, disrupting the normal way (Participant 22). Disruption brings in a complete scenario and ushers in an environment that requires completely different types of skills (Participant 26). It's a radical change. No longer business as usual. It turns things on its head (Participant 42).</p>	<p>Current ways or knowledge are obsolete</p>	
<p>Disruption means that people need to change how they think about certain things (Participants 9 and 41). It is some kind of really new approach which turns the sector or field on its head, disrupting the normal way (Participant 22). Disruption is a new way of doing things, that could be because of technology, it could be because of politics, uh, could be because of, a sudden change in peoples, way of perceiving the world (Participant 27). Uber, that's disruption. It changes the entire business model; it changes the way you operate (Participant 28). Disruption is a deliberate changing of direction, for me, or a deliberate halting or ceasing of, the status quo (Participants and 29).</p>	<p>Completely changes the way of doing and thinking</p>	<p>Revolutionary new way of working</p>
<p>Your whole world is turned upside down...you look at things differently (Participant 19). It is some kind of really new approach which turns the sector or field on its head, disrupting the normal way (Participant 22). We just woke up to find ourselves inside of this situation and there was no answer to it (Participant 35). It takes people out of their comfort zones. It is outside the structure and policy you were used to; it disrupts the culture and norms (Participant 44).</p>	<p>Cannot continue as before</p>	
<p>Disruption basically means, happening differently from the norm (Participant 2). Anything that upsets or causes the normal way of doing things to be disrupted forcing one to look at things differently (Participant 38). It's a radical change; no longer business as usual (Participant 42). It is necessary to what a university does, to constantly challenge (the norm) (Participant 47). It disturbs or destabilises the norm – a sudden act to get attention which disrupts the stakeholders (Participant 66).</p>	<p>Different from the norm</p>	

<p>We need to look at our offering and say are we relevant in 20 years from now? These jobs may not exist (Participant 19). Disruption brings in a complete scenario and ushers in an environment that requires completely different types of skills (Participant 26). Individuals, organisations and countries can no longer claim that the success of yesterday will work in future; those formulas won't work in future (Participant 62).</p>	<p>Different skills required</p>
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b. Discussion of the codes and themes regarding the definition of disruption

The definition of disruption for this study, which was formulated from the most common categories that emerged from the data, is as follows: “Disruption is any change that is unexpected, involuntary and fast-paced that results in a revolutionary new way of doing things along with far-reaching consequences which must be acted upon to ensure relevance and sustainability”.

The above definition of disruption is similar in certain ways to how it has been defined in the literature. For example, disruption has been defined as a situation where it is difficult for something to continue in the way it used to, to break apart, interrupt the normal course or to disrupt an industry with new technologies (Merriam-Webster, 2018a; Oxford learner dictionaries, 2018) (as discussed in section 3.2.2 of Chapter 3).

The word “disruption” has also been defined to provide meaning depending on the context. For example, Chung et al. (2015) view disruption, in the context of express logistics, and therefore view it as any delay or cancellation that can have a negative impact on the efficiency of air transport (as discussed in section 3.2.2 of Chapter 3). In another example, Burggraef et al. (2019) view disruption as any unintentional event that has a negative impact on the normal assembly process of a manufacturer (as discussed in section 3.2.2 of Chapter 3). Finzi (2018) viewed disruption as an infrequent yet radical change to the existing dominant way of doing business (as discussed in section 3.2.2 of Chapter 3). Disruption also been defined in terms of disruptive technologies which have a major effect how people live, work and how organisations operate (Kaivo-oja & Lauraeus, 2017) (as discussed in section 3.2.2 of Chapter 3).

Disruption has been further defined according to its effect on organisations such as

causing organisation strategies to become obsolete and effecting the whole organisation (Bolland, 2018) (as discussed in section 3.2.2 of Chapter 3). From the aforementioned research it is evident that the definition for disruption that emerged from this research correlates with most of the definitions or elements of disruption discussed (i.e. Bolland, 2018; Burggraef et al.,2019; Chung et al., 2015; Finzi, 2018; Kaivo-oja & Lauraeus, 2017; Oxford learner dictionaries, 2018) (as discussed in section 3.2.2 of Chapter 3).

However, this definition is different from the existing literature because it acknowledges that disruption must be acted upon to ensure relevance and sustainability. By doing so, this definition also implies a consequence of not responding to a disruption. It is arguable however, that existing definitions or meaning of disruption could imply that it must be acted upon in order to remain relevant or to be sustainable (e.g. Bolland, 2018; Burggraef et al.,2019; Finzi, 2018) (as discussed in section 3.2.2 of Chapter 3).

c. Final definition of disruption adopted by this research

The final definition of disruption, for this study, that emerged from the data and adopted by this research is as follows:

“Disruption is any change that is unexpected, involuntary and fast-paced that results in a revolutionary new way of doing things along with far-reaching consequences which must be acted upon to ensure relevance and sustainability”.

5.5.2.4 Subtheme 2.3: Perceptions of the influence of rapid change and disruption on South African HEI

a. Types of rapid change

On analysing the research data, several codes emerged that represented the most common occurring and significant rapid changes that affected universities over the last two to three years. The codes were refined and reduced to the categories of political and government influences, technological developments, transformation, Fees Must Fall, declining resources, insourcing, effect of leadership, staff turnover and systems

and governance changes. Table 5.19 below contains examples of evidence of the codes and categories that emerged.

Table 5.19

Examples of the codes and categories of rapid changes that influenced universities

Verbatim evidence	Code	Category
<p>First of all, it is the, political landscape, where there's a lot of pressure on all universities to, uhm, get their demographics in order (Participant 10).</p> <p>A change in politics has resulted in increased enrolments and a demand for access and facilities which we are not able to deal with because of the increasing numbers (Participant 15).</p> <p>In terms of, what's happening outside, external, political one, "Fees must Fall" hashtags (Participants 27 and 67).</p> <p>It's political – Fees Must Fall and it's a political agenda to keep the people away from the classrooms and changes to government funding models (Participant 40).</p>	Political landscape	Political and government influences
<p>the decision that was made in connection with NSFAS... that was forced us through, through a declaration by the President. And all of the sudden, higher education sat with a lot of problems (Participant 9).</p> <p>Announcements made by government that are not policy driven, free education. They did not think it through (Participant 19).</p>	Government decision	
<p>In the agricultural sector, there are rapid changes. And there, our agricultural faculty had to adopt precision farming, if we want to be relevant (Participant 10)</p> <p>Change is rapid because we have exposure to technology that causes us to see it as rapid (Participants 8 and 14).</p> <p>The inclusion of technology into our lectures (Participant 55).</p> <p>...new knowledge systems and new knowledges that are emerging, as a result of technology that allow us to prepare for our future scenario, that nobody is actually quite sure what it's gonna look like ultimately (Participant 26).</p>	New technologies	Technological developments
<p>It is due to the fourth Industrial Revolution that changes our processes (Participant 61).</p> <p>The impact of the fourth Industrial Revolution and how we remain keeping up (Participant 69).</p>	Fourth Industrial Revolution	
<p>The cost of technology has decreased for Universities which has resulted in contact universities converting their course into distance learning in a matter of weeks (Participant 62).</p>	Affordability of technology	
<p>Recognising cultural diversity and multilingualism (Participants 11 and 67).</p> <p>Historically disadvantaged people were given more leadership roles along with support (Participant 17).</p> <p>The transformation strategy being fully implemented of the last few years that resulted in new processes and procedures to fill positions especially in my professional services section (Participants 2, 5 and 25)</p> <p>Changes to staff demographics (Participant 66).</p>	Correcting demographics of staff and students	Transformation

<p>Decolonisation because universities across the world have been put on their heads and need to rewrite the curriculum and look at the whole paradigm (Participants 11, 19 and 38).</p> <p>Fees Must Fall ideas and philosophy of decolonising the curriculum (Participant 43).</p>	Decolonisation of the curriculum	
<p>Tension between Afrikaans versus English curriculum. The university has a long way to go to transform. It is difficult compared to other universities (Participant 46).</p> <p>The change in language policy from Afrikaans to English because of the changing student population which is more diverse (Participants 11, 55 and 67).</p>	Change in language policy	
<p>Some of the changes or the rapid changes that universities have had to react to, include the whole "Fees Must Fall" context (Participants 28, 38, 46 and 62).</p> <p>Fees Must Fall is the most recent one (Participant 45).</p>	Fees Must Fall	Fees Must Fall
<p>Free education. The person who made a promise for it, is not there to fund it, you know. Now students are coming to say, "It's promised, I must get it" (Participants 31 and 56).</p> <p>Fees Must Fall brought in a rapid change in the management of tuition fees for student. Universities were forced not to implement new fees based on Higher Education needs. Now we are told by what percentage we can increase the fees from government (Participant 53).</p>	Free Education	
<p>The university has grown significantly, in terms of enrolment. ... The university expected that by twenty-twenty-one, we'll have reached the threshold of about forty percent. Right now, the university has overshoot the expectation, and that has implications in terms of support and throughput (Participant 2).</p> <p>Massification of student enrolments and the demand for access and facilities that we are not able to deal with (Participant 15).</p> <p>...having to grow more than your existing capacity can cope with. A huge growth from 700 to 4000 students over three years (Participants 49 and 58).</p>	Increased enrolments	
<p>The is a change in the student population demographics and culture. They are different from what we are used to. They don't take no for an answer (Participant 5).</p> <p>...there's probably an issue around, around the quality of students that needs a different approach... maybe a bit overstated. Maybe it's just from where I sit (Participant 7).</p> <p>We are getting more and more poorest of the poor students and the government support to them is not enough. With decreasing sponsorships universities now look differently at the costs they incur (Participant 15).</p> <p>Universities have also had to react to poor quality school leavers entering the university environment. It affects you, obviously graduation, etcetera (Participants 28).</p>	Changes in student population	
<p>Student strikes (Participant 23).</p> <p>Fees Must Fall caused violent protest that lead to demands to staff to reschedule the tests and the academic calendar, in already peak periods (Participant 25).</p> <p>Academics have given up. They feel intimidated. The moment the SRC enters they give me 30 seconds to clear. I am afraid for our safety (Participants 33 and 64).</p> <p>NSFAS student issues being promised laptops. Delays in delivery led to student disruptions and negatively impacted on the registration process (Participant 44).</p>	Student protests	
<p>They are different from what we are used to. They don't take no for an answer. There is a generation gap. An</p>	Stronger student voice	

<p>entitlement mentality. The tension due to poverty (Participant 5).</p> <p>Increased demands from students over the past two to three years, for example Information Technology, transport, food, study spaces (Participant 23).</p> <p>Students have suddenly got a voice. It has become a time to delay tests. The campus has become student run. The demand of students are always met and the academics have no say (Participant 64).</p>		
<p>The insourcing of non-core activities (Participants 17 and 66).</p> <p>Insourcing. We almost went into bankruptcy. Policies and procedures did not cover it (Participant 19, 23 and 52).</p> <p>...the insourcing and the way that, that followed rapid change in the labour space... (Participant 27)</p> <p>The balance between protecting the insourcing and outsourcing debates (Participant 40).</p>	Effects of insourcing staff	Insourcing
<p>The university experienced worker uprising. Labour movements not happy with the insourced staff (Participant 44)</p> <p>The bigger one was the insourcing and outsourcing protests because they wanted to be on the fulltime the payroll... (Participant 45).</p> <p>Insourcing was not announced but we responded appropriately in the face of violence (Participant 47).</p>	Protests and strikes	
<p>One has to relate to a change in Rectorate, that, the Rector was changed because Professor "X" retired or, what do you say, bedank. He was taken over by our new Rector, Professor "Y", who have a new way of doing things (Participant 13).</p> <p>I think, for me, and the work that I do, has been new staff at executive level, most of whom had never worked in a university environment before, or many of them... (Participant 29).</p> <p>...it would be the change of the management, especially the top management. It would be people that would be coming in with their own views...and then somebody comes in the middle of the period and changes the direction of whatever that we'll be doing... (Participant 30).</p> <p>Two Vice Chancellors in the last two to three years and you have to get used to new leadership styles (Participant 59).</p>	Changes in top leadership	Effect of leadership
<p>Through leadership instability due to vacancies at executive level and several people were acting. Staff feel insecure due to permanent reorganising due to new executives (Participant 23).</p> <p>Is there a crisis in leadership? Where is the Captain (Participant 42)?</p> <p>Alienation between academics and management. There is no communication from management. Management is giving into student demands which has resulted in a loss of staff and a loss of trust (Participant 64).</p>	Perceived lack of leadership direction	
<p>New performance management system. New finance system to keep up with NSFAS (Participants 5 and 66).</p> <p>Had to change the way we deal with cash allowances for student books, now pay directly into the students' accounts (Participant 48).</p> <p>Technological obsolescence. We had to introduce a new student finance system and process (Participant 67).</p>	System and procedure changes	Systems and governance
<p>We've also had, like you know, new policies coming into effect, new legislations coming into effect (Participant 34).</p>	Legalisation and policy changes	

NSFAS and associated free education legislation changes by the government (Participants 48 and 56). Universities were forced not to implement new fees based on Higher Education needs. Now we are told by what percentage we can increase the fees from government (Participant 53).		
Some staff lost the jobs and others lost their salary (Participant 19).	Dismissals	Staff turnover
Through leadership instability due to vacancies at executive level and several people were acting (Participant 23).	Leadership vacancies	
The exit of five executives resulted in a change from autocratic to democratic leadership (Participant 66)	Resignation of top leaders	
The number of teaching staff is decreasing because we can't pay them what is needed (Participant 20). Large number of qualified people are leaving the university to other employee spaces for better pay (Participant 35).	Decrease in qualified employees	
Massification of student enrolments and a change in politics resulted in an increased demand for access and facilities that we are not able to cope with (Participant 15).	Insufficient facilities	Declining resources
The number of teaching staff is decreasing because we can't pay them what is needed (Participant 20). The number of students doubled but not the staff (Participants 31 and 55).	Insufficient staff	
Decreased private sector income through sponsorships due to a decline in the economy (Participant 15). Insourcing almost bankrupt the university (Participant 19). Absurd finance decisions were made to appease the troops – the students (Participant 42). The biggest one was insourcing. We had to commit extra funds that were not budgeted for (Participant 45). Fees Must Fall - We had to take stock of our finances because we had to fund the infrastructure costs and changes (Participant 56). Changes in the economic climate contributed to the disruptions (Participant 61). The decline in funding for research lead to the decline in research (Participant 68).	Decreasing funding and finance	

b. Discussion of the types of rapid change that had influenced universities

The type of rapid changes that emerged as categories from this research are similar in many aspects to what has been found by other researchers and are discussed below.

i. Transformation

In their research, Coates and Mahat (2014) argue that higher education is being reshaped through various forces including increasing costs, increased privatisation, pressure to be transparent about their activities and performance standards, which requires a new way of thinking, a specialised workforce” and new ways of doing things

(as discussed in section 3.3.1 of Chapter 3). Scott (2018) researched the topic of student success in South African higher education (as discussed in section 3.3.1 of Chapter 3). To him, the current design of the whole South African HEI system is not delivering on its mandate to produce highly skilled and educated graduates for the South African economy (Scott, 2018) (as discussed in section 3.3.1 of Chapter 3). He argues that the relevant political and other stakeholders must commit to implementing a broad strategy that prioritises student success, including the need for South African higher education to review the curriculum content and orientation, curriculum delivery and the curriculum framework to enhance student success and achieve the required number of skilled graduates (Scott, 2018) (as discussed in section 3.3.1 of Chapter 3). Ramrathan (2016) appears to have a similar view Scott (2018) about the need for South African higher education to review its curriculum to improve the graduation rate (as discussed in section 3.3.1 of Chapter 3). To him change is needed to improve the graduation rates (Ramrathan, 2016) (as discussed in section 3.3.1 of Chapter 3). He states that while access to higher education in South Africa has increased since 1994, not much has changed in the South African higher education over the past century despite major social, political and economic changes in the country (Ramrathan, 2016) (as discussed in section 3.3.1 of Chapter 3). Bazana and Mogotsi (2017), Davids (2016); Heleta (2016) and Mahabeer (2018) concur that the South African higher education system needs to be transformed as set out in the White Paper 3 (Department of Education, 1997), the Higher Education Act, as amended (Republic of South Africa, 1997) and the South African National Plan for Higher Education (Ministry of Education, 2001) (as discussed in section 3.3.1 of Chapter 3). Researchers such as Bazana and Mogotsi (2017), Mampane et al. (2018) concur with Ramrathan (2016) and Scott (2018) for the need of South African HEIs to transform given that little progress has been made because as Ramrathan (2016) argues, transformation appears to be chasing numbers rather than addressing the deep-rooted social issues such as being taught in your home language (as discussed in section 3.3.1 of Chapter 3). Bazana and Mogotsi (2017) argue for previously mainly white universities in South Africa to change their cultures to become inclusive and supportive to Black students so that they can integrate successfully and Heleta (2016), Mampane et al. (2018), Mheta et al. (2018) argue that indigenous knowledge must also include in curriculums so that higher education is context (i.e. locally) and internationally relevant (as discussed in section 3.3.1 of Chapter 3). Luvalo (2019) argues that there is a low level of representation of

Africans in management levels and in academic roles and that few HEIs had change strategies and plans in place to drive transformation (as discussed in section 3.3.1 of Chapter 3).

This research therefore concurs with the aforementioned researchers, in that it also high-lighted the need for students and staff to be more representative of the demographics of South Africa, the need for the curriculum to be transformed (i.e. decolonisation of the curriculum) and that the language policies of South African HEIs need to be reviewed to enable transformation.

ii. Fees Must Fall

This research produced similar findings to the existing research regarding fees must fall in that it identified Fees Must Fall, free education, increased enrolments, student protests, changes in the student population (e.g. diversity, economic background, level of readiness for university) and a stronger student voice as the codes that constitute the category of Fees Must Fall. For example, existing research states that increased enrolment rates, massification, the call for decolonisation of the curriculum and the announcement on 16 December 2017 that the Government would provide free higher education to all University and TVET students from South African households with a combined annual income of less than R350 000.00 appeared to all form part of the #FeesMustFall movement (Altbach et al., 2009; Areff & Spies, 2018; Bawa, 2019; Bazana & Mogotsi, 2017; Cornell et al., 2016; Langa, 2017; Steyn et al., 2014) (as discussed in section 3.3.1 of Chapter 3). The Fees Must Fall movement came mainly as a result of a nationwide outcry against university fee increases which culminated in nationwide protest action which became known as #FeesMustFall (Altbach et al., 2009; Areff & Spies, 2018; Bawa, 2019; Davids, 2016; Friedman & Edigheji, 2006; Jameson, 2012; Langa, 2017) (as discussed in section 3.3.1 of Chapter 3). Furthermore, Bazana and Mogotsi (2017) argue that HEIs, particularly Historically White Universities (HWU) such as Stellenbosch and Potchefstroom Universities), need to change their cultures enabling them to integrate successfully (as discussed in section 3.3.1 of Chapter 3). Research has shown that by refusing to do so could cause adjustment problems for black students and contribute to reduced performance and low through-put (Bazana &

Mogotsi, 2017; Cornell et al., 2016; Steyn et al., 2014) (as discussed in section 3.3.1 of Chapter 3).

Furthermore, several leaders were perceived to be aloof and insensitive during the “Fees Must Fall” protests, which placed extra strain and tension on an already precarious situation (Langa, 2017) (as discussed in section 3.3.1 of Chapter 3). The literature also found that South African HEIs and their leaders, were unprepared to deal with the ferocity of the manner in which the students presented their demands, often resorting to interdicts and deployment of the South African Police Services (SAPS) and Private Security Companies which escalated the level of violence, brutality and damage to University property to a point that has not been experienced before (Bawa, 2019; Langa, 2017) (as discussed in section 3.3.1 of Chapter 3). Another factor was the political affiliation of the various student bodies that formed part of the SRC (e.g. the Economic Freedom Fighters, the ANC Youth League and the South African Students Congress – SASCO) because it appeared as if the philosophies of those “parent political organisations” were entering into the HEI arena with the aim of achieving their political agendas and advancement rather than purely addressing student issues (Langa, 2017) (as discussed in section 3.3.1 of Chapter 3).

A powerful finding (and realisation) of this research was that the students had developed a much stronger student voice and determination to ensure changing from the past. Bawa (2019), Bazana and Mogotsi (2017), Cornell et al. (2016), Langa (2017) and Steyn et al. (2014) also appear to directly and/or indirectly emphasise the “stronger student voice” although they do not necessarily use that exact phrase (as discussed in section 3.3.1 of Chapter 3). While the evidence in the findings appear to suggest that students “won’t take no for an answer” and “get what they want”, Bazana and Mogotsi (2017), Davids (2016), Heleta (2016), Mahabeer (2018) and Pennington et al. (2017) argue that while transformation of South African HEIs has been a priority since 1997 with the publication of White Paper 3 (Department of Education, 1997), the Higher Education Act, as amended (Republic of South Africa, 1997) and the South African National Plan for Higher Education (Ministry of Education, 2001), not much progress had been made (as discussed in section 3.3.1 of Chapter 3). Therefore, it is the researcher’s view that, rather than students “getting what they want”, it appears as if the students have become frustrated with the delays in transforming higher education

within South Africa, albeit that they have used unacceptable means of displaying their frustration. Bawa (2019), Langa (2017) and Pennington et al. (2017) appear to support this view because they found that a lack of management responsiveness, unwillingness to respond and the excessive use of force exacerbated matters which resulted in unprecedented levels of violence (as discussed in section 3.3.1 of Chapter 3).

Another finding of this research was the effect of fees must fall on the students. Specifically, while the enrolment numbers have increased, the findings indicate that job markets may not be able to absorb all of them and the schooling system has degraded such that students are not ready for university which has caused the universities to put bridging programmes in place to support them. This finding is supported by Bazana and Mogotsi (2017), Davids (2016), Mampane et al. (2018) and Scott (2018) who argue that the present education system in South Africa does not prepare students for university (which affects student dropout rates), provide access to financial means nor help them deal with the increased cost of higher education (as discussed in section 3.3.1 of Chapter 3).

iii. Declining resources

This research found that declining resources (i.e. insufficient staff, insufficient facilities and decreasing funds and finance) were the rapid changes that effected South African HEIs. The findings of this research concur with Flanagan (2012) who states that higher education costs are rising, which means that University leaders would need to design new business models that creates value, while placing students at the centre of what they do (as discussed in section 3.3.1 of Chapter 3). In other words, Flanagan (2012) implies that HEI funds are not enough for them to deliver higher education, which is what this research also found (as discussed in section 3.3.1 of Chapter 3).

In other research by Browne and Shen (2017) they emphasise the negative impact that rising costs of higher education, and insufficient government revenue have on access to quality higher education in the Caribbean (as discussed in section 3.3.1 of Chapter 3). Once again, this research findings concur with Brown and Shen (2017) because it also found that finance and funding of higher education are declining (as discussed in

section 3.3.1 of Chapter 3). Bawa (2019) and Langa (2017) state that changes relating to insourcing of previously outsourced services and the government's announcement of free education placed increased financial constraints on HEI running costs and infrastructure because they were not enough (as discussed in section 3.3.1 of Chapter 3). In many cases, existing facilities, accommodation and/or finances were not enough to cover the increase in enrolment numbers and/or staff (Bawa, 2019; Langa, 2017) (as discussed in section 3.3.1 of Chapter 3). Once again, the findings of this research also concur with Bawa (2019) and Langa's (2017) findings in that facilities were not sufficient to accommodate the increase in staff and students and that finance and funding were not sufficient (as discussed in section 3.3.1 of Chapter 3). This research also partly concurs with Mitchell's (2015) argument that there is a drive for Universities to become more financially self-sufficient (e.g. third-stream income from international student fees) and financially successful, although he states that it may risk the quality of higher education in the long term (as discussed in section 3.3.1 of Chapter 3). The findings showed that participants indicated that universities had to carefully consider how they spent the funds and that a decline or shortage in funds had either caused funds to be redirected from elsewhere to cover gaps that had occurred, or it had resulted in a decline in research, for example. This research did not however find evidence that concurred with Mitchell's (2015) finding regarding the need to generate a third-stream income as being a rapid change (as discussed in section 3.3.1 of Chapter 3).

This research appeared to differ from the above research in that none of the researchers appeared to find anything about reduction in staff as being a rapid change, whereas this research did.

iv. Insourcing

This research concurs with Bawa (2019) Kamsteeg and Wels (2007), Langa (2017), Luckett and Mzobe (2016), Pennington et al. (2017) and Prinsloo (2016) in that it also found that insourcing of previously outsourced services (e.g. security, catering and cleaning services) was a rapid change that affected the South African HEIs (as discussed in section 3.3.1 of Chapter 3). This research also found that the insourcing created increased financial constraints for HEIs because in many cases either the

current facilities or finances were insufficient to accommodate these increases, which concurs with Bawa (2019) and Langa (2017) (as discussed in section 3.3.1 of Chapter 3).

v. *Effect of leadership*

The findings of this research identified that the effect of leadership was a rapid change that affected South African HEIs (i.e. changes in top leadership, perceived lack of leadership direction). While Bawa (2019), Langa (2017) and Pennington et al. (2017) found a lack of management responsiveness, an unwillingness to respond to student demands and that universities felt abandoned at the height of the student protest action, as discussed in Chapter 3, they do not appear to directly indicate the effect of leadership as being a rapid change (as discussed in section 3.3.1 of Chapter 3). Similarly, Beattie et al. (2013) indicated that some of the leaders' action could have unintended consequences because of their lack of experience or training required to lead during such changing times although they did not identify the effect of leadership as being a rapid change that affected South African HEIs (as discussed in section 3.3.1 of Chapter 3). Other researchers who researched leadership in South African HEIs, such as Tjeldvoll (2011), Arntzen (2016), Cronje and Bitzer (2019), Herbst (2007), Ngcamu and Teferra (2015) and Williams and Gardener (2012), already discussed in Chapter 3 (section 3.3.1), also did not find that effect of leadership was a rapid change affecting South African HEIs, whereas this study did.

vi. *Staff turnover*

This research found that staff turnover was a rapid change that had affected the South African HEIs (i.e. dismissals, leadership vacancies, resignation of top leaders, decrease in qualified employees). Little existing research could be found that identified staff turnover as a rapid change that had affected South African HEIs. Research by Flanagan (2012) does state that the cost higher education is being scrutinised more closely and that costs are rising but there is no finding that staff turnover is a rapid change that is affecting higher education globally or South Africa in particular (as discussed in section 3.3.1 of Chapter 3). Similarly, while Browne and Shen (2017) emphasise the negative impact that rising costs of higher education, increased student

enrolments and insufficient government revenue, amongst others, have on access to quality higher education in the Caribbean they do not identify staff turnover as a rapid change (as discussed in section 3.3.1 of Chapter 3).

Even research by Bawa (2019) and Langa (2017) (as discussed in section 3.3.1 of Chapter 3) regarding the impact of insourcing and free education on current university facilities, accommodation or finances did not identify staff turnover as being a rapid change that affected South African HEIs, whereas this research did.

vii. Systems and governance changes

This research found that changes to systems and governance was a rapid change that had affected South African HEIs (i.e. system and procedure, legalisation and policy changes). Participants reported for example that student funding legislation had changed as well as their finance systems to deal with the change in the student funding legislation and procedures. No research could be found that identifies changes to systems and governance as being a rapid change. Even research by Bawa (2019), Langa (2017), Davids (2016), Fox (2019), Heleta (2016), Langa (2017), Marshall (2010), Mheta et al. (2018), Pennington et al.(2017), Mtshali and Iyamu (2013), Salmon (2019) and Zhamanov et al. (2018) (as discussed in section 3.3.1 of Chapter 3) regarding insourcing of previously outsourced employees, increased safety and security of students on campuses, implementation of the government announcement of free education and introduction of learning methods that harness new technologies to deliver higher education do not appear to identify changing systems and governance as a rapid change affecting South African HEIs, whereas this research did.

viii. Technological developments

The findings of this research indicate that new technologies, the Fourth Industrial Revolution and affordability of technology were technological developments that emerged as rapid changes influencing the world and also South African HEIs. For example researchers such as Ahn et al. (2004), Geldenhuys and Veldsman (2011), Gratton (2017), Igun (2011), Mitchell (2015), Roche (2015) and Reilly (2012) (as discussed in section 3.3.1 of Chapter 3) acknowledge how technological

advancements, digitisation and on-line communication have affected the world from capital flows, the knowledge economy, employees demanding more work-life balance, the need to be more technology competent and the impact of the gap between countries to communities who have access to such technology and those who don't. In addition, Igun (2011) argues how information communication technologies (ICT) are important for libraries and universities in Africa to access, share and distribute information (as discussed in section 3.3.1 of Chapter 3). Existing research also studied the use and adoption of new information technologies for teaching and learning within South African HEIs to enhance learning (Jaffer et al., 2007). (Cilliers, Chinyamurindi & Viljoen, 2017, Hough & Neuland, 2013; Kruger & Bester, 2014; McNaught & Amory, 2006; Mushi, Hoskins & Bell, 2011; Naidoo & Raju, 2012; Ng'ambi et al., 2016; Jaffer et al., 2007; Nkonki & Ntlabathi, 2016) (as discussed in section 3.3.1 of Chapter 3).

Even though affordability emerged in this research as making it easier for South African HEIs to change from contact-based teaching to on-line teaching, it did not explicitly find that the cost, exposure and/or access to ICT by poorer groups or communities was a rapid change that disadvantaged them. However, this could be implied because this research did find that quality students in general was not the same as before (i.e. poorer student population than before which could include not being able to afford or have access to ICT).

xiv. Political and government influences

This research found that the political landscape and government decisions were rapid changes that influenced South African HEIs. In particular, a change in politics and the government's announcement of free education for all emerged from this research as being the rapid changes that affected South African HEIs. Therefore, this research concurs with Bawa (2019) and Langa (2017) (as discussed in section 3.3.1 of Chapter 3) who argued that, amongst others, the political agendas and actions of some political parties, in particular the ruling party (the announcement of free education as mentioned above by African National Congress – ANC) made it hard for Universities to resolve the various issues linked to the student protest action, which have already been discussed above.

c. *South African HEIs were not affected by rapid changes*

Analysis of the data revealed that there were a few participants who stated that there was no or little rapid change that influenced their universities. Table 5.20 below contains examples of the codes and category that emerged in this regard.

Table 5.20

Examples of the codes and categories indicating that none or little rapid changes had influenced universities

Verbatim evidence	Code	Category
I started in 2018 so I can't say much. I don't know to what extent change has happened. There have been events (Participant 41). Very little, if, if there was any change... very little. I'm just trying to think very hard, and if I remember what change that made things better... (Participant 33). Not much in the last two to three years compared to 2008 to 2014 (Participant 59).	Little rapid change	Not affected by rapid change
So, what really bothers me about leadership in higher education is a lot of the so-called disruption and rapid change, we can predict now. But we actually treat them as if they are a crisis (Participant 1). Nothing of that nature. No rapid change. No real examples (Participant 3). No major rapid change or disruption here (Participant 14). Not changing very rapidly. Change is very slow at the university (Participant 60).	No rapid changes	

Existing research by Mitchell (2015) confirms the above finding because he argues that the higher education model is sound, and it does not necessarily face the same forces as other industries (as discussed in section 3.3.1 of Chapter 3). He acknowledges the impact of digitisation, globalisation, increasing cost of higher education and the many access issues, but argues that universities have skilled academics who can deal with the changes because they have dealt with changes for many years (Mitchell, 2015) (as discussed in section 3.3.1 of Chapter 3). However, the research by Mitchell (2015) was the only research that could be found which argued that point. In the literature review, as with this study, all existing researchers discussed, found that South African HEIs have been or will be affected by rapid changes which emerged from this research (as discussed in section 3.3.1 of Chapter 3).

d. *Summary of the rapid changes that influenced South African HEIs*

From the analysis of the data and existing research it is therefore evident that the most common rapid changes that affected South African HEIs were political and government influences, technological developments, transformation, Fees Must Fall, effect on resources, insourcing, effect of leadership, staff turnover and systems and governance.

e. *Types of disruptions that influenced Universities*

i. *Types of disruptions*

The disruptions identified by the participants were almost the same as what emerged as being the rapid changes. In most cases, the evidence to support the stated disruptions was the same as that which was used to support the rapid changes they had reported. The categories of the most common occurring disruptions, which are the same as those for rapid change, were political and government influences, technological developments, transformation, Fees Must Fall, declining resources, insourcing, effect of leadership, staff turnover and systems and governance. Table 5.21 below contains examples of evidence of the codes and categories that emerged of the type of disruptions that affected universities.

Table 5.21

Examples of the codes and categories of disruptions that affected universities

Verbatim evidence	Code	Category
It affected the culture of higher education, but all of sudden councils and political leaders were forced to bring about interventions regarding in-sourcing, etcetera (Participant 9).	Political landscape	Political and government influences
It was an announcement made by government, that was not policy driven, for free education. It was not thought through (Participant 19).	Government decision	
Google disruption in terms of technologies, you know, if we are talking about technological revolution. It does affect people in their workplace, in the way we do things (Participant 2).	New technologies	Technological developments
They have also been about gearing our curriculum for the so-called "Fourth Industrial Revolution" ... it's about the fact that, with technology, being an online institution	Fourth Industrial Revolution	

we constantly, have to guard against being complacent (Participant 26).		
MOOCs are the way to go. There are thousands of free courses shared for all. It is a shock to higher education. It challenges higher education to look at it (Participant 22).	Affordability of technology	
...increased drive to meet equity targets. The old university system has changed from hierarchical to a more open and inclusive system – more inclusive of students (Participant 40).	Correcting demographics of staff and students	Transformation
Decolonisation because universities across the world have been put on their heads and need to rewrite the curriculum and look at the whole paradigm (Participants 11, 19 and 38). Fees Must Fall ideas and philosophy of decolonising the curriculum (Participant 43).	Decolonisation of the curriculum	
Political and other sources caused us to bring about change in the language policy to be more accessible (Participant 67).	Change in language policy	
Fees Must Fall caused great disruption which lead to violent protests and demands for staff to reschedule tests, the academic calendar and special exams in already peak periods (participant 25).	Fees Must Fall	Fees Must Fall
Free education. The person who made a promise for it, is not there to fund it, you know. Now students are coming to say, "It's promised, I must get it" (Participant 31).	Free Education	
Massification of student enrolments due to a change in politics which caused increased enrolments and a demand for access and facilities, but we are not able to deal with the increased numbers, which caused disruptions (Participant 15).	Increased enrolments	
Universities have also had to react to poor quality school leavers entering the university environment. It affects you, obviously graduation, etcetera (Participant 28).	Changes in student population	
Academics have given up. They feel intimidated. The moment the SRC enters they give me 30 seconds to clear. I am afraid for our safety (Participants 64).	Student protests	
They are different from what we are used to. They don't take no for an answer. There is a generation gap. An entitlement mentality. The tension due to poverty (Participant 5). Increased demands from students over the past two to three years, for example Information Technology, transport, food, study spaces (Participant 23).	Stronger student voice	
Insourcing of staff but we needed policies and procedures in place for staff for shift workers to get onto the pay system and induction (Participant 52).	Insourcing outsourced or contract staff	Insourcing
The university experienced worker uprising. Labour movements not happy with the insourced staff (Participant 44).	Protests and strikes	
Through leadership instability due to vacancies at executive level and several people were acting. Staff feel insecure due to permanent reorganising due to new executives (Participant 23).	Changes in top leadership	Effect of leadership
Is there a crisis in leadership? Where is the Captain (Participant 42)?	Perceived lack of leadership direction	

Student issues such as Fees Must Fall and NSFAS guidelines have resulted in profound system and processes issues that needed to be addressed...and changes in government funding models (Participants 48 and 69). Change in NRF funding models and amounts allocated (Participant 56).	System and procedure changes	Systems and governance
The NSFAS and free education legislation change by government. We have to adjust the big boss (Participant 56).	Legalisation and policy changes	
Change in leaders at all levels; Deans who are HoDs (Participant 42).	Resignation of top leaders	Staff turnover
Through leadership instability due to vacancies at executive level and several people were acting (Participant 23).	Leadership vacancies	
Number of teaching staff are decreasing, and we can't pay what is needed (Participants 20 and 42).	Decrease in qualified employees	
Massification of student enrolments and a change in politics resulted in an increased demand for access and facilities that we are not able to cope with (Participant 15).	Insufficient facilities	
Number of students have doubled but not the staff (Participant 55).	Insufficient staff	
Declining funding for research resulted in a decline in research output (Participant 68).	Decreasing funding and finance	

ii. Discussion of the types of disruptions that influenced Universities

According to this research, the categories of the most common occurring disruptions, which are the same as those for rapid change, were political and government influences, technological developments, transformation, Fees Must Fall, declining resources, insourcing, effect of leadership, staff turnover and systems and governance. While this research concurs with existing research regarding the effect of disruptions in technology and information technology on the world in general and on South African HEIs in particular, no research could be found that clearly identified the other categories of disruption that emerged from this research, as already described. For example, Adam et al. (2015), Block (2016) Biber et al. (2017), Gupta (2018) and Smith (2017) argue the effects of disruptive technology and ICT on the world in general, on the one hand, such as job obsolescence, the raise of the on-line economy and the rise of MOOCs and also the potential skewing of the resources into the hands of a wealthy few, and on the other hand the need of South African HEIs to harness these technologies to deliver education (as discussed in section 3.3.3 of Chapter 3).

Therefore, whereas existing research appears to mainly identify technological and ICT development as disruptions of South African HEIs (as discussed in section 3.3.3 of Chapter 3), this research found that political and government influences, transformation, Fees Must Fall, declining resources, insourcing, effect of leadership, staff turnover and systems and governance were also key types of disruption that had affected South African HEIs.

iii. South African HEIs were not influenced by disruptions

There were a few participants who stated that they had not experienced any or little disruptions within their universities. These participants also believed that their university had not experienced any rapid changes. The categories that emerged in the universities that experienced little or no disruptions, along with evidence, are listed in Table 5.22 below.

Table 5.22

Examples of the codes and categories that no or little disruptions affected universities

Verbatim evidence	Code	Category
In my mind, the university sector's not been disrupted. And the reason it's not being disrupted is you've not seen, and again, if you take Kodac, the old camera guys, and what digital did to Kodac's business, that was disruption (Participants 28).	No disruption	Not affected by disruption
There has been no major rapid change or disruption here (Participant 14).	Little disruption	

No research could be found that indicated that no or little disruption had affected the South African HEIs.

iv. Summary the types of disruptions that influenced South African HEIs

Despite the few additional disruptions and alternate views that emerged from the data, most participants reported that they had experienced disruptions at their university, which were the same as the rapid changes that had emerged from the data. In addition, no research could be found that confirms that no or little disruption had taken place. Therefore, the categories of the most common disruptions that emerged and adopted

by this research were: political and government influences, technological developments, transformation, Fees Must Fall, effect on resources, insourcing, effect of leadership, staff turnover and systems and governance changes.

f. Influence of rapid change and disruptions on South African HEIs and their leaders

The following section will discuss the influence of rapid change and disruption firstly on South African HEIs and then on their leaders.

i. Influence of rapid change and disruptions on South African HEIs

From the research data, it emerged that the influence of rapid change and disruption on universities could be grouped into the following most common categories: transformation, Fees Must Fall, effect of leadership, revolutionary new way of working, declining resources, effect on staff, systems and governance, effect on service delivery and consequences for higher education. In addition, the research data revealed that, according to the participants, the influence of rapid change was mostly the same as the influence of disruption. The categories of the common influences of the rapid change and disruptions, along with evidence, are set out in Table 5.23 below.

Table 5.23

Examples of the influence of rapid change and disruptions on South African HEIs

Verbatim evidence	Code	Category
The demographics have changed so that we now have 90% Blacks and 10 whites (Participation 5). ...increased drive to meet equity targets. The old university system has changed from hierarchical to a more open and inclusive system – more inclusive of students (Participant 40). There are changes to the staff profile (i.e. age and sex) because we need to be more relevant (Participant 64).	Correcting demographics of staff and students	Transformation
I think then all the, the others that I've mentioned: fourth industrial revolution; decolonisation; financials; technology in teaching (Participant 8). Decolonisation because universities across the world have been put on their heads and need to rewrite the curriculum and look at the whole paradigm (Participants 11, 19 and 38). Fees Must Fall ideas and philosophy of decolonising the curriculum (Participant 43). Decolonising the curriculum (Participant 64).	Decolonisation of the curriculum	
There was also a change in language policy (Participant 5).	Change in language policy	

<p>Lectures were not bilingual. But we had to teach in English. Most subjects were presented in two languages which doubled the scheduling pressure on lecture halls. We put pressure on IT to translate lectures and prepare podcasts in two languages (Participant 67).</p>		
<p>They are different from what we are used to. They don't take no for an answer. There is a generation gap. An entitlement mentality. The tension due to poverty (Participant 5). Increased demands from students over the past two to three years, for example Information Technology, transport, food, study spaces (Participant 23). Students not only want to do what they are here to do. You give assignments with due dates because now they don't understand their right as paying students. They don't submit, but they will go to the head of the department, or even to a higher person in the hierarchy of the university (Participant 35). ...there sense of entitlement and their perception of what they think the university must deliver – what government can't (Participant 43). Students are being heard...Social change starts with a student voice...Students are spoilt, they get what they want (Participants 23, 60 and 64).</p>	<p>Stronger student voice</p>	<p>Fees Must Fall</p>
<p>...the impact on the students, were more severe than we ever thought. We didn't think that, especially those that didn't want to protest, or those that want to complete (participant 11). We have too many students, but the job market cannot absorb them (Participant 19). Unable to deliver study material and assignments to students on time which delayed the feedback to prepare for exams causing the exam dates to change (Participant 23). The degradation of the schooling system meant that we have to implement programmes to support and assist students to cope, special aide and bridging programmes are more common (Participants 5 and 25). With Fees Must Fall the students suddenly got a voice, it has become a time to delay tests. The campus has become student run...Increased demands from students...Poor quality of school leavers affects throughput...Fees Must Fall brought about change will be the saving grace... the year that I arrived, that's when the "Fees must Fall" was all over the country...the most radical change in recent years...made the budgeting process difficult (Participants 23, 26, 28, 46, 64 and 68).</p>	<p>Effect on students</p>	

<p>...has meant that we are not able to cope and I think one needs to find a way of trying to say, "Okay, what are our initial plans? What towards this university developed to be able to accommodate in terms of students? And where are we going beyond that without significant increase in resources (Participant 2)?</p> <p>There is a disconnect between what the executive say we must focus...We get requests of what to do and what the CIO wants us to deliver (Participants 23 and 44).</p> <p>...also, relationship dissonance between what is supposed to do-be happening and what is really happening. And I just don't think anyone was prepared or was able to deal with that (Participant 29).</p> <p>We saw unqualified people occupying positions of importance in academia, and then with the standards deteriorating. You could find the head of the department without a PhD. The head of this or that without any qualifications and leading professors.... And, you know, these fellows who are not qualified for this position, who failed the necessary skills, sometimes they can behave themselves like a high school principal (Participant 35).</p>	<p>Perceived lack of leadership direction</p>	<p>Effect of leadership</p>
<p>Leaders did not know what to do, did not understand what was needed (Participant 17).</p> <p>We saw unqualified people occupying positions of importance in academia, and then with the standards deteriorating. You could find the head of the department without a PhD. The head of this or that without any qualifications and leading professors... And, you know, these fellows who are not qualified for this position, who failed the necessary skills, sometimes they can behave themselves like a high school principal (Participant 35).</p> <p>Had to learn how to manage security, catering etc...Because leadership has never been equipped, or trained, to deal with what was thrown at them...they needed to be experts in labour; experts in law; experts in everything, and none of them had been trained to cover all of those fields (Participants 25, 29 and 47).</p>	<p>Areas of leadership development</p>	
<p>The dean leaves early other staff...Leadership did not know what to do; did not understand what was needed (Participant 17).</p> <p>Absurd finance decisions were made to appease the troops – the students...Is there a crisis of leadership? Where is the leader of the ship (Participant 42)?</p> <p>The previous Vice Chancellor was committed to what the staff needed and he followed through... (Participant 59).</p> <p>There is uncertainty in the effective use of resources, a lack of communication, lack of direction that results in people not knowing what to do (Participant 63).</p> <p>Poor leadership decisions created an unsustainable organisation, creating long term financial instability (Participant 66).</p>	<p>Effect of decisions and behaviours</p>	
<p>There is a need for structure role definitions and accountability boundaries for people (Participant 58).</p> <p>Low accountability of leader action. They bide their time, then leave and the poor state remains (Participant 66).</p>	<p>Lack of accountability</p>	
<p>Secondly on the technology side, universities have actually used that as an opportunity... actually a lot of universities started offering more distance type learning... Which, for me was, you know, when in crisis, the best strategies are</p>	<p>Completely changes the way of doing and thinking/Change</p>	<p>Revolutionary new way of working</p>

<p>developed and I think technology gave us that enabler... (Participant 28). Innovation has increased...creativity has increased...we are rethinking the way we do things...lecturers had to think out of the box of how can I best support my students (Participants 11 and 42). The students are different today; the staff are not trained to deal with this...a lot more expectations the aspect of higher education that could be the death of higher education institutions if we don't find a solution (Participants 14, 15 and 43). In the past students were ready for university. Not now. Leaders must come up with a plan (Participants 20 and 28). The rapid change in terms of the administration was beneficial to the institution because new systems and processes were implemented, which was desirable (Participant 57). Going to build safe places on campus where students can socialise, with WiFi...Students are being heard (Participant 64).</p>	<p>the way things are done or the direction</p>
<p>The immediate thing that I realise is that, if we want to innovate and create jobs, we need to do that in this Province. And that has a total different mindset when you do technology and transfer and innovation...the challenge is to be innovative and creative (Participants 10 and 43). ...there were new miscellaneous costs and employee relations issues, disciplines and absenteeism which was overwhelming because we were under capacitated. We are trying to put measures in place because it was not planned (Participant 52) It forced staff to look for different ways to deliver lectures...both enlightening and traumatising because it opened up windows to areas previously not in forefront of your vision and sight (Participants 38 and 65). ...actually, a lot of universities started offering more distance type learning. Which, for me, was, you know, when in crisis, the best strategies are developed and I think technology gave us that enabler (Participants 28). You must think differently. How do we do business differently and finance or budget differently for digital methods (Participants 2 and 69).</p>	<p>Different from the norm</p>
<p>Technology is heard in a great dealing the way we perform... there are bound to be changes like, you know, staff sizing, or as a right sizing, where you find that things that were being done, can now just be done, you know, by the machines (Participant 2). On the education side I think people need to carefully think how they do their teaching...it probably requires people to keep up with, with the latest technology, not just, uhm, teaching technology ...also research technology and how we design research projects... and obviously that's got a bearing back to your competitive grant making environment...We are increasingly working in groups because it is virtually impossible to write proposals on your own to get accepted. Ninety percent is a collaborative effort (Participants 7 and 25). It's so impressive how technology disrupts the way that our lecturers are lecturing. In some instances, they are not needed anymore. There are excellent stuff on black board that can be licenced...and lecturers just ending up doing mentorship and support (Participants 10 and 22).</p>	<p>Cannot continue as before</p>

<p>Huge impact on how the university operates. For example, we have put a contingency committee in place, which is on stand-by for reoccurrence...a more inclusive way of decision making, everyone contributes to creating the strategy (Participants 40 and 45).</p> <p>There are a lot of opportunities for our external stakeholders due to the fourth industrial revolution to introduce programmes in schools, such as coding, which brings challenges to the department of higher education because it then needs to change the syllabus (Participant 56).</p> <p>The university has not sufficiently embraced technology. We are still doing manual reporting (Participant 62).</p>		
<p>On the technology side it probably requires people to keep up with, with the latest technology. But not just, teaching technology and things like that, also research technology and how we design research projects; how can we use some of the stuff around data that can be available immediately (Participant 7).</p> <p>Staff are not trained to deal with this. Nothing was in place to help us deal with this new type of student... (Participant 15).</p> <p>We are developing the capacity to build new online programmes and on-line learning: seeing what will be needed in future (Participant 22).</p> <p>It required upskilling in emotional intelligence because you are dealing with emotive staff and you must be cool and calm under pressure. Because leadership has never been equipped, or trained, to deal with what was thrown at them...they needed to be experts in labour; experts in law; experts in everything, and none of them had been trained to cover all of those fields (Participants 25 and 29).</p> <p>From a human capital development view, I and my leadership team am lagging behind in relevance (Participant 62).</p>	Different skills required	
<p>The university expected that by twenty-twenty-one, we'll have reached the threshold of about forty percent. Right now, the university has overshot the expectation, and that has implications in terms of support and throughput (Participant 2).</p> <p>Having to grow slightly more than your capacity. A huge growth from 700 to 4000 students over three years. Like going from a family business to corporate...have become overwhelmed because we are under capacitated – we are putting mechanisms in place (Participants 52 and 58).</p>	Insufficient facilities	Declining resources
<p>Insourcing almost bankrupt the university (Participant 19).</p> <p>You know, our decline of revenues, or rather; our revenue uncertainty; debt collection, you know, even the guys who can pay you (Participant 31).</p> <p>...some of our sponsors withdrew their funding from the university (Participant 44).</p> <p>Absurd finance decisions were made to appease the troops – the students (Participant 42).</p> <p>The biggest one was insourcing. We had to commit extra funds that were not budgeted for (Participant 45).</p> <p>The university had a challenge in managing its cashflow or budget...subsidises the accommodation. Now we are trying to raise the fees for accommodation to the reduce subsidies, and now we cannot. We cannot manage the budget of accommodation and tuition (Participant 53).</p> <p>Fees Must Fall - We had to take stock of our finances because we had to fund the infrastructure costs and changes (Participant 56).</p>	Decreasing funding and finance	

<p>So, what we have seen there, has been a reduction in income for academic institutions... we are living in an environment of resource constraints, and therefore we must utilise resource we have to the best that we can get out of it (Participants 26 and 68).</p>		
<p>...demotivated workforce...low staff morale (Participants 30 and 66). There was a huge drop in staff morale (Participants 5 and 23).</p>	<p>Decreased staff morale</p>	<p>Effect on staff</p>
<p>It was not the usual way of doing things for lecturers and support staff. There was potential fear and a feeling of helplessness or powerlessness because what worked in the past won't work now; you need help (Participants 2 and 22). Uhm, there were staff, uh, we had, uh, buildings burned, uhm, petrol bombs being thrown into buildings while you're sitting in the building... a lot of people had personal damages because... things were very volatile, uhm, a lot of staff need quite a lot of assistance in terms of counselling (Participant 9) It was very violent...the GSB was protected but we felt scared because we had nothing to protect us – we had to get out...I felt that it was an attack on women. I felt unsafe (Participant 17). There's a, there's fear and I mean, I know that they have cases where staff was assaulted, so, with no consequences, by the way. So, it created a climate of fear and, that of course goes hand-in-hand with resentment and anger at, at top management for not protecting them (Participants 17 and 29). There are a lot of inexperienced colleagues. It was a serious shock for them the first time they worked with a student protest (Participant 57). The student protest disruptions had violence and vandalism which had negative consequences...a lot of negativism because of the student protests...felt humiliated to be chased out of the classroom by students (Participants 41 and 65).</p>	<p>Increased stress, fear and anxiety</p>	
<p>We need to review the university's resource needs to increase representatively to the increase volume we need to deliver (Participant 2). There's probably more pressure on the number of outputs you need to deliver from an academic point of view, research wise (Participant 7). HR was also burdened at all the universities who were forced to insource because all of the sudden, they had to generate contracts for seven, nine hundred, additional staff members that had to be placed on payrolls and it had to happen overnight...also, it was problematic to integrate their conditions of service because some of them worked for sectors which are governed by sectoral determinations (Participant 9). Stayed after hours to ensure workload gets done...workload has increased and changed; you are doing a lot more... And to give you an example, what happens now, is that lectures start at seven in the morning, and go up until nine in the evening. Just, just because of, uh, physical space, lecture rooms. That's not acceptable (Participants 5,10 and 17). There is an increased impression that staff need to produce research (Participant 20). Important tasks end up not being done or compromised (i.e. quality) because of the resultant increased workload....do</p>	<p>Increased workloads</p>	

<p>work above his/her work...It's crisis management because you are fighting fires all the time... (Participant 23). The massification of education has resulted in more students in higher education...Influx of students wanting to register (Participants 5, 28 and 42). Most subjects were presented in two languages which meant the scheduling doubled which put pressure on the lecture halls...We took in too many undergraduates and that put pressure on classrooms, physical, the infrastructure (Participant 10 and 67).</p>	
<p>...I completely sometimes am horrified at what happens at the university... I see public humiliation where a word is spelt incorrectly... I think what has paralysed us, is how we do it. And now we've created this environment that really is problematic..., it has resulted in very high levels of timidity among leaders. Because, you scared, or there's a fear level of making a decision, of following up, or engaging with issues (Participant 1). ...there was a risk of bullying and toxicity... (Participant 19). We were almost hiding out at times...it was very violent... it created a climate of fear and that of course goes hand-in-hand with resentment and anger at top management for not protecting them (Participant 17 and 29). The disruptions created an environment of a tense Environment. I felt not so as at home anymore...I have a feeling that one is not so at home anymore at the university and that your background and who you are is challenged by other people. And as leader you've got the impression that not all is set, your views as leader, of how you un-understand things. (Participants 13 and 30). The teaching environment became a very sour one. Student not only want to do what they are here to do you. Give assignments with due dates because now they don't understand their right as paying students. They don't submit, but they will go to the head of the department, or even to a higher person in the hierarchy of the university. And are different people, we are having a large number of people from outside, on contract and they start threatening you. We will not renew your contract. What did you do? You lowered the standards to accommodate the students (Participant 35). Demands of students are always met. The academics have no say in these demands. Academics have given up. They feel intimidated...(Participant 64).</p>	<p>Poor work climate</p>
<p>...we had buildings burned, petrol bombs being thrown into buildings while you're sitting in the building. That happened to me, my car was stoned, some staff's cars were set alight. So, a lot of people had personal damages because they didn't have the, what do they call that cover, SASRIA, cover for student protests (Participants 9 and 29). We were the only division required to stay at work. We felt vulnerable and unsupported. There was no extra security or insurance for our cars...Staff felt unsafe, uncared for (Participant 17). The university's surroundings are not safe (Participant 64).</p>	<p>Concern for safety</p>
<p>A lot of uncertainty because of the new policies...I hear what I must do but I am not sure how to implement (Participant 5). There was a lack of trust and uncertainty from staff because they were not sure when the next disruption would occur. Management sends out a communication saying issues are solved whereas they are not solved and therefore you are not sure of the impact of the next disruption (Participant 44).</p>	<p>Discomfort, concern and uncertainty</p>

<p>Poor cohesion, lack of direction – not knowing what to do (Participants 17 and 63).</p>		
<p>...the incident...brought about quite difficult situations on campus and it was a difficult in the sense of reconciliation between the different races; were very challenged at that time because of these disruptions (Participant 13). There are changes which put a strain on relationships between senior leadership and students which resulted in an adversarial schism deliberate from the students (Participant 14). It eroded the trust that was between, uh, us as staff between each other, and us as students. And it, it, it created a lot of tension between the different levels of management...the racial tension that came to the fore. And now they're much more harder to deal with, because now and then suddenly...it's their perceptions that come to the fore now (Participant 30). It caused a tension between staff, questioning their value and effective impact (Participant 38). ...it caused a polarisation between staff. It caused people to question their own biases and to think as if they were in the other people's shoes (Participant 61).</p>	<p>Negative impact on interpersonal relations</p>	
<p>Need a plan of action...Dean leaves early with other staff while the rest remain...Leadership did not know what to do, they did not understand what was needed (Participant 17). You know, you've gotto come to work", whether or not, you know, you get threatened. You wanna stop me from my work, I'll get up and leave", and then you'd have management saying but, "You know, you've gotto come to work", whether or not, you know, you get threatened (Participant 29). The middle one said, "Top management", when you talk to your junior staff, they would say, "Management". So, it's that mistrust with everybody, because they think that some information that they don't have access (Participant 30).</p>	<p>Mistrust and anger toward leadership</p>	
<p>A lot of wellness issues that occurred, for staff was traumatised...we had buildings burned, petrol bombs being thrown into buildings while you're sitting in the building...things were very volatile, a lot of staff need quite a lot of assistance in terms of counselling, etcetera, which placed a very big burden on HR (Participant 9). ...there is fatigue and increased alcohol abuse (Participants 5 and 23). More staff are burnt out and booked off for some time. The type of challenges is not easy anymore...Large number of employees' wellness affected by the protests (Participants 45 and 55).</p>	<p>Wellness issues</p>	
<p>Staff are resistant to change... (Participant 5). It was difficult for staff to change. Why? We followed a good process... (Participant 69).</p>	<p>Resistance to change</p>	
<p>...had to develop more policies and sit on more committees to implement the change (Participant 5). There was a change in language policy...pressure from political and other sources to change the language policy to be more accessible (Participants 5 and 67). Insourcing of staff but we needed policies and procedures in place for staff for shift workers to get onto the pay system and induction (Participant 52). The rapid change in terms of the administration was beneficial to the institution because new systems and</p>	<p>System and procedure changes</p>	<p>Systems and governance</p>

<p>processes were implemented, which was desirable (Participant 57). Technological obsolescence brought resulted in new student and finance systems and processes (Participant 67).</p>		
<p>The NSFAS guidelines changed in January 2019 and that changed the way we deal with cash allowances for students (Participant 48). Lots of curriculum reviews due to new legislation and policies (Participant 34). Change in language policy... Lectures were not bilingual. But we had to teach in English. Most subjects were presented in two languages which doubled the scheduling pressure on lecture halls... (Participant 67).</p>	<p>Legalisation and policy changes</p>	
<p>I think that that the thing about research pressures are one of, I think a small number of people do a large number of work in this regard...So, there's a huge institutional pressure on the capable people to do more and I think that has got long term individual impact on people (Participant 7). ...the impact on research because staff are so occupied with lecturing and they don't have the time left to do proper research and our knowledge base is not increasing (Participant 10). There has been a decline in research output due to not filling posts and spending on insourcing; not putting the money where it is needed (Participants 15 and 42). Decline in research output due to not filling posts...academic vacancies affected teaching and learning due to the time it takes to fill vacancies (Participants 25 and 42). it interrupts your, ability to deliver on your own on your own goals, or identified performance, your targets. It also is very time consuming. So, it takes away the time that you would use for other things (Participant 34).</p>	<p>Reduced time to conduct teaching and research</p>	<p>Service delivery</p>
<p>The decline in finance has resulted in us not being able to perform the requirements of the job (Participant (15). Leadership instability due to vacancies at executive level replaced by acting staff...when new people are acting it causes confusion, delays in service and payment of providers...There is a decline in security and cleanliness due to the cuts...causes disruptions in daily operations when people are acting because it causes confusion and delays in service...important tasks end up not being done or the quality compromised (Participant 23). Reduction in security and cleaning staff caused a decline in security and cleanliness. We are compromised because we don't have the capacity for protection services (Participants 23 and 27). So, they had to meet our internal requirements. And some did not qualify, for example. So, we had to lay off quite a huge number of this... so that, that led to the number of security and staff being reduced and hence, exposure. Uhm, in terms of "Fees must Fall" ... (Participant 27). More output in terms of service delivery (Participant 40). Key flagship programmes were failing because what I hear is that we lost staff which resulted in the decline in chartered accounting, English, architecture and arts (Participant 42). And there's also the issue of, you know, the demand for higher quality of provision of our services, which means now, you need to now react more quicker. But you know, in a transition there's always delays just because of people, you</p>	<p>Decline in service delivery</p>	

<p>know...we were not ready for the increase in enrolments (Participants 31, 44 and 62).</p>		
<p>I was talking about the student protest. It creates instability because you know your SRC, which is part of your normal running of a university, you know could have disruptions in it. So, that's what it brings about instability (Participant 34). Key flagship programmes were failing because what I hear is that we lost staff which resulted in the decline in chartered accounting, English, architecture and arts (Participant 42). It affected the registration process because not enough were registered by the cut-off (Participant 44). The exam dates had to change because we were not ready... (Participant 62).</p>	<p>Negative impact on the academic project</p>	
<p>We take in many more post graduate students, but the level of students is not on par and it is harder to get them through the system (Participants 5, 25 and 28). There is a big loss in quality because there is not enough time to interrogate the quality which leads to a drop in standards (Participant 19).</p>	<p>Decline in standards and pass rates</p>	
<p>Lecturers had to think out of the box of how best to support my students...I think the impact on the students, were more severe than we ever thought. We didn't think that, especially those that didn't want to protest, or those that want to complete (Participant 11). In the past students were ready for university. Not now. Leaders must now come up with a plan which increases the workload and impacts the pass rates (Participant 20). Money has been taken from support for students' which effects service delivery (Participants 25 and 42). The university had a challenge in managing its cashflow or budget...subsidises the accommodation. Now we are trying to raise the fees for accommodation to the reduce subsidies, and now we cannot. We cannot manage the budget of accommodation and tuition (Participant 53).</p>	<p>Effect on student support</p>	
<p>I think it had a huge effect on the culture and climate of higher education. And it brought a big political element into higher ed, both through student activities, the SRCs, and also them siding with employees and forming alliances (Participant 9). The role of higher education institutions is intertwined with social upliftment. The SRC changed from SASCO to the EFF which changed the politics. There were a lot more expectations. This year the SRC wanted to manage management and they became rude (Participant 14). There was a cultural change because people were being heard...They were not heard for a very long time (Participant 17). There's a, there's fear and I mean, I know that they have cases where staff was assaulted with no consequences, by the way. So, it created a climate of fear and that of course goes hand-in-hand with resentment and anger at top management for not protecting them Participant 29), The university is not the same place as before. There is a new political will and awareness that was not there before (Participant 46).</p>	<p>Disruptions to culture</p>	<p>Consequences for higher education</p>
<p>It brought a big political element into higher ed, both through student activities, the SRCs and also them siding with employees and forming alliances (Participant 9). It challenged the University's identity because it was not the traditional way of doing things for lecturers and support staff...the purpose of the university has changed because</p>	<p>Uncertain times for higher education</p>	

the community and external role-players have been included in its direction (Participants 22 and 63).

And that “must Fall” movement did two things, which I felt were quite shattering. Number one, there was no support for university by the way, from government, but it, threw the sector into disarray and everybody was like battling to keep head above the water, with no support. The second thing that it did, is that it took a, a horrendous toll on the leadership of universities (Participant 29).

Student expectations of free education was there...their sense of entitlement and their perception of what they think the university must deliver – what government can't (Participant 43).

The landscape of higher education has changed dramatically. The university is not the same place after Fees Must Fall. There is a new political will and awareness that was not there before (Participant 46).

ii. Discussion of the influence of rapid change and disruption on South African HEIs

The influence of rapid change and disruptions on universities are as follows:

(1) Influence of rapid change on South African HEIs

This research found that transformation, Fees Must Fall, effect of leadership, revolutionary new way of working, declining resources, effect on staff, systems and governance, effect on service delivery and consequences for higher education were the rapid changes and disruptions that emerged from the data as those that influenced South African HEIs. Furthermore, according to the research data, the influence of the disruptions and the rapid changes on universities appeared to be the same. Stated differently, the findings revealed that the participants did not distinguish between what was the influence of rapid change and what was the influence of disruption on South African HEIs.

When the findings of this research are compared to the existing literature about the influence of rapid change in general and in particular to South African HEIs, then only some of the findings appear to confirm what is available in existing research. In other words, this research concurs with existing research in that it also found that transformation, Fees Must Fall, effect of leadership, declining resources and systems and governance influenced South African HEIs. For example, Alexander et al. (2016), Benamati and Lederer (2010) and Ronquest-Ross et al. (2018), argue how rapid

changes in technology and information technology have influenced various sectors across the world, including higher education and will impact how things are done, organisations are structured, and the way work is done, new skills required, including teaching and learning (as discussed in section 3.3.3.2 of Chapter 3). Furthermore, Adam et al. (2015), Basitere and Ivala (2017), Du Plessis and Mabunda (2016), Mudaly et al. (2015), Naidoo et al. (2013), Ojo and Adu (2018) and Waghid et al. (2019) have researched how technology and ICT have influenced and will continue to influence South African HEIs (as discussed in section 3.3.3.2 of Chapter 3). Luvalo (2019) and Zembylas (2018) argue for the change in university cultures to become more inclusive and decolonisation of the curriculum, respectively (as discussed in section 3.3.3.2 of Chapter 3). Heyns and Kerr (2018) argue for a more inclusive workplace of the future that accommodates all generations from baby boomers to millennials, who all have different requirements (as discussed in section 3.3.3.2 of Chapter 3). All the aforementioned research therefore appears to concur with this research that rapid change will result in a revolutionary new way of working in South African HEIs whether it is how HEIs are structured, work is structured and performed, different skills that are required or how we communicate.

This research also concurs with research by Luvalo (2019), Mabokela and Mlambo (2017) and Zembylas (2018) who argue that South African HEIs need to transform at a faster rate (as discussed in section 3.3.3.2 of Chapter 3). To these authors, as with the findings of this research, transformation needs to occur by correcting demographics of staff at management and academic roles and students, decolonisation of the curriculum and change language policies to ensure HEIs are more inclusive and representative of the country, especially previously disadvantaged groups. Bawa (2019) and Langa (2017) found that the decision to insource previously outsourced services and the government's announcement of free education resulted in insufficient resources, as discussed in Chapter 3 section 3.3.3.2). This research also concurs with existing research that Fees Must Fall as a rapid change influenced the South African HEIs in that it found that students displayed a stronger student voice (e.g. increased student demands and expectations such as decolonising the curriculum), and that it had a negative effect on students (e.g. negative impact of student protest action on them, students required extra support to bridge the gap from schooling to university) as found by Bawa (2019), Langa (2017), Luvalo (2019),

Mabokela and Mlambo (2017) and Zembylas (2018) (as discussed in section 3.3.3.2 of Chapter 3).

While this research reported on the effect of leadership (i.e. perceived lack of leadership direction, areas of leadership development, effect of decisions and behaviours and lack of accountability) it was rapid change that affected South African HEIs the most. Existing research did not appear to support nor dispute this finding. Instead, existing research, for example, by Arntzen (2016), Beattie et al. (2013), (Jansen (2004), Luvalo (2019), Lu and Xie (2014), Mabokela and Mlambo (2017) and Rudhumbu (2014) discuss the impact of the rapid change on leaders within higher education and South African HEIs with regards to the changing nature of their roles (e.g. Deans), the skills and competencies they should possess or the unintended consequences of their actions because they were not trained or prepared on how to deal with the rapid changes (as discussed in section 3.3.3.2 of Chapter 3). In contrast, this research reported that effect of leaders was a rapid change that had influenced South African HEIs. In particular, the lack of decision making, unwillingness to take accountability and effect of leaders' behaviours were particular areas under the effect of leadership that influenced HEIs.

The consensus across this research suggests that there was a perceived lack of leadership direction in that leaders did not appear to have a plan on how to deal with the students or what resources were required, there appeared to be a disconnect between what executive wanted employees to focus on and what their direct leaders asked them to focus on, unqualified people were put into leadership positions and there was a disconnect with what was supposed to be happening and what was actually happening. Furthermore, consensus amongst participants indicate that they felt that leaders did not know or understand what to do, leadership decisions created uncertainty and instability in the organisation, they communicated poorly, did not provide direction and made decisions without considering the consequences (e.g. giving in to student demands, insourcing of staff despite financial implications). This research reported that leaders did not want to take accountability to act and there is a need to clearly define leader's accountability. Finally, this research identified areas of leadership development. The areas for leadership development identified were the need to have relevant qualifications and skills to lead academics, human resources,

finance, labour law and training on how to deal with rapid change and disruption. Leaders were not trained to do this. Some participants even referred to the experience of leading in rapid change and disruption to “being thrown in the deep end”.

Even though existing research did not appear to reveal this finding, it does identify the lack of experience, training and competencies leaders require (Arntzen, 2016; Beattie et al., 2013) and unwillingness or slowness to respond (Bawa, 2019); Langa, 2017) as factors that influence how rapid change is handled or responded to (as discussed in section 3.3.3.2 of Chapter 3). In general, existing research does not directly identify effect of leadership as a rapid change, whereas this research did. However, the current research available does not appear to discuss or adequately discuss leadership’s lack of accountability, poor communication to employees (including the disconnect between the different levels of leadership regarding what they expected employees to focus on) and/or the placing of unqualified individuals into leadership positions. According to this research, the aforementioned could be a consequence of leaders not being equipped to handle rapid change and disruption and the fact that higher education leaders themselves felt overwhelmed because they did not receive any guidance or direction from the Government as mentioned by Bawa (2019) and Langa (2017) (as discussed in section 3.3.3.2 of Chapter 3).

Systems and governance (i.e. system and procedure changes, legalisation and policy changes) were identified by this research as another rapid change that influenced South African HEIs. Rapid change resulted in changes to systems, policies and/or procedures. Current research does not appear to always directly indicate that systems and governance was a rapid change that influenced South African HEIs. However, it was implied by Adam, et al. (2015), Bawa (2019), Langa (2017), Luvalo (2019), Mabokela and Mlambo (2017), Naidoo et al. (2013), Waghid et al. (2019) and Zembylas (2018) that the need for transformation in higher education, Fees Must Fall, use of new technologies, the government announcement of free education and the need to decolonise the curriculum would arguably require a change in systems, procedures and policies within South African HEIs (as discussed in section 3.3.3.2 of Chapter 3). Climate change and changes to the organisation structure of South African HEIs did not emerge as rapid changes effecting South African HEIs in this research, even though it did emerge in the previous research discussed in Chapter 3 (e.g. Bawa,

2019; Smith, 2013; Van den Berg, 2018; Veldsman, 2015; Venter et al., 2019; Zuber-skerrit, 2007) (as discussed in section 3.3.3.2 of Chapter 3). However, it can be argued that changes to organisational structures could be implied given the need to adapt teaching and learning to new technological developments that are emerging, for example, as presented in the finding in Table 5.23 above.

This research findings support research of Bawa (2019), Lange (2017), Ntshoe et al. (2008) in that it also found that the rapid changes had reduced time to conduct teaching and research due to the extra workloads and shifting of exams due to the student protests, decline in service delivery because the universities were not prepaid for the increase in students without the corresponding increase in resources and a general negative impact on the academic project as a result of the associated student protest action (as discussed in section 3.3.3.2 of Chapter 3). In particular, the evidence in this research reported that due to the increased enrolments and increased demand for access, universities did not have sufficient facilities. According to the findings of this research some universities have already exceeded their enrolment projections for 2021 or experienced a fourfold rise in enrolment and were under capacitated, which could ultimately influence their throughput. This research furthermore reported that funding and finance were decreasing in that income had decreased, sponsors had withdrawn in some instances, it was uncertain if the university's debtors would pay them and the cost of insourcing had to be covered while it had not been budgeted for. This research indicated that universities had to carefully manage their existing cashflow and do the best they can with what they have. The research currently available partially supports this research findings in that Altbach, Reisberg and Rumbley (2009), Areff and Spies (2018), Bawa (2019), Coates and Mahat (2014), Davids (2016), Friedman and Edigheji (2006), Jameson (2012), Shrivastava and Shrivastava (2014), Tonini, Burbules and Gunsalus (2016) confirmed that government subsidies to higher education have decreased, costs of higher education have increased, higher education institutions need to create third stream income and the cost of insourcing constrained university finances (as discussed in section 3.3.3.2 of Chapter 3).

However, current literature does not highlight the difficulty that universities had in trying to recover money from debtors, nor does it specifically deal with the need for

universities to do the best they can with the finances they have available. However, it is possible that both can be implied where one considers Mitchell (2015) considered that universities will need to become more self-sufficient (e.g. third-stream income). That may, however, negatively influence the quality of higher education because universities may change the focus from education to making profit (as discussed in section 3.3.3.2 of Chapter 3). Furthermore, this research arguably concurs with Ramrathan (2016) and Scott (2018) who reported that the current education system was not adequately preparing African students for higher education nor was the higher education system geared towards assisting the weaker students to succeed. This results in a decline in the pass rates (as discussed in section 3.3.3.2 of Chapter 3). While the aforementioned researchers discussed the declining pass rates they do not appear to directly deal with the decline in standards as being a rapid change whereas this research did (presented in Table 5.23). The findings of Bawa (2019) and Langa (2017) might imply that South African HEIs were not prepared for the increased enrolments and impact of Fees Must Fall (as discussed in section 3.3.3.2 of Chapter 3).

Furthermore, this research concurs with Ramrathan (2016) and Scott (2018) (as discussed in section 3.3.3.2 of Chapter 3) that the effect on student support was a rapid change because it identified that researchers had to find new ways of presenting subjects because of the increased workload and provide additional support to ensure students were successful. The existing research appears to partly deal with the effect of rapid changes on staff. This research presents that decreased staff morale, increased stress, fear and anxiety, increased workloads, poor work climate, concern for safety, discomfort, concern and uncertainty, negative impact on interpersonal relations, mistrust and anger toward leadership, wellness issues and resistance to change were the effects on staff. For example, Ntshoe et al. (2008) (as discussed in section 3.3.3.2 of Chapter 3) argued that increased enrolments, the implementation of finance management and performance management at South African HEIs had increased the workload of academics but reduced their research productivity and morale at that time. More recent research specifically into the Fees Must Fall and decolonisation of the curriculum, by Bawa (2019), Langa (2017), Luvalo (2019) and Mabokela and Mlambo (2017), argue that South African HEIs were not ready for the influence of these events, resistance to change, a lack of support from the government

and that transformation has not taken place at the pace it should have (as discussed in section 3.3.3.2 of Chapter 3).

The authors of the aforementioned research appear to attribute the effect of these rapid changes on staff as far as increase in workload, lack of support, mistrust and anger toward leaders and decreased morale are concerned (as discussed in section 3.3.3.2 of Chapter 3). However, they do not appear to directly identify increased stress, fear and anxiety, poor work climate, concern for safety, discomfort, concern and uncertainty, negative impact on interpersonal relations, mistrust and anger toward leadership and wellness issues as effects on staff (as discussed in section 3.3.3.2 of Chapter 3), whereas this research did. Furthermore, from the consensus amongst participants this research highlighted burnout, feelings of helplessness and powerlessness, fatigue and questioning of personal identity as wellness issues that influenced employees because of the rapid change and disruption that affected the South African HEIs over the past two to three years. The researcher is of the view that the anger and mistrust employees expressed towards leadership can be attributed to their perceived lack of direction, lack of care and ineffective communication.

This research reported that the rapid changes have consequences for higher education, specifically disruptions to culture and uncertain times for higher education. Whereas existing research focused on rapid changes such as technological developments (i.e. revolutionary new way of doing things), changing organisation structures, increased enrolments, Fees Must Fall and decolonising the curriculum. This research highlighted that disruption of culture and uncertain times for higher education emerged as having a greater influence because it challenged the traditional way of doing things. The consequences for higher education are unlike those which have been experienced in the past, as discussed by previous researchers (e.g. Adam, et al., 2015; Bawa, 2019; Luvalo, 2019; Mabokela & Mlambo, 2017; Venter et al., 2019; Zuber-skerrit, 2007) (as discussed in section 3.3.3.2 of Chapter 3). This research identified that the increased politicisation and stronger political will (and power) of the student representative councils, more firmly expressed demand and excessive levels of violence (which according to participants appeared to go unchecked by leadership) have produced consequences that higher education had to face and are still facing. Overall, this research confirmed findings of existing research (i.e. even if they only

implied them indirectly) that the influences presented and discussed above in Table 5.23 have far reaching consequences for South African HEIs.

(2) Summary of the influence of rapid change on South African HEIs

This research adopted the influences of rapid changes on South African HEIs that emerged from its findings, as presented in Table 5.23, which are transformation, Fees Must Fall, effect of leadership, revolutionary new way of working, declining resources, effect on staff, systems and governance, effect on service delivery and consequences for higher education.

(3) Influence of disruption on South African HEIs

According to existing research the only disruptions that have been reported to influence South African HEIs were governance and system changes resulting from the influence of technological and ICT changes, revolutionary new way of doing things (e.g. due to reduced funding, changing student expectations and disruptive technology) and changed organisations structures due to the rise of on-line learning and social media platforms that have changed the way teaching and learning takes place. Researchers such as Bass (2012), Morris (2016), Purcell (2014) argue that South African HEIs in general need to review their offering, structure and content of curriculums to remain relevant in the wake of disruptive technology, decreased funding and changing student expectations (as discussed in section 3.3.3.2 of Chapter 3). Bass (2012) argues for higher education to focus on adapting the teaching and learning process to enable students to learn to practice their knowledge and to think critically, while collaborating (as discussed in section 3.3.3.2 of Chapter 3). Therefore, it is important for HEIs to adapt the curricula and the use of technology so that the gap between the real world and classroom can be closed (Bass 2012) (as discussed in section 3.3.3.2 of Chapter 3). Furthermore, researchers appear to mainly discuss the influence of disruption on South African HEIs from a technological, ICT and the need to make curricula more relevant point of view while this research mainly discusses the influence of disruptions that appear to be more closely linked to the Fees Must Fall and transformation, as presented in Table 5.23.

iii. *Influence of rapid change and disruption on leaders*

The influence of rapid change and disruptions on leaders are as follows:

(1) Influences on leaders

From the research data, it emerged that the influence of the rapid change and disruption experienced by leaders was somewhat similar to those which had influenced the Universities. The following were the most common categories of influence of rapid change and disruption on leaders: transformation, effect of leadership, revolutionary new way, effect on resources, effect on staff, service delivery and systems and governance. The codes and categories of the most common occurring influences of the rapid change and disruptions on leaders, along with evidence, are contained in Table 5.24 below.

Table 5.24

Examples of the influence of rapid change and disruptions on leaders

Verbatim evidence	Code	Category
Developed contingency plans to catch up to get students through the semester (Participant 5). Tried to provide leadership and manage the office to deliver what we can, remaining calm and not adding to the uncertainty...See to it that we have enough staff to deliver...means that staff must adjust to teach over weekends (Participant 44).	Improved service delivery	Service delivery
Was part of the team that dealt with the large-scale corruption in exams and marks fraud (Participant 25). Service deliver because people were not ready for the increase in enrolment. The exam dates had to change (Participant 62).	Decline in service delivery	
It interrupts your ability to deliver on your own goals or identified performance targets. It also is very time consuming. So, it takes away the time that you would use for other things... The exam dates had to change... (Participants 34 and 62).	Negative impact on the academic project	
I am part of the transformation committee and I felt betrayed by the article. I felt it was a step backwards from the work we do (Participant 45).	Decreased staff morale	Effect on staff
My car was stoned, I was in a building when a petrol bomb was thrown on my floor. So, it, it creates a sense of panic... (Participant 9). The persistent threat of violence takes its toll...you are not prepared or trained for it...You just muddle through it (Participant 47).	Increased, fear stress and anxiety	

For me it became stressful due to the volume because HR does not have the capacity to deal with the volume, but my team was productive (Participant 52).	Increased workloads	
It silenced them (the leaders). Better bite your tongue for fear of reprisal or being called a racist...it decreased their confidence to take decisions (Participant 42).	Poor work climate	
I mean, if you don't feel safe yourself to go to work, then, uhm, how do you convince other people that (Participant 9)?	Concern for safety	
Irritated with a small group of students who have taken over the university (hi-jacking). There are different rules for different people. (Participant 42).	Negative impact on interpersonal relations	
it has created an environment or a space, wherein I'm uncertain of the ground that I'm...of my institution. I don't know anything anymore. I'm not certain where we are going, what are we doing (Participant 30).	Discomfort, concern and uncertainty	
I spent a lot of time dealing with the rapid changes and dealing with people's rejection of the rapid change. I had to become a mediator...People are not willing to change...For academia it seems difficult because of the silo system; slow to change (Participants 20,40 and 64).	Resistance to change	
I didn't feel the university would help the staff but only students. We all felt that way...Lost all faith in management (Participant 17).	Mistrust and anger toward leadership	
We must think differently. Must learn to listen to different views...How do I get the correct infrastructure in place? How do you influence others (Participant 69)?	Different from the norm	Revolutionary new way
The laboratory had to increase the amount of external work to increase the income to run the laboratory because of declining funds and increased student numbers (Participant 55). At this institution, the immediate thing that I realise is that, if we want to innovate and create jobs, we need to do that in the Province. And that has a totally different mindset when you do technology and transfer and innovation... my role is to take the lead at this institution and to direct our research projects, to contribute to the national system of innovation within the context of the global...the university has not sufficiently embraced technology; still manual reporting... (Participants 10 and 62).	Cannot continue as before	
...you need to constantly be alert to developments in the college, both in management; both in the teaching and learning and research; innovation; and, community engagement areas... so that we can respond in time to the demands that come with that change (Participant 26). Presented the opportunity to use new tools, new technologies...it's just a matter of now, these changes and demands, for me, I see an opportunity to do new tasks...From a human capital point of view, I am lagging behind in my relevance (Participants 31 and 62).	Different skills required	
Senior leaders did not know how things will run...It was up to the leaders to sort it out (Participant 66).	Perceived lack of leadership direction	Effect of leadership
Because of leadership challenges, where we were having many people who don't qualify; they don't have management; they don't have, uh, leadership...to the extent where other people who did not qualify started selling degree qualifications (Participant 35). Sometimes I feel that I should have had military training. You are not prepared or trained for it; you just muddle through it (Participant 47).	Areas of leadership development	

It has resulted in very high levels of timidity among leaders. Because you scared or there's a fear level of making a decision, of following up, or engaging, uh, with issues (Participant 1).

I had to revisit my emotional strength to handle angry students. And to accommodate a different perspective...As an individual we have to adapt... You need to familiarize yourself with the environment...As a leader, one needs to be on top of things...as the university changes, leadership is also expected to adapt (Participants 2, 11 and 35).

Be open to listen to both sides whether students or protestors. Don't judge them. Open the dialogue. you consult with employees and explain to them...help people understand what is going on...We meet as the leadership team and take part in the university decision making that manages and implements the decisions at school level (Participant 17, 42, 53 and 57).

There is a lack of transparency from management. Staff look to us for information, but we don't know. The staff think we are incompetent...they (leadership) don't act appropriately (Participants 23 and 64).

Effect of decisions and behaviours

Even though the categories of influence on leaders that emerged, as presented in Table 5.24, were somewhat similar to those that affected South African HEIs (presented in Table 5.23), it emerged that only some of the codes contained within each category of the influence on leaders were supported by evidence, when compared to the same category that influenced South African HEIs. For example, the data only contained evidence for the code "Decolonisation of the curriculum" for the category "Transformation" regarding the impact of rapid change and disruption on leaders whereas there was evidence for all four codes under that category when analysing the research data regarding the influence on South African HEIs.

(2) Discussion of the influences of rapid change and disruption on leaders in South African HEIs

This research reported that responses from leaders implied areas of leadership development because senior leaders did not know how things would unfold and were perceived as not providing direction. The participants reported that some leaders did not have the training, qualifications or leadership or management experience required. Furthermore, this research identified that leader's behaviour was perceived to have negative consequences. Specifically, leaders appeared to be timid and did not want to make decisions, they needed to adapt, needed to understand their environment, be

open to listen to opposing views, be more transparent, needed to provide information to staff but did not have it, appeared incompetent to staff or did not act appropriately.

Research by Herbst and Conradie (2011), Rudhumbu (2014) and Zuber-skerrit (2007) state that rapid changes have influenced the skills that leaders will require (e.g. new leadership skills) and that the nature of their role has changed (e.g. provide input into the overall strategy) (as discussed in sections 3.3.2.7 and 3.3.3.2 of Chapter 3). In addition, Lu and Xie (2014) argue that some leaders may resist the change because they are risk averse but state that change will happen even if leaders resist it (as discussed in sections 3.3.2.7 and 3.3.3.2 of Chapter 3). Bennet (2017) stated that leaders remain responsible for what happens during times of change (i.e. unstable times) (as discussed in sections 3.3.2.7 and 3.3.3.2 of Chapter 3). However, little research could be found that directly discusses the influence of disruption on leaders within South African HEIs. Research by Gartner (2018) argued that organisation leaders (which by implication includes leaders in South African HEIs) need to become digitally competent and drive collaboration to remain competitive (as discussed in sections 3.3.2.7 and 3.3.3.2 of Chapter 3). It could be argued, however, that the rapid changes and disruptions that influenced the South African HEIs, as discussed and presented in Table 5.23, also influenced their leaders because they are an integral part of those institutions. For example, research by Gore (2014), Morris (2016), Purcell (2014) and Smith (2017) argue for the need of HEIs to become more student focused due to disruptive technology, declining funds and changing student expectations (as discussed in section 3.3.3.2 of Chapter 3). By implication therefore, they also mean that these changes influence leaders in HEIs because they are responsible for implementing them (as discussed in section 3.3.3.2 of Chapter 3). Similarly, research by Adam, et al. (2015), Bawa (2019), Langa (2017), Luvalo (2019), Mabokela and Mlambo (2017), Naidoo et al. (2013), Waghid et al. (2019) and Zembylas (2018) regarding the need for transformation in higher education, Fees Must Fall, use of new technologies, the government announcement of free education and the need to decolonise the curriculum imply an influence on leaders because they are usually responsible for successfully implementing such changes (as discussed in section 3.3.3.2 of Chapter 3).

In fact, Bawa (2019), Beattie et al. (2013), Langa (2017) and Zuber-skerrit (2007) argue

that leaders were influenced by the rapid changes and in many cases did not have the skills required, and even felt abandoned by the national government (Bawa, 2019) (as discussed in sections 3.3.2.7 and 3.3.3.2 of Chapter 3). The findings of this research support research by Beck and Wiersema (2013), Bennet (2017), Boerner et al. (2007) and Metcalfe and Metcalfe (2005) who respectively identified that leader skills, experience and networks of support, the extent to which they embrace uncertainty (including disruption to deal with it effectively), the extent to which they apply transformational leadership (e.g. set and communicate a compelling vision, inspire, and develop followers) and the extent to which they are flexible and adaptable influence the extent to which their organisations performs in a given situation (as discussed in sections 3.3.2.7 and 3.3.3.2 of Chapter 3).

This research partly confirms the findings by Arntzen (2016), Beattie et al. (2013) and Tjeldvoll (2011), along with research by Herbst and Conradie (2011), Rudhumbu (2014), Zuber-skerrit (2007) who arguably found that leaders did not have the training or experience needed to lead during rapid change and disruption. Furthermore, Beattie et al. (2013) indicated that some of leaders' action could have unintended consequences because of the lack of training and experience. This research reported that leaders affected the organisation performance or effectiveness to the extent in which they dealt successfully with the rapid change and disruption that had influenced their university. More specifically this research identified that the universities and leaders coped with the rapid change and disruption even though some aspects, such as service delivery had declined.

Researchers have not specifically and directly identified the behaviours and the effect of leaders' decisions. In certain research, such as Arntzen (2016) and Beattie et al. (2013) it is stated what skills or competencies leaders should have, but it does not clearly indicate if these are required specifically to lead successfully during times of rapid changes and disruption nor does it appear to clearly deal with the effect of leaders during rapid change and disruption (as discussed in sections 3.3.2.7 and 3.3.3.2 of Chapter 3).

This research concurs with the existing literature presented above, in that it reported that rapid change and disruption influenced leaders to do things in a revolutionary new

way (i.e. different skills required, cannot continue as before, different from the norm). However, this research differs from existing literature in that it clearly identified that the rapid changes and disruptions influenced the leaders' service delivery (positively because they had to think of new ways of doing things and negatively because they were often not prepared) and leaders as members of staff (i.e. decreased morale, increased fear stress and anxiety, increased workloads, poor work climate, concern for safety, negative impact on interpersonal relations, discomfort, concern and uncertainty, resistance to change, mistrust and anger toward leadership). Furthermore, this research directly identified that the rapid change and disruption had negatively influenced leaders personally and their effect on their organisations (i.e. perceived lack of leadership direction, areas of leadership development, effect of decisions and behaviours), as presented in Table 5.24 above. It is however possible to imply from existing research that leaders were influenced in some of the aforementioned categories of influences because of the influence on their organisations. For example, when Bawa (2019) and Langa (2017) refer to the level of violence that occurred during the Fees Must Fall protest action, it is possible to imply that leaders were influenced by it even though they did not directly refer to it (as discussed in sections 3.3.2.7 and 3.3.3.2 of Chapter 3). Similarly, Bennet (2012) stated that leaders may themselves be negatively affected by rapid change although he does not clearly identify in what way (as discussed in sections 3.3.2.7 and 3.3.3.2 of Chapter 3).

When comparing the influence of the rapid change and disruptions on leaders of South African HEIs versus the whole organisation (i.e. South African HEIs), then leaders appear to be influenced by fewer areas than the whole organisation (i.e. those that emerged as influences on South African HEIs as presented in Table 5.23 compared to those that influenced their leaders as presented in Table 5.24). This could be because leaders are responsible for the influence on service delivery, ensuring that the way things are done and structured is changed, provide clear direction, and create a conducive and trusting environment within which the rapid change and disruption occur, including acquiring new skills and identifying skills that they need to develop.

Furthermore, leaders were influenced by the change as members of staff in that they were also subjected to and influenced by the rapid changes and disruptions as presented in Table 5.24. In other words, of all the influences of rapid change and

disruption on South African HEIs it could be reasonably argued that those few that emerged as influences on leaders are understandable because ultimately it is them who effect how the organisation responds to those situations by providing plans, direction and guidance so that all influences that emerged and were presented in Table 5.23 can be successfully dealt with. By dealing with the influences of rapid change and disruption on South African HEIs, leaders will arguably enable their organisations to successfully respond to the rapid change and disruptions that they encounter.

This research concurs with existing research by Bawa (2019), Bennet (2017), Beattie et al. (2013), Gartner (2018) and Lu and Xie (2014) in that they argue that leaders are responsible to drive and implement rapid changes, compile plans and/or to respond to rapidly changing environments (as discussed in sections 3.3.2.7 and 3.3.3.2 of Chapter 3).

Even though these researchers do not directly deal with disruption that influenced South African HEIs, it can arguably be implied that the same would apply to such leaders when dealing with disruptions that influence their organisation. As with the influences of disruption on South African HEIs, this research also reported that the influence on leaders of South African HEIs appears to be more in relation to Fees Must Fall, revolutionary new way and transformation, whereas existing research on the influence of disruption on leaders appears to mainly focus on the influence of technological developments and systems and governance.

(3) Summary of the influence of rapid change and disruption on South African HEIs and their leaders

This research identified and adopted the influences of rapid change and disruption on South African HEIs as presented in Table 5.23. Furthermore, this research reported and adopted the influences of rapid change and disruption on leaders of South African HEIs as presented in Table 5.24. In this research study the influence of the rapid change and disruption was found to directly influence leaders' effect on their organisation during rapid change and disruption. These findings arguably serve as a vital basis on which to identify the capabilities needed to successfully lead South African HEIs during such times.

5.5.3 Theme 3: Perceptions of coping mechanisms to overcome rapid change and disruption

The responses to the following questions during the focus group interviews and individual interviews were used to develop theme 3, perceptions of coping mechanisms to overcome rapid change and disruption, and the subthemes discussed below:

- (1) In your view, how did the university cope with the rapid change and disruption?
- (2) In your view, how did you cope with the rapid change and disruption as an individual and as a leader within the university?

The following subthemes were developed

- (1) Subtheme 3.1: Universities and leaders that coped with the rapid change and disruption.
- (2) Subtheme 3.2: Universities and leaders that did not cope with the rapid change and disruption.

5.5.3.1 Subtheme 3.1: Universities and leaders that coped with the rapid change and disruption

(a) Coping with rapid change and disruption

According to this research, 54% (43 of the participants) indicated that their university had coped with the rapid change and disruption, which had affected their institution. Furthermore, 72% (58 of participants) stated that leaders at their university had coped with the rapid change and disruption that had affected their institution. In other words, most of the participants indicated that their university and leaders had coped with the rapid change and disruption. Table 5.25 below contains examples of the evidence for the codes and categories that emerged for universities and leaders that coped with the rapid change and disruption.

Table 5.25

Examples of codes and categories for universities and leaders that coped

Verbatim evidence	Code	Category
<p>If we get to something like dealing with the student protests, I think they were very proactive, and very engaged with the students, and we were one of the lucky universities that have not really had any damage to infrastructure, or things, like that (Participant 8).</p> <p>I think the university probably coped better than most... So, we got off pretty lightly, I don't think our damages were as bad...Counsel and management actually worked together and they brought in whatever expertise they needed, and created task team, stakeholder task teams, to manage the university (Participant 29).</p> <p>Too early to tell because it happened in July 2019. To a certain extent we are coping because we are all trying to solve the issues and risks (Participant 52).</p> <p>Coped fairly well. There was no interruption in the academic programme. We avoided disruptions...the university coped fairly well (Participants 48, 55 and 57).</p> <p>Retrospectively, fairly well despite being in the news...The university acted normally to me. In the current context it acted meaningfully and created relative space for conversation and allowed people to converse about the changes Participants (63, 66 and 67).</p>	University coped	Level of coping
<p>On a personal level I'm not too upset about too many changes taking place and I think, one adjusts quite quickly to realities and try to understand it and try to work through it (Participant 7).</p> <p>I'll have to say I was lucky that I could rely on a management team... So, that allowed me to have awareness and understanding of, the policy environment within which the university operated, and how that environment linked up with DHED and CHD systems (Participant 26).</p> <p>Ja, look, for me, I feel we're not changing quick enough. That's why I'm saying. The reality is, it is easier now for any other university to open distance learning, it's much easier. So, you're gonna lose relevance if you don't move quickly (Participant 31).</p> <p>I have a network of Vice Chancellors and professionals to share views and the Vice Chancellor community of practice which helps a lot (Participant 43).</p> <p>I coped relatively well. I am fairly used to the environment and my business background helped me develop the staff...Relatively okay. I am used to unforeseen circumstances... (Participants 46 and 49).</p> <p>I enjoyed it...I don't like routine. I am energised by challenges (Participant 58).</p> <p>I came out okay at the other end. I had to learn to sit through it or embrace it (Participant 60).</p> <p>I think I contributed towards the university preparing itself for the constant change. I helped others understand (Participant 63).</p>	Leaders coped	

b. Discussion about coping with rapid change and disruption

While this research found that South African HEIs (54% or 43 of the participants) and their leaders (72% of 58 of the participants) coped with the rapid change and disruption, little existing research could be found that supports this finding. Researchers such as Bawa (2019), Beattie et al. (2013), Langa (2017) and Zuber-skerrit (2007) who investigated the rapid change and disruptions that influenced South African HEIs either from the perspective of Fees Must Fall, technological developments or decolonisation of the curriculum, appear to mainly argue that South African HEIs and/or their leaders did not cope (as discussed in sections 3.3.2.7 and 3.3.3.2 of Chapter 3). To them, South African HEIs and their leaders require training, government support, overcome their resistance to change and or need development to successfully deal with rapid changes and disruption in future (as discussed in sections 3.3.2.7 and 3.3.3.2 of Chapter 3).

5.5.3.2 Subtheme 3.2: Universities and leaders that did not cope with the rapid change and disruption.

(a) Not coping with rapid change and disruption

According to this research, 46% (37 of participants) reported that their university did not cope with the rapid change and disruption. In addition, 28% (22 of participants) indicated that the leaders at their university did not cope with the rapid change and disruption. Table 5.26 below contains examples of the evidence for the codes and categories that emerged for universities and leaders that did not cope with the rapid change and disruption.

Table 5.26

Examples of codes and categories for universities and leaders that did not cope

Verbatim evidence	Code	Category
I think all universities are on the back foot, because I think what's set the stage for us to be on the back foot is how government responded to that initial "Fees must Fall" demands...I think the lack of consultation, giving in quickly, not really understanding the dynamics or engaging...The	University did not cope	Level of coping

university has not seen the light of day. They are not ready for such things (Participants 1 and 3).

Uhm, but what I found astounding, is that the university didn't take a stronger stance because with every disruption there was a strong racially charged element which kind of, students, you know, inciting racial violence on campus. And I was disappointed that universities did not take a stronger stand (Participant 9).

I think in some cases our response has been dismal. When changes were happening, we haven't been firm enough to lay the line and insist that, that line must not be crossed (Participant 29).

The disruption, first, it threw us off, it didn't take us by surprise, because we expected... you know that it's coming to you, you just don't know when... But we were, sort of trying to cope with it as we went along, we did not want to react in a way that is going to make the environment more tense (Participant 30).

Not very well. Tried to drive it (organisation restructuring) relentlessly and we are being consulted, but it appears as if the change has already been decided...Not very well. There were pockets or spaces of care but mostly not very well (Participants 17 and 42).

The university was not coping well. Suddenly seeing tight security and bouncers when you enter and to higher floors...Relying on security and justice system to show you are in control...Not very well...we are not good at learning from or mistakes and faults (Participants 44 and 61).

Well, I think sometimes I felt not at home, felt that not much was done to help me as individual (Participant 13).

It's becoming almost unbearable. The whole environment. I don't look forward to coming to work. You must dig deep to keep your team going even though there is no future. I am stressed. I lie awake at night. I had problems to disengage from work...I clench my teeth...I won't stay at the university (Participants 19 and 23).

...I am not coping well, in the sense that I've written reports about the negative impact this thing has on the faculty. The violent protests affected me hard. I witnessed violence on others... (Participants 25 and 33).

It started slowly in 2016 and built up to a complete breakdown personally. I got progressively more vulnerable and traumatised...I was booked off... (Participant 38).

Not happy the way top management deals with it. We will lose brilliant people because we want safety and structure...It's management because we don't get guidance or communication from management (Participant 64).

Mentally I was not stable. I was affected in that staff around me were scared...I felt their fear...It affected my work effectiveness (Participant 65).

We don't have a voice...weaker people may not say anything. The straight line of authority and decision making is not clear. No-one is held accountable for the bad decisions. They fall through the cracks (Participant 66).

Leaders did not cope

(b) Discussion about not coping with rapid change and disruption

The finding of this research concurs with researchers such as Bawa (2019), Beattie et

al. (2013), Langa (2017) and Zuber-skerrit (2007) who appear to mainly argue that South African HEIs and/or their leaders did not cope with the rapid change and disruption that had influenced them (as discussed in sections 3.3.2.7 and 3.3.3.2 of Chapter 3). The aforementioned researchers argue that leaders were either not trained, not experienced and in some cases lacked the responsiveness to deal promptly with the rapid changes and disruptions that influenced their universities.

5.5.3.3 Summary about coping with rapid change and disruption with emphasis on the coping of leaders

This research found that overall South African HEIs (54% or 43 of the participants) and their leaders (72% of 58 of the participants) coped with the rapid change and disruption although little existing research could be found that supports this finding. In addition, this research found that 46% (37 of the participants) reported that their university did not and 28% (22 of the participants) indicated that the leaders at their university did not cope with the rapid change and disruption, which was partially supported by existing research discussed above. The findings regarding leaders who did not cope with rapid change and disruption serve as an important basis for identifying the capabilities needed to successfully lead South African HEIs during rapid change and disruption. The reason for this is because leaders are responsible to successfully deal with such situations and if they cannot cope, how effective will the organisation be?

5.5.4 Theme 4: Perceptions of leadership capabilities needed to successfully lead South African universities during rapid change and disruption

The responses to the following questions during the focus group interviews and individual interviews were used to develop theme 4, perceptions of leadership capabilities needed to successfully lead South African universities during rapid change and disruption, and the subthemes discussed below:

- (1) In your view what capabilities did you display that you believe contributed to the university successfully dealing with the rapid change and disruption?

- (2) In your view what capabilities did other university leaders display that you believe contributed to the university successfully dealing with the rapid change and disruption?
- (3) According to you, what leadership capabilities were not displayed by you or other leaders which you believe could have improved the way the rapid change and disruption were handled?
- (4) Looking back at the rapid change and disruption that affected your university, what leadership capabilities would you say are important to lead successfully, in times of rapid change and disruption? Could you please explain your answer?
- (5) In your opinion, are there different leadership capabilities required at different leadership levels within the university to successfully deal with rapid change and disruption? Could you please explain your answer?

The following sub themes were developed:

- (1) Subtheme 4.1: Leadership capabilities needed to successfully lead South African universities during rapid change and disruption.
- (2) Subtheme 4.2: Capabilities required at the different leadership levels to lead successfully during rapid change and disruption.

5.5.4.1 Subtheme 4.1: Leadership capabilities needed to successfully lead South African universities during rapid change and disruption

The research data was analysed and the categories that emerged as those that were necessary to successfully lead South African HEIs during rapid change and disruption were influencing ability, communication, providing direction, emotional intelligence (EQ), drive for results, trustworthiness, adaptability, cognitive ability, environmental awareness and understanding, determination, teamwork, decision making, change management, inspiring others, management skills, decisiveness, agility and

innovativeness. Table 5.27 below contains examples of the evidence of the codes and categories emerged.

Table 5.27

Examples of codes and categories of capabilities required to lead during rapid change and disruption

Verbatim evidence	Code	Category
Agility, adaptability...Needed to adapt plan - what works - adapt with the environment...Adapt quickly to change...As a leader you must be adaptable - read the situation - apply the same principles (Participants 28, 40, 48 and 65).	Adaptable	Adaptability
Get advice from international bodies...Change has a positive impact because it jolts people to think differently - leaders need to think differently...Think differently - how do we do things differently...Think differently - and include those into plans...Ask what I can do differently... (Participant 2, 40, 41, 63 and 69).	Openness to new ideas	
Agility, adaptability...React a bit quicker...Very proactive in engaging students... Do things quicker - focus on quicker delivery...Move with speed - don't drag things out (Participants 8, 20, 25, 27, 28, 30 and 60).	Agility	Agility
Create an environment where institution can do the change...To show embracing the change...Change management is very important...Manager must drive change management - drive, implement, develop and upskill staff...Create a state of readiness/create a conducive space for change (Participants 2, 3, 8, 45, 52 and 67).	Change management	Change management
Astuteness, logical. Insightfulness (Participants 14, 27 and 56).	Intellectual ability	Cognitive ability
Business acumen...Business acumen - it is now a business - must understand planning, strategic drivers, vision of where we are going - profit driven - understand financial drivers...Make most of limited resources...My business background helped me develop staff...University must understand the environment and demonstrate our competitive edge (Participants 2, 19, 20, 49 and 66).	Business acumen	
Conceptual skills were not displayed...People conceptualised things very narrowly...Conceptual thinking - engage with people at a conceptual level (Participants 7, 41 and 42).	Conceptual thinking	
Dealing with uncertainty – fundamental...Dealing with complexity - no time for analysis - must respond off the cuff - hope that your decision is not far off...Dealing with complexity and a number of stakeholders...Integrate...Simplify matters...Technical knowledge - must understand how it fits together... (Participants 10, 11, 38, 43, 61and 66).	Dealing with ambiguity and complexity	
Financial acumen...It is now a business - Must understand planning, strategic drivers, vision of where we are going - profit driven - understand financial drivers...Financially trained...You must keep these changes in mind (cash flow/budget) because it limits what you can implement...Reinforce alignment between budget and strategy (Participants 15, 19, 28, 43 and 53).	Financial acumen	

Dealing with problems in a correct way...Consider alternatives - alternate solutions...Root cause needs to be examined - that will influence your response...Problem solving skills...Sit around the table to resolve the situation...The lab had to increase external work to increase income to run due to decrease funding/increased student numbers - implies - problem solving/finding solutions (Participants 13, 15, 52, 57 and 65).	Problem solving ability	
Be able to foresee and analyse scenarios - very important...Ability to analyse situations - it is important to read the situation...I can analyse a situation and can plan a response...Must immediately analyse and then chart a way forward (Participants 15, 33, 35 and 43).	Analytical skills	
Provide feedback from senior management...Had to answer for the University - was attacked by outsiders...Providing answers - letting people know what is going on...Provide information to staff - keep them updated...Goals must be communicated and all work towards it...Lots of staff engagement - to keep staff informed - resulted in improved motivation...Communicator of messages to college to keep them abreast (Participants 17, 19, 44, 48, 52 and 55).	Providing information and feedback	Effective communication
Engage with staff and hear their views...Engage certain stakeholders more - but be sensitive...Leader must create space for staff to engage and come with proposals to implement as a team...Able to engage people at a conceptual, intellectual and at an operational level...Keep engaging...Collaboration, engagement, partnership with various stakeholders...Engage and hold to account (Participants 2, 11, 28, 41, 43 and 53).	Ability to engage others	
Consult widely...Consult wider to reduce negative impact of decisions...Consultation, engaging, listening and guiding...More consultation and dialogue...Consultation approach - you consult and explain to get buy-in...Regular strategic development and monitoring with consultation...Consultation to ensure better plan and delivery (Participants 2, 22, 25, 28, 52, 57 and 58).	Ability to consult others	
Ability to listen...Listen to competing views and consolidate most efficient decision...Ability to listen to different views...Listening is number one...Listening (Participants 15, 26, 30, 48, 65 and 69).	Listening skills	
Communication - able to articulate...Communication skills...Ability to engage and communicate...Regular and constant honest communication...Good communications...Effective communication and transparency...Clear communications... Good and regular communications... To communicate appropriately at right moment... Constant communication (Participants 15, 41, 43, 48, 52, 58, 60,62, 66 and 67).	Quality and frequency of communication	
Think through consequences of decisions...Must be able to evaluate decisions so that they are collective and sound...Balance give and take - don't bend over backwards... Identify the right role players to engage about issues...Don't simply trust...Judgement (Participants 20, 25, 30, 34 and 60).	Good judgement	Decision making
Mobilising experts to get info fast enough to make decisions... Identify the right role players to engage about issues... Need to have people at the bottom take part in decisions... More inclusive way of decision making... Strategic consultation - have a network - feedback loop to improve decision making (Participants 20, 25, 27, 40 and 66).	Participative behaviour	

Must be able to evaluate decisions so that they are collective and sound... Look at various options... Be mindful of pressures from all stakeholders and take appropriate decisions... Tried to be decisive based on principles - if not in line then can't go ahead... Don't simply trust... Be more careful to make assumptions (Participants 20, 26, 34, 60 and 68).	Consider and evaluate the options	
Decision making ...Make decisions...Part of management - take decision and director of what was needed to be done... Taking staff needs into consideration - balance staff and student needs... Must be able to make a decision after listening to all and stick to it even if it is hard but is in the interest of the University...Improved decision making (Participants 26, 30, 48, 52 and 55).	Select the best option	
Balance give and take - don't bend over backwards... Think through consequences of decisions... Able to make decisions - if leaders don't make decisions, they cause confusion... Must be aware of capacity on the ground before making decisions... (I would) act differently - give more input, consider impact of their decisions - it was done too fast (Participants 25, 30, 48, 66 and 68).	Consider the consequences	
Being decisive... Take decisive action - analyse and assess first... Ability to take decisions and be responsive to situations as and when they happen... Decisiveness of the difficult decisions to make... Make and stick to decisions... Made quick and decisive decisions - very decisive (Participants 1, 3, 13, 19, 27, 30 and 55).	Decisiveness	Decisiveness
VC is a charismatic leader - lot of confidence, determination, ferocious work ethic... Need principled leaders - not swayed by political allegiance/to be popular - stick to your guns... Make and stick to decisions... Insistence on the line which you don't cross - line should be drawn earlier... We have to be consistent.....in the way we deal with public funds (Participants 14, 19, 35, 38, 44 and 58).	Steadfastness	Determination
Perseverance with what you believe is right... To not get despondent - be persistent... Constant alertness... Ability to engage in a firm environment... Work long days - working through issues (Participants 8, 11, 30, 38 and 58)	Perseverance	
Resilience - be open to change and understanding cause of insults...I have to be the strong one...Strong resilience...They were very resilient to get message across in the face of strong resistance...Resilient...Need to prepare yourself for this space - type of resilience...Kept driving it despite bad treatment they received (Participants 9, 11, 56, 59, 61, 65 and 66).	Resilience	
Courage - In front... Being brave and independent is crucial... Make tough decisions... Make difficult decisions... Courage to take a stand - say your say do not be silenced... Courage - need a backbone... Make difficult decisions (Participants 28, 42, 46, 47 and 62).	Courage	
Be more contextually aware... Understand the context... Examine the different perspectives - helps to make collective decisions Not stuck in your paradigm in context - analyse the context (e.g. economics, election time) ... Need people who understand the environment you are dealing with... Good understanding of higher education... Every context and campus features are different - make decision that is wisest for the situation - we eventually got an interdict... Understand the Socio-Economic situation... We need strategic leadership - Not stuck in your paradigm; you need to read	Contextual awareness and understanding	Environmental awareness and understanding

the environment and the "slip factors" (Participants 11, 22, 34, 35, 38, 45, 49 and 60).		
Deal with politics and networking is very important... Must read political mood... Understand politics of the person, country and students... Never show political affiliation...Political interpretation and understanding of national protest... Draw the line between managing the University and political imperatives (Participants 2, 15, 20, 28, 47 and 57).	Political astuteness	
Read the situation - Understanding the dynamics on the ground...Each situation requires that you assess it - respond in a way based on circumstances and context... Leaders should try understand before tabling solutions (Participants 30, 34, 35 and 55).	Situational awareness and understanding	
Need to reflect on the situation in order to learn... Know how to change your energy... Good reflection skills... Reflection is important - draw from what worked/did not work so well - implement skills from experience to apply in new situation... Able to reflect or review... Self-awareness... Self-awareness - growing and developing yourself... High level of self-awareness (Participants 5, 8, 17, 44, 46 and 63).	Intrapersonal skills	Emotional intelligence
Show empathy and appreciation... Don't be too negative or insensitive... Empathy - let students know we understand them... Sensitivity to response of others...Try understand what is being said and the feelings... Empathy (Participants 26, 60, 65, 67 and 68).	Empathy	
Good interpersonal skills... Be approachable any time...Need to know people skills...Better people skills...Interpersonal relations with staff and students...Human skills...Must have people skills (Participants 2, 15, 19, 30, 35, 53 and 67).	Interpersonal skills	
Remained calm... Resilience... Think clearly - when confronted with violence or situation... Emotional strength to handle angry students...Have certain skills - test their ability how to handle tense situations beforehand... I had to think on my feet... Keeping people calm... Must keep your cool (Participants 9, 11, 30, 38, 65, 67 and 68).	Stress management	
Assertiveness...I am assertive... Confidence... Be confident...Need to be self-assured - authoritative to give direction...I have to be the strong one (Participants 22, 26, 27, 45, 48, 49, 54 and 65).	Assertiveness	
Be positive... Avoid looking at the negative... Be hopeful... Staying positive... Tried to be creative and positive... I am inclined to be positive (Participants 5, 20, 41, 42, 51, 55 and 68).	Optimism	
Ability to influence or convince... Ability to bring along people you lead is important for successful change... Convincing people of benefits of change... Need to influence... Take people along... Ensure buy-in - have a network to share views (Participants 3, 30, 38, 43, 45, 60 and 69).	Influence others	Influencing ability
Inclusive way of doing things - give minority chance to speak within boundaries (no class disruptions) ... Be inclusive - everyone has input - Buy-in... More distributed leadership approach - took views of other groups... Be more inclusive - hear the voice of students... Lead in a diversified environment... Give a voice to all people involved - not just some (Participants 22, 23, 40, 60 and 64).	Inclusive behaviour	

Negotiating skills... Engage and negotiate with students... Good negotiator... Need to know when to give and when to hold... Negotiate... I had to negotiate and had regular communications with the SRC (Participants 19, 27, 30, 53 and 61).	Negotiation skills	
Provide support to your staff... Back and protect staff in difficult situation... Allow people to grow... Develop teams... Empower others... Must be able to empower people (Participants 13, 20,22, 25, 35, 40, 41 and 56).	Supporting, empowering and developing others	
Build networks... Meet, engage and build relations, and training during this time... Develop alliances and coalitions... Building trust relationships... Build good relations... Collaboration, engagement, partnership with various stakeholders... Built stronger relations in the college... Dealt appropriately with stakeholders at a time it was needed (Participants 1, 11, 19, 26, 43, 61 and 68).	Building strategic relationships	
Conflict resolution capability... Lot of conflict management skills... Bringing peace to the situation... Facilitated difficult discussions with students - prevented segregation (Participants 5, 13, 15, 40, 45 and 68).	Conflict resolution	
Have to be innovate or creative... Creativity... Find creative ways to deal with new challenges... Be inventive - have to do more with less... Creative (Participants 17, 23, 42, 43 and 62).	Creativity	Innovativeness
Needed to become more creative - need more innovation... Be more innovative... Must think differently - take what is good from one situation to apply to others... Able to innovate... Innovativeness (Participants 2, 11, 20, 56, 66 and 69).	Ability to innovate	
Be more visible...Visible leadership...Being accessible and available...Inspire others...Create an enabling platform...Get people focussed on things that excite them...To be successful, must come up with the "Why"...Inspire people's peoples' productivity - don't beat it out of them...I am visible during disruption - people want to see you...Lead people to respond positively. Motivate others...You must motivate and assist people - without showing you emotions...Ability to motivate others...Show them incentive to achieve the goal...Get staff engaged and motivated in times of much change...Help your team - motivate your team - need to get the team working...Motivate (Participants 2, 8, 19, 22, 23, 28, 30, 31, 40, 42, 43, 47, 49, 52, 59 and 63).	Motivate others	Inspire others
Celebrate small wins...Celebrate the small successes - identify them...Reward people, especially academics...See potential in others...Bringing others to the fore...Praise my team (Participants 20, 23, 28 and 60).	Recognition	
Management things (e.g. Finance, HR, Law, Business) ... Keep people in check with resources...Appoint people with technical skills and emotional intelligence and understanding of the situation...Talent Management and Succession Planning to create a Pipeline...Rely on people with experience and integrity (Participants 5, 20, 26, 27 and 69).	Resource management	Management ability
Constantly focus on important things...Ability to discern what is important...Prioritise what needs to be done...Need to decide what is important and push out the noise...Had to look at priorities and what we want to be as a University... You expect a Dean or Head of Department to stand back – a good Dean needs to appoint a good manager to implement strategy and comply with statute... Increasingly do project	Planning, organising and prioritising ability	

management... Put your ducks in a row...Proper planning and control (Participants 7, 10, 20, 26, 63 and 68).		
Management capabilities...Strong leadership with managerial skills...Knowledge of management theory and practice...Proper planning and control...Due diligence is needed, Experience in management and leadership... Knowledge of labour law and of University policies...Administrative leadership (Participants 9, 11, 41, 49, 56, 58 and 63).	Management knowledge and skills	
Provide direction...Provide proper guidance...Help team understand the purpose and goals...Provide guidance...Articulate strategy and provide guidance...Get people focussed in a continuously changing environment...look at the situation in an immediate way and arrange staff/senate/security in the best way in the situation...Give direction to others - help them think (Participants 8, 13, 26, 31, 44 and 63).	Guidance and direction	Provide strategic direction
Have a vision to lead...Have foresight to deliver on vision...Help colleagues see where we can envision; to embrace change and uncertainty...Clear vision of where you want to go...Have a vision - the "Why"...Visionary leadership...Visionary - to make you believe in what you cannot see (Participants 11, 17, 22, 40, 42, 44 and 63).	Visioning	
One needs to have a contingency plan - we were taken by surprise - need a crisis plan...Contingency planning (e.g. emergency panel of legal experts) ... Develop contingency plans...Have back-up plans/plans in place...Planning for the unseen (Participants 1, 5, 17, 27, 34 and 43).	Contingency planning	
Strategic level - put strategy together...Strategic planning...Give meaning to the trends and formulate a strategic response...Regular strategic development and monitoring with consultation...It is now a business - Must understand planning, strategic drivers, vision of where we are going - profit driven - understand financial drivers...Align projects & strategy and ensure accountability and alignment to overall strategy (Participants 7, 19, 26, 28, 43 and 58).	Strategy development	
Take a longer term view of the organisation and sector...Strategic thinking is critical to lead...Have a long term perspective - tell people to see the long term perspective...Strategic leadership; not stuck in your paradigm - to read the environment and the "slip factors"...See the big picture - what's best for the institution and not the individual...It is now a business - Must understand planning, strategic drivers, vision of where we are going - profit driven - understand financial drivers...Strategic leadership is very important (Participants 7, 19, 35, 41, 43, 66 and 62).	Strategic thinking	
Scan the environment to understand history, main players etc...Environmental scanning to identify trends, market share etc ...Must be on top of things - environmental scanning...Good understanding of socio-economic landscape...Be vigilant...Get a 360° view of a situation and lead from that...Scan the environment (Participants 2, 8, 10, 26, 62 and 68).	Environmental scanning	
Focus on quicker delivery...Quick response...Be responsive to students...Focus on what we must do - we are still expected to produce...Entrepreneurial approach - lets' just start to provide a service...Leaders should respond or be part of the situation - not be absent...We have experienced leadership at the top...Ability to drive the organisation to meet its vision and mission...Increased ways to be	Performance quality and speed	Drive for results

responsive (to students) (Participants 15, 20, 35, 46, 65, 66 and 68).		
Need to be willing to acquire new knowledge...Must constantly learn...Seek advice...Leader must be teachable - willing to learn...Keep abreast of the developments of the fields we work in...School leadership forcing us to do extra courses or training to get our standards up...Learn from your experience...Understand you don't know everything...Recognise the positive and negative and look forward - try learn and mitigate the negative and understand the reasons...We will learn from it and adapt to the situation (Participants 2, 5, 23, 40, 57, 64 and 68).	Continuous learning	
Collaboration and effort to do things differently... Constantly benchmark and form partnerships... Work increasingly in groups - collaborative effort...Willingness to find solutions together...Collaboration, engagement, partnership with various stakeholders... Collaboration... Start looking for new partners to deal with 4IR (Participants 2, 3, 15, 27, 43, 56 and 57).	Collaboration	Teamwork
Teamwork - not as individuals... Function within a team... Team player... Work together to solve problems - led to reduced queries, increased training of staff and improved cohesion... Acted as a collective leadership front even if we disagreed behind closed doors... Respond as a collective - harnesses the strengths of each individual... Should use a team approach (Participants 11, 14, 19, 20, 42, 43 and 56).	Teamwork	
Being genuine and honest...Ethical leadership...Must act in a principled way - act in a certain way at a certain time in a university...Making decisions with integrity...Integrity - be open and honest...Authenticity - be honest and true...Transparency in the way you present things...Must improve transparency...Lead by example (Participants 5, 23, 27, 35, 41, 44, 60 and 68).	Honesty and integrity	Trustworthiness
Trust is a big thing...Trust is very important...Trustworthy...Have confidence in your managers...Trust and sincerity and interest in their success is important...Trust is bigger - it leads to respect...When I know the Chief Executive Officer is holding everything together then I can do other things (Participants 26, 28, 33, 46, 47, 58 and 68).	Trust	
Take accountability...Taking responsibility...Need managers accountable for each floor who are responsible for communication and safety of the floor...Leadership accountability - can't lead through Unions...Take responsibility at early stage on how to deal with the situation...Gave direction and refocussed people - people weren't held accountable nor was there an agenda...Engage and hold to account (Participants 5, 13, 17, 30, 44, 53, 58 and 66).	Accountability and responsibility	

a. Presentation of leadership capabilities needed to successfully lead South African HEIs during rapid change and disruption

The researcher found that each capability (i.e. category) that emerged was comprised of competencies (i.e. codes) that emerged from the data analysis which were more closely related to the capability into which they were placed than in relation to any

other. There were capabilities for which no specific competencies emerged, and because of their uniqueness, they were identified as a capability on their own (i.e. agility, change management, decisiveness).

The following leadership capabilities emerged from this research:

(1) Adaptability

The investigation identified that the capability called adaptability was made up of the competencies of being adaptable and being open to new ideas, based on the evidence presented for the codes and categories in the previous chapter which indicated that leaders need to adapt and be open to new ideas or to do things differently.

(2) Agility

The capability agility was identified to exist on its own and is concerned with doing things quickly, being agile and moving with speed.

(3) Change management

According to the findings of this research, change management emerged on its own and is concerned with embracing change, driving change, and creating readiness for and managing change.

(4) Cognitive ability

Cognitive ability emerged from the findings with the competencies of intellectual ability (i.e. astuteness, insightfulness), business acumen (e.g. business acumen, understand strategic drivers, understand the financial drivers), conceptual thinking (i.e. conceptual thinking, conceptualise things), dealing with ambiguity and complexity (i.e. dealing with complexity, dealing with uncertainty), financial acumen (i.e. financial acumen, alignment between budget and strategy, understand financial drivers), problem solving ability (i.e. problem solving skills, finding solutions, examine the root cause, problem

solving) and analytical skills (i.e. analyse the scenarios, ability to analyse the situation, read the situation).

(5) Effective communication

This researcher identified the capability of effective communication which consisted of providing information and feedback, being able to engage others, the ability to listen, being able to consult others and the quality and frequency of communication.

(6) Decision making

Decision making was another capability to emerge in the findings and consisted of the competencies of showing good judgement, displaying participative behaviour in decision making, considering and evaluating the possible options, considering the consequences of the decision and selecting the best option. Evidence for each competency included in the capability of decision making was presented in Table 5.27.

(7) Decisiveness

Decisiveness emerged as a capability and had to do with the ability to take decisive action, make and stick to decisions and take decisions to be responsive to the situation. Evidence for decisiveness was presented in Table 5.27.

(8) Determination

Determination emerged as another capability from the findings presented in the previous chapter and comprises of steadfastness or determination, the ability to persevere, being resilient and having courage for example to make tough decisions.

(9) Environmental awareness and understanding

Another capability that emerged from the findings was environmental awareness and understanding which comprised of the leader's ability to be aware of and understand

their context and situation and to be politically astute to understand and navigate the politics to be able to respond appropriately.

(10) Emotional intelligence

Emotional intelligence emerged from this research and consisted of leaders having intrapersonal skills to be self-aware and reflect, displaying empathy, displaying interpersonal skills to get along with others, manage stress and remain calm, being assertive and displaying optimism.

(11) Influencing ability

The discussions revealed that leaders need to have influencing ability which consisted of being able to influence others, displaying inclusive behaviour, having negotiating skills, providing support through developing and empowering others, being able to build strategic relationships with various stakeholders and being able to resolve conflict. Evidence for each of the capabilities and their competencies were presented in Table 5.27.

(12) Innovativeness

Innovativeness consists of being able to innovate and be creative to come up with new ways or ideas of doing things.

(13) Ability to inspire others

Inspire others consists of the ability to motivate others to perform the work and recognising (i.e. rewarding) them for their contribution.

(14) Management ability

This researcher reported that management ability emerged as a leadership capability. It consists of the ability to manage resources, ability to plan, prioritise and organise and management knowledge and skills.

(15) Providing strategic direction

Providing strategic direction emerged from the findings of this research and consists of providing guidance and direction to others, being able to create a vision, contingency planning, developing a strategy, strategic thinking and performing environmental scanning.

(16) Drive for results

Another leadership capability that emerged from the discussions in this research was the drive for results which comprised of performance quality and speed and the ability to continuously learn with the aim of improving performance.

(17) Teamwork

Teamwork emerged as a leadership capability needed to lead successfully during rapid change and disruption in South African HEIs. Teamwork consisted of being able to collaborate and being able to work as and in a team.

(18) Trustworthiness

The final leadership capability that emerged from the discussions in this research was trustworthiness. Trustworthiness comprised of acting with honesty and integrity, trust and displaying accountability and responsibility for one's actions. Once again, all the evidence for this capability and its competencies were presented in Table 5.27.

b. Discussion of leadership capabilities needed to successfully lead South African HEIs during rapid change and disruption

The research data was further analysed to determine how frequently each of the above categories emerged during the data collection process. Table 5.28 below reflects the frequency of the various categories of leadership capabilities that emerged.

Table 5.28

Frequency of the categories of leadership capabilities

Category	Total
Adaptability	84
Agility	20
Change management	35
Cognitive ability	85
Decision making	39
Decisiveness	23
Determination	60
Drive for results	98
Effective communication	165
Environmental awareness and understanding	43
EQ	160
Influencing ability	156
Innovativeness	25
Inspire others	40
Management ability	27
Provide strategic direction	152
Teamwork	38
Trustworthiness	91
Total	1346

According to the frequency that each category (capability) emerged, the top eight frequently occurring capabilities were effective communication, emotional intelligence (EQ), influencing ability, providing strategic direction, drive for results, trustworthiness, Cognitive ability and adaptability. From the research it is possible to infer that these are the capabilities that the participants believed were the most important of all to lead successfully during rapid change and disruption, within South African HEIs. This research confirms some of the leadership capabilities identified by Atkins et al. (2013), Bartram and Ilke (2011), Dunn et al. (2012), Mathews (2016), Van Wart (2004) and Yukl (2006) who respectively identified the capabilities needed for leaders to be effective in ensuring sustainable development, corporate leadership, global leadership, leadership intelligences, organisational leadership for the public service or to be an effective leader (as discussed in section 2.7 of Chapter 2). However, the aforementioned research focused on capabilities required to be an effective leader in general, in the global arena, in the corporate sector or in the public service. Neither appear to have focussed specifically on higher education, South African higher HEIs nor on South African HEIs during rapid change and disruption. Despite the leadership

capabilities that emerged from this research, there are several capabilities that are the same in existing research as those that emerged as findings of this research. Table 5.29 below contains a comparison between the capabilities that emerged from this research and those general leadership capabilities needed to be an effective leader that have been found in the abovementioned existing research.

Table 5.29

Comparison between the leadership capabilities that emerged from this research and those that already exist

Atkins et al. (2013)	Bartram and Ilke (2011)	Dunn et al. (2012)	Mathews (2016),	Van Wart (2004)	Yukl (2006)	This research	
Life-term learning	Developing the vision: Analysing and interpreting	Intellectual Intelligence	Cognitive Abilities/ Processes	Appealing personal style	High energy levels and stress tolerance	Adaptability	
Empowering	Developing the vision: Creating and conceptualising	Emotional intelligence	Emotional resilience	Self confidence	Self confidence	Agility	
Adaptable	Sharing the goals: Adapting and coping	Cultural intelligence	Cultural intelligence	Decisive-ness	Internal locus of control	Change management	
Develop future leaders	Sharing the goals: Interacting and presenting	Metacognitive, existential and moral intelligence	Intrinsic/ internal motivation	Resilience	Emotional stability and maturity	Cognitive ability	
Engagement	Gaining support: Supporting and cooperating		Global strategic orientation	Flexibility	Personal integrity	Effective communication	
Reflection	Gaining support: Leading and deciding		Other personality traits such as flexibility, hardiness, risk-taking, courage	Energy	Motivation to influence others	Decision making	
Sustain: motivate and inspire their followers	Delivering Success: Organizing and executing		Visionary leadership	Willingness to assume responsibility	Achievement orientated	Decisive-ness	
Humility	Delivering success: Enterprising and performing		Global mindset	Need for achievement	Balance need for affiliation	Determination	
Integrity					Fairness, integrity, honesty	Good technical skills	Environmental awareness and understanding
Practice: continuously strive for growth and increased performance					Drive for excellence	Good conceptual skills	Emotional intelligence
		Service motivation and customer service orientation			Social intelligence	Influencing ability	
		Emotional maturity			Systems thinking	Innovativeness	
	Technical skills	Ability to learn	Inspire others				
	Communication	Emotional intelligence	Management ability				

			Influencing and negotiating/ power	Ability to adapt and apply skills to different situations	Provide strategic direction
			Continual learning		Drive for results
			Assessment and evaluation functions		Teamwork
			Formulation and planning functions		Trustworthiness
			Implementation functions		
			Change management functions		

When comparing the capabilities that emerged from the findings of this research to the capabilities in Table 5.29 above it becomes evident that certain of the capabilities found in that research were confirmed in this research. The capability of adaptability found in this research is similar if not the same as found by Atkins et al. (2013), Bertram and Ilke (2011), Mathews (2016), Van Wart (2004) and Yukl (2006). The capability of agility that was identified in this study did not seem to appear in the findings of the existing research in Table 5.29 above. The capability of change management found by this research was only explicitly stated in the research of Van Wart (2004). However, none of the researchers appeared to directly or indirectly identify change management as a specific leadership capability. Cognitive ability was identified by this research as a leadership capability which concurs with Bertram and Ilke (2011), Dunn et al. (2012), Mathews (2016) and Yukl (2006).

This research reported that effective communication was a leadership capability that was required which concurred with Atkins et al. (2013), Bertram and Ilke (2011) and Van Wart (2004). Bertram and Ilke (2011) highlighted that decision making was a capability needed by leaders to be effective which was also the case with the findings of this research. Apart from Bertram and Ilke (2011) no other research mentioned in Table 5.29 appeared to directly or indirectly identify that decision making was a leadership capability required to lead effectively. This research concluded that decisiveness was a capability that leaders require to lead successfully in South African HEIs during rapid change and disruption. Van Wart (2004) reported that decisiveness was needed to lead effectively (as discussed in section 2.7 of Chapter 2). Determination emerged from the findings of this research as a leadership capability

which concurred with research by Mathews (2016) (i.e. hardiness) and Van Wart (2004) (i.e. resilience) (as discussed in section 2.7 of Chapter 2). While this research indicated that environmental awareness and understanding was a capability that leaders needed to be effective in rapid change and disruption, none of the literature in Table 5.29 above directly indicated it to be a needed capability to lead effectively. It is possible, however, to imply that it was included indirectly as a leadership capability in the capability “developing the vision: analysing and interpreting” in the research by Bertram and Ilke (2011) and in the capability “assessment and evaluation functions” in research by Van Wart (2004) (as discussed in section 2.7 of Chapter 2).

According to this research, emotional intelligence was identified as a leadership capability required to lead successfully during rapid change and disruption within South African HEIs. Therefore, this research concurs with the research by Atkins et al. (2013), Dunn et al. (2012), Mathews (2016), Van Wart (2004) and Yukl (2006) who directly or indirectly (i.e. Atkins et al., 2013 refer to reflection which this research identified to be part of intrapersonal relations as part of emotional intelligence) indicated that emotional intelligence is a leadership capability needed to be an effective leader (as discussed in section 2.7 of Chapter 2). Influencing ability (i.e. influence others, inclusive behaviour, negotiations skills, supporting, developing and empowering others and building strategic relations) was identified by this research to be a leadership capability that is required to lead effectively during rapid change and disruption within South African HEIs. Research by Bertram and Ilke (2011) (i.e. gaining support: supporting and cooperating), Dunn et al. (2012) (i.e. cultural intelligence which this research likens to inclusive behaviour), Mathews (2016) (i.e. cultural intelligence which this research likens to inclusive behaviour), Van Wart (2004) and Yukl (2006) highlighted that influencing ability is a capability to needed lead effectively (as discussed in section 2.7 of Chapter 2).

This research identified innovativeness to be a leadership capability that was needed to lead effectively. However, none of the research in Table 5.29 above showed similar findings. The ability to inspire others was identified by this research to be a capability needed by leaders to lead effectively. From the literature presented in Table 5.29, only Atkins et al. (2013) identified that the ability to inspire others is needed to be an effective leader (as discussed in section 2.7 of Chapter 2). The findings of this research

indicate that management ability is a capability that is needed to lead successfully. Bertram and Ilke (2011) (i.e. delivering success: organizing and executing) and Van Wart (2004) (i.e. assessment and evaluation functions, formulation and planning functions, implementation functions) appear to indirectly refer to management ability because management involves the action of organising, planning what needs to be done, performing or executing what needs to be done and assessing and evaluating what has been done (as discussed in section 2.7 of Chapter 2).

Providing strategic direction was identified as a capability needed to lead effectively in this research. The findings of this research concur with Bertram and Ilke (2011), Mathews (2016) and Van Wart (2004) who indicated that developing a vision, visionary leadership, global strategic orientation and formulation and planning functions are needed to be an effective leader (as discussed in section 2.7 of Chapter 2). Teamwork emerged from the findings of this research as a capability needed to lead successfully, however, none of the literature presented in Table 5.29 identified it directly or indirectly as a capability needed to lead effectively.

This research identified drive for results as a leadership capability that was needed and concurs with research by Atkins et al. (2013), Bertram and Ilke (2011), Van Wart (2004) and Yukl (2006) where achievement orientation or increased performance are identified as capabilities needed to lead effectively (as discussed in section 2.7 of Chapter 2). Trustworthiness (i.e. acting with honesty and integrity, trust, displaying accountability and responsibility for one's actions) was identified to be a capability needed by leaders to be effective according to this research. Atkins et al. (2013), Bertram and Ilke (2011), Van Wart (2004) and Yukl (2006) obtained similar results in identifying integrity, moral intelligence, fairness and/or honesty as necessary capabilities to lead effectively (as discussed in section 2.7 of Chapter 2).

Even though most of the competencies that emerged in this research have been identified in existing research, as discussed above (and as discussed in section 2.7 of Chapter 2), the existing research does not appear to have clearly linked them as being required by leaders to successfully lead South African HEIs during rapid change and disruption. Research by Smith and Wolverton (2010), Spanenberg and Theron (2002) and Tonini et al. (2016) resulted in either a leadership model for higher education,

South Africa or a particular university that indicated the capabilities needed to lead successfully (as discussed in section 2.7 of Chapter 2). However, none of their research appears to relate to capabilities needed to lead in South African HEIs during rapid change and disruption (as discussed in section 2.7 of Chapter 2).

Table 5.30 below contains the comparison between the leadership capabilities that emerged in this research and those that emerged in existing research.

Table 5.30

Comparison of the findings of this research to existing South African and higher education leadership capability models

Smith and Wolverton (2010)	Spanenberg and Theron (2002)	Tonini et al. (2016)	This research
Analytical leadership (i.e. Entrepreneurial, creative, apply strategic thinking, and action orientated)	Environmental orientation (i.e. Awareness external environment, awareness internal environment)	Leadership skills (i.e. Listening, patience, empathy, socialization, communication, diplomacy, tenacity, knowledge, negotiation, motivational prowess)	Adaptability
Communication leadership (i.e. Written and spoken communication and self-presentation)	Vision formulation and sharing (i.e. Developing challenging vision, building trust, articulating vision and enlisting followers, conceptualizing strategy)	Themes to be a successful leader (i.e. Becoming an academic leader, managing change, communications, problem-solving, conflict management, using data for decision-making, developing relationships, motivate teams)	Agility
Behavioural leadership (i.e. Light-hearted, unselfish, people-focused)	Preparing the organisation for implementing the vision (i.e. Enabling the leader: personal growth and self-discovery and self-management, empowering followers, optimizing structures and processes, building culture)		Change management
Student affairs leadership (i.e. Understanding and dealing with all student issues)	Implementing the vision (i.e. influencing the external environment, honesty and integrity, decisiveness and hardiness, challenging current reality, facilitating learning, interpersonal skills, showing concern for others, inspiring people Facilitating interdepartmental co-ordination, acting entrepreneurial, developing and implementing performance plans,		Cognitive ability
			Effective communication
			Decision making
			Decisiveness
			Determination
			Environmental aware-ness and under-standing
			Emotional intelligence

reviewing performance	Influencing ability
Rewarding performance)	Innovativeness
	Inspire others
	Management ability
	Provide strategic direction
	Drive for results
	Teamwork
	Trustworthiness

While this research highlighted that adaptability, agility and cognitive ability were capabilities needed to lead successfully in South African HEIs during rapid change and disruption none of the research contained in Table 5.30 identified these capabilities as part of their leadership capability model, even though their research was conducted in the South Africa or Higher Education in general. This research did however partially support the leadership capabilities identified by Smith and Wolverton (2010) who investigated a Higher Education Leadership Competency (HELCO) model necessary to lead effectively in Higher Education (as discussed in section 2.7 of Chapter 2). Smith and Wolverton (2010) also identified effective communication, influencing ability, innovation and providing strategic direction even though they had named them differently (as discussed in section 2.7 of Chapter 2). For example, what Smith and Wolverton (2010) call behavioural leadership which consists of being light-hearted, unselfish and people-focused, this research named it influencing ability (as discussed in section 2.7 of Chapter 2).

Similarly, nine of the leadership capabilities that emerged from this research were also identified by Tonini et al. (2016) who investigated a hybrid leadership model to develop leaders in Nanyang Technological University (NTU) (as discussed in section 2.7 of Chapter 2). The capabilities were effective communication, influencing ability, inspire others, determination, emotional intelligence, teamwork, decision making, change management and cognitive ability. In some instances, Tonini et al. (2016) used different names for the competencies (as discussed in section 2.7 of Chapter 2). For example, the leadership capability of problem-solving identified by Tonini et al. (2016) was identified by this research as being one of the competencies (i.e. codes) that fall into the leadership capability (i.e. category) called cognitive ability (as discussed in section 2.7 of Chapter 2). In yet another example Tonini et al. (2016) use the name

tenacity in the place of the name determination which was used in this research to name the leadership capability which included perseverance (tenacity), steadfastness, courage and resilience (as discussed in section 2.7 of Chapter 2).

This research identified 11 of the leadership capabilities that were identified by Spanenberg and Theron (2002) in their research to develop a uniquely South African leadership questionnaire (as discussed in section 2.7 of Chapter 2). The capabilities were providing strategic direction (which they named developing a challenging vision), inspire others, decisiveness, determination (which they call hardiness), environmental awareness and understanding (which they call environmental orientation), influencing ability (which they call influencing external environment and is only one of the competencies under the capability named influencing ability in this research), effective communication (e.g. vision formulation and sharing, articulating a vision), trustworthiness (i.e. building trust), innovativeness (i.e. challenging current reality), drive for results (i.e. acting entrepreneurial, implementing performance plans) and management ability (e.g. facilitating interdepartmental co-ordination, developing and implementing performance plans) (as discussed in section 2.7 of Chapter 2).

The findings of this research support some of the research findings of Cronje and Bitzer (2019) (i.e. confirmed the need to be sensitive to the environment, provide development opportunities) and Zuber-skerrit (2007) (i.e. confirmed self-reflection which this research identified as part of emotional intelligence, feedback which this research identified as part of effective communication and coaching which this research included under support and development which was part of influencing ability) (as discussed in section 2.7 of Chapter 2). This research agrees with Herbst (2007) who reported that leaders of South African HEIs need to have high levels of emotional intelligence. However, this research specifically identified emotional intelligence as one of the capabilities needed by leaders in South African HEIs during rapid change and disruption, whereas Herbst (2007) did not (as discussed in section 2.7 of Chapter 2).

Apart from the existing research discussed above, the Council for Higher Education published a book called “Reflections of South African university leaders 1981 to 2014” that details the leadership experiences of past Vice Chancellors and Principle, Vice Chancellors or Deputy Vice Chancellors of South African universities during the

aforementioned period. It includes their reflection on what they believed are the capabilities that leaders need to be successful (i.e. individuals who held positions such as the ones they did).

Below is a comparison of the leadership capabilities according to what some of the university leaders contained in Council on Higher Education (2016) believed they should be, and those that emerged from this research (as discussed in section 2.7 of Chapter 2):

(1) Professor Stuart Saunders (Vice Chancellor of the University of Cape Town from 1981 to 1996) identified vigour (called determination in this research), having a vision (called providing strategic direction in this research), anticipating change (called change management in this research), hard work (called drive for results in this research), participation (i.e. called teamwork in this research), communication (i.e. be well-informed), respect and serving others (i.e. pay attention to others' needs) (called influencing ability in this research) are important leadership capabilities (Council on Higher Education, 2016) (as discussed in section 2.7 of Chapter 2). This research confirms the capabilities stated by Professor Stuart Saunders, however, he does not appear to have clearly identified adaptability, agility, cognitive ability, decision making, decisiveness, environmental awareness and understanding, and management ability as leadership capabilities (as discussed in section 2.7 of Chapter 2). Furthermore, the leadership capabilities that he identified were not specifically linked to those that are needed to successfully South African HEIs during rapid change and disruption.

(2) Professor Brenda Gourley (Vice Chancellor of the University of Natal from 1994 to 2001 and Vice Chancellor of the Open University in the United Kingdom from 2002 to 2009) integrity, courage, optimism, self-reflection, capacity to listen, discipline, compassion, decisiveness, ability to compromise, sense of humour and composure to be capabilities required to be an effective Vice Chancellor (Council on Higher Education, 2016) (as discussed in section 2.7 of Chapter 2). This research concurs with the leadership listed by Professor Brenda Gourley in Council on Higher Education (2016) however, agility, adaptability, managing change, drive

for results, providing strategic direction, environmental awareness and understanding, cognitive ability, innovativeness, teamwork and management ability do not appear to be clearly identified as leadership capabilities required by leaders (as discussed in section 2.7 of Chapter 2). Furthermore, the leadership capabilities listed in Council on Higher Education (2016) do not appear to be clearly linked to leading successfully during times of rapid change and disruption in South African HEIs (as discussed in section 2.7 of Chapter 2).

- (3) Professor Brian Figaji (Principle and Vice Chancellor of the Cape Peninsula Technikon from 1994 to 2004) stated that respect, being able to delegate, financial management, consistency, visible presence, encouraging innovation and have clear but firm rules of engagement are the capabilities that leaders require (Council on Higher Education, 2016) (as discussed in section 2.7 of Chapter 2). This research concurs with the leadership capabilities stated by Professor Brian Figaji in Council on Higher Education (2016) however he too only identified some of the leadership capabilities required but did not identify others such as agility and decisiveness, whereas this research did (as discussed in section 2.7 of Chapter 2). The leadership capabilities listed in Council on Higher Education (2016) do not appear to be clearly linked to those needed to lead successfully during times of rapid change and disruption (as discussed in section 2.7 of Chapter 2).
- (4) Professor Rolf Stumpf (Vice Chancellor and Principle of University of Port Elizabeth from 2002 to 2007 at which time it had become the e Mandela University) stated that leaders must be able to set a compelling vision, have a moral and ethical framework, remain steadfast on course, balance managerialism with collegial management, develop sound organisational plans, policies, systems and structure (Council on Higher Education, 2016) (as discussed in section 2.7 of Chapter 2). The findings of this research concur with Professor Rolf Stumpf in general, although this research did not find that leaders must have a balance between managerialism and collegial management. There are leadership capabilities that emerged from this research, but which were not listed by Professor Rolf Stumpf in Council on Higher Education (2016) such as emotional intelligence, innovativeness, change management and cognitive ability (as discussed in section 2.7 of Chapter 2). Furthermore, the leadership capabilities that he listed in Council

on Higher Education (2016) do not appear to be clearly linked to those needed to lead successfully during times of rapid change and disruption (as discussed in section 2.7 of Chapter 2).

- (5) Professor Lineo Vuyisa Mazwi-Tanga (Vice Chancellor of the Cape Peninsula University of Technology from 2006 to 2013) indicated that strategic planning, integrity of leadership, learning from others and relationship with key stakeholders (e.g. Department of Higher Education and Training, university council) are important leadership capabilities to lead successfully (Council on Higher Education, 2016) (as discussed in section 2.7 of Chapter 2). This research confirmed the leadership capabilities listed by Professor Lineo Vuyisa Mazwi-Tanga in Council on Higher Education (2016). However, this research differed from her list in Council on Higher Education (2016) in that it identified leadership capabilities that were not on her list such as agility, decision making and determination (as discussed in section 2.7 of Chapter 2). In addition, the leadership capabilities that were listed in Council on Higher Education (2016) do not appear to be clearly linked to those needed to lead successfully during times of rapid change and disruption (as discussed in section 2.7 of Chapter 2).

Overall, even though the leadership capabilities listed by the past leaders of South African HEIs in Council on Higher Education (2016) above are the same or similar to the findings of this research, there is no clear agreement or alignment between them that culminates onto one coherent model (as discussed in section 2.7 of Chapter 2). Neither do they appear to have clearly linked the leadership capabilities that they identified to successfully leading a South African HEIs during rapid change and disruption (as discussed in section 2.7 of Chapter 2).

Even though several of the leadership capabilities that emerged from the findings of this research were identified by the literature in Table 5.30 and other research discussed above, those did not emerge as capabilities needed to lead South African HEIs successfully during rapid change and disruption, whereas this research identified just that. When comparing the capabilities that resulted from the research as contained in Table 5.29, Table 5.30 and those identified by past leaders of South African HEIs above, as well as research by Cronje and Bitzer (2019), Herbst (2007) and Zuber-skerrit (2007) discussed above (and in section 2.7 of Chapter 2), it is evident that

several of the leadership capabilities identified in that research were confirmed by this research.

However, there were several leadership capabilities that did not emerge from the research in Table 5.29, Table 5.30 and other research discussed above, but did emerge as leadership capabilities in this research, as discussed above (for example agility). Furthermore, none of the existing literature discussed above explicitly and directly focussed on identifying the capabilities required to lead in South African HEIs during rapid change and disruption. This research aimed to fill that gap in literature.

d. Summary of leadership capabilities needed to successfully lead South African HEIs during rapid change and disruption

The leadership capabilities that emerged from this research and discussed above, were adopted by this research and are influencing ability, communication, providing direction, emotional intelligence (EQ), drive for results, trustworthiness, adaptability, cognitive ability, environmental awareness and understanding, determination, teamwork, decision making, change management, inspiring others, management skills, decisiveness, agility and innovativeness. These capabilities were adopted as they were clearly identified as being necessary to lead South African HEIs successfully during rapid change and disruption.

5.5.4.2 Subtheme 4.2: Capabilities required at the different leadership levels to lead successfully during rapid change and disruption

This research identified that there were different capabilities required to lead South African HEIs successfully during rapid change and disruption at different levels of leadership. This research selected top leadership (executives) senior leadership, middle leadership (managers) and lower leadership (supervisors) as being the levels of leadership, as discussed in Chapter 4, to take part in this research. The leadership capabilities that emerged for each leadership level were as follows:

a. Discussion of the most common leadership capabilities that emerged for top leadership (executive) level

The research data was analysed to identify the capabilities required to lead at the different leadership levels, in South African HEIs, during rapid change and disruption. The most common categories that emerged for the executive level were effective communication, trustworthiness, provide strategic direction, influencing ability, management ability, emotional intelligence, cognitive ability, teamwork, determination and decision making.

Table 5.31 below contains examples of the evidence of the most common codes and categories that emerged for the executive level.

Table 5.31

Examples of codes and categories of capabilities required at top leadership (executive) level during rapid change and disruption

Verbatim evidence	Code	Category
Creation of an enabling environment... engage with people at a conceptual, intellectual and operational level... Give space for engagement and input, relate to academics and professionals, consider your audiences, time, content...Communicating with different levels...Dealing with students, negotiate and respond...Two-way communication - ability to persuade (Participants 33, 41, 45, 47, 62 and 63).	Ability to engage others	Effective communication
In a situation you need to give collective response from all levels, otherwise it is chaos...Be more diverse, be sure all understand, respond and are aligned...Well informed by his/her direct reports, consultation, good communication skills...Communication to academics... Communication and execution of the plan (Participants 17, 34, 47, 52 and 64).	Ability to consult others	
Listen, impart what needs to be done...Listening skills...Well informed by his/her direct reports, consultation, good communication skills...listen to those opposed to change (Participants 23, 52, 58 and 59).	Listening skills	
Understand strategy holistically and communicate it down... Communicating with different levels... Release of communications... Communication - two way Communications... Good communication skills Communication, presentation skills (Participants 7, 33, 38, 45, 48, 52 and 67).	Providing information and feedback	
...Consistency...Morals, transparency...integrity type skills...Be authentic...Serve as a role model - walk the talk - be an exemplar role...Must have values...Transparency (Participants 8, 14, 28, 35, 60, 64 and 66).	Honesty and integrity	Trustworthiness

Must explain who is responsible and accountable for what...Strategic responsibility, responsible to stakeholders... take the blame... ownership of projects (Participants 28, 34, 55 and 67).	Accountability and responsibility	
Impart what needs to be done, see what's needed in your particular area you lead...Look after staff and deliverables...The lower you go it is more operational...Direction... Strategic leadership - give direction...Be sure all understand, respond and are aligned... Must understand the goals, explain them, get buy-in and manage them (Participants 28, 35, 40, 47, 55, 59 and 60).	Guidance and direction	Provide strategic direction
A turn - around strategist, not an academic but a corporate guru...Think how micro links to macro, look at entire picture...Strategic understanding... Align the vision and research strategy to rapid change, understand the change and respond...Strategic management, understand strategy holistically and communicate it down ... He is charismatic, strategic, commands respect from wide range of stakeholders... Strategic thinking (Participants 7, 26, 45, 61, 62 and 69).	Strategic thinking	
A turn - around strategist, not an academic but a corporate guru - creation of an enabling environment...Think how micro links to macro, look at entire picture - build systems on how each department works...Draw plans and give space for engagement and input... Alignment of vision University priorities linked to the law and demands of private and public sector...Need to integrate different stakeholder needs...Must be a visionary - set milestones (Participants 9, 15, 26, 33, 62 and 63)	Strategy development	
Strategic vision... Must be a visionary... Strategic acumen... Being strategic, able to foresee and analyse scenarios... Strategic leadership, give direction... Visionary process - the "Why" (Participants 19, 22, 33, 35, 43 and 66).	Visioning	
Impart what needs to be done, see what's needed in your particular area you lead...Need broad ability empowering at higher level objectives... More caring, listen to those opposed to change...Be approachable - people's person, no favouritism - treat all equally...Look after staff...Must explain who is responsible and accountable for what...Must understand the goals and explain them (Participants 23, 26, 28, 44, 55 and 59).	Supporting, empowering and developing others	Influencing ability
Negotiating...Communicating with different levels, negotiating...Negotiating skills...Negotiate and respond...Negotiation skills (Participants 30, 42, 45, 46 and 47).	Negotiating skills	
Need support from Board or Council; it's important...Charismatic...Get buy-in...Influencing others... Harness support...Dealing with students, negotiate and respond...Ability to persuade (Participants 3, 22, 33, 45, 47, 60 and 61).	Influence others	
Create an inclusive culture No favouritism - treat all equally, do not be hostile or a "know it all"... Dealing with students, negotiate and respond...be more diverse... Transgender leadership, be humane, respect (Participants 29, 44, 47 and 66).	Inclusive behaviour	
Building strategic relations...Interpersonal relations, build bridges...More stakeholder relations...Relate to academics and professionals...Relate to academics and professionals (Participants 19, 33, 60 and 63),	Building strategic relations	

Had to become financial manager quickly... Understand how to handle conflict, finances...HR, Security...In leadership you need to manage/bring together all capabilities to solve issues (Participants 11, 49 and 53).	Resource management	Management ability
Build systems on how each department works... Moving away from the cold face; draw plans... Explain to people why you do things in a certain way to be successful...Understand the change and respond, strategy – implement...Had to become financial manager quickly, measure efficiency, how to be a technocrat... (Participants 11, 26, 41, 53 and 63).	Management knowledge and skills	
Must understand the goals, explain them... May need combination of all skills - some positions require a master of them all... Very good managers that can handle the situation... Moving away from the cold face; draw plans, give space for engagement and input (Participants 10, 11, 53, 55 and 63).	Planning, organising and prioritising ability	
Assertiveness... Diplomacy - authoritative leadership does not work... Explain to people why you do things in a certain way to be successful... decide and then act confidently (Participants 30, 41, 46 and 67).	Assertiveness	EQ
Be approachable - people's person... must create an enabling environment...Emotional intelligence is important...Be humane, respectful... Stronger interpersonal skills - more caring (Participants 23, 25, 44, 62, 66 and 67).	Interpersonal skills	EQ
Must have empathy... Compassion, understanding ...Empathy (Participants 23, 58 and 62).	Empathy	
Critical reflection...Self-belief in decisions made...EQ - self-awareness... Must be disciplined... (Participants 5, 8, 17 and 55).	Intrapersonal skills	
Look at entire picture, analytical skills...Assess the situation which requires different capabilities at different phases...Analyse, decide and then act confidently... Able to foresee and analyse scenarios (Participants 3, 26, 43 and 67).	Analytical skills	Cognitive ability
Give space for engagement and input, relate to academics and professionals, consider your audiences, time, content; One person does not have all the answers...Understand solutions won't come from you... Surround yourself with people with relevant skills... In a situation need to give collective response from all levels - otherwise chaos (Participants 20, 34, 61 and 63).	Collaboration	Teamwork
Must display transparency, a collective voice, consistency...Tirelessness, have guts to do what is needed... Self-belief in decisions made and implemented (Participants 14, 17 and 29).	Steadfastness	Determination
Must create an enabling environment...Opens up the minority opinions - have some opportunity to participate - be part of the whole thing...Decision making: well informed by his or her direct reports, consultation... Need to integrate different stakeholder needs (Participants 15, 40, 52 and 62).	Participative behaviour	Decision making

Various existing leadership capability theories and models such as Yukl (2006), Mathews (2016) and Tonini et al. (2016) have been discussed in relation to the leadership capabilities (i.e. leadership capability model) that emerged in this research. However, none of the existing research identified leadership capabilities required per level of leadership within an organisation, within higher education in general or within

South African HEIs during rapid change and disruption. Rather, the existing research focussed on an umbrella approach to developing their leadership capability theories or models for successful leadership. This could, arguably and inadvertently, neglect to factor in situational or contextual variables which could increase the importance of certain capabilities in certain situations and render them obsolete in others. Little or no research was found that identified capabilities for the different levels of leadership and no research could be found that clearly identified the capabilities needed for the different levels of leadership to lead successfully within South African HEIs during rapid change and disruption (as discussed in section 2.7 of Chapter 2).

Research by Drucker (2006) does provide competencies needed to be an effective Executive leader (as discussed in section 2.7 of Chapter 2). The competencies which he identified were time management, focus on results, build on their strengths, focus on a few areas that will lead to excellent results and effective decision-making (Drucker, 2006) (as discussed in section 2.7 of Chapter 2). This research confirmed that the competencies identified by Drucker (2006), even though his research was not focused on higher education, are relevant to Executive level leaders being successful in South African HEIs during rapid change and disruption (as discussed in section 2.7 of Chapter 2). For example, Drucker's competency of "Focus on few ideas" is like the competency "Planning, organising and prioritising ability" which is part of the capability called "Management ability" in this research (as discussed in section 2.7 of Chapter 2).

Similarly, the competency "Effective decision making" in the research of Drucker (2006) is similar to the capability called "Decision making" in this research (as discussed in section 2.7 of Chapter 2). Similarly, the leadership capabilities listed by past leaders of South African HEIs in Council on Higher Education (2016) while being the same or similar to those identified by this research for executive level leader, they did not reduce to a coherent model of leadership capabilities required for South African HEIs or what is required to lead those organisations, at an executive level, during rapid change and disruption (as discussed in section 2.7 of Chapter 2). This research did just that as presented in Table 5.31. Furthermore, the findings of this research revealed that not only did different capabilities appear to be more relevant at certain levels of leadership (e.g. agility), certain competencies within a particular capability also emerged as being more relevant than others to a particular level of leadership (e.g.

stress management as a competency of emotional intelligence was found to only be relevant to Executive level leaders whereas interpersonal skills which is also part of emotional intelligent was found to be applicable to all leadership levels). None of the existing research discussed above clearly defined leadership capabilities for different levels of leadership to lead South African HEIs successfully during rapid change and disruption, whereas this research did.

i. Discussion of the least common leadership capabilities that emerged for top leadership (executive) level

The least common codes and categories of leadership capabilities for the executive level were adaptability, decisiveness, drive for results (i.e. performance quality and speed), environmental awareness and understanding (i.e. contextual awareness and understanding), effective communication (i.e. quality and frequency of communication), trustworthiness (i.e. trust), provide strategic direction (i.e. environmental scanning), influencing ability (i.e. conflict resolution), emotional intelligence (i.e. stress management and optimism), teamwork (i.e. teamwork), cognitive ability (i.e. dealing with ambiguity and complexity and conceptual thinking), decision making (i.e. consider and evaluate the options and consider the consequences) and agility. Table 5.32 below contains examples evidence of the least common codes and categories of leadership capabilities for the executive level.

Table 5.32

Examples of the least common occurring codes and categories of capabilities required at top leadership (executive) level during rapid change and disruption

Verbatim evidence	Code	Category
Openness (Participant 67).	Openness to new ideas	Adaptability
Must be diverse to see things differently and bring sense (Participant 15).	Adaptable	
Decide and then act confidently (Participant 67).	Decisiveness	Decisiveness
Results orientated... Execution of the plan (Participants 5 and 17).	Performance quality and speed	Drive for results
Understanding the environment and define it in a way it is understandable to lowest level... Know a university, know the business (Participants 2 and 41).	Contextual awareness and understanding	Environmental awareness and understanding
Well informed by his/her direct reports, consultation, good communication skills... Consider your audiences, time, content (Participants 52 and 63).	Quality and frequency of communication	Effective communication

Be trustworthy ... People must have confidence in their leader (Participants 44 and 49).	Trust	Trustworthy
Assess the situation which requires different capabilities at different phases... Have ear on the ground (Participant 3 and 57).	Environmental scanning	Provide strategic direction
Variety of conflict handling skills (Participant 46)	Conflict resolution	Influencing ability
Must be positive (Participant 55).	Optimism	EQ
Very calm, analyse, decide and then act confidently...ability to think/operate under pressure (Participants 17 and 67).	Stress management	
Must display transparency, a collective voice (Participant 14).	Teamwork	Teamwork
Think how micro links to macro, look at entire picture (Participant 26).	Conceptual thinking	Cognitive ability
Expert/specialist knowledge depending on risk and complexity... Dealing with complexity and macro management (Participants 19 and 61).	Dealing with ambiguity and complexity	
Decision making, well informed by his/her direct reports...Need different perspective, discuss different possibilities...Make certain decisions (Participants 13, 38 and 52).	Consider and evaluate the options	Decision making
Decision making, well informed by his/her direct reports...Make certain decisions... recognise implications of compromise (Participants 38, 47 and 52).	Consider the consequences	
Respond quickly...Understand the change and respond, Results orientated, high drive... (Participants 5, 10 and 20).	Agility	Agility

Existing research discussed above (e.g. Smith & Wolverton, 2010; Spanenberg & Theron, 2002; Tonini et al., 2016) do not clearly identify the competencies within the leadership capabilities they found that are needed to lead at an executive level (as discussed in section 2.7 of Chapter 2). Furthermore, none of the research above clearly identifies the leadership capabilities required at executive level to successfully lead South African HEIs during rapid change and disruption, whereas this research did (as discussed in section 2.7 of Chapter 2).

ii. Summary of the leadership capabilities that emerged and were adopted for top leadership (executive) level

Based on the above discussions, this research has adopted the most common occurring codes and categories (and arguably the most important due to the frequency of their occurrence) that emerged as being necessary to lead South African HEIs successfully at executive level during rapid change and disruption. Those leadership capabilities were effective communication, trustworthiness, provide strategic direction, influencing ability, management ability, emotional intelligence, cognitive ability, teamwork, determination and decision making. Furthermore, within these capabilities

only certain of the competencies contained in each, appeared to be relevant at executive level (e.g. quality and frequency of communication which is a competency of effective communication did not emerge as being common occurring whereas the other competencies were).

c. Capabilities for senior leadership level

i. Capabilities that emerged for senior leadership level

The most common categories that emerged for the senior leadership level were effective communication, trustworthiness, provide strategic direction, influencing ability, management ability and emotional intelligence. Table 5.33 below contains examples of the evidence of the most common occurring codes and categories that emerged for the senior leadership level.

Table 5.33

Examples of codes and categories of capabilities required at senior leadership level during rapid change and disruption

Verbatim evidence	Code	Category
Engage with people at a conceptual, intellectual and operational level... Give space for engagement and input, relate to academics and professionals, consider your audiences, time, content (Participants 41 and 63).	Ability to engage others	Effective communication
Listen, impart what needs to be done...Listening skills... (Participants 58 and 59).	Listening skills	
Understand strategy holistically and communicate it down...Good communication skills Communication, presentation skills (Participants 7 and 52).	Providing information and feedback	
Morals, transparency...integrity type skills... (Participants 8, and 28).	Honesty and integrity	Trustworthiness
Must explain who is responsible and accountable for what ... take the blame (Participants 55 and 67).	Accountability and responsibility	
Impart what needs to be done, see what's needed in your particular area you lead...Be sure all understand, respond and are aligned (Participants 47 and 59).	Guidance and direction	Provide strategic direction
Strategic understanding...Strategic thinking (Participants 5, and 69).	Strategic thinking	
Strategic leadership, give direction...Draw plans and give space for engagement and input... Building the big idea (Participants 22, 35, and 63)	Strategy development	
Strategic vision... Being strategic, able to foresee and analyse scenarios (Participants 19 and 43).	Visioning	

Impart what needs to be done, see what's needed in your particular area you lead... More caring, listen to those opposed to change... (Participants 23, and 59).	Supporting, empowering and developing others	Influencing ability
Negotiating skills... ..Negotiation skills (Participants 30 and 46).	Negotiating skills	
Must understand the goals, explain them, get buy-in ...Harness support... Diplomacy - authoritative leadership does not work, negotiating skills (Participants 46, 55 and 60).	Influence others	
Had to become financial manager quickly... Understand how to handle conflict, finances...HR, Security...In leadership you need to manage/bring together all capabilities to solve issues (Participants 11, 49 and 53).	Resource management	Management ability
Moving away from the cold face, draw plans, consider colleagues strengths and weaknesses and use accordingly... Explain to people why you do things in a certain way to be successful (Participants 41 and 63).	Management knowledge and skills	
Effective and efficient planning ... Must have ability to understand, then implement and develop operational measures... Operationalise the strategy (Participants 10, 20 and 45).	Planning, organising and prioritising ability	
Emotional intelligence is important...People skills... Interpersonal skills (Participants 8, 25 and 52).	Interpersonal skills	EQ
Must have empathy... Compassion, understanding ...Empathy (Participants 23, 58 and 62).	Empathy	

ii. Discussion of the most common capabilities that emerged for senior leadership level

From the findings of this research, it emerged that most of the participants indicated that the evidence for the codes and categories of capabilities needed to lead at the executive level were the same as those that were required to lead at senior leadership level. For example, participant 25 stated that experience and emotional intelligence are important and play a key role. Participant 35 provided the same capabilities for senior and top-level leaders which are strategic leadership, giving direction, serve as a role model (walk the talk - be an exemplar role for the university community) and create synergy. Participant 52 also states that senior and top-level leaders need the same capabilities which are decision making, being well informed by his or her direct reports, consultation, good communication skills and interpersonal skills.

While in general this research concurs with most of the leadership capabilities identified by Atkins et al. (2013), Bertram and Ilke (2011), Council on Higher Education (2016), Cronje and Bitzer (2019), Herbst (2007), Mathews (2016), Van Wart (2004) and Yukl (2006), Smith and Wolverson (2010), Spanenberg and Theron (2002), Tonini et al. (2016) and Zuber-skerrit (2007) they did not all clearly identify the capabilities

needed at different leadership levels to successfully lead South African HEIs during rapid change and disruption (as discussed in section 2.7 of Chapter 2). This research did identify the capabilities needed to lead South African HEIs at various levels, including at a senior level (along with the competencies) during rapid change and disruption whereas existing literature discussed above does not appear to have done so, nor could existing literature be found that did so.

iii. Discussion of the least common capabilities that emerged for senior leadership level

The least common codes and categories of leadership capabilities for the senior leadership level, which emerged during analysis of the research data, were cognitive ability (i.e. analytical skills), drive for results (i.e. performance quality and speed), environmental awareness and understanding (i.e. contextual awareness and understanding), teamwork, emotional intelligence (i.e. assertiveness and intrapersonal skills), determination (i.e. steadfastness), decision making (i.e. ability to consult others), innovativeness (i.e. ability to innovate), adaptability (i.e. openness to new ideas) and influencing ability (i.e. building strategic relations). Table 5.34 below contains the evidence of the least common occurring codes and categories of leadership capabilities for the senior leadership level.

Table 5.34

Examples of the least common codes and categories of capabilities required at senior leadership level during rapid change and disruption

Verbatim evidence	Code	Category
Able to foresee and analyse scenarios (Participant 43).	Analytical skills	Cognitive ability
Results orientated... high drive (Participant 5).	Performance quality and speed	Drive for results
Understanding the environment and define it in a way it is understandable to lowest level... Know a university, know the business (Participants 2 and 41).	Contextual awareness and understanding	Environmental awareness and understanding
Must display transparency, a collective voice (Participant 14).	Teamwork	Teamwork
Draw plans, give space for engagement and input, relate to academics and professionals (Participant 63).	Collaboration	
Critical reflection... Self-belief in decisions made and implement (Participants 8 and 17).	Intrapersonal skills	EQ
Negotiating skills, strong viewpoints, variety of conflict handling skills (Participant 46).	Assertiveness	
Consistency... Self-belief in decisions made and implement (Participant 14 and 17).	Steadfastness	Determination

Consultation, good communication skills (Participant 52).	Ability to consult others	Effective communication
Be able to innovate (Participant 33).	Ability to innovate	Innovativeness
Openness (Participant 67).	Openness to new ideas	Adaptability
Building strategic relations, harness support... more stakeholder relations (Participants 19 and 60).	Building strategic relations	Influencing ability

While the abovementioned codes and categories of capabilities emerged from the data for senior leaders, they emerged far less often. Furthermore, none of the existing literature discussed above identified the capabilities needed for the different levels of leadership, including senior leadership levels, to successfully lead South African HEIs during rapid change and disruption, as previously discussed.

iv. Summary of the capabilities that emerged and adopted by this research for senior leadership level

Little existing literature could be found that clearly identified the capabilities needed to lead successfully at the different leadership levels in South African HEIs during rapid change and disruption, including at this level (as already discussed). In addition, even though a few least common leadership capabilities were identified at this level, the low level of their frequency appears to suggest that they were not as important as those that emerged as the most common capabilities needed at this level of leadership. Therefore, the most common capabilities (and therefore arguably the most important) that emerged from and were adopted by this research as being necessary to successfully lead South African HEIs, at a senior leadership level, during rapid change and disruption were effective communication, trustworthiness, provide strategic direction, influencing ability, management ability and emotional intelligence.

c. Capabilities for middle leadership (manager) level

i. Capabilities that emerged for middle leadership (manager) level

The most common categories that emerged from the findings of this research for the middle leadership (manager) level were trustworthiness, provide strategic direction, communication, influencing ability, management ability and emotional intelligence.

Table 5.35 below contains examples of the evidence of the most common codes and categories that emerged for the manager level.

Table 5.35

Examples of codes and categories of capabilities required at middle leaders (manager) level during rapid change and disruption

Verbatim evidence	Code	Category
Must display transparency...Consistency... Morals, transparency... Lead by example... Be present, follow leadership - don't be opportunistic...Transparency (Participant 14, 28, 46, 63 and 64).	Honesty and integrity	Trustworthiness
Manage day to day tasks, lead, develop and mentor your staff, account for your staff... Need analytical, accountable and operational capabilities... Ownership of projects... Must explain who is responsible and accountable for what (Participant 26,28, 44 and 55).	Accountability and responsibility	
Impart what needs to be done, see what's needed in your particular area you lead... Manage day to day tasks, lead/develop/mentor your staff... Shop stewards lead for a specific purpose... Set timelines and decide how to do follow-ups... Must explain who is responsible and accountable for what (Participants 28, 33, 44, 55 and 59).	Guidance and direction	Provide strategic direction
Listen, impart what needs to be done...Must communicate processes, reporting, make follow-ups...Keep people calm - can refer to higher levels if needed...Communications...Communicating effectively...Communication and execution of the plan and clear communication to others (Participant 5, 17, 33, 59 and 67).	Providing information and feedback	Effective communication
Deal with staff concerns and redirect them appropriately to think about the change...Prepare staff, staff development...More people skills, team builder...Support others, listen more, refer to others when you don't know (Participants 7, 19, 23 and 63).	Supporting, empowering and developing others	Influencing ability
Know the operations, be a champion in the unit, management capabilities (e.g. planning, control)... Motivational skills, planning, managing resources...Must understand the goals, explain them, get buy-in and manage them... Worry about managing operations ...Operationalise the strategy (Participants 9, 23, 35, 55 and 66).	Planning, organising and prioritising ability	Management ability
Manage day to day tasks... Need analytical, accountable and operational capabilities ...Rapid results & stabilise production...Operational - Implement management... Operate effectively and efficiently to run the business of the university and respond to changes (Participants 2, 20, 26, 43 and 44).	Management knowledge and skills	
Prepare staff, staff development, change management, motivational skills, planning, managing resources...Lead/develop/mentor your staff, account for your staff, create safe space for them, protect them...They must know Finance and HR...Worry about managing operations...Operate effectively and efficiently to run the business of the university and respond to changes... They	Resource management	

manage HR, Security...(Participants 9, 23, 41, 43, 44 and 49).		
Greater EQ, generally caring...EQ is important...EQ, keep people calm...Some people cannot control their temper, which you must learn to because it can cause problems...Be humane, respectful...More people skills, team builder (Participants 19, 25, 29, 49, 66 and 67).	Interpersonal skills	EQ
Compassion, understanding...Empathy...Generally caring... Be humane, respectful...Create safe space for them, protect them... Deal with staff concerns (Participants 7, 29, 42, 44 and 58).	Empathy	
Balance what must change and a little how... Deal with staff concerns and redirect them appropriately to think about the change... Operate effectively and efficiently to run the business of the university and respond to changes...Change management (Participants 7, 23, 43 and 69).	Change management	Change management

ii. Discussion of the most common capabilities that emerged for middle leadership (manager) level

The research also found that several of the participants had indicated that the evidence for the codes and categories of capabilities needed to lead at the middle leadership level were the same as those that were required to lead at senior leadership level. For example, participant 55 stated that all leaders should be able to explain who is responsible and accountable for what, must be positive, must understand the goals, explain them, get buy-in and manage them, and must be disciplined. Participant 59 stated that all leaders must display the same qualities at all levels which are listen, impart what needs to be done and see what is needed in your particular area you lead. Once again, as discussed above, existing research does not appear to have identified the capabilities needed at different leadership levels to successfully lead South African HEIs during rapid change and disruption, including those required at a middle leadership (manager) level (along with the competencies).

In general this research concurs with most of the leadership capabilities identified by Atkins et al. (2013), Bertram and Ilke (2011), Council on Higher Education (2016), Cronje and Bitzer (2019), Herbst (2007), Mathews (2016), Van Wart (2004) and Yukl (2006), Smith and Wolverton (2010), Spanenberg and Theron (2002), Tonini et al. (2016) and Zuber-skerrit (2007), but they did not all clearly identify the capabilities needed at different leadership levels to successfully lead South African HEIs during rapid change and disruption, including those required at middle leadership (manager) level (as discussed in section 2.7 of Chapter 2).

iii. *Discussion of the least common capabilities that emerged for middle leadership (manager) level*

The analysis of the research data also revealed evidence of codes and categories of the least common leadership capabilities required to lead successfully during rapid change and disruption at the manager level. The codes and categories were change management, drive for results (i.e. performance quality and speed), inspire others (i.e. motivation), cognitive ability (i.e. analytical skills), determination (i.e. steadfastness), environmental awareness and understanding (i.e. contextual awareness and understanding), innovativeness (i.e. ability to innovate), communication (i.e. listening skills), provide strategic direction (i.e. environmental scanning, strategy development and strategic thinking), influencing ability (i.e. influence others and inclusive behaviour), decision making (i.e. participative behaviour) and trustworthiness (i.e. trust). Table 5.36 below contains examples of the evidence of the least common codes and categories that emerged.

Table 5.36

Examples of the least common occurring codes and categories of capabilities required at middle leadership (manager) level during rapid change and disruption

Verbatim evidence	Code	Category
Rapid results & stabilise production... Results orientated (Participants 5 and 20).	Performance quality and speed	Drive for results
Make employees happy (Participant 52).	Motivate others	Inspire others
Need analytical, accountable and operational capabilities (Participant 26).	Analytical skills	Cognitive ability
Firmness... Self-belief in decisions made and implement (Participants 17 and 42).	Steadfastness	Determination
Know a university, know the business (Participant 41).	Contextual awareness and understanding	Environmental awareness and understanding
Have ears on the ground operationally... Ability to sense something is brewing (Participants 30 and 52).	Environmental scanning	Provide strategic direction
Ability to synergise information and put forward a credible strategic direction (Participant 58).	Strategy development	
Results orientated, strategic thinking, business acumen... Strategic capability Forward thinking in a changing environment (Participants 5, 17 and 23).	Strategic thinking	
Listen, impart what needs to be done... Listening skills... Listen more (Participants 58, 59 and 63).	Listening skills	Effective communication
Get buy-in and manage them... Building relations, harness support (Participants 55 and 60).	Influence others	Influencing ability
Transgender leadership, be humane, respect (Participant 60).	Inclusive behaviour	

People must have confidence in their leader...Trust our leadership (Participants 46 and 49).	Trust	Trustworthiness
Innovation, operationalise the strategy (Participant 66).	Ability to innovate	Innovativeness
Be present, be critical when needed... Have some opportunity to participate - be part of the whole thing (Participants 40 and 46).	Participative behaviour	Decision making

None of the existing research already presented and discussed identified the least common occurring leadership capabilities at a middle leadership (manager) level.

iv. Summary of the capabilities that emerged for middle leadership (manager) level

This research identified leadership capabilities at middle leadership (manager) level of leadership within South African HEIs that were relevant for dealing successfully with rapid change and disruption. Even though a few least common leadership capabilities were identified in this research study, the low level of their frequency appears to suggest that they were not as important as those that emerged as the most common capabilities needed at this level of leadership. Therefore, this research adopted trustworthiness, provide strategic direction, communication, influencing ability, management ability and emotional intelligence as the relevant leadership capabilities at this level because they emerged as the most common capabilities (and therefore arguably the most important) necessary to successfully lead South African HEIs, at a middle leadership (manager) level, during rapid change and disruption.

d. Capabilities for lower leadership level

i. Capabilities that emerged for lower leadership level

The most common categories of capabilities that emerged from the research data for the lower leadership levels were trustworthiness, effective communication, influencing ability, management ability and emotional intelligence.

Table 5.37 below contains examples of the evidence of the most common occurring codes and categories that emerged for the lower leadership level.

Table 5.37

Examples of codes and categories of capabilities required at lower leadership level during rapid change and disruption

Verbatim evidence	Code	Category
Morals, transparency, ownership of projects... Be authentic... All must have values... Consistency... Transparency... Lead by example (Participants 14, 28, 60, 63, 64 and 66).	Honesty and integrity	Trustworthiness
Listen, impart what needs to be done...Communications...Communicating effectively... Communication skills (Participant 5, 19, 52 and 59).	Providing information and feedback	Effective communication
Listen more...Listen...Communicating effectively... Opens up the minority opinions - have some opportunity to participate (Participants 5, 40, 59 and 63,	Listening skills	
See what's needed in your particular area you lead...Lead by example, support others...Deal with staff concerns and redirect them appropriately to think about the change...More people skills, team builder (Participants 7, 19, 59 and 63).	Supporting, empowering and developing others	Influencing ability
Impart what needs to be done, see what's needed in your particular area you lead... In all levels it must be based on common shared values... Must explain who is responsible and accountable for what. Advise, follow better - don't try resist (Participants 40, 55, 59 and 64).	Guidance and direction	Provide strategic direction
Implement management...Know a university, know the business, engage with people at a conceptual, intellectual and operational level...The lower you go it is more operational...Team builder, micro manager of processes...Carry out the plan...Must understand the goals, explain them, get buy-in and manage them (Participants 2, 19, 40, 41, and 55).	Management knowledge and skills	Management ability
EQ is important...Be humane, respect...EQ - self-awareness...More people skills (Participants 5, 19, 25 and 66).	Interpersonal skills	EQ

ii. Discussion of the most common capabilities that emerged for lower leadership level

The research data revealed that several participants indicated that the evidence for the codes and categories of capabilities needed to lead at the lower leadership level were the same as those that were required to lead at manager level. Participants 5, 14, 60 and 66 believe that leaders at all levels require the same skills. For example, participant 5 stated that all leaders should have results orientation, strategic thinking, business acumen, communicate effectively, emotional intelligence (i.e. self-awareness) and high drive. On the other hand, participant 60 stated that all leaders should be able to build relations, harness support and be authentic. This research again concurs with most of the leadership capabilities identified by Atkins et al. (2013), Bertram and Ilke (2011), Council on Higher Education (2016), Cronje and Bitzer (2019), Drucker (2006),

Herbst (2007), Mathews (2016), Van Wart (2004) and Yukl (2006), Smith and Wolverson (2010), Spanenberg and Theron (2002), Tonini et al. (2016) and Zuber-skerrit (2007), however, they did not all clearly identify the capabilities needed at different leadership levels to successfully lead South African HEIs during rapid change and disruption, including those required at the lower leadership level (as discussed in section 2.7 of Chapter 2). In contrast, this research did.

iii. Discussion of the least common capabilities that emerged for lower leadership level

The analysis of the research data revealed evidence of codes and categories of the least common leadership capabilities required to lead successfully during rapid change and disruption at the lower leadership level. The codes and categories were change management, drive for results (i.e. performance quality and speed), inspire others (i.e. motivation), cognitive ability (i.e. analytical skills), determination (i.e. steadfastness), environmental awareness and understanding (i.e. contextual awareness and understanding), innovativeness (i.e. ability to innovate), communication (i.e. listening skills), provide strategic direction (i.e. environmental scanning and strategic thinking), influencing ability (i.e. influence others and inclusive behaviour) and trustworthiness (i.e. trust).

Table 5.38 below contains examples of the evidence of the codes and categories that emerged.

Table 5.38

Examples of the least common codes and categories of capabilities required at lower leadership level during rapid change and disruption

Verbatim evidence	Code	Category
A collective voice (Participant 59).	Teamwork	Teamwork
Have ears on the ground operationally (Participant 52).	Environmental scanning	Provide strategic direction
Strategic thinking, business acumen (Participant 5).	Strategic thinking	
Transgender leadership (Participant 66).	Inclusive behaviour	Influencing ability
Building relations, harness support...Must understand the goals, explain them, get buy-in and manage them (Participants 55 and 60).	Influence others	
Building relations, harness support, be authentic (Participant 60).	Building strategic relations	

Ownership of projects...Must explain who is responsible and accountable for what (Participants 28 and 55).	Accountability and responsibility	Trustworthiness
Finance and HR (Participant 41).	Resource management	Management ability
Refer to others when you do not know (Participant 63).	Openness to new ideas	Adaptability
Must be positive (Participant 55).	Optimism	EQ
High drive (Participant 5).	Agility	Agility
Engage with people at a conceptual, intellectual, and operational level (Participant 41).	Ability to engage others	Effective communication
Make employees happy (Participant 52).	Motivate others	Inspire others
Must be based on common shared values - opens up the minority opinions; have some opportunity to participate - be part of the whole thing (Participant 40).	Participative behaviour	Decision making
Know a university, know the business (Participant 41)	Contextual awareness and understanding	Environmental awareness and understanding
Operationalise the change, find a way to address change from a discipline perspective (Participant 69).	Change management	Change management

Analysis of existing literature (as discussed in section 2.7 of Chapter 2) revealed did not clearly identify the capabilities needed at different leadership levels to successfully lead South African HEIs during rapid change and disruption, those required at the lower leadership level or those that were least common as those that emerged from the findings of this research.

iv. Summary of the capabilities that emerged for lower leadership level

A review of the existing literature revealed that little research could be found which clearly identified the capabilities needed by the different leadership levels to successfully lead South African HEIs during rapid change and disruption, including those required at the lower leadership level (as discussed in section 2.7 of Chapter 2). Apart from the most common capabilities that emerged in this research as being necessary to successfully lead South African HEIs, at this level, a few less-common capabilities also emerged as discussed above. Due to the relatively low frequency of their occurrence, this research adopted the most common occurring capabilities which emerged as being necessary to lead successfully at this level during rapid change and disruption because they appeared to be most relevant (and arguably most important). The capabilities therefore adopted for the lower leadership level, by this research, were trustworthiness, provide strategic direction, communication, influencing ability, management ability and emotional intelligence as the relevant leadership capabilities at this level.

e. *Comparative summary of the capabilities required for the different leadership levels*

When compared to each other, the different levels of leadership contain some of the same capabilities on the one hand some that are different on the other. Table 5.39 below contains a comparative summary of the frequency of most common categories of leadership capabilities in comparison to the least common capabilities that emerged for different leadership levels to lead successfully in South African HEIs during rapid change and disruption, which were adopted by this research.

Table 5.39

Summary of categories of all leadership capabilities that emerged for different leadership levels

Category	Junior leadership	Middle leadership	Senior Leadership	Top leadership	Total
Trustworthiness	7	11	9	11	38
Provide strategic direction	5	13	20	32	70
Effective communication	7	12	14	19	52
Influencing ability	6	10	8	20	44
Management ability	5	17	14	7	43
EQ	5	11	15	16	47
Cognitive ability		1	2	5	8
Drive for results		3	1	2	6
Environmental awareness and understanding	1	1	2	2	6
Teamwork	1	1	2	5	9
Determination	1	3	2	3	9
Decision making	1	2	1	7	11
Agility	1	1	1	3	6
Adaptability	1		1	2	4
Decisiveness			1	2	3
Innovation		1	1		2
Change management	2	4	1		7
Inspire others	1	2			3
Total	44	93	95	136	368

i. *Discussion of the comparison of leadership capabilities for all levels of leaders*

According to Table 5.39, trustworthiness, provide strategic direction, effective communication, influencing ability, management ability and emotional intelligence (EQ) are the most common leadership capabilities needed to successfully lead South African HEIs during rapid change and disruption. According to existing research

already discussed above none appeared to provide such a finding even though some of the researchers studied leadership within South African HEIs. Furthermore, Table 5.39 also shows how common the various leadership capabilities emerged for the different levels of leadership, arguably suggesting that the some are more important to a particular leadership level than to others. For example, while trustworthiness appears to be common to all levels of leadership, when compared to the other capabilities within a specific level of leadership, it appears to be comparatively more important to lower leadership levels than to senior and top leader levels where to provide strategic direction appears to be comparatively more important. Similarly, to provide strategic direction is also common to all levels of leadership, but in comparison to the other capabilities in a particular level of leadership, it appears to be comparatively more important than trustworthiness to senior and top leader levels. In contrast, trustworthiness appears to be more important to lower-level managers than to provide strategic direction. As a further example, the capability effective communication is one of the most important capabilities that emerged for all leadership levels.

However, in comparison to the other capabilities that emerged within the different leadership levels, effective communication emerged as being equally important to the lower leadership level as trustworthiness whereas it was identified to be the third most common (and arguably the third most important) capability for all other levels of leadership. None of the existing research on leadership discussed above, have clearly identified the capabilities needed to successfully lead (nor those needed per level of leadership) South African HEIs during rapid change and disruption including the past university leaders discussed in Council on Higher Education (2016) (as discussed in section 2.7 of Chapter 2).

ii. Discussion of the comparison of the most common leadership capabilities for all levels of leaders

Table 5.39 above contains the frequency of all the various leadership capabilities that emerged from the research data, per leadership level. However, Table 5.40 below contains a summary of only the most common leadership capabilities (i.e. categories) that emerged for the data, for each level of leadership, needed to lead South African HEIs during rapid change and disruption.

Table 5.40

Summary of categories of the most common leadership capabilities that emerged for different leadership levels

Category	Junior leadership	Middle leadership	Senior Leadership	Top leadership	Total
Trustworthiness	7	11	9	11	38
Provide strategic direction	5	13	20	32	70
Effective communication	7	12	14	19	52
Influencing ability	6	10	8	20	44
Management ability	5	17	14	7	43
EQ	5	11	15	16	47
Cognitive ability				5	5
Teamwork				5	5
Decision making				7	7
Change management		4			4
Total	35	78	80	122	315

Table 5.40 appears to suggest that although the codes and categories that emerged overall as capabilities needed to lead in South African HEIs during rapid change and disruption, as presented in Table 5.39, those in Table 5.40 emerged as being most common per leadership level (and arguably the most important). Stated differently, the leadership capabilities of environmental awareness and understanding, teamwork, determination, agility, adaptability, decisiveness, innovation and inspire others that emerged from the analysis of the data and presented in Table 39 above (i.e. which contains all the leadership capabilities that emerged from this research), appear to be not as important to lead at the different levels of leadership when compared to those presented in Table 5.40. None of the existing research discussed above clearly identified the most common occurring (and arguably most important) capabilities needed to successfully lead South African HEIs, per leadership level, during rapid change and disruption.

5.6 SUMMARY

This chapter began with a detailed description of the research population and sample. The researcher also provided an explanation of the challenges that were encountered with the sample and the potential impact those could have on the research results. Next, the themes that dealt with the perceptions of the definitions for leadership, leadership capabilities, rapid change and disruption were discussed based on the

codes and categories that emerged from the data during the analysis phase. The perceptions of the rapid changes and disruptions that affected the South African HEIs, perceptions of their influence and the perceptions of coping with rapid change and disruption were then discussed. Finally, the themes relating to the perceptions of leadership capabilities needed to lead in South African HEIs during rapid changed and disruption were discussed, along with those that emerged for each level of leadership.

In the next chapter, the findings will be discussed as well as the conclusions, limitations and recommendations.

CHAPTER 6: CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

In the previous chapter, the findings of the research were thoroughly presented, discussed in detail, compared and integrated with the relevant existing research that was presented in in Chapters 2 and 3.

In this chapter, the findings that were presented and discussed in the previous chapter will be discussed in relation to the aims of this research. After that, the unexpected findings will be discussed in relation to the literature review, followed by the limitations of the study and recommendations for possible future research. The implementation of the leadership capability theory and model in future will also be discussed.

6.1.1 Aims of this study

The aims of this study were as follows:

(1) General aim

The general aim of the research was to identify the leadership capabilities required to lead successfully in South African HEIs during times of rapid change and disruption.

(2) Aims of the literature review

- a. To conceptualise and contextualise leadership within HEIs.
- b. To conceptualise and contextualise the terms rapid change and disruption within HEIs.
- c. To investigate leadership capabilities applied in times of rapid change and disruption in HEIs.

(3) Aims for the empirical study

- a. To identify leadership capabilities needed to lead successfully in South African HEIs during rapid change and disruption.
- b. To formulate a theory and model of leadership capabilities needed to successfully lead South African HEIs during rapid change and disruption.

6.2 CONCLUSIONS RELATING TO THE LITERATURE REVIEW OF THE CAPABILITIES REQUIRED TO LEAD SUCCESSFULLY DURING RAPID CHANGE AND DISRUPTION

6.2.1 Conclusions to leadership and leadership capabilities

In the literature review in Chapter 2, the concept of leadership was thoroughly discussed from its definition, component parts (e.g. influence), approaches (e.g. behavioural approach), theories (e.g. transformational leadership theory) and extra aspects (e.g. diversity, ethics) that influence it. As part of the literature review this research also formalised a definition for the concepts of leadership and leadership capabilities, based on combining parts of various definitions that exist in the literature. The literature review also discussed the importance of leadership to organisational effectiveness, leadership in dealing with rapid change and disruption, the concept of leadership within sub-Saharan Africa and leadership and rapid change and disruption in South African HEIs. All the aforementioned concepts have been presented and thoroughly discussed in Chapter 2. The literature review concluded that leaders within South African HEIs needed capabilities to lead successfully during such times, and that little current research could be found that clearly identify and describe such capabilities.

6.2.2 Conclusions to rapid change and disruption

The literature review discussed the concepts of rapid change and disruption from what was meant by each of concept, the causes and types of each as well as the influence of each globally, on Africa, higher education and on South African HEIs (e.g.

technological advances, increased student enrolments, Fees Must Fall, Covid-19), approaches (e.g. behavioural approach). A definition was formalised for the concepts of rapid change and disruption, based on combining parts of various definitions that exist in the literature. All the concepts have been presented and thoroughly discussed in Chapter 3. It was concluded that leaders within South African HEIs needed capabilities to lead successfully during rapid change and disruption. However, little existing research could be found that clearly identified and described such capabilities that are needed in such situations.

6.3 CONCLUSIONS RELATING TO THE PARTICIPANTS' REPORTED EXPERIENCE OF THE CAPABILITIES REQUIRED TO LEAD SUCCESSFULLY DURING RAPID CHANGE AND DISRUPTION

The research process and main conclusions are summarised and presented in Table 6.1.

Table 6.1

Summary of the research process and main conclusions

Steps	Interview question	Aim	Relevant data	Research method applied	Conclusions
Step 1	In your own words, explain what you understand by leadership and leadership capabilities	To determine whether there is common understanding/consensus between the participants on their perceived meaning of leadership and leadership capabilities	Data from focus groups and semi-structured interviews	Content analysis of the qualitative data gathered from focus groups and semi-structured interviews	The participants experienced a high degree of consensus on the meaning/definition of leadership and leadership capabilities
Step 2	In your own words, explain what capabilities you displayed that you believe contributed to the university successfully or	To determine whether there is consensus between the participants on their perceived view if they displayed the capabilities which resulted in them successfully or unsuccessfully leading during rapid change and	Data from focus group interviews and individual interviews	Qualitative content analysis using Tesch's method	Using Tesch's method of content analysis, participants experienced a high degree of consensus on the leadership capabilities displayed by them which resulted in

	unsuccessfully dealing with the rapid change and disruption?	disruption that faced their universities			them successfully or unsuccessfully dealing with rapid change and disruption
Step 3	According to you, what capabilities did other university leaders display that you believe contributed to the university successfully or unsuccessfully dealing with the rapid change and disruption?	To determine whether there is consensus between the participants on their perceived view if other university leaders in their university displayed the capabilities which resulted in them successfully or unsuccessfully leading during rapid change and disruption that faced their universities	Data from focus group interviews and individual interviews	Qualitative content analysis using Tesch's method	Using Tesch's method of content analysis, participants appeared to display a high degree of consensus on the leadership capabilities displayed by other leaders which resulted in them successfully or unsuccessfully dealing with rapid change and disruption
Step 4	According to you, what leadership capabilities were not displayed by you or other leaders which you believe could have improved the way the rapid change and disruption were handled?	To determine whether there is consensus between the participants on their perceived view if they and other university leaders in their university did not display capabilities, which could have improved the way the rapid change and disruption that faced their universities was handled	Data from focus group interviews and individual interviews	Qualitative content analysis using Tesch's method	Using Tesch's method of content analysis, participants appeared to display a high degree of consensus on the leadership capabilities not displayed by them or other leaders, which could have improved the way the rapid change and disruption that faced their universities was handled
Step 5	In your own words, explain what you understand by "rapid change" and "disruption", within the context of Higher Education?	To determine whether there is consensus between the participants on their perceived view of what they understand by "rapid change" and "disruption", within the context of Higher Education	Data from focus group interviews and individual interviews	Content analysis of the qualitative data gathered from focus groups and semi-structured interviews	The participants experienced a high degree of consensus on the meaning/definition rapid change and disruption
Step 6	In your own words could you please	To determine whether there is consensus between the participants	Data from focus group	Qualitative content analysis	Using Tesch's method of content analysis,

	describe to me what rapid change and disruption have affected your university over the past two to three years?	on their perceived view of what “rapid change” and “disruption” affected their university over the past two to three years	interviews and individual interviews	using Tesch’s method	participants appeared to display a high degree of consensus on the type of rapid change and disruption that had affected their universities
Step 7	In your own words, could you please explain what the impact of the rapid change and disruption was on your university?	To determine whether there is consensus between the participants on their perceived view of what the impact of the rapid change and disruption was on their university	Data from focus group interviews and individual interviews	Qualitative content analysis using Tesch’s method	Using Tesch’s method of content analysis, participants appeared to display a high degree of consensus on the influence that rapid change and disruption had had on their universities
Step 8	In your own words, could you please explain what the impact of the rapid change and disruption was on you and on your role as leader within the university?	To determine whether there is consensus between the participants on their perceived view of what the impact of the rapid change and disruption was on their role as leader within the university	Data from focus group interviews and individual interviews	Qualitative content analysis using Tesch’s method	Using Tesch’s method of content analysis, participants appeared to display a high degree of consensus on the influence that rapid change and disruption had had on their role as leaders within their universities
Step 9	In your view, how did the university cope with the rapid change and disruption?	To determine whether there is consensus between the participants on their perceived view of how their university coped with the rapid change and disruption	Data from focus group interviews and individual interviews	Qualitative content analysis using Tesch’s method	Using Tesch’s method of content analysis, participants appeared to display a high degree of consensus on their perceived view of how their university coped with the rapid change and disruption
Step 10	In your view, how did you cope with the rapid change and disruption	To determine whether there is consensus between the participants on their perceived view of how they coped with the	Data from focus group interviews and	Qualitative content analysis using	Using Tesch’s method of content analysis, participants appeared to

	as an individual and as a leader within the university?	rapid change and disruption as an individual and as a leader within the university	individual interviews	Tesch's method	display a high degree of consensus on their perceived view of how they coped with the rapid change and disruption as an individual and as a leader within the university
Step 11	Looking back at the rapid change and disruption that affected your university, what leadership capabilities would you say are important to lead successfully, in times of rapid change and disruption? Could you please explain your answer?	To determine whether there is consensus between the participants on their perceived view of what leadership capabilities would they say are important to lead successfully, in times of rapid change and disruption	Data from focus group interviews and individual interviews	Content analysis of the qualitative data using NVivo and Tech's method of content analysis	Using Tesch's method of content analysis and NVivo, participants appeared to display a high degree of consensus on their perceived view of what leadership capabilities are important to lead successfully, in times of rapid change and disruption, which are contained in table 6.5 and figure 6.1
Step 12	In your opinion, are there different leadership capabilities required at different leadership levels within the university to successfully deal with rapid change and disruption? Could you please explain your answer?	To determine whether there is consensus between the participants on their perceived view that there are different leadership capabilities required at different leadership levels within the university to successfully deal with rapid change and disruption	Data from focus group interviews and individual interviews	Content analysis of the qualitative data using NVivo and Tech's method of content analysis	Using Tesch's method of content analysis and NVivo, participants appeared to display a high degree of consensus on their perceived view that there are different leadership capabilities required at different leadership levels within the university to successfully deal with rapid change and disruption, which are

The evidence of all the research questions in table 6.1 have been discussed in detail in Chapter 5, under the various themes that emerged, and compared to relevant existing research. In the research questions one to ten evidence exists that either completely or partially confirms the existing research relating to these questions. For the research questions 11 to 12 the evidence related to the findings could not confirm existing research because no research could be found that directly identifies the capabilities needed to successfully lead South African HEIs, including those required for the different leadership levels.

Since the findings of the study were presented and discussed in Chapter 5, only the main conclusions, according to the themes that emerged, will be dealt with in this chapter. Therefore, the conclusions relating to the main research questions will now be discussed.

6.3.1 Conclusion regarding the research question of theme 1 (Research process step 1): Perceptions of leadership and leadership capabilities

6.3.1.1 Subtheme 1.1: Definition of leadership

Two definitions for leadership emerged from the analysis of the data as reported in the previous chapter. The first definition is as follows:

"Leadership is the action of a trustworthy person who applies foresight to provide direction to the organisation and influences followers to successfully reach the end state through teamwork, within a conducive environment".

The definition above is unique or different because it originated within the South African HEI environment as part of this research, which was to determine the capabilities required to lead successfully during rapid change and disruption within South African HEIs. In other words, it relates to a specific situation and context of rapid change and disruption within South African HEIs. However, the definition is also consistent with the literature because it contains similar elements to the definitions found in the literature,

including the one that was adopted in Chapter 2 of this research, as part of the literature review. The research findings confirmed that leadership takes place within and is influenced by a specific situation or context (Hughes et al., 2009; Landy & Conte, 2007; Northouse, 2007; Yukl, 2006) (as discussed in sections 2.2.1 and 2.2.2 of Chapter 2). The second definition was formulated from the least common codes and categories that emerged from the analysis of the data and is as follows:

“Leadership is the application of in-born attributes by a person in a position to exercise power and authority, within a context and/or situation, to achieve the objectives by ensuring followers do their work.”

The second definition also confirms various research in the literature such as Hughes et al. (2009), Landy and Conte (2007) and Northouse (2007) who discuss the “great man and great woman” theories of leadership where the in-born characteristics of great leaders were studied to understand what made them successful (as discussed in sections 2.2.1 and 2.2.2 of Chapter 2). The second definition also confirms that leadership is the exercise of power and authority within a context or situation to ensure followers achieve their objectives and do their work as stated by Bass and Stogdill (1990), Fiedler (1972), Grobler and Singh (2018), Hughes et al. (2009), Landy and Conte (2007), Northouse (2007) and Yukl (2006) (as discussed in sections 2.2.1 and 2.2.2 of Chapter 2).

This research acknowledges the presence of the second definition, however, the first definition of leadership was adopted as the definition for this research because it was formulated from the most common occurring codes and categories as provided by the participants. The definition adopted for this research was as follows:

“Leadership is a process where individuals or groups are influenced through a relationship with the leader to bring about real change and achieve outcomes through a common purpose, with due consideration for the context and situation”.

6.3.1.2 *Subtheme 1.2: Definition of leadership capabilities*

Two definitions for leadership capabilities emerged from the analysis of the data of this

research, as presented in the previous chapter. The first definition, is as follows:

“Leadership capabilities are the abilities and competencies (i.e. knowledge, skills, abilities and attributes) needed, by the occupant of a leadership role, to be successful at achieving the goals and objectives within a given context and/or situation”.

The definition that emerged for leadership capabilities from this research confirms those that exist in the current literature. It also describes them as abilities and competencies needed by leaders to successfully guide their organisations to achieve the organisational goals within a specific situation or context (i.e. in the case of this research it was South Africa HEIs during rapid change and disruption) (Atkinset al., 2013; Bartram & Ilke, 2011; Hughes et al., 2009; Smith & Wolverson, 2010; Spanenberg & Theron, 2002; Van Wart, 2004) (as discussed in section 2.7 of Chapter 2).

The second definition was formulated on the least common codes and categories and is as follows:

“Leadership capabilities are in-born, an in-born ability”.

The second definition also confirms existing literature because it aligns to the “great man and great woman” theory of leadership where the in-born characteristics of great leaders were studied to understand what made them successful (Hughes et al., 2009; Landy & Conte, 2007; Northouse, 2007). While this research acknowledges the second definition that emerged for leadership capabilities, it adopted the first one because it was formulated from the most common codes and categories, which is “Leadership capabilities are the abilities and competencies (i.e. knowledge, skills, abilities and attributes) needed, by the occupant of a leadership role, to be successful at achieving the goals and objectives within a given context and/or situation”.

6.3.2 Conclusion regarding the research question of theme 2 (Research process step 5, 6, 7 and 8): Perceptions of rapid change and disruption

6.3.2.1 Subtheme 2.1: Definition of rapid change

Two definitions emerged from the data analysis for this research. The first definition that emerged, is as follows:

“Rapid change is any change that is involuntary, unexpected, occurs frequently and at a fast pace which results in new ways of doing things to ensure relevance and sustainability”.

While existing literature often explained rapid change in terms of change that had taken place in certain environments such as in De Bruyne and Gerritse (2018), Du Preez, et al. (2016), Harris (2018) and Hornsby and Osman (2014) (as discussed in section 3.2.1 of Chapter 3) no formal and comprehensive definition for rapid change could be found other than synonyms for the word rapid and change within mainstream dictionaries (e.g. Collins dictionary, 2018).

The definition that emerged for rapid change from this research confirms most of the elements of rapid change as stated by various researchers in the literature (Du Preez, et al., 2016; Harris, 2018; SAHRC, 2015), however, it is unique because it appears to be the first that captures the essence of what rapid change is all about namely, it is any change that is involuntary, unexpected, occurs frequently and at a fast pace which results in new ways of doing things to ensure relevance and sustainability (as discussed in section 3.2.1 of Chapter 3).

The second definition that emerged based on the least common codes and categories during the data analysis, which was presented in the previous chapter, is as follows:

“Rapid change is a change that is planned and to which you are able to respond”.

The second definition of rapid change did not seem to confirm existing literature although several studies were found which may imply a measure of confirmation of

parts it. For example, research by De Bruyne and Gerritse (2018) about the future workplace and the need to be more agile could be interpreted to support a part of second definition in that they found that organisations can respond to the change. In another example, Touseau and Le Sommer (2019) found that the use of sensors and agribots within the “Internet of Things” could improve agricultural practices even in rural areas here connectivity was intermittent. Therefore, their research suggests that the rapid change can be responded to. A further example is Loomis and Rodriguez (2009) who found that changes within the American Christian Higher Education sector could result in the creation of new opportunities in the market and the elimination of others. Once again, it appears that the rapid change that occurred can be responded to.

While this research acknowledges the second definition that emerged for rapid change, it adopted the first one because it was formulated from the most common codes and categories, which is that “Rapid change is any change that is involuntary, unexpected, occurs frequently and at a fast pace which results in new ways of doing things to ensure relevance and sustainability”.

6.3.2.2 *Subtheme 2.2: Definition of disruption*

The definition for disruption that emerged in this research’s findings is mostly consistent with what exists in the literature because it contains all the elements of disruption as reported by previous research (Burggraef et al., 2019; Chung et al., 2015; Collins dictionary, 2018; Merriam-Webster, 2018a; Oxford learner dictionaries, 2018; Rambe, 2012; Rajasingham, 2011; Rasool et al., 2018;) (as discussed in section 3.2.2 of Chapter 3).

However, the main difference between the definitions in literature and the one that emerged in the findings of this research is that disruption was found to be fast-paced and not developing slowly and eventually disrupting the current way of doing things with a revolutionary new way as reported for example by Christensen (1997), Denning (2016), Kaivo-oja and Lauraeus (2017) and Rasool et al. (2018) (as discussed in section 3.2.1 of Chapter 3).

The definition for disruption that emerged from the analysis of the data in this research, which was presented in the previous chapter, and finally adopted for this research, is as follows:

“Disruption is any change that is unexpected, involuntary and fast-paced that results in a revolutionary new way of doing things along with far-reaching consequences which must be acted upon to ensure relevance and sustainability”.

6.3.2.3 Subtheme 2.3: Perceptions of the impact of rapid change and disruption on South African HEI and their leaders

a. Type of rapid change that influenced South African HEIs

This research found that the main rapid changes that affected South African HEIs over the last two to three years were political and governmental influences, technological developments, transformation, Fees Must Fall, insourcing of previously outsourced functions, effects of university leadership, changes to systems and governance, staff turnover and declining resources. Table 6.2 below contains the type of rapid change, including the sub areas related to each one, that affected South African HEIs, according to this research.

Table 6.2

Rapid changes that influenced South African HEIs over the last two to three years

Type of rapid change	Sub area of rapid change
Political and government influences	Political landscape
	Government decision
Technological developments	New technologies
	Fourth Industrial Revolution
	Affordability of technology
Transformation	Correcting demographics of staff and students
	Decolonisation of the curriculum
	Change in language policy
Fees Must Fall	Fees Must Fall
	Free Education
	Increased enrolments
	Changes in student population
	Student protests

	Stronger student voice
Insourcing	Effects of insourcing staff
	Protests and strikes
Effect of leadership	Changes in top leadership
	Perceived lack of leadership direction
Systems and governance	System and procedure changes
	Legalisation and policy changes
Staff turnover	Dismissals
	Leadership vacancies
	Resignation of top leaders
	Decrease in qualified employees
Declining resources	Insufficient facilities
	Insufficient staff
	Decreasing funding and finance

The findings of this research also included a view from a few participants that South African HEIs had been affected by little or no rapid change. The research by Altbach et al. (2009), Areff and Spies (2018), Bawa (2019), Davids (2016), Friedman and Edigheji (2006) and Jameson (2012) does not support that view. A detailed discussion of the findings regarding the type of rapid changes that influenced South African HEIs had already been presented and discussed in Chapter 5.

The final view of adopted by this research, based on the most common codes and categories that emerged, through applying Tech's method of content analysis, is that South African HEIs were affected by the rapid changes listed in Table 6.2 above, which have already been discussed in Chapter 5.

b. Type of disruption that affected South African HEIs

This research found that participants provided the same experiences as examples of disruptions which they had provided as examples of rapid changes that influenced their HEIs. Consequently, the list provided in Table 6.2 as rapid changes was also adopted to represent the type of disruptions that had influenced South African HEIs over the last two to three years.

The findings also identified a few participants who stated that their universities had experienced little or no disruptions. These participants were the same ones who believed that their university had not experienced any rapid change. Most of the current

research available in the literature does not support this finding in the general sense due to the impact that disruptive technology has had on travel industry and taxi industry as indicated by Christensen (1997) and Denning (2016), respectively. In addition, the higher education sector and particularly the South African higher education institutions have also been affected by disruptions such as rising costs, impact of the digital age on teaching and learning, increased demands for access to higher education and the impact of Covid-19 (Adam, Blewit & Wasserman, 2015; Department of Health, 2020; Department of Higher Education and Training, 2020; Gore, 2014; Mathiba, 2020; Morris, 2016; Ng’ambi, et al., 2016; Purcell, 2014; Shoba, 2020; Smith, 2017; WHO, 2020).

The above-mentioned findings and existing research have already been discussed in Chapter 5. The findings of this research therefore adopted the rapid changes listed in Table 6.2 as also being the disruptions that influenced South African HEIs.

c. Influence of the rapid changes and disruptions on South African HEIs

This research found that rapid change and disruption had the same the influence on HEIs. The most common categories that emerged as influences on HEIs were transformation, Fees Must Fall, insourcing, effect of leadership, revolutionary new way (of doing things), declining resources, effect on staff, systems and governance, effect on service delivery and consequences for higher education. The common influences of rapid change and disruptions on South African HEIs along with their sub areas of influence are set out in Table 6.3 below.

Table 6.3

Influence of rapid change and disruptions on South African HEIs

Type of influence	Sub area of influence
Transformation	Correcting demographics of staff and students
	Decolonisation of the curriculum
	Change in language policy
Fees Must Fall	Stronger student voice
	Effect on students
Effect of leadership	Perceived lack of leadership direction
	Areas of leadership development

	Effect of decisions and behaviours
	Lack of accountability
Revolutionary new way of working	Completely changes the way of doing and thinking/Change the way things are done or the direction
	Different from the norm
	Cannot continue as before
	Different skills required
Declining resources	Insufficient facilities
	Decreasing funding and finance
Effect on staff	Decreased staff morale
	Increased stress, fear and anxiety
	Increased workloads
	Poor work climate
	Concern for safety
	Discomfort, concern and uncertainty
	Negative impact on interpersonal relations
	Mistrust and anger toward leadership
	Wellness issues
	Resistance to change
Systems and governance	System and procedure changes
	Legalisation and policy changes
Service delivery	Reduced time to conduct teaching and research
	Decline in service delivery
	Negative impact on the academic project
	Decline in standards and pass rates
	Effect on student support
Consequences for higher education	Disruptions to culture
	Uncertain times for higher education

The influences of the rapid change and disruption on South African HEIs have been presented and discussed in the previous chapter. Therefore, the influences presented in Table 6.3 above are adopted by this research because they represent a high degree of consensus amongst participants, as already discussed.

d. Influence of rapid change and disruptions on leaders

Table 6.3 above contains the findings relating to the influence of rapid change and disruption that were discussed from the perspective of South African HEIs in general. This research found that leaders within South African HEIs had also been influenced by rapid change and disruption. According to a high level of consensus amongst participants the categories of influences on leaders were service delivery, effect on staff, revolutionary new way and effect of leadership. Table 6.4 below contains the

codes and categories of the influence of rapid change and disruption, that emerged from the data, as experienced by leaders within universities.

Table 6.4

Influence of rapid change and disruption on leaders within South African HEIs

Code	Category
Improved service delivery	Service delivery
Decline in service delivery	
Negative impact on the academic project	
Decreased staff morale	Effect on staff
Increased, fear stress and anxiety	
Increased workloads	
Poor work climate	
Concern for safety	
Negative impact on interpersonal relations	
Discomfort, concern and uncertainty	
Resistance to change	
Mistrust and anger toward leadership	
Different from the norm	
Cannot continue as before	
Different skills required	
Perceived lack of leadership direction	Effect of leadership
Areas of leadership development	
Effect of decisions and behaviours	

The influences of the rapid change and disruption on leaders of South African HEIs as presented in Table 6.4, have been presented and discussed in the previous chapter. This research differs from existing literature as discussed in Chapter 5, because it clearly identified what the influences of rapid change and disruption were on leaders within South African HEIs, whereas the literature did not. Therefore, the influences presented in Table 6.4 above are adopted by this research because they represent a high degree of consensus amongst participants, as already discussed.

6.3.3 Conclusion regarding the research question of theme 3 (Research process step 9 and 10): Perceptions of coping mechanisms to overcome rapid change and disruption

6.3.3.1 Subtheme 3.1: Universities and leaders that coped with the rapid change and disruption

According to a high level of consensus amongst participants in this research, 54% (43 of the participants) indicated that their university had coped with the rapid change and disruption which had affected their institution. This research found that 72% (58 of participants) indicated that leaders at their university had coped with the rapid change and disruption that had affected their institution. This research however differs with the current research in that it found 54% of universities and 72% of the leaders that were part of this study did cope with the rapid change and disruption, whereas existing research, already discussed in Chapter 5, found that they had not.

6.3.3.2 Subtheme 3.2: Universities and leaders that did not cope with the rapid change and disruption

This research found that 46% (37 of participants) reported that their university did not cope with the rapid change and disruption. Furthermore, according to this research 28% (22 of participants) indicated that the leaders at their university did not cope with the rapid change and disruption. The findings of this research are consistent with the research discussed in Chapter 5 which indicates in general that universities and leaders appeared to be unprepared, unsupported, not trained or experienced to deal with the rapid change and disruption, and even slow to respond or unwilling to respond, thus implying that they did not cope.

6.3.3.3 Summary of coping with rapid change and disruption

Based on the majority level of consensus amongst participants, this research adopts the finding that in general, South African HEIs and their leaders coped with the rapid change and disruption that had influenced them over the past two to three years. However, despite this finding there is reason for concern because just under half the participants indicated that their HEIs had not coped and just under one third of the participants indicated that the leaders of their universities had not coped.

6.3.4 Conclusion regarding the research question of theme 4 (Research process step 2, 3, 4, 11 and 12): Perceptions of leadership capabilities required to lead successfully in South African HEIs during rapid change and disruption

6.3.4.1 Subtheme 4.1: Leadership capabilities needed to successfully lead South African universities during rapid change and disruption

This research found eighteen capabilities that leaders in South African HEIs should have to lead successfully during rapid change and disruption, based on a high level of consensus amongst participants, and presented and discussed in Chapter 5. Table 6.5 below lists the capabilities (i.e. categories) that emerged in the findings as well as the competencies (i.e. codes) that are relevant each one.

Table 6.5

Capabilities to lead successfully in South African HEIs during rapid change and disruption

Capability	Competency
Adaptability	Adaptable
	Openness to new ideas
Agility	Agility
Change management	Change management
Cognitive ability	Cognitive ability
	Business acumen
	Conceptual thinking
	Dealing with ambiguity and complexity
	Financial acumen
	Problem solving ability
	Analytical skills
Effective communication	Providing information and feedback
	Ability to engage others
	Ability to consult others
	Listening skills
	Quality and frequency of communication
Decision making	Good judgement
	Participative behaviour
	Consider and evaluate the options
	Select the best option
	Consider the consequences
Decisiveness	Decisiveness
Determination	Steadfastness

	Perseverance
	Resilience
	Courage
Environmental awareness and understanding	Contextual awareness and understanding
	Political astuteness
	Situational awareness and understanding
Emotional intelligence	Intrapersonal skills
	Empathy
	Interpersonal skills
	Stress management
	Assertiveness
	Optimism
Influencing ability	Influence others
	Inclusive behaviour
	Negotiation skills
	Supporting, empowering and developing others
	Building strategic relationships
	Conflict resolution
Innovativeness	Creativity
	Ability to innovate
Inspire others	Inspire others
	Motivate others
	Recognition
Management ability	Resource management
	Planning, organising and prioritising ability
	Management knowledge and skills
Provide strategic direction	Guidance and direction
	Visioning
	Contingency planning
	Strategy development
	Strategic thinking
	Environmental scanning
Drive for results	Performance quality and speed
	Continuous learning
Teamwork	Collaboration
	Teamwork
Trustworthiness	Honesty and integrity
	Trust
	Accountability and responsibility

Source: Own compilation

Each of the capabilities listed in Table 6.5 above have been presented in Chapter 5 and discussed in relation to existing research. However, even though most of the competencies that emerged in this research have been found in previous research, as previously discussed, they do not appear to have been clearly linked as being required by leaders to successfully lead South African HEIs during rapid change and disruption.

Furthermore, none of the existing research discussed above explicitly and directly focussed on identifying the capabilities required to lead in South African HEIs during rapid change and disruption, whereas this research did.

6.3.4.2 Subtheme 4.2: Capabilities required at the different leadership levels to lead successfully during rapid change and disruption

This research identified the capabilities needed to lead successfully during rapid change and disruption at the different levels of leadership within South African HEIs. The findings of this research culminated in leadership capabilities emerging for the executive level, senior leadership level, manager level and lower leadership level. The capabilities that emerged for each leadership level are part of the overall leadership capabilities that emerged from the findings of this research, which were presented in Table 6.5 above and have been discussed.

All the capabilities (i.e. categories) and competencies (i.e. codes) that emerged as part of the findings of this research, for each leadership level, were as a result of a high level of consensus amongst participants. Table 6.6 below contains the leadership capabilities for each level of leadership along with the competencies that emerged as being relevant to each capability per level.

Table 6.6

Leadership capabilities for each level of leadership along with the relevant competencies

Executive leadership	Senior leadership	Middle leadership	Lower leadership	Competency	Capability
X				Adaptable	Adaptability
X	X		X	Openness to new ideas	
X			X	Agility	Agility
		X	X	Change management	Change management
				Intellectual ability	Cognitive ability
				Business acumen	
				Conceptual thinking	

				Dealing with ambiguity and complexity	
				Financial acumen	
				Problem solving ability	
X	X	X		Analytical skills	
X	X	X	X	Providing information and feedback	Effective communication
X	X		X	Ability to engage others	
X	X			Ability to consult others	
X	X	X	X	Listening skills	
X				Quality and frequency	
				Good judgement	Decision making
X		X	X	Participative behaviour	
				Consider and evaluate the options	
				Select the best option	
				Consider the consequences	
X				Decisiveness	Decisiveness
X	X	X		Steadfastness	Determination
				Perseverance	
				Resilience	
				Courage	
X	X		X	Contextual awareness and understanding	Environmental awareness and understanding
				Political astuteness	
				Situational awareness and understanding	
X	X			Intrapersonal skills	Emotional intelligence
X	X	X		Empathy	
X	X	X	X	Interpersonal skills	
X				Stress management	
X	X			Assertiveness	
X			X	Optimism	
X	X	X	X	Influence others	Influencing ability
X		X	X	Inclusive behaviour	
X	X			Negotiation skills	
X	X	X	X	Supporting, empowering and developing others	
X	X		X	Building strategic relations	
X				Conflict resolution	
				Creativity	Innovativeness
	X	X		Ability to innovate	
		X	X	Motivate others	Inspire others
				Recognition	
X	X	X	X	Resource management	Management ability
X	X	X		Planning, organising and prioritising ability	
X	X	X	X	Management knowledge and skills	
X	X	X	X	Guidance and direction	Provide strategic direction
X	X	X	X	Strategic thinking	
X	X			Visioning	
				Contingency planning	
X	X	X		Strategy development	
X		X	X	Environmental scanning	
X	X	X		Performance quality and speed	Drive for results
				Continuous learning	
X	X			Collaboration	Teamwork
X	X		X	Teamwork	
X	X	X	X	Honesty and integrity	Trustworthiness
X		X		Trust	
X	X	X	X	Accountability and responsibility	

Source: Own compilation

Various existing leadership capability theories and models such as Yukl (2006), Mathews (2016) and Tonini, Burbules and Gunsalus (2016) have been discussed in relation the leadership capabilities (i.e. leadership capability model) that emerged in the findings of this research (as discussed in Chapter 5). Very little existing research, that could be found and discussed, appears to identify leadership capabilities required per level of leadership within an organisation, higher education in general or within South African HEIs during rapid change and disruption.

The findings of this research revealed that not only did different capabilities appear to be more relevant at certain levels of leadership (e.g. agility), certain competencies within a particular capability also emerged as being more relevant than others to a particular level of leadership (e.g. stress management as a competency of emotional intelligence was found to only be relevant to Executive level leaders whereas interpersonal skills which is also part of emotional intelligent was found to be applicable to all leadership levels). This research also found that certain competencies within certain capabilities emerged as being relevant to most or all levels of leadership. Table 6.7 below contains the competencies within each capability that were found to be relevant to most or all levels of leadership, which have been presented and discussed in Chapter 5.

Table 6.7

Competencies within capabilities relevant to most or all levels of leadership

Executive leadership	Senior leadership	Middle leadership	Lower leadership	Competency	Capability
X	X		X	Openness to new ideas	Adaptability
X	X	X		Analytical skills	Cognitive ability
X	X	X	X	Providing information and feedback	Effective communication
X	X		X	Ability to engage others	
X	X	X	X	Listening skills	
X		X	X	Participative behaviour	Decision making
X	X	X		Steadfastness	Determination
X	X		X	Contextual awareness and understanding	Environmental awareness and understanding
X	X	X		Empathy	Emotional intelligence
X	X	X	X	Interpersonal skills	
X	X	X	X	Influence others	Influencing ability

X		X	X	Inclusive behaviour	
X	X	X	X	Supporting, empowering and developing others	
X	X		X	Building strategic relations	
X	X	X	X	Resource management	Management ability
X	X	X		Planning, organising and prioritising ability	
X	X	X	X	Management knowledge and skills	
X	X	X	X	Guidance and direction	Provide strategic direction
X	X	X	X	Strategic thinking	
X	X	X		Strategy development	
X		X	X	Environmental scanning	
X	X	X		Performance quality and speed	Drive for results
X	X		X	Teamwork	Teamwork
X	X	X	X	Honesty and integrity	Trustworthiness
X	X	X	X	Accountability and responsibility	

Source: Own compilation

According to this research, all levels of leadership need the capabilities of adaptability, cognitive ability, effective communication, decision making, determination, environmental awareness and understanding, emotional intelligence, influencing ability, management ability, provide strategic direction, drive for results, teamwork and trustworthiness. However, the leadership capabilities of agility, decisiveness, change management, innovativeness and inspires others emerged as being needed by some by and not all leadership levels. For example, innovation emerged as a leadership capability needed only by senior and middle leadership levels. Similarly, decisiveness emerged as a leadership capability for Executive level leaders but no other leadership level.

Furthermore, within certain capabilities not all the competencies within the capability emerged as being needed by all levels of leadership. In some instances, a competency within a capability did not emerge as being needed by any leadership level. More specifically, the competencies in the capabilities cognitive ability (i.e. intellectual ability, business acumen, financial acumen and problem solving ability); decision making (i.e. good judgement and select the best option); environmental awareness and understanding (i.e. political astuteness and situational awareness and understanding);

innovativeness (i.e. creativity); inspire others (i.e. recognition); provide strategic direction (i.e. contingency planning); drive for results (i.e. continuous learning) emerged as part of the overall list of leadership capabilities and competencies needed to lead successfully, but did not emerge as being needed when identifying the capabilities (including the competencies) needed for each level of leadership. Similarly, the competency of conflict resolution under the capability influencing ability emerged as being only needed by Executive level leaders.

Therefore, based on the high level of consensus amongst participants and the lack of existing research that clearly identifies the capabilities needed to lead at different levels within South African HEIs during rapid change and disruption, the leadership capabilities as listed per level in Table 6.7 have been adopted by this research.

6.3.5 Unexpected findings

This research produced several unexpected findings. The first unexpected finding was the extent of the influence of the violence associated with the student protests associated with Fees Must Fall on employees. In particular the level of fear, anxiety, trauma and concern for personal safety that influenced the wellbeing of employees, including leaders at all levels. Most of the research discussed above, focussed on the influence on students with little direct focus on employees. Yet employees are the key ingredient to ensure that higher education is delivered and supported to educate our country to remain relevant and respond to rapid change and disruption.

The next unexpected finding was the finding that none or only certain competencies or capabilities were relevant to some or all of the leadership levels even though clear evidence emerged to support the overall list of leadership capabilities and competencies needed to lead successfully in South African HEIs during rapid change and disruption. The reason for this unexpected finding could be the direct and varying experience of the participants in relation to the level of leadership to which they directly report. Therefore, that could have influenced their expectations of what they believe is needed to lead successfully especially if they are not familiar with the functions and tasks of other leadership levels. In other words, they defined the leadership capabilities needed in relation to what they expect versus their actual experience in relation to the

leadership levels they have been exposed to or with whom they have interacted. For example, not all participants report to a Vice Chancellor, Executive Dean or Executive Director. Therefore, depending on their exposure, knowledge and experience with individuals performing those roles they may not identify the capabilities needed at that level to lead successfully during rapid change and disruption, but rather attribute to them the capabilities expected or displayed by their direct leader (e.g. middle leadership level) to the Executive level leaders.

Even though this research reported that the type of rapid change and disruption that influenced South African HEIs was the same, it was not expected. The final unexpected finding was the emergence of specific competencies within each capability, which helps define each capability more clearly, as already presented and discussed.

6.3.6 Summary

The leadership capabilities that emerged from this research, based on a high level of consensus amongst participants, are those that were provided because of the participants' experience. In addition, specific competencies (i.e. codes) have been grouped together to form leadership capabilities (i.e. categories), which provide a richer description of each capability. Finally, the findings resulted in the emergence of capabilities and competencies, needed to successfully lead South African HEIs during rapid change and disruption, for each level of leadership.

This research reported leadership capabilities needed to lead successfully in South African HEIs during rapid change and disruption which were in many instances similar if not the same as those found in current research discussed above. However, the findings of this research are different from existing research because it identified and described capabilities and competencies needed to lead successfully in rapid change and disruption, including those which are needed for each level of leadership, which existing research did not do.

6.4 THEORY AND MODEL OF LEADERSHIP CAPABILITIES REQUIRED TO LEAD SUCCESSFULLY IN SOUTH AFRICAN HEIS DURING RAPID CHANGE AND DISRUPTION

6.4.1 Theory Building Model of Carlile and Christensen

This research followed the Theory Building Model of Carlile and Christensen (2004) to develop a theory and model of capabilities needed to lead successfully in South African HEIs during rapid change and disruption. Although the Theory Building Model of Carlile and Christensen (2004) consists of a descriptive and a normative phase, this research only completed the descriptive phase because this research followed a qualitative approach. In other words, this research only identified, described and categorised constructs relating to the phenomena (i.e. leadership capabilities) and explored the relationships between them and the relevant outcome (i.e. Leading successfully during rapid change and disruption) (Carlile & Christensen, 2004).

The outcome of the descriptive phase is a model that diagrammatically shows the relationships between categories and the relevant outcome (Carlile & Christensen, 2004). To complete the normative phase of the Theory Building Model the researcher would need to confirm the theory and any hypothesis formed in the descriptive phase, by applying the model to a new set of data in the ‘real world’ to determine its predictive validity (i.e. proceed to conduct the normative phase) (Carlile & Christensen, 2004). In other words, conduct a quantitative research study to confirm the theory or model (Carlile & Christensen, 2004). This research did not aim to confirm the theory or model, but merely to describe and explain it.

6.4.2 Theory of leadership capabilities required to lead successfully in South African HEIs during rapid change and disruption (LCRCD)

6.4.2.1 Conceptualising the LCRCD theory and model

a. Theory constructs

The following constructs emerged:

- (1) Rapid change: “Rapid change is any change that is involuntary, unexpected, occurs frequently and at a fast pace which results in new ways of doing things to ensure relevance and sustainability”.
- (2) Disruption: “Disruption is any change that is unexpected, involuntary and fast-paced that results in a revolutionary new way of doing things along with far-reaching consequences which must be acted upon to ensure relevance and sustainability”.
- (3) Influence of the rapid change and disruption on the HEI (e.g. influence on service delivery, employees, way of doing things).
- (4) Influence of rapid change and disruption on the HEI leader (e.g. influence on service delivery, effect of leaders, way of doing things).
- (5) Coping was the extent to which HEIs, and leaders were able to handle or deal with the rapid change and disruption that influenced their HEIs.
- (6) Leadership: “Leadership is the action of a trustworthy person who applies foresight to provide direction to the organisation and influences followers to successfully reach the end state through teamwork, within a conducive environment”.
- (7) Leadership capabilities: “Leadership capabilities are the abilities and competencies (i.e. knowledge, skills, abilities and attributes) needed, by the occupant of a leadership role, to be successful at achieving the goals and objectives within a given context and/or situation”.
- (8) Lead successfully during rapid change and disruption: Being able to successfully adapt, cope and respond appropriately, effectively, and in sufficient time during rapid change and disruption (as a leader and HEI).

b. Relationship between constructs

The evidence relating to the type of rapid change and disruption that affected South African HEIs and the influence thereof on them and the leaders have been presented and discussed in section 6.3.2 to 6.3.3 above, based on a high level of consensus between the participants. While this research confirmed several of the types and influence of rapid change and disruption on South African HEIs found by existing research, this research found that there were differences which were not clearly identified by existing research, as discussed above. Through the process of content analysis, following Tesch's (1990) method of analysis, the codes and categories that emerged regarding the types, influences and coping with rapid change and disruption, were grouped together, compared and discussed (including similarities and differences) in sections 5.5.2, 6.3.2 and 6.3.3 above. These codes and categories were not clearly identified and described in existing research.

The evidence relating to the leadership capabilities required to lead in South African HEIs, including those required for each level of leadership, during rapid change and disruption were compared and discussed (including their similarities and differences) in sections 5.5.4 and 6.3.4 above. Existing research discussed these but did not provide clarity on the leadership capabilities required to lead in South African HEIs during rapid change and disruption, including those required for the different leadership levels.

6.4.2.2 The LCRC model

The model is a summary of the main conclusions and posits that if leaders within South African HEIs possess and apply the capabilities found in this research, and presented in Tables 6.5 and 6.6 above, they should be able to cope with such change and successfully implement or deal with them.

Figure 6.1 presents a model which is a summary of the specific conclusions of this research and depicts the different codes under each main category with the focus on the capabilities needed to successfully lead South African HEIs during rapid change and disruption.

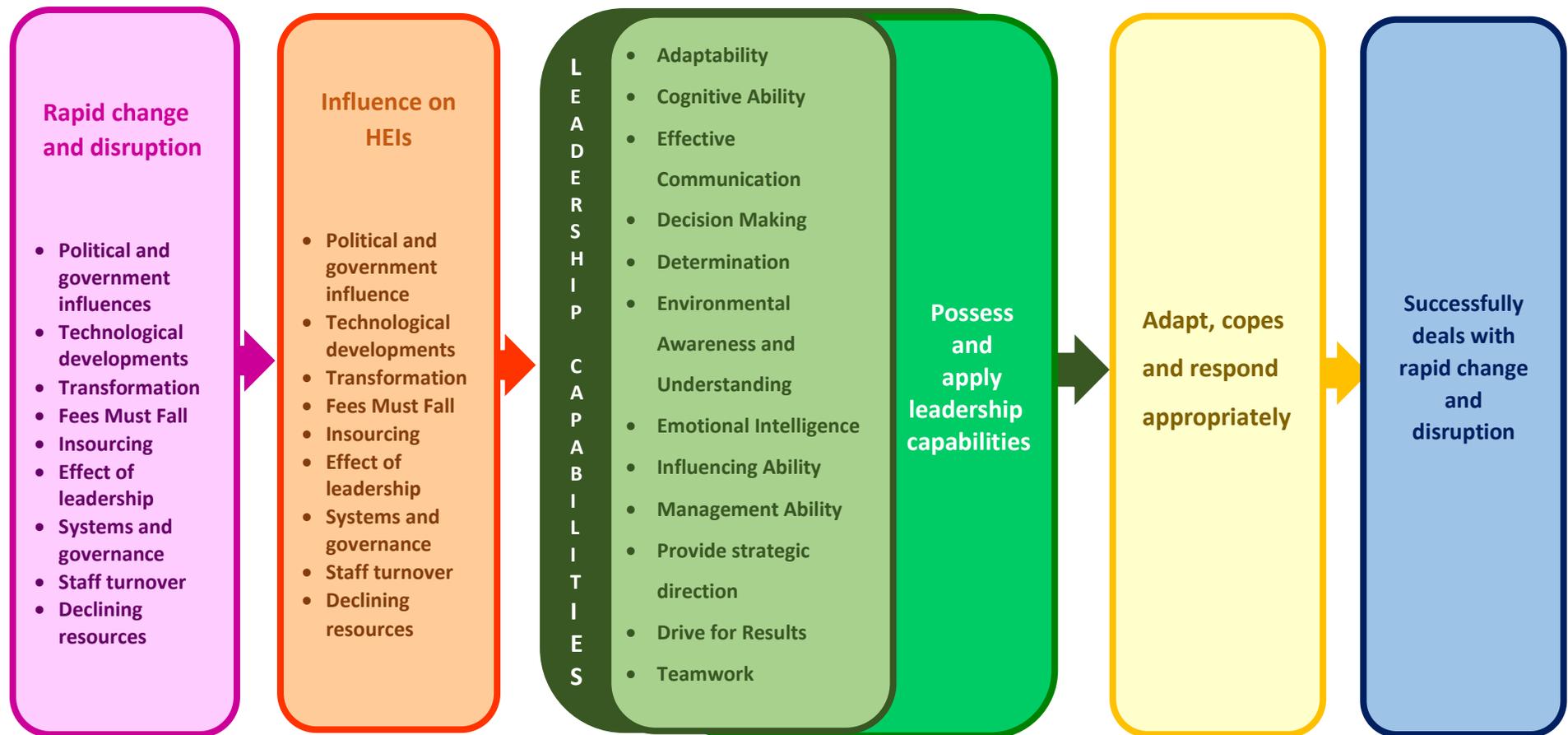


Figure 6.1. Model of leadership capabilities required to lead successfully in South African HEIs during rapid change and disruption (LCRCD)

6.5 PERSONAL EXPERIENCES DURING THE STUDY

The researcher was grateful and humbled for the opportunity to be granted permission to undertake this research within a sector which arguably is responsible to discover the answers to the questions and challenges of society as a whole. The researcher had the following personal experiences during this research study:

- (1) By being exposed to the participants' environment and being moved by their accounts of their lived experience the researcher realised, yet again, how leaders influence a situation and people in that situation by what and how they behave. Specifically, in South African HEIs there is a critical need to recruit and develop leaders with appropriate capabilities to successfully lead during rapid change and disruption.
- (2) The researcher gained valuable experience into the importance of making a concerted "real-time" effort to remain objective irrespective of the nature of the participants lived experience or their emotional state while they were responding to interview questions. This also meant making a concerted effort to "start from scratch again" with each new interview or focus group so that any emotional influence from a previous interview or focus group that formed part of this research, did not influence subsequent ones.
- (3) The researcher gained valuable experience and insight into the methods and practice of conducting qualitative research and the importance of following sound research practices to ensure fair, thorough, credible, and relevant research that contributes to an existing body of knowledge. In addition, skills that were developed during this research will also enable the researcher to conduct credible research on any problem that may present itself at his workplace in future.
- (4) The researcher gained valuable insights and understanding of the key constructs that formed part of this research, as well as of the Higher Education environment and its influence on leaders who function therein, particularly the influence of possessing or lacking the leadership capabilities that emerged

during this study. To that end, the researcher is of the view that South African HEIs need to focus their efforts on ensuring that leaders at all levels are selected with a “baseline” level of these competencies and or that they be developed on an ongoing basis, as this appeared to be lacking.

- (5) The researcher was overwhelmed by the negative impact that the rapid change and disruption had on the participants’ wellbeing and the apparent lack of protection and or support that appeared to have been provided in many cases.
- (6) The different processes and standards encountered during the process of requesting gate-keeper approval, as applied by the various participating South African HEIs in the research, proved to be challenging and unexpectedly time-consuming.
- (7) The need to be focused, committed, persevere, flexible, open-minded, planful and well organised played a critical role in ensuring steady progress, resolving challenges while also maintaining a work-life balance.
- (8) The experience of fatigue from becoming a container or “targeted object” for the fear, anxiety, hopeless, anger, desperation and gratitude for the opportunity to be heard and express feelings, that were displayed by participants during the ISSIs or focus groups.
- (9) The realisation that delivery of world-class higher education to all South Africans is caught in a “catch 22 situation” between political and social agendas on the one hand and committed but under resourced and unsupported academics and South African HEIs on the other.
- (10) The openness, frankness and cooperation from all participants along with their desire to improve South African higher education, without further delay.

6.6 STRENGTHS OF THE STUDY

This research is arguably the first of its kind in South Africa that has enabled a theory and model of capabilities to emerge that is relevant to successfully leading South

African HEIs during rapid change and disruption (using a qualitative research design, while applying an interpretivist, phenomenological approach). The significance is that this theory and model can serve not only as a basis for recruitment, selection and development of leaders at all levels within South African HEIs to enhance performance during such times, but also serves as a catalyst for future research in the context of higher education, and beyond.

Once the researcher had established rapport with participants, and trust had been established, they started sharing intimate details of their organisation and their leaders in dealing with rapid change and disruption, including how they had been affected. As the participants became more at ease with the researcher and the interview or focus group process, they began sharing their experiences and perceptions of their organisations, including their frustrations, concerns, fears and suggestions relating to how their leaders and institutions had responded to the rapid change and disruption that had affected them.

Surprisingly, according to the researcher, the interviews and focus groups also appeared to serve as a form of release for the participants in that many commented on it being the first time, they had either spoken to someone about their experiences or that someone had asked them about their experience, even though this was not the intention of this research. Participants in some instances even expressed a sense of relief at the end of the interview or focus group. The researcher explained to the participants that they were potentially contributing to improving the leadership of South African HEIs because the outcome of the research (i.e. leadership capability model for South African HEIs) would be made available to all participants and to the broader the structures within South African higher education. The research also gave participants opportunity to express in detail how the rapid change and disruption had negatively affected employees and leaders, even though that was not the purpose of this research.

6.7 LIMITATIONS

The following limitations affected this research:

- a. While there is a wide range of research on leadership in general, research within higher education and particularly with reference to what is needed to lead in South Africa HEIs does not appear that prevalent, whereas given the current VUCA environment it should be.
- b. Obtaining gatekeepers' permission from the various sampled universities was a limitation in that each had its own procedure which was different from the others. As a result, in some cases that difference had a negative influence on the response rate because some universities allowed the researcher to send reminders once he had sent out the initial invitation to employee requesting their participation, while others insisted on sending the invitations themselves and did not allow reminders to be sent. Hence it had an influence on the response rate.
- c. The sample was another limitation. Even though this research followed a qualitative approach, the researcher purposefully selected one university from each of the nine provinces to enhance the trustworthiness of the findings. However, due to NWU (North West) and UM (Mpumalanga) declining to take part, they were replaced by US (Western Cape, together with UCT) and MUT (KZN, together with UKZN).
- d. The response rate was also a limitation. Once again even though this research followed a qualitative approach, the response was low in relation to the sample size selected. The result is that certain races, occupations, levels of leadership and functions (e.g. academic or professional services such as student services, risk management, finance) may not be sufficiently representative which could influence the research findings.
- e. It is also possible that participants may not have been as open an honest when they responded to interview questions due to various reasons including lack of trust, impact that the rapid change and disruption had on them and on their feelings toward their university and/or their leaders.
- f. Language was also a possible limitation in that interviews were conducted in English whereas it was not the first language of several participants. This

difference in language could have influenced how participants interpreted and answered the interview questions.

- g. Skype or telephone was used to conduct a few semi-structured interviews and a focus group. Due to interruptions with the telephone or internet signal, the researcher was not able to clearly hear some participants' responses. In two cases the signal interruptions were so common that it was not possible to repeat the question and obtain a response from the participant because you could simply not reconnect to either the telephone number or Skype address.
- h. The POPI Act was a limitation in that different universities interpreted it and applied it differently. Therefore, some universities were more lenient compared to others in providing access to the or employees and their information. In one case, the university would not even provide email addresses for the researcher to correspond with their employees. The university decided to contact them on behalf of the researcher.
- i. The researcher's knowledge, beliefs, personal style, and experience were a potential limitation. Even though the researcher consciously remained as objective as possible and analysed and interpreted the data as objectively as possible, including ensuring triangulation through different sources of data (e.g. Different universities, different levels of participants, different provinces), it is still possible that he unconsciously influenced the findings (e.g. Formulation of definitions, the way data was processed and analysed based on past knowledge and experience).
- j. The leadership capabilities, theory and model that emerged have not been quantitatively verified.
- k. Some of the leadership capabilities and competencies that emerged from the research were only supported by a low frequency of occurrence according to participants' responses.

6.8 RECOMMENDATIONS

6.8.1 Recommendations for future research

The leadership capabilities and competencies that emerged as being necessary to successfully lead South African HEIs during rapid change and disruption, along with the competencies per capability and the resultant theory and model, should be confirmed through future research to confirm and adjust them where needed. In addition, future research should empirically determine the extent to which possessing and applying the leadership capabilities and competencies found in this research contribute to leaders successfully dealing with rapid change and disruption.

Future research should study whether the leadership capabilities and competencies identified per level of leadership are confirmed as well as to what extent they enable the leaders at the different leadership levels to lead successfully during rapid change and disruption. Finally, even though this research in general and the literature do not appear to directly support the “alternate’ finding of this research that rapid change can be planned for and responded to, it may be valuable for future research to investigate that finding more closely.

6.8.2 Recommendations for improving leadership in South African HEIs during rapid change and disruption

This research identified and described the capabilities needed to lead successfully in South African HEIs during rapid change and disruption. Part of the findings indicated that the type and magnitude of rapid change and disruption vary and that they influence the country, the higher education sector, South African HEIs, the employees and leaders. Furthermore, this research found that neither South African HEIs nor their leaders were trained and/or prepared for the rapid change and disruption, and they reported being abandoned by the government and ruling party, particularly in the wake of the government announcement of free higher education.

The result was that while this research found that most HEIs (54%) and their leaders

(72%) coped, a considerable number of HEIs (i.e. 46%) and their leaders (i.e. 28%) did not. Therefore, the following is recommended:

- a. The findings of this research should be shared with South African higher education to enable them to facilitate the development of their leaders, particularly the leadership capabilities that emerged.
- b. HE in South Africa in general and South African HEIs in particular, need to develop their leaders and employees on how to deal with and manage rapid change and disruption, particularly the violence that often accompanies student related rapid changes and disruptions.
- c. The recruitment and selection of leaders in South African HEIs should include an assessment of their ability to successfully deal with and manage rapid change and disruption based on the leadership capabilities that have emerged from this research.
- d. Higher education in South Africa in general and South African HEIs in particular need to implement policies and procedures that clearly stipulate how rapid change and disruptions will be managed.
- e. Higher education in South Africa in general and South African HEIs in particular need to implement policies and procedures to ensure employee wellness, safety and ability to cope with rapid change and disruption, as appropriate.
- f. Despite the potential sensitivity surrounding some of the causes of rapid change and disruption, higher education in South Africa in general and South African HEIs in particular need to apply consequence management firmly and consistently to ensure the health, welfare and safety of all employees and students are maintained, not just one party above the other or for the “greater good”, where situations turn violent.
- g. Leaders in South African HEIs need to have their performance contracts adjusted so that they are clearly held accountable and evaluated for the planning, guiding,

organising and deliver of actions that need to be taken to successfully deal with rapid change and disruption.

- h. Leaders and HEIs in South Africa need to humble themselves and accept that they are no longer the driver of what, how, when, who, how much and to whom higher education will be delivered, which includes accepting and applying the very same managerial and leadership theories which it sells to the world in the form of higher education.
- i. The Government and Department of Higher Education and Training need to work closely together with HEIs and align themselves so that they can speed up the implementation of the transformation of South African higher education.
- j. The Government and Department of Higher Education and Training need to work closely together with leaders of HEIs to regularly scan their environment, benchmark latest developments and stay abreast of socio-economic conditions that influence the delivery of higher education so that they can be more proactive and responsive to rapid change and disruption within the sector (i.e. to avoid being caught off guard or unprepared).
- k. Any significant change which the Government, ruling party or higher education wishes to implement should first be discussed with and amongst each of these stakeholders, as well as organised labour and student representatives. Doing so before such decisions are implemented will ensure alignment and enhance buy-in and successful implementation of such decisions. Political grand-standing and making associated public commitments, without considering the impact on society at large, the capacity of HEIs, the students, the national fiscus and budget, employees who are exposed to the potential aftermath and leaders who need to implement such decisions, need to be carefully considered before such an announcement is made. It is equally important that where such a decision is taken leaders and HEIs must be given the relevant resources and physical and practical support (not lip service).

6.9 SUMMARY

Over the past few years, the world in general has been influenced by several rapid changes and disruptions from climate change, globalisation, economic developments, the fourth industrial revolution, technological advancements, social changes, political changes and most recently the Covid-19 pandemic. In other words, the broader environment has become volatile, uncertain, complex and ambiguous (VUCA), demanding that leaders possess the capabilities that will enable them to successfully lead their organisations during such times.

The above changes have also influenced Africa, South Africa and in particular HEIs in South Africa. Particularly over the past two to three years, South African HEIs have been increasingly faced with the drive for transformation in higher education (including the decolonisation of the curriculum), reduced government subsidies, rising costs, increased enrolments, declining resources the announcement of free higher education, increased politicisation of higher education and the increased need to use information technology in teaching and research have caught South African HEIs, to a larger or lesser degree, off guard or unprepared. Even though in general this research found that HEIs coped with the rapid changes and disruptions, there were substantial negative influences on employees, leaders, service delivery, students and their capacity to successfully deal with them. According to the findings of this research the cause of the negative effects was mainly due to leaders not having the capabilities, training or experience to deal with rapid change and disruption, which affected the way in which the rapid change and disruption was handled.

What is concerning is that while the rapid change and disruption affected the South African HEIs over the past two to three years, particularly transformation in HE and free higher education, was found to be rapid change and disruption, the HEI sector was arguably aware that it had been sitting on a preverbal “ticking time bomb” since as early as 1997 (i.e. the White Paper 3) and as late as 2001 (i.e. South African National Plan for Higher Education) because implementation has been so slow (Department of Education, 1997; Ministry of Education, 2001). Another concern is that while the world is being forced to radically redefine how work is performed in relation to amongst others, rapid change and disruption in technological, social, economic and

social change, this research found that South African HEIs, and the leadership were either too slow to respond or resisted change, even though they are part of the very machine that drives research and knowledge generation to help society grow and change. The term managerialism was “tossed” around in the literature on higher education as if it is a contagious disease that belongs “out there”. The researcher even dares to conclude that higher education sees itself “above those things” as the “know-it-all” and “can do it all” superhero who refuses to accept that the world is changing and that there is a good chance it could be replaced. Who, how and what will replace it is not entirely clear although the signals are present in terms of the potential factors that could lead to it being replaced, at least in its current form? The Fees Must Fall movement showed that students will no longer accept the way they used to be treated or how things were done. Covid-19 has resulted in even more radical adjustments, such as increased remote working and increased reliance on information technology to deliver higher education, which could replace higher education as we know it if it is not willing to humble itself and radically change to be relevant. At the heart of the ability to remain relevant is the leadership of South African HEIs, at all levels.

The aim of this research was to establish a leadership capability theory and model required to lead successfully during rapid change and disruption within South African HEIs. This research has achieved its aim in that it identified and described the capabilities and competencies needed to lead successfully during rapid change and disruption. This research also identified the capabilities required for each leadership level within South African HEIs needed to lead successfully during rapid change and disruption.

Finally, this research formulated a theory and model that explains the relationship between rapid change and disruption, the possession and application of the capabilities required to lead successfully and dealing successfully with it. By achieving its aim, this research has contributed to industrial and organisational psychology and personnel psychology in that it has resulted in new knowledge relating to capabilities required to lead successfully within South African HEIs during rapid change and disruption. Even though this research has achieved its aim it will not save South African HEIs from destroying itself if it chooses to continue to do things in the same way, which has arguably dire and far-reaching implications for the growth and sustainability of the

sector, country, region and global arena. The time is now for leaders in South African HEIs to make a choice: change or be changed (even replaced).

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APPENDIX A

SEMI STRUCTURED INTERVIEW GUIDE

Introduction

The research aims to identify the leadership capabilities needed to lead successfully during times of rapid change and disruption within South African Higher Education Institutions.

The interview questions that follow aim to obtain your feedback on what you believe those leadership capabilities should be. The interview will take approximately one to one and a half hours. I appreciate your willingness to take part; however, you are free to withdraw from the interview at any time.

All responses will be treated confidentially and anonymously.

Biographical information

Name of University	Position	Professional Service or Academic Staff	
Age	Gender	Race	Persons with Disability

Interview Questions

1. In your own words, explain what you understand by “leadership” and “leadership capabilities”
2. In your own words, explain what you understand by “rapid change” and “disruption”, within the context of Higher Education?

3. In your own words could you please describe to me what rapid change and disruption have affected your university over the past two to three years?
4. In your own words could you please explain what the impact of the rapid change and disruption was on your university?
5. In your own words could you please explain what the impact of the rapid change and disruption was on you and on your role as leader within the university?
6. In your view, how did the university cope with the rapid change and disruption?
7. In your view, how did you cope with the rapid change and disruption as an individual and as a leader within the university?
8. In your view what capabilities did you display that you believe contributed to the university successfully dealing with the rapid change and disruption?
9. In your view what capabilities did other university leaders display that you believe contributed to the university successfully dealing with the rapid change and disruption?
10. Looking back at the rapid change and disruption that affected your university, what leadership capabilities would you say are important to lead successfully, in times of rapid change and disruption? Could you please explain your answer?
11. In your opinion are there different leadership capabilities required at different leadership levels within the university to successfully deal with rapid change and disruption? Could you please explain your answer?

APPENDIX B

FOCUS GROUP QUESTIONS GUIDE

Introduction

The research aims to identify the leadership capabilities needed to lead successfully during times of rapid change and disruption within South African Higher Education Institutions.

The focus group questions that follow aim to obtain your feedback on what you believe those leadership capabilities should be. The focus group will take approximately one hour. I appreciate your willingness to take part; however, you are free to withdraw from the focus group at any time.

All responses will be treated confidentially and anonymously.

Biographical information

Name of University	Position	Professional Service or Academic Staff	
Age	Gender	Race	Persons with Disability

Focus group interview questions

1. In your own words, explain what you understand by “leadership” and “leadership capabilities”
2. In your own words, explain what you understand by “rapid change” and “disruption”, within the context of Higher Education?

3. In your own words could you please describe to me what rapid change and disruption have affected your university over the past two to three years?
4. In your own words could you please explain what the impact of the rapid change and disruption was on your university?
5. In your own words could you please explain what the impact of the rapid change and disruption was on you and on your role as leader within the university?
6. In your view, how did the university cope with the rapid change and disruption?
7. In your view, how did you cope with the rapid change and disruption as an individual and as a leader within the university?
8. In your view what capabilities did you display that you believe contributed to the university successfully dealing with the rapid change and disruption?
9. In your view what capabilities did other university leaders display that you believe contributed to the university successfully dealing with the rapid change and disruption?
10. Looking back at the rapid change and disruption that affected your university, what leadership capabilities would you say are important to lead successfully, in times of rapid change and disruption? Could you please explain your answer?
11. In your opinion, are there different leadership capabilities required at different leadership levels within the university to successfully deal with rapid change and disruption? Could you please explain your answer?

APPENDIX C

PARTICIPATION IN RESEARCH PROJECT: A LEADERSHIP CAPABILITY MODEL FOR THE SOUTH AFRICAN HIGHER EDUCATION ENVIRONMENT. INFORMED CONSENT AND PARTICIPANT INFORMATION SHEET

1 May 2019

Dear Prospective Participant

My name is Michael Cloete and I am doing research with Sonja Grobler, a Professor in the Department of Industrial and Organisational Psychology, towards a PhD in Consulting Psychology at the University of South Africa. We are inviting you to participate in a study entitled leadership capability model for the South African Higher Education environment

WHAT IS THE PURPOSE OF THE STUDY?

I am conducting this research to find out the capabilities needed to lead successfully in South African Higher Education Institutions during times of rapid change and disruption. By identifying, describing, establishing a model of the leadership capabilities and confirming it, Higher Education will be able to recruit, select and develop leaders that will enhance the Universities' ability to respond successfully during rapid change and disruption, in South Africa.

WHY AM I BEING INVITED TO PARTICIPATE?

To identify, understand and describe the leadership capabilities necessary, it is relevant and important to speak to employees at all levels of the organization to get their view of what they believe these leadership capabilities should be because they experience the actual behaviour being displayed during times of rapid change and disruption. In other words, they would have first-hand experience of the leadership capabilities displayed during rapid change or disruption within their University.

Therefore, all academic and professional service employees across all levels within all the Universities in South Africa are eligible to take part in this research.

UNISA and your institution has granted ethical clearance for me to conduct the research (please see the attached approval from UNISA and your University). Nine universities were purposefully selected to participate so that there was one from each province. Data will be gathered using semi-structured interviews and focus groups to identify understand and describe the leadership capabilities. A total of 4630 participants were randomly selected from the employee list (according to each employee level) of your University to take part in in semi-structured interviews and/or focus groups

WHAT IS THE NATURE OF MY PARTICIPATION IN THIS STUDY?

The study involves semi-structured interviews, focus groups and an on-line questionnaire. In the semi structured interviews and focus groups, participants will be requested to identify and describe what they believe are leadership capabilities needed to lead successfully during rapid change and disruption, as well as their reasons for their choice. Semi structured interviews will be from 60 to 90 minutes at most. Focus groups will be 90 minutes at most.

When completing to the questionnaire, respondents will need to select the most important leadership capabilities from a list that has been provided, in response to a particular event that involved rapid change and disruption. The questionnaire should not take more than 40 to 50 minutes to complete. Indicate what sort of questions will be asked or show the questions on this document. You have been randomly selected to participate in a semi structured interview/focus group/respond to the on-line questionnaire (delete what is not applicable).

CAN I WITHDRAW FROM THIS STUDY EVEN AFTER HAVING AGREED TO PARTICIPATE?

If you do decide to take part, you will be given this information sheet to keep and be asked to sign a written consent form. Participating in this study is voluntary and you

are under no obligation to consent to participation. You are free to withdraw at any time, without giving a reason. This means that if you participate in either the semi structured interview or focus group you can withdraw at any time even if they have commenced.

WHAT ARE THE POTENTIAL BENEFITS OF TAKING PART IN THIS STUDY?

By taking part in the study you will assist in identifying, describing, establishing a model of the leadership capabilities required to lead successfully during rapid change and disruption in South African Higher Education, as well as and confirming it. The results will enable Higher Education Institutions to recruit, select and develop leaders that will enhance their ability to respond successfully during rapid change and disruption. The results could therefore also benefit your development as an employee within your University.

ARE THERE ANY NEGATIVE CONSEQUENCES FOR ME IF I PARTICIPATE IN THE RESEARCH PROJECT?

During the semi structured interview or focus group, there may be times when you could feel disappointment and frustration about the leadership style that you experienced from your leaders. You may also feel discomfort when recalling your experiences about rapid change and disruption at your University, in relation to the leadership behaviour that was displayed at the time. Therefore, you will be offered an opportunity to take part in a debriefing at the end of the focus group or semi structured interview to ensure that you are in a comfortable “space” before you leave.

WILL THE INFORMATION THAT I CONVEY TO THE RESEARCHER AND MY IDENTITY BE KEPT CONFIDENTIAL?

You have the right to insist that your name will not be recorded anywhere and that no one, apart from the researcher and identified members of the research team, will know about your involvement in this research (*this measure refers to confidentiality*). Furthermore, your name will not be recorded anywhere, and no one will be able to connect you to the answers you give [*this measure refers to anonymity*]. Your answers

will be given a code number, or a pseudonym and you will be referred to in this way in the data, any publications, or other research reporting methods such as conference proceedings [*this measure refers to anonymity*].

Only the researcher, the research assistant who will co-facilitate the focus groups and the statistician who will process the quantitative data, will have access to the data. The research assistant and statistician have all signed confidentiality agreements, which forbids them from breaking confidentiality. All focus group participants will also sign a confidentiality agreement to ensure that the identity of focus group participants and the detailed content of the discussion remain confidential. Your answers may be reviewed by people responsible for making sure that research is done properly, including the transcriber, external coder, and members of the Research Ethics Review Committee. Otherwise, records that identify you will be available only to people working on the study, unless you give permission for other people to see the records.

It is also possible that your anonymous data may be used for other purposes, such as a research report, journal articles and/or conference proceedings. In such instances, the data is contained in a report that used tables and graphs to present the data. However, no one will be able to identify anyone who participated in the study.

Please keep in mind that it is sometimes impossible to make an absolute guarantee of confidentiality or anonymity, e.g. when focus groups are used as a data collection method. A focus group is a method that is used to gather information about a subject by asking the participants to answer a few pre-planned questions aimed at gathering specific data. Focus Groups usually include up to 15 individuals, can last up to 90 minutes and the discussion is led by a facilitator using a structured agenda. While every effort will be made by the researcher to ensure that you will not be connected to the information that you share during the focus group, I cannot guarantee that other participants in the focus group will treat information confidentially. I shall, however, encourage all participants to do so. In this research project, all focus group participants will also sign confidentiality agreements as a measure to eliminate any breach to confidentiality.

HOW WILL THE RESEARCHER(S) PROTECT THE SECURITY OF DATA?

The researcher will store hard copies of your answers for a period of five years in a locked cupboard/filing cabinet [in the Archives at UKZN, Westville Campus] for future research or academic purposes; electronic information will be stored on a password-protected computer. Future use of the stored data will be subject to further Research Ethics Review and approval if applicable. If necessary, information will also be destroyed [i.e. hard copies will be shredded, and/or electronic copies will be permanently deleted from the hard drive of the computer using a relevant software programme].

WILL I RECEIVE PAYMENT OR ANY INCENTIVES FOR PARTICIPATING IN THIS STUDY?

All research will be conducted either on site at your university or via the internet using your e-mail address coupled to a unique password. Therefore, I do not anticipate that you should incur any expenses to participate in this research. Furthermore, participants will not receive incentives or payment of any kind for taking part in this research project.

HAS THE STUDY RECEIVED ETHICS APPROVAL?

This study has received written approval from the Research Ethics Review Committee of the College of Economic and Management Sciences (CEMS) (CEMS-RERC), UNISA. A copy of the approval letter can be obtained from the researcher if you so wish.

HOW WILL I BE INFORMED OF THE FINDINGS/RESULTS OF THE RESEARCH?

If you would like to be informed of the final research findings, please contact Mr Michael Cloete, Tel 031 260 3303, Cell 083 4444 315, e-mail cloetem@ukzn.ac.za. The findings are accessible for six months. Should you require any further information or want to contact the researcher about any aspect of this study, please contact Mr Michael Cloete (principal researcher) using the above contact details.

Should you have concerns about the way in which the research has been conducted, you may contact Professor Sonja Grobler (Research Supervisor), Department of Industrial and Organizational Psychology at UNISA) at grobbs@unisa.ac.za or 012 429 8272.

Thank you for taking time to read this information sheet and for participating in this study.

Thank you.

Michael Cloete

Student number: 3076 4335

CONSENT TO PARTICIPATE IN THIS STUDY

I, _____ (participant name), confirm that the person asking my consent to take part in this research has told me about the nature, procedure, potential benefits and anticipated inconvenience of participation.

I have read (or had explained to me) and understood the study as explained in the information sheet.

I have had sufficient opportunity to ask questions and am prepared to participate in the study.

I understand that my participation is voluntary and that I am free to withdraw at any time without penalty (if applicable).

I am aware that the findings of this study will be processed into a research report, journal publications and/or conference proceedings, but that my participation will be kept confidential unless otherwise specified.

I agree to the recording of the focus group/semi structure interview (delete what is not applicable)

I have received a signed copy of the informed consent agreement.

Participant Name & Surname..... (please print)

Participant Signature..... Date.....

Researcher’s Name & Surname..... (please print)

Researcher’s signature..... Date.....

APPENDIX D

PARTICIPATION IN RESEARCH PROJECT: A LEADERSHIP CAPABILITY MODEL FOR THE SOUTH AFRICAN HIGHER EDUCATION ENVIRONMENT. INFORMED CONSENT AND PARTICIPANT INFORMATION SHEET

1 May 2019

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I agree to the recording of the focus group/semi structure interview (delete what is not applicable)

I have received a signed copy of the informed consent agreement.

Participant Name & Surname..... (please print)

Participant Signature.....Date.....

Researcher’s Name & Surname.....(please print)

Researcher’s signature.....Date.....

APPENDIX E

Themes and subthemes

Themes	Subthemes
1. Perceptions of leadership and leadership capabilities	1.1: Definition of leadership
	1.2: Definition of leadership capabilities
2. Perceptions of rapid change and disruption	2.1: Definition of rapid change
	2.2: Definition of disruption
	2.3: Perceptions of the impact of rapid change and disruption on South African HEI and their leaders
3. Perceptions of coping mechanisms to overcome rapid change and disruption	3.1. Universities and leaders that coped with the rapid change and disruption
	3.2. Universities and leaders that did not cope with the rapid change and disruption
4. Perceptions of leadership capabilities needed to successfully lead South African universities during rapid change and disruption	4.1. Leadership capabilities needed to successfully lead South African universities during rapid change and disruption
	4.2. Capabilities required at the different leadership levels to lead successfully during rapid change and disruption