

**Crisis management competencies: Perspectives
from executive management of selected universities
of technology**

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KEY WORDS

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Crisis management competencies

University of Technology

Executive management

Higher Education Institutions



DECLARATION OF AUTHENTICITY

I declare that the thesis entitled 'Crisis management competencies: Perspectives from executive management of selected universities of technology' is my own work, that it has not been submitted before for any degree or examination in any other university, and that all the sources I have used and quoted have been indicated and acknowledged by complete references.



Signature:

A handwritten signature in black ink, appearing to read "C. Pharaoh", written over the printed name.

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Date: 16 November 2023

ABSTRACT

Crisis management competencies: Perspectives from executive management of selected universities of technology

The start of the 2021 academic year saw a new wave of student protests erupt all over the South African Higher Education sector. Furthermore, the Covid-19 Pandemic reach its climax forcing the closure of all higher education institutions. The aim of this study was to identify the crisis management and management competencies needed to effectively manage a university of technology within South Africa from the executive management viewpoint. In this exploratory research study, the analysis of current literature on general management competencies, crisis management competencies plus qualitative interviews of executive management members, the researcher identified crisis management and management competencies necessary to effectively manage a university of technology within South Africa in non-crisis times as well as in times of crisis.

This study identified the crisis management and management competencies needed by executive management members of universities of technology to manage these organisations within South Africa during a time of crisis and provided *verbatim* explanations for the importance of these crisis management and management competencies.

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DEDICATION

This thesis is dedicated to my son, **Noah Ethan Pharaoh**. When I started this journey, you were a distant dream. I finished it, with you in my arms. I hope this will motivate you to always push yourself to be the best you can be. Hoping you will also chase your dreams and fulfil them.



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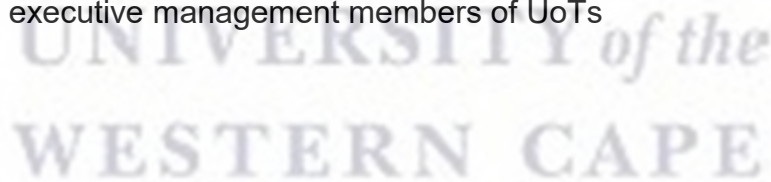
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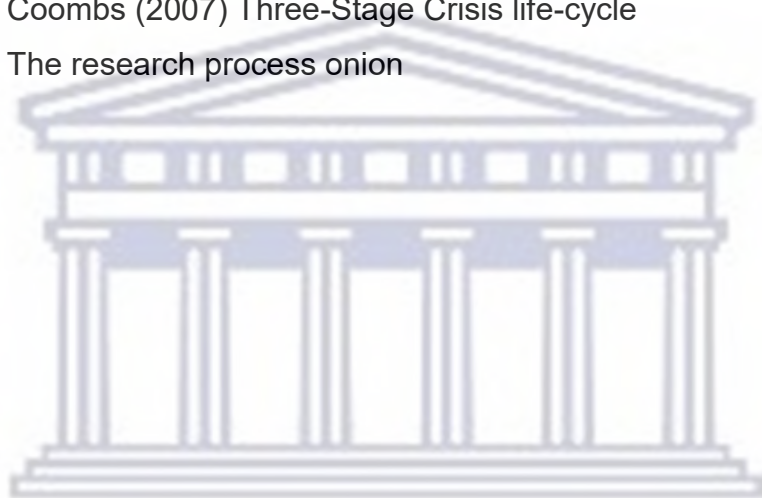
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List of Abbreviations

#FMF	FeesMustFall
TVET	Technical and Vocational Education and Training
UoT	University of Technology
BA	Batchelor of Arts
BSc	Bachelor of Science
BScEng	Bachelor of Science: Engineering
MBChB	Bachelor of Medicine and Bachelor of Surgery
US/USA	United States of America
UK	United Kingdom
MCI	Management Charter Imitative
QCA	Qualitative Content Analysis
HEIs	Higher education institutions
SASCO	The South African Students Congress
BTech	Bachelor of Technology
IQ	Intelligence quotient
JCA	Job Competence Assessment
NVQ	National Vocational Qualification
MBA	Master of Business Administration
SHL	Saville and Holdsworth Ltd
UCT	University of Cape Town
DoBE	Department of Basic Education
HSSREC	Humanities and Social Sciences Research Ethics Committee
UWC	University of the Western Cape
DHET	Department of Higher Education and Training
DVC	Deputy Vice Chancellor
VC	Vice Chancellor
EQ	Emotional Intelligence
BCI	Business Continuity Institute
BCM	Business continuity management
MOU	Memorandum of Understanding

CHAPTER ONE

1.1 Introduction

1.1.1 Background

In October 2015, South African universities were engulfed in a “civil war” when rioting students reacted to the increase in the 2016 student fees published by the Minister of Education, Blade Nzimande (BBC, 2015). This battle cry by the student corps ignited the movement for the decolonisation of the current tertiary system and led to the establishment of the #FeesmustFall student movement., also known as #FMF. University Management at large was brutally criticized for the handling of the student crisis (Muller, 2016), especially for the employment of private security personnel to deal with the rioting students. The Minister of Higher Education and Training, Naledi Pandor, conveyed to the South African Parliament in 2018, that the #FMF movement which lasted over three years, accumulated damages to the amount of R786 million (Kahn, 2018).

The start of the 2021 academic year saw a new wave of student protests erupt all over the South African Higher Education sector. The protests resulted in students from the TVET college sector joining traditional university students in requesting free education, and also asking that the historical debt of students be scrapped (Macupe, 2021). The new wave of protest led to the loss of life, when an innocent bystander was killed during the violent protest at the University of the Witwatersrand on 10 March 2021 (Naidu, 2021).

South Africa and the rest of the world approached the end of the rampant Covid-19 Pandemic at the time; the first case had been reported on 6 March 2020 (Turner and Nkgadima, 2021) and the country gradually moved into a 21-day lockdown with numerous levels implemented to turn the tide on the pandemic. All educational institutions, including higher education institutions, closed during Level 5 lockdown. Restrictions led to the re-organisation of the 2020 academic year, to allow all institutions and their students to conclude their academic requirements, with the prospect of extending the academic year to early 2021. The re-organisation also enabled universities to develop and implement an effective multi-modal remote learning system (analogue, physical and digital delivery of education resources) to

deliver a sensible level of academic support to all students at all institutions (Agency, 2020).

The #FMF student movement, the Covid-19 Pandemic and the new surge of student protests, were all key moments and these happenings challenged and radically upset the status quo of organisations; in this context universities needed to function under the influence of these new developments. Wicked issues/problems or moments as defined by Trowler (2012, p.1) are *“ill-understood; there are many causal levels; there is no clear stopping point and where a solution has been reached; solutions are not clearly right or wrong”*. These key moments were regarded as wicked moments.

1.1.2 Introduction to the problem and the research rationale

The South African Higher Education faced the #FeesMustFall student protest, which cost the sector R786 million in damages and other costs (Kahn, 2018). Thereafter, the sector faced fresh student protests (Mlaba, 2021) as well as the Covid-19 Pandemic which led to numerous changes within the higher education sector. These changes included changes in teaching methods, limited face-to-face lectures, as well as limited space in the student residences (Booyesen, 2021). Executive management teams of universities were confronted with fresh problems and had to be flexible to manage these challenges.

This research study aims to discover and describe what management and crisis management competencies are required by executive management members at Universities of Technologies during a time of crisis to manage a University of Technology (UoT) in South Africa. The aims of the study flow from the critique of executive management of universities received during the #FeesMustFall student protest crisis. Also of importance is the fact that before Covid-19 pandemic reached South Africa, the South African higher education sector was seeing a resurgence of student protests (Tshikalange, 2021). Furthermore, after a detailed search on Scopus, ResearchGate, ScienceDirect, and Google Scholar, a limited amount of literature was found on management or managerial competencies in higher education. The search also revealed that no literature was found on managerial competencies on the executive management level, or crisis management competencies on the executive management level, especially from a South African context. In terms of this gap in research, this study's secondary purpose would be to add to the management

competencies and crisis management competencies body of knowledge. In the following section a context to the current higher education structure is provided.

South Africa's 26 official public universities are divided into three categories (BusinessTech, 2015):

- Traditional Universities;
- Universities of Technology (UoT) (previously known as "Technikons"); and,
- Comprehensive Universities.

Due to the number of public universities within South Africa (26 official public universities) and the fact that the universities are spread across the whole of South Africa, the researcher will focus the study on the seven UoTs within South Africa. A further motivation for the study to focus on the universities of technologies, is the fact that UoTs have gone through a merger process during which numerous technikons merged with other technikons to form UoTs (Asmal, 2002). These mergers have instigated staff downsizing and institutional changes, which require staff to make necessary paradigm shifts (Hay and Fourie, 2002), clashes of institutional cultures as different educational institutions have different educational philosophies and priorities (Fielden and Markman, 1997). The study will include members of the executive management, including the Rectors/ Vice-Chancellors or Principals, Deputy Vice-Chancellors, and Registrars. The researcher intends to interview executive management members, based on their experience and perception, and establish which management competencies are required by executive management members at Universities of Technologies within South Africa during a time of crisis.

1.2. Preliminary literature review

The preliminary literature review presents an introductory review of the existing literature on key impressions such as competencies, management competencies within higher or tertiary education, as well as crisis management competencies. The section starts with a brief introduction of the three types of universities in South Africa.

1.2.1 Background to the South African Higher Education

Taking into account South Africa's political past and the impact apartheid played, as well as the current political environment and the role the new democratic South Africa had on the Higher Educational landscape, the South African Higher Education landscape has gone through numerous changes in the last 30 years. Before the establishment of South Africa as a democratic nation, there were 15 public technikons, 24 nursing colleges, 120 colleges of education, 11 agricultural colleges and 21 public universities (Waghid, 2015). In a radical move in 2002, the South African Government permitted the mergers of Higher Education institutions amounting to R3.1 billion (Moya, 2002). These mergers reduced the number of universities, technikons, nursing colleges, education colleges and other tertiary colleges, to 26 public universities.

The South African Higher Education policy framework has categorised three university types in South Africa:

- 1.2.1.1 Traditional Universities: provide rudimentary, formative degrees such as a BA & BSc, and professional undergraduate degrees such as Bachelor of Science: Engineering (BScEng) and Bachelor of Medicine and Bachelor of Surgery (MBChB). At the postgraduate level, they offer honours degrees, and a range of masters and doctoral degrees. Traditional Universities in South Africa are the University of the Western Cape, University of Cape Town, University of the Free State, University of KwaZulu-Natal, North-West University, University of Pretoria, Rhodes University, Stellenbosch University, and the University of the Witwatersrand.
- 1.2.1.2 Universities of Technology (UoT): provide primarily career-focused or vocational undergraduate diplomas, and BTech degrees that serve as a capping qualification for diploma graduates. It offers a limited number of masters and doctoral degrees. Universities of Technology in South Africa are the Cape Peninsula University of Technology, Central University of Technology, Vaal University of Technology, Durban University of Technology, Mangosuthu University of Technology, University of Mpumalanga, Sol Plaatje University and the Tswane University of Technology.

1.2.1.3 Comprehensive universities: provide basic, customary university programs as well as programs typical of a university of technology. Comprehensive Universities in South Africa are: University of Johannesburg, Nelson Mandela University, University of South Africa, University of Venda, Walter Sisulu University, and the University of Zululand (USAF, 2021).

1.2.2 Competency, competencies or competence

There are several comparisons and intersecting views on the meaning of competencies. Skorkova (2016) indicated that the term “competence” originated from the Latin word “competent”, which can be directly interpreted as the ‘one who has the right to judge,’ or ‘the one who has the right to speak.’ There has been a debate about the use and meaning of the words competence, competency and competencies, which have been disputed by several researchers over the years; this has led to two distinctive methodologies, namely the United States of America (US) and United Kingdom (UK) approaches.

1.2.2.1 The US approach

Research by David McClelland and the McBer consultancy group about managerial competencies in the United States of America in the 1970's, led to the introduction of the notion of individual competencies, which McClelland defined as any distinctive quality that separates performance in a particular work-related duty, culture, role or organisation. (McClelland, 1973) David McClelland is regularly credited with the introduction of the competency movement (Wooi, 2017). McClelland's “Testing for Competence rather than for Intelligence” in 1973, gave evidence that reinforced the fact that personal/individual competencies/characteristics, were acknowledged as significant predictors of effective worker performance.

McClelland debated that old-fashioned psychometrics such as IQ and aptitude checks were dated, and that personal competencies are more accurate in forecasting achievement in the workplace (McClelland, 1973). Yifei Gou (2018) further added that McClelland's research recognized the definition of competency as the probable, in-depth features that differentiate an individual from other workers as an effective and efficient worker. Gou (2018) also added that these competencies can be attitudes or values, motives, traits, self-images, cognitive or behavioural skills, knowledge in a field

or whatever can be dependably calculated or measured, and can considerably differentiate individual features of outstanding performance, from usual performance.

The above approach is widely supported by numerous scholars (Brannick, Levine, and Morgeson, 2007; Schippmann, Ash, Batjtsta, Carr, Eyde, Hesketh and Sanchez, 2000; Woodruffe, 1993, in Rubin and Dierdorff, 2009). Over the years' numerous scholars have defined competency or competencies and Table 1.1 below presents these scholars' submissions and timelines.

Table 1.1: Competency definitions by authors		
Authors	Year	Meaning and definitions
McClelland	1973	Competencies as the key components of performance related to "clusters of life outcomes". They can be interpreted as broadly as any kind of psychological or behavioural characteristics related to success in a person's life.
Boyatzis	1982, 2008	Competencies are underlying characteristics that are causally related to the job performance of individuals. They can be trained during adulthood.
Spencer and Spencer	1993	Competencies are "motives, traits, self-concepts, attitudes or values, content knowledge, or cognitive or behavioural skills – any individual characteristic that can be measured or counted reliably and that can be shown to differ significantly between superior and average performers, or between effective and ineffective performers"
Page and Wilson	1994	Competencies can be defined as the skills, abilities, and personal characteristics needed by a 'successful' or 'superior' manager. However, this definition emphasizes both the explicit (e.g., knowledge and skills) and implicit (e.g., personal attributes) detectable and testable competencies.
Parry	1996	Competencies are a set of interrelated knowledge, skills and attitudes that represents a key component of a person's job role and responsibility, that associates with performance in a job, that can be measured against well-established standards, and that can be reinforced through training and development.
Athey and Orth	1999	Competencies refer to "...a set of observable performance dimensions, including individual knowledge, skills, attitudes, and behaviours, as well as collective team, process, and organizational capabilities, that are linked to high performance and provide the organization with sustainable competitive advantage" (p. 216).

Dubois and Rothwell	2004	Competencies are qualities the individual can use to perform activities in an exemplary and successful manner.” (p.26)
Chung and Lo	2007	Competencies are skills, knowledge, and capabilities that individuals should have possessed when completing assigned tasks or achieving goals.
Lakshminarayanan, Pai and Ramaprasad	2016	Characteristics that permit one to accomplish his or her work/duties.
Source: Adapted from Wong (2020): A glimpse of the competency definitions by various authors		

Based on the above table, we can deduce that the scholars did not agree on a universal definition of competencies. But a consensus agrees that competencies consist of skills, knowledge, personal traits motives, and self-concept and values. For this study, competencies will be defined ‘as a set of observable and measurable ‘attributes’ or ‘success factors’ required for individuals for effective work performance’ (Wong, 2020).

1.2.2.2 The UK approach

Human resource practitioners and scholars in the United Kingdom refer to competence, especially in the management education setting, due to the impact of research of Handy (1987), Constable and McCormick (1987) and the Management Charter Initiative (MCI), who perceive competence as being about the outputs to detailed minimum standards (Jamil, 2015). This approach concentrated on the practical analysis process, which comprises of seeking opinions from commerce experts to assess the functions of a particular job and the minimum level its incumbent has to achieve (Jamil, 2015). Consequently, the UK approach does not seek to determine what makes individuals excellent in their job, which is the focus of the US approach. Instead, the term ‘competence’ within the UK approach reflects the achievement of occupational standards.

Numerous researchers believe that the two approaches can be combined and that they accommodate each other's shortcomings. Bergenhenegouwen (2009) states that the two competing competency methodologies can be combined to offer an optimal level of performance. Bergenhenegouwen’s theory is supported by numerous

academics, for example Stuart and Lindsay (1997), who advocate that the methodologies complement each other as both methodologies are incomplete, while Elkin (1990) is of the opinion that as a worker moves up the professional hierarchy, the United Kingdom methodology becomes less important, and that the United States methodology increases in significance. Elkin's (1990) statement emphasises the corresponding nature of the dual methodologies. The foremost dissimilarities between the dual methods are that in the UK competence is used to define a fitting standard for certification in specialised organisations, whereas the US approach acknowledges the attributes of successful performance and superiority (Cheng, *et al.*, 2003).

Based on current literature, research has acknowledged that several academics have found many comparisons and intersecting views on the meaning of competencies. The common ground is that competencies comprise numerous qualities which include motivation, abilities, experience, skills and knowledge, that permit an individual to accomplish a chore/job/duty or occupation with competence, and that competencies are measurements of behaviour that are associated with better work performance.

This study acknowledges and supports the definition compiled by Boyatzis (1982), who defines competency as an assortment of primary essential capabilities, which include characteristics, knowledge, skills, attitudes, experience, motivation, and particular abilities that contribute a given job or position which leads to superior job performance." Based on the above analysis, this study follows the US approach.

1.2.3 Management competencies

Yarmohammadian, *et al.*, (2013) indicated that management is the most significant requirement for organisations to obtain their organisational goals. They further add that the organisation's success to reach its goals is contingent upon how it is managed, thus the organisation's success is reliant on the manager's ability and effectiveness. Yarmohammadian, *et al.*, (2013) conclude, by stating that managers' effectiveness also depends on their competency, skill, knowledge, insight and abilities. According to (Kantanen, *et al.*, 2017) leadership and management competencies refer to the attributes, skills and knowledge that a manager needs to be an expert in her/his field.

Management competency is an extension of the description acknowledged above, but the emphasis is on the managerial area. According to (Kantanen, *et al.*, 2017) leadership and management competencies refer to the attributes, abilities and

understanding that a manager must be an expert in her/his field. Furthermore, the above scholars dictate that management competencies refer to the proficiencies required to work and function successfully in society, and to the management of the essential skills, knowledge, values, motivations, attitudes and their associated levels of ability. According to Thomas, Miles and Fisk (2009, p. 13) *“proper managerial competencies are a condition for good management: taking proper decisions and practising committed leadership to ensure that those decisions translate into concrete activities while maintaining strategic perspective and reconciling the imperative of efficiency with ethical conduct and social responsibility.”*

Numerous scholars have presented various groupings of management competencies (Pocztowski, 2013; Huping and Wenxuan, 2013; Filipowicz, 2004,). Table 1.2 presents the managerial competency as identified by Lakshminarayanan, Pai and Ramaprasad (2016), by grouping the competencies into six categories of relationship management, social awareness, self-management, self-awareness, analytical skills, and goal and action management.

Table 1.2: Structure of managerial competencies		
Analytical skills	Self-management	Relationship management
<ul style="list-style-type: none"> - Appropriate use of concepts - Systems thinking - Recognising patterns in assorted data - Building theory for process improvement and troubleshooting - Using advanced technologies - Analysing data quantitatively - Social objectivity - Communicating important aspects of tasks and responsibilities 	<ul style="list-style-type: none"> - Demonstrate self-control; - Behaviour is driven by achievement and motivation; - Display adaptability in a dynamic work environment - Showcase transparency in all work-related issues; - Taking initiative; - Display optimism in all situations. 	<ul style="list-style-type: none"> - Lead by example - Positively influence and motivate co-workers - Effectively manage conflicts - Be a catalyst to change - Develop others - Promote teamwork and collaboration
Self-awareness	Goal and action management	Social awareness
<ul style="list-style-type: none"> - Strive to understand oneself - Accurately assessing the self - Exhibit self-confidence in all situations 	<ul style="list-style-type: none"> - Plan each task meticulously - Continuously strive to achieve efficiency - Pay attention to the minutest details - Exhibit flexibility with regard to process and solution 	<ul style="list-style-type: none"> - Show empathy - Display continuous orientation towards service - Be aware of the organisation’s processes, policies and rules
Source: Lakshminarayanan, Pai and Ramaprasad (2016)		

Oleksyn (2006) indicates that the predictable competencies of managers at several echelons of management are different but, in some parts, intersect. Taking the above into consideration, the specific nature of the necessities regarding dissimilar levels of management should be measured.

The top management or executive management level is constituted by a moderately small group of individuals that control the company or organisations. This privilege leads to bearing the responsibility for all its operations as well. Any organisation, company, or even higher education institution operates by employing managers to manage the enterprise or business on behalf of the stakeholders or owners. Executive management takes calculated decisions in regard to the use of the organisation's resources, and determines the sustainable development of the business or company (Tyranska, 2016). Based on the above, managers operating at this level must have competencies beneficial to shaping the future of the company, as well as suitable personal and social competencies. Table 1.3 demonstrates these high-level competencies as perceived by Oleksyn (2006). Tyranska (2016) indicates that the competencies identified for top managers by Oleksyn (2006) have a major influence on creating the organisation's strategic objectives and developmental strategies, as well as the organisation's vision and mission.

Table 1.3. High-level management competencies		
Knowledge and skills in the area of strategic management	Personal competencies	Social competencies
<ul style="list-style-type: none"> – knowledge of the various types of strategy; – ability to give proper direction for the enterprise's development; – ability to make decisions of key importance relating to mergers and acquisitions, restructuring, outsourcing, purchase or sale of shares; – proceed by the principles of business ethics; – imagination and the ability to anticipate; – oriented on system management; – ability to generate profits. 	<ul style="list-style-type: none"> – responsibility; – reliability; – kindness; – magnanimity; – self-criticism and modesty; – communication skills; – ease of establishing contacts. 	<ul style="list-style-type: none"> – ability to recognise common interests on an organisational scale; – empathy; – ability to cooperate with people and have an effective influence on them; – serving its interests and dignified representing the organisation outside; – ability to choose people for key positions in the organisation.
Source: (Oleksyn 2006)		

Although shaping these fundamentals of management, the manager does not deal with it exclusively, but aids the proprietors of the business, strategic management specialists, the utmost significant line managers, heads of autonomous business units and worker representatives. Future-looking capabilities allow the manager to arrange that the organisation functions efficiently and effectively, to ensure survival and development, maximise profits, fulfil the organisation's community mission and safeguard the organisation against all threats, internal and external.

1.2.4 Management competencies within Higher Education

Middlehurst (1992) maintains that the purpose of management is to make a company efficient and effective within the recognised objective. This definition is supported by Bush and Glover (2003), who define management within Higher Education as the effective and efficient upkeep of the enactment of policies and the organisation's present undertakings.

Several researchers have issued work on leadership and management in Higher Education such as (Dirani, *et al.*, 2020; Ruben, *et al.*, 2017; Smith and Wolverton, 2010; Bryman, 2008; Spendlove, 2007) but limited compelling literature was found on management competencies and crisis management competencies within Higher Education. Smith and Wolverton (2010) state that university management often has to balance the numerous challenging interests from stakeholders like scholars, trustees, patrons, government and the public. Smith, Bargh, Boccock and Scott (1999), in an earlier study, proclaimed that vice-chancellors have progressively been playing a much more influential part in institutional change, and in defining and shaping the culture and mission of their institutions. The above statement was supported by Kulati (2003) who expresses that the emphasis on institutional effectiveness, efficiency, and responsiveness within the new higher education exemption, has propelled the role of leadership, and more specifically that of the vice-chancellor, on to the centre stage of institutional change agendas.

Botha and Camphor (2008) regard the advancement of management competencies and skills in higher education institutions as vital. According to these authors, the emphasis of management development and training should be on evolving the management skills and competence essential in support of the university's vision, mission and strategy. Managerial competence rests on both knowledge and skills,

grounded in understanding. Warn and Tranter (2001) stated that these management competencies should include the capacity to transfer information and abilities to new tasks and situations.

1.2.5 Crisis management

To define crisis management, one must understand the meaning and origin of the word “crisis”. Paraskevas (2006) indicates that the word “crisis” is derived from the ancient Greek term “Krisis” which means choice, decision or judgement. The Cambridge English Dictionary (Dictionary, 2021) however, terms crisis as “a time of great disagreement, confusion, or suffering” as well as “an extremely difficult or dangerous point in a situation.” Coombs (2015) defines crisis management as a set of elements planned to battle crises and to reduce the actual damage imposed by a crisis. Bundy, Pfarrer, Short and Coombs (2017) support this definition and articulate their definition by stating that crisis management involves the synchronization of intricate technical and relational structures and the design of organizational configurations to avoid the occurrence, lessen the effect, and acquire the necessary lessons from a crisis event. The above sentiment is supported by numerous academic scholars through the decades (Roux-Dufort (2007), Herbane (2013), Boin, *et al*, (2013), Coombs (2015)), who identify the unpredictability of crisis, and that the effective organisational planning is needed by organisations to be ready for crises, and the management of the crises and its effects, as well as collecting as much information to learn from the crisis to effectively plan for any similar future events.

Van Wart and Kapucu (2011, p.496) further add that “crisis management is a special type of change management typified by surprise, due to unexpectedness of the size of an incident, short time frame, criticality in terms of life-or-death consequences or organisational threat.” From the above statements, it is clear that the scholars agree that crisis management is the plan to reduce and recover from crises. The impact or consequences can be measured in terms of the death toll (not applicable to all crises) and critical damages to infrastructure and public institutions.

Van Wart and Kapucu (2011) surveyed 51 emergency management officials across the United States of America. The study produced a list of 37 leadership competencies and the top 10 crisis management competencies are listed in Table 1.4, as identified

by their respondents. The list was calculated using the response rate for each competency, from the emergency management officials.

Table 1.4. Top 10 Generic crisis management competencies	
1	Willingness to assume responsibility
2	Flexibility
3	Decisiveness
4	Communication
5	Analytical Skills
6	Self-confidence
7	Delegate
8	Manage teams and team building
9	Network and partner
10	Resilience
Source: Adapted from Van Wart and Kapucu (2011)	

Mikusova and Copikova (2016) maintain that “crisis management competencies often come from competencies of ‘general’ managers that are emphatically requested just in times of crises.” The above table demonstrates that during a time of crisis, crisis management professionals rely more on certain competencies than other competencies. These competencies are identified as crisis management competencies.

Tomastika, Strohmandlb and Cechc (2014) state that managerial competencies, which include skills and abilities, add to the performance level of a crisis manager, and that a crisis manager is a different form of manager due to the fact that he not only has to cope with possible technological breakdown but also has to execute the saving of property and people, protect his reputation and in the case of low productivity, can be replaced by another manager.

It is clear from the literature that during a time of crisis, management relies on certain specific competencies identified as crisis management competencies. Based on research of the various scholars listed above a crisis is identified as;

- a specific event, which is time-sensitive;

- has the potential to threaten and interrupt the working routines of society;
- can be human-made or of natural origin;
- can last anywhere from a few hours to several months, but requires specific competencies to manage.

1.3. Research problem, objectives and research questions

1.3.1 Research problem

Yarmohammadian, Fooladvand, Haghshenas, Atighechian and Alavi (2013) indicate that management is the most significant requirement for any organisation to reach their organisational goals. They also add that the organisation's success to reach its goals is contingent upon how it is managed, thus an organisation's success is reliant on the manager's ability and effectiveness. Yarmohammadian, *et al.*, (2013) established that the managers' effectiveness also depends on their competency, skills, knowledge, insight and abilities. According to (Kantanen, *et al.*, 2017) management and leadership competencies refer to the attributes, skills and knowledge that a manager needs, to be an expert in her/his field.

The research problem was based on the severe criticism executive management of universities endured during the #FMF movement. The executive management of numerous universities was publicly criticised for the handling of the #FMF crises and the manner in which the management teams managed the crises. At the time of research, the tertiary education sector faced a re-insurgency of student protests as well as a worldwide pandemic, which resulted in various stages of lockdown throughout South Africa from 27 March 2020. Bilic, *et al.*, (2017) believe that crisis management has become a significant part of modern commerce, as the knowledge and readiness of a company's management for a possible crisis, plays a decisive role in the avoidance and successful crisis management throughout and after a crisis ensues. Szczepanska-Woszczyzna (2013) proposes that the effectiveness of management in times of crisis is determined by the managerial competencies of managers. She further adds that given the growth of a crisis, crisis management has become a vital skill of managers and the crisis is a test of leadership skills; it also

highlights that competencies are useful in the daily work of managers but may be insufficient during the time of a crisis.

This research project intends to establish which crisis management competencies are needed by executive management members at universities of technologies during a time of a crisis, as well as management competencies needed to manage a UoT in South Africa. Currently, no literature comprehensively addresses the latter for executive management members at any university. The population focused on for this research study comprises of the following executive management members: The Vice-Chancellors/ Rectors/ Principals, the Deputy Vice-Chancellors, Registrars as well as the Executive Director: Finance. According to Tyranska (2016), management at the highest level comprises a comparatively small group that manages the organisation and is solely accountable for all its operations.

The study would then produce a list of management competencies needed to manage a university of technology within South Africa during a time of normality as well as a list of management competencies needed during a time of crisis. Further value will be added to the study as executive members will give reasons for their decisions, and also elaborate on how the executive management would adapt managerially from a time of normality to a time of crisis.

1.3.2 Research objectives

The research objectives were developed from the review of the current literature which identified a gap in the literature within management and crisis management competencies within higher education institutions. The research objectives for this study are as follows:

- 1.3.2.1 To identify the management competencies needed to manage a university of technology within South Africa;
- 1.3.2.2 To determine why the management competencies identified above are important to manage a university of technology within South Africa;
- 1.3.2.3 To identify the management competencies needed by executive university management to manage a UoT within South Africa during a time of crisis;

- 1.3.2.4 To ascertain why the above-identified management competencies are important during a time of crisis;
- 1.3.2.5 To ascertain how executive management members will have to adapt managerially from a time of non-crisis to a time of crisis.

1.3.3 Research questions:

The preliminary literature study and research problem indicate that there is a gap in the current literature on management and crisis management competencies within higher education institutions. To address the gap, the following research questions were developed:

- 1.3.3.1 What are the management competencies needed by executive management members to manage a university effectively within South Africa?
- 1.3.3.2 Why are the management competencies identified above important?
- 1.3.3.3 What management competencies are needed by executive management of UoTs to effectively manage a crisis?
- 1.3.3.4 Why are these competencies important during times of crises?
- 1.3.3.5 How do these crisis management competencies differ from the management competencies in non-crisis times?

1.4. Research design/methodology

1.4.1 Research methodology

This research study will be founded on an exploratory research design that will focus on qualitative research methodology. According to Saunders and Lewis (2018) exploratory studies are well-suited to qualitative methodologies such as semi- and unstructured interviews or unstructured observation. Brown (2006), conveyed that exploratory research focuses on research areas where little or no previous research has been published. The motivation by Brown (2006), supported by Burns and Bush (2010), states that exploratory research design is appropriate when the researchers have partial information about the phenomenon or research area. The above

statements are supported by Saunders and Lewis (2018), who stated that exploratory research is about gathering new data about an issue that is not understood clearly by the scholar, and lends itself well to new phenomenon where you may have adequate information but want to add more understanding that will enlighten your research.

1.4.2 Sample

Sampling allows researchers to gather information about the sample of the population without investigating every individual. This is a practical method that reduces the cost, time and workload of the study, and increases the possibility of collecting data-rich information. According to Bryman and Bell (2016), a population is defined as the universe it bonds, such as regions, cities, people, nations, firms etc. from which the sample is to be sourced.

The study will employ a purposive sampling method, and according to Saunders and Lewis, (2018), this sampling method is the most frequently used technique within non-probability sampling. The above authors also state that this method is commonly used within a small sample when collecting qualitative data. Matthews and Ross (2010) motivate that purposive sampling is concerned with the selection of fewer cases that would best aid the researcher in exploring the study questions in-depth and to work with the data retrieved, to identify and explore abstract ideas. Etikan and Bala (2017) state that purposive sampling method is based on the decision of the scholar in terms of who would offer the best data that would fulfil the objectives of the research study. Etikan, Musa and Alkassim (2016) indicate that participants in the purposive sampling method are chosen due to their abilities. Etikan and Bala (2017) further add that the researcher or scholar must focus on those with the same view, and those who are willing to share their information. Based on the above statements, it is clear that the purposive sampling method is used when the academic selects what needs to be identified, and sets out to find individuals who are prepared to offer the information by virtue of experience and knowledge. Etikan, *et al.*, (2016) further add that this method is typically used in qualitative research studies, to ascertain and select information-rich cases for the most correct use of accessible resources, which comprises identification and choice of individuals, or groups of individuals that are capable and well-informed with the research phenomenon.

This method would be ideal for this study, as it focusses on the six (6) Universities of technology within South Africa. Each UoT has a limited number of executive management members which means that the study has a limited number of possible participants, to collect the information needed to fulfil the objectives identified within this research study. Each UoT would be contacted in the hope of interviewing as many executive members as possible.

1.4.3 Data collection method

The data collection phase consists of interviewing executive management members for their perception based on their related experience on what management competencies are needed to effectively manage a university in South Africa. Saunders and Lewis (2018) further state that the available methods such as semi- and unstructured interviews are well-suited to exploratory studies. Kvale (1983) describes the qualitative research interview as an interview in which the goal is to collect portrayals of the life-world of the interviewee, regarding his understanding of the phenomena in question. Ryan, Coughlan and Cronin (2009) indicate that semi-structured interviews contain a set of open-ended queries that potentially elicit spontaneous and in-depth responses. Baumbusch (2010) further adds that semi-structured interviews are key data-gathering tools as they enable rich depiction and comprehensive interpretations of the participants' perspectives and experiences on the research phenomenon.

Adams (2015) indicates that semi-structured interviews are perfect if you need to ask penetrating, open-ended questions and want to know the independent view of each person in a specific group. Kallio, Pietila, Johnson and Kangasiemi (2016) state that the semi-structured interview has been proven to be flexible and versatile. It can be combined with both individual and group interview methods, and the rigidity of the format allows for it to be mixed, subject to the research questions and study purpose. Kallio, *et al.*, (2016) also point out that one of the main advantages of the semi-structured interview method is based on participants' responses. It enables the interviewer to improvise probing questions and permits space for the participants to voice their individual expressions. Semi-structured interviews comprise pre-set questions, where the academic is free to pursue clarity. As the researcher is making use of open-ended questions, the academic has the opportunity to explore issues that

arise spontaneously during the interview, by asking probing questions. As stated earlier, semi-structured interviews are flexible, thus giving the researcher the opportunity to explore new paths that emerge during the interview which may not have been considered before.

Opdenakker (2006) identifies four crucial advantages of using interviews as a data collecting method. He stated that the interviewer would be able to take advantage of 'social cues' from the interviewee, which he described as changes in voice, intonation and body language. This could lead to probing questions about any changes in the above social cues, when asked about a certain topic. He further describes the fact that there was no noteworthy time delay between question and answer, emphasising the fact that the answers are more impulsive and without protracted reflection. A third advantage was the fact that the interview can be documented for record purposes with the approval of the interviewee. A recording can be replayed to ensure the effective capturing of data. A final advantage is that the interviewer can create a good ambience for the interviewee. This is important to make the interviewee feel at ease and set an environment where the interviewee does not feel uncomfortable or uneasy.

The researcher will schedule interviews with respondents who are available for a meeting. Taking into consideration that, at the time, South Africa and the rest of the world were battling the Covid-19 Pandemic, the South African Government implemented numerous restrictions and requirements to ensure that the virus did not spread. The researcher foresaw that not all executive members would be available to meet in person due to their busy schedules, travelling challenges as well as the lockdown requirements instituted by the South African Government.

The Universities of Technology in South Africa are located in Cape Town (Cape Peninsula University of Technology), Durban (Durban University of Technology), Vanderbijlpark (Vaal University of Technology), Pretoria (Tshwane University of Technology), Bloemfontein (Central University of Technology) and Umlazi (Mangosuthu University of Technology).

The researcher identified a communication method aided by technology to supply a solution to the challenges mentioned, namely video conferencing as a substitute for face-to-face interviews, as a data collection tool. Video conferencing has numerous advantages, as set out by Sedgwick and Spiers (2009), including the fact that it is cost-

effective, convenient (taking into consideration the targeted participants) and ideal when the targeted participants are geographically dispersed over a large area in terms of this research study. The researcher will make use of Skype/Zoom or Microsoft Teams - whichever is more suitable for the respondents. The interviews will be recorded with the approval of the respondent, and scheduled for an hour. Interviews will be scheduled at the convenience of the respondents and their offices. If needed, an additional appointment will be requested for follow up questions.

1.4.4 Data analysis method

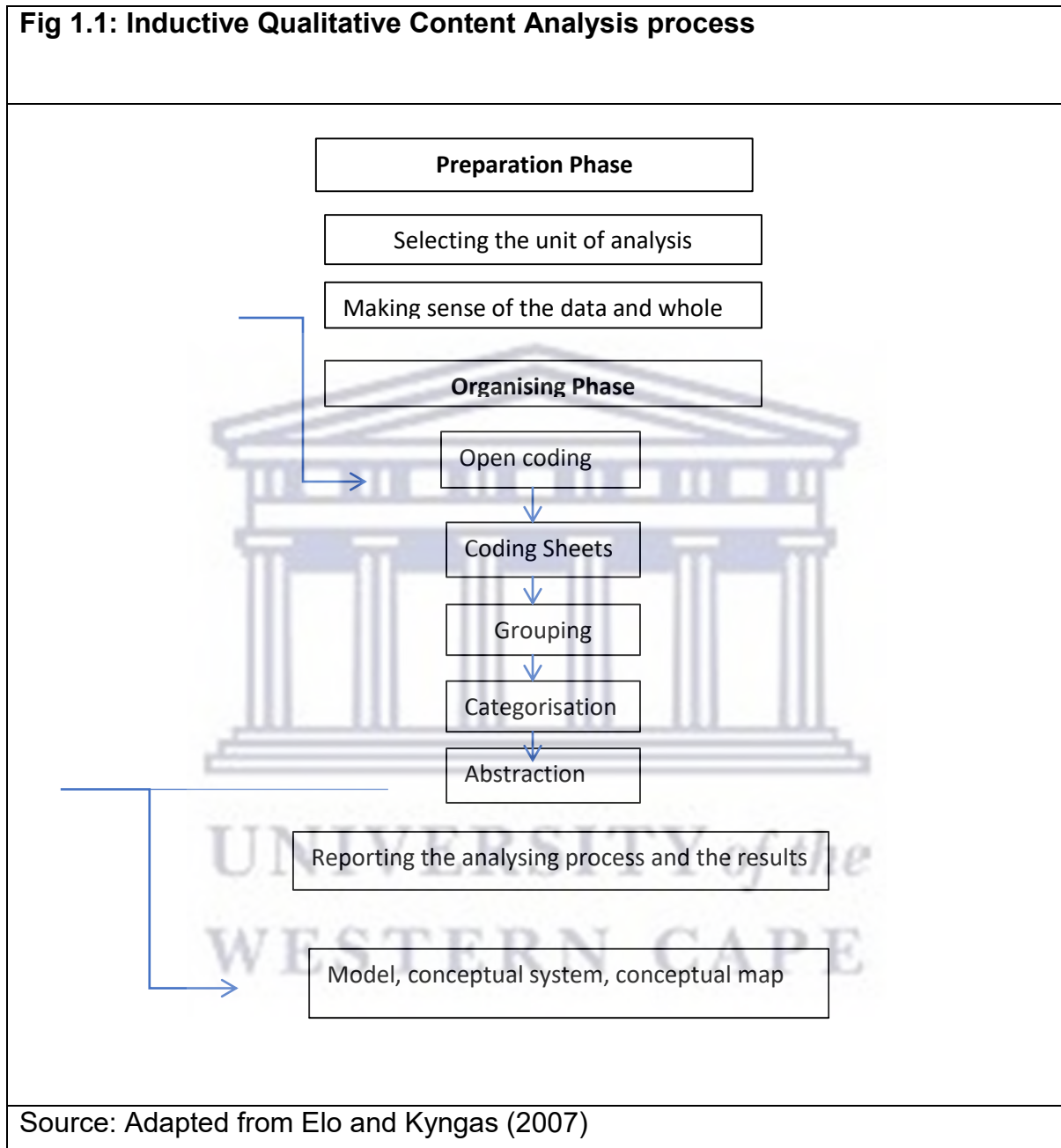
The study will make use of analytical categories to clarify and define social manifestations (Pope, *et al.*, (2000)). The researcher will make use of Qualitative Content Analysis (QCA) for this study. Cavanagh (1997) cited in Hsieh and Shannon (2005), stated that researchers consider QCA as an agile way for analysing text data. Cavanagh (1997) and Hsieh and Shannon (2005) believe that a requirement for the effective content analysis is that data can be condensed to concepts that describe the research phenomenon by generating concepts, a model, categories, conceptual system, or conceptual map. Lauri and Kynga (2005) indicated that should there not be enough past knowledge about the phenomenon, the inductive approach is recommended (Refer to the chapter on Methodology).

Kondracki and Wellman (2002) indicate that the evidence might be in photocopy, oral or electronic form and might have been attained from old responses, which could have been focus groups, open-ended study questions, even articles, interviews, books or manuals. Weber (1990) adds that QCA did not purely tally the words to scrutinise the language intensely for the aim of categorising large numbers of text into a well-organised quantity of categories, that represented equivalent meanings. Schreier (2012) indicates that QCA, as a research method, symbolises a methodical and impartial means of unfolding and measuring the phenomena, for the analysis and comprehension of the data.

Elo and Kyngas (2007) provides a diagram (Figure 1.1) of the inductive Qualitative Content Analysis process, which the scholar will follow, to provide a complete data analysis of the data collected. The academic will follow the inductive qualitative content analysis method as prescribed by Elo and Kyngas, from preparation and organisation

stage to the abstraction stage, to provide the key findings of the data collected for this research project.

Fig 1.1: Inductive Qualitative Content Analysis process



Source: Adapted from Elo and Kyngas (2007)

All recordings of the interviews will be transcribed into text. As per the figure above, the inductive qualitative content analysis method starts with the preparation stage, in which a unit of analysis is selected, also to ensure that the sampling is representative of the universe from which it is drawn. After this process, the unit of analysis is chosen. The next step in the process is that the academic immerses himself/herself within the data to make sense thereof and to learn what is going on.

The following step is to organise the qualitative data. This route comprises open coding, creating categories and abstraction. During the open coding phase, headings will be written in the text while reading it. Coding sheets will be used to collect the headings and categories will be easily produced.

During the abstraction phases a broad description of the research topic, by means of categories, will be formulated. Categories will be assigned names, using content-characteristic words and subcategories will be clustered together, and categories will be grouped as main categories. The abstraction phase will last as far as it is reasonably conceivable.

1.5. Ethical consideration

The research will be directed according to the ethical standards recommended by the University of the Western Cape, and the data produced through the interviews, will remain confidential. The researcher will comply to 'all the UoTs' respective ethical/governance committees for approval, to collect data via interviews with executive management members. No degree of deception will be used in this research study, as participants to the study will be informed of their rights through a disclaimer on the information sheet, which will be provided to all participants.

Throughout the data collection stage, the participants will be advised that their involvement in the research study is voluntary and can withdraw at any time. and that their identities as well as the institution they represent, will remain confidential. The confidentiality of each participant will be maintained through the use of pseudonyms and the confidentiality of the institutions will remain intact. Participants will be informed of their right to stop the interview, or can request that the researcher move to another question if they feel uncomfortable. Following this explanation, they will be asked to confirm that they are still willing to participate after which they will be requested to sign a consent form. Both the researcher and the participants will sign copies of these agreements. The interviews will be recorded with the strict approval of the interviewee. The recordings will be saved for analysis on a password-protected hard drive, until the interviews are analysed and findings noted. The recordings will be destroyed after a period of five (5) years. The researchers will ensure that the data collected will not be made available to any third parties in terms of the Protection of Personal Information

POPI Act of 2013, which clearly indicate that the data collected during the research study may only be retained for the reason it was collected (Bryman and Bell, 2016).

1.6. Limitations/assumptions

One of the requirements of any study is to recognise its limitations.

Although this study contributes to the body of knowledge concerning management competencies within higher education as well as crisis management competencies:

- The study is confined to universities of technology within South Africa only;
- The study is limited to executive management members of universities of technology only, thus making only use of data collected from those members;
- The researcher foresees that not all executive members of the identified Universities of Technology will be interviewed, due to their busy schedules during the data collection phase.

The researcher anticipated that some of the executive members might respond negatively to the study and could feel that the study is an attack on their management style; this could result in biased data. Thus, the researcher anticipates that only a small number of participants may participate which could lead to a low response rate.

1.7. Conclusions/summary

This study aims to identify the management competencies needed to effectively manage a university of technology within South Africa in a time of crisis, as well as during non-crisis times, from the perspective of the members of the executive management of universities of technology, as well as the management competencies needed during a time of crisis, from the perception of the executive management members. With the use of face-to-face interviews or Skype/Zoom/Microsoft teams video conferencing, the researcher was able to establish what the management competencies were, as perceived by the members of the executive management. The researcher would recommend that comparative studies be investigated within the other university categories within South Africa, and that these findings be compared

to this study's findings. A comparative study could then be implemented in terms of the differences/similarities with the competencies of the three categories.

1.8. Structure of the thesis

The thesis is organised into seven chapters as follows:

Chapter One - Introduction

This chapter will introduce the thesis topic, as well as provide the background to the study, including the topic to be investigated and the research questions identified by the researcher. The chapter will also give a brief account of the existing literature as well as an introduction to the research methodology of the study.

Chapter Two – Literature Review

This chapter provides an in-depth review of the literature on Competencies, Management Competencies, Leadership Competencies, Crisis Management as well as Management Competencies within Tertiary Institutions.

Chapter Three – Discourse on crisis, organisational crisis and crisis management.

Chapter Three contains a theoretical discourse on crisis, organisational crisis as well as crisis management providing clear clarification on the various definitions, antecedents and characteristics of the above terms.

Chapter Four – Research Methodology

This chapter provides an overview of the research methodology used in this study. In this chapter the population, sample, sampling technique, research procedures, and instruments used to analyse the data and ethical standards that were followed are discussed in detail. The data collection, which consists of interviews will be documented in detail. The data collection phase will be defined and an in-detail presentation of the data collected will be presented. The data analysis phase will be defined and presented in this chapter.

Chapter Five - Presentation of the Responses

This chapter presents the verbatim responses from the executive management members interviewed.

Chapter Six - Summary of the findings and discussions

This chapter presents a summary of the findings in the study based on the results of the analysis, and emphasises the major findings and lessons learned from this research study. This chapter also presents the conclusions of the work and makes general and specific recommendations for future research on the topic.

Chapter seven – Recommendation and conclusion

The chapter includes the recommendations for future studies, as well as a conclusion

Bibliography

A presentation of material sourced in order to do research for this study is included.



CHAPTER TWO: THE LITERATURE REVIEW

2.1 Introduction

This chapter will present an inclusive examination of the current literature on the central concepts of competencies, management competencies, and management competencies in higher education. In addition, the South African Higher Education setting, as well as the formation of the current higher education institutions will also be discussed, as it gives clarity to what is being researched; an examination of the existing literature is one of the most substantial parts of any research project.

According to Saunders and Lewis (2018) a literature review emphasises four important aspects, namely:

- Summarising of important literature accessible in the chosen field of research;
- Consulting pertinent items such as books, academic journals, articles and other academic sources;
- Offering dialogue and critical assessment of the academic sources mentioned above, and the level of detail reflecting the importance of each item to one's research questions;
- Cultivating clear arguments to contextualise and validate research.

Similarly, Matthews and Ross (2010) established a list of reasons for a researcher to conduct a literature review. The review of the literature enables the researcher to:

- Critically analyse the current situation in an identified research area;
- Identify what is known within the research area;
- Learn from the different theoretical and methodological approaches that have been used;
- Establish which analytical frameworks and strategies have been used by previous researchers;

- Compare and contrast different sources and the opinions by experts;
- Put one's research into context;
- Learn the 'language' of the topic under investigation;
- Find important issues or variables in the topic under investigation;
- Rethink and define the research questions;
- Inform the way that one deals with the research findings;
- Help identify links between practice and theory; and,
- Provide a synthesis of relevant information within the field.

Therefore, based on the arguments presented by Saunders and Lewis (2018), Matthews and Ross (2010) and others, the main purpose of this chapter is to examine the theoretical underpinnings of this research project.

2.2 Background to the South African Higher Education Sector

This section presents the history, development and current status of the South African Higher Education landscape since the establishment of South Africa as a democratic nation.

On 27 April 1994, South Africa had its first democratic election, which led to the inauguration of Mr Nelson Mandela as the first democratic president (SAHistory, 2020). As a vital part to ending apartheid and unifying the peoples of South Africa, the political parties all contributed to the creation of a new Democratic Constitution.

On 4 December 1996, The Constitution of the Republic of South Africa was approved by the Constitutional Court (Government, 2021). The Constitution of the Republic of South Africa of 1996 declared that higher education is no longer a provincial competency, but a national government competency. The latter implies that higher education establishment resorts under the authority of the national Ministry of Education (Government, 2021).

The Higher Education Act of 1997 affords the legislative foundation and framework for South African higher education (Government, 2016), as well as to:

- Regulate higher education;
- Provide for the establishment, composition and functions of a Council on Higher Education;
- Provide for the establishment, governance and funding of public higher education institutions;
- Provide for the appointment and functions of an independent assessor;
- Provide for the registration of private higher education institutions;
- Provide for quality assurance and quality promotion in higher education;
- Provide for transitional arrangements and the repeal of certain laws and,
- Provide for matters connected therewith.

In his report to the South African Government, the Minister of Education (at the time), Minister Kader Asmal, stated that the need for the restructuring of the higher education system was found in the geopolitical imagination of Hendrik Verwoerd, whose vision of separate but equal development took effect through the Universities Extension Act in 1959 (Asmal, 2002). The Minister further added that the Act, firstly, ensured that traditionally white institutions serve the ideological, political, educational, cultural, economic and social desires of white South Africans and, secondly, established institutions that would produce a subservient class of educated black people who would service white South Africa. According to Badat (2010), at the time the higher education sector (pre-mergers) consisted of 120 colleges of education, 15 public technikons, 21 public universities, 24 nursing colleges, 11 agricultural colleges and numerous generally small, private providers of higher education

According to Mzangwa (2019), before South Africa became a democracy in 1994, the social inclusiveness of numerous groups in higher education (predominantly persons from disadvantaged backgrounds) was not supported by all the education institutions (HEIs) in South Africa. Mzangwa (2019) further states that admission and the widening participation, were viewed as challenging and complicated aspects to sustain, since they involved students from poor and disadvantaged social backgrounds.

This perception of restricting access was nullified by the drivers for mergers, identified by Lethoko (2016) in the education sector, which includes the following:

- Increase efficiency and effectiveness, especially in coping with rapid and substantial growth in students' numbers, which in turn caused heavier demands on institutions;
- Dealing with problems of non-viable institutions and institutional fragmentation;
- Widening student access and implementation of more broad scale equity strategies;
- Differentiation of course offerings to cater for greater student diversity. and to improve the quality of graduates and,
- Increased government control of the overall direction of higher education systems, especially to ensure that higher education institutions serve more directly in relation to national and regional economic and social objectives.

According to Goldman (2012), SASCO (2009), Sehoole (2005), and (Jansen, 2003), the motives given by the government for the mergers in higher education, suggest that the mergers were politically and ideologically-driven and the explanations could be addressed by the following:

- Overcome the racial fragmentation of the educational system;
- Achieve economies of scale through reducing unit costs and economies of scope;
- Streamline governance and management structures, and enhance administrative and management capacity;
- Achieve more effective utilisation of existing academic staff capabilities;
- Improve administrative systems;
- Reduce duplication between institutions located close to one another and
- Improve the quality of programmes offered;

- A quest by the post-apartheid government to rid the education system of the apartheid past and,
- Incorporate the South African higher education system within the fast-changing, technology-driven and information-based economies described under the rubric of globalisation.

The restructuring of the Higher Education sector was approved by the South African government on 21 June 2002 via Government Gazette Vol 444, No 23549 Hall (2015). Its implementation led to the creation of 11 new higher education institutions emerging from 26 merger allies; this affected 62 % of current student registrations of the South African higher education system.

Tables 2.1 and 2.2 below indicate the higher education institutions, both universities, technikons, and the mergers with different universities, technikons, and even different faculties of other universities or technikons, as well as the new higher education institute, birthed from those mergers.


Table 2.1: Mergers of technikons and other institutions	
New and merged universities of technology	Merged from:
Tshwane University of Technology	Pretoria Technikon Technikon Northern Gauteng North West Technikon
Cape Peninsula University of Technology	Cape Technikon Peninsula Technikon
Durban Institute of Technology	ML Sultan Technikon Technikon Natal University of Zululand, Umlazi campus
Vaal University of Technology	Vista University, Sebokeng campus Vaal Triangle Technikon
Walter Sisulu University of Technology	Eastern Cape Technikon University of Transkei Border Technikon
Mangosuthu University of Technology	Mangosuthu Technikon
Source: Adapted from Lethoko (2016)	

Table 2.2: The new dispensation for comprehensive and traditional universities	
New and merged universities	Merged from:
Rhodes University	Rhodes University, Grahamstown Campus, Eastern Cape
North-West University	Potchefstroom University of Christian Education University of the North West Sebokeng campus of Vista University University of Bophuthatswana.
University of Kwa-Zulu Natal	University of Natal University of Durban- Westville
University of Pretoria	Vista University Mamelodi campus University of Pretoria
University of Free State	University of the Orange Free State University of the North, Qwa-Qwa campus Vista University, Vista campus
University of Johannesburg	Rand Afrikaans University Vista University Soweto campus Vista University, East Rand campus
University of the Western Cape	University of Western Cape Dental Faculty of the University of Stellenbosch
University of Fort Hare	University of Fort Hare Rhodes University, East London campus
Nelson Mandela University	University of Port Elizabeth Vista University, Port Elizabeth campus Port Elizabeth Technikon
University of Limpopo	University of the North Medical Faculty Medical University of South Africa
University of South Africa	University of South Africa Vista University, Distance Education campus Technikon South Africa
University of Witwatersrand	University of Witwatersrand Johannesburg College of Education
University of Venda	University of Venda Giyani College of Education
Source: Adapted from Lethoko (2016)	

Following the restructuring of the higher education sector, and the promulgation of the Higher Education Act (Act 101 of 1997) Badat (2010) states that the South African Higher Education policy framework accommodated three institutional types for universities within South Africa:

2.2.1 Traditional universities: these universities offer rudimentary formative degrees such as BA & BSc, and professional undergraduate degrees such as BSc (Eng) and MBChB; at the postgraduate level, this group of universities offers honours degrees, and a variety of postgraduate (masters and doctoral) degrees.

Consequently, higher education institutions defined as traditional universities in South Africa are:

- 
- North-West University,
 - Rhodes University;
 - Stellenbosch University;
 - University of Cape Town;
 - University of KwaZulu-Natal;
 - University of the Free State;
 - University of Mpumalanga;
 - University of Pretoria;
 - University of the Western Cape;
 - University of the Witwatersrand; and,
 - Walter Sisulu University

2.2.2 Universities of Technology (UoT): these universities offer mainly vocational or career focused undergraduate diplomas and Bachelor of Technology (BTech) degrees, which serve as a capping qualification for diploma graduates. UoTs offer a limited number of masters and doctoral degrees.

In the context of the new dispensation, Universities of Technology are:

- Cape Peninsula University of Technology;
- Central University of Technology;
- Durban University of Technology;
- Mangosuthu University of Technology;
- Tswane University of Technology; and,
- Vaal University of Technology.

2.2.3 Comprehensive universities: these institutions provide programmes representative of a university, as well as programs typical of the university of technology. Comprehensive universities in South Africa are:

- Nelson Mandela University
- Sol Plaatjie University (established in 2014);
- University of Johannesburg;
- University of South Africa;
- University of Mpumalanga (established in 2013);
- University of Venda; and,
- University of Zululand (USAF, 2021).

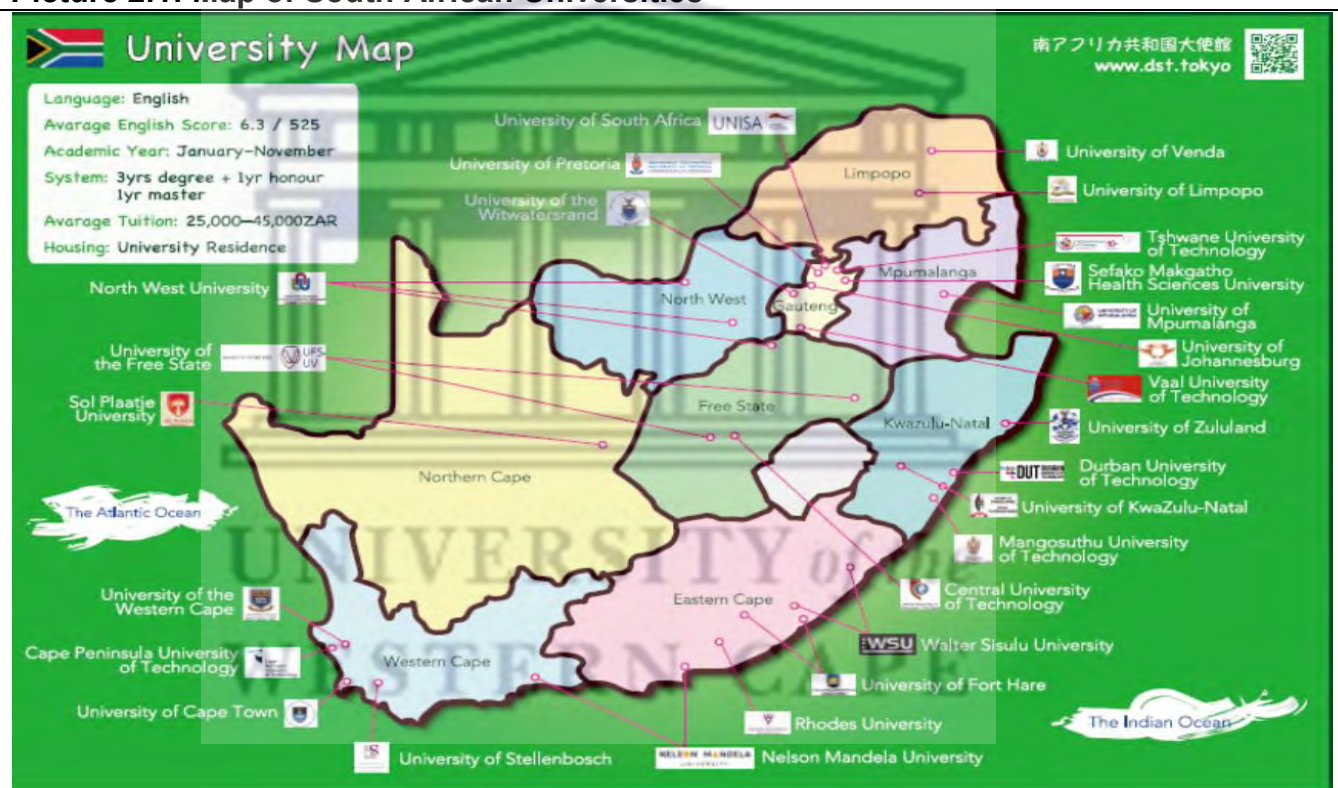
After the merger in a provincial context and from a geographical perspective, Map 2.1 presents the geographical locations of all the higher education institutions. From a provincial perspective, we can deduce that:

- The Western Cape Province has five higher education institutions: University of the Western Cape, University of Cape Town, Cape Peninsula University of Technology, Nelson Mandela University and University of Stellenbosch;
- The Northern Cape: Sol Plaatjie University, was not part of the original dispensation of the 1997 Act and was only established in 2014 - it is the only University in the Northern Cape (Sol Plaatje, 2022);
- The Eastern Cape has four higher education institutions: Nelson Mandela University, Rhodes University, University of Fort Hare, Walter Sisulu University;
- The Kwazulu-Natal province has four higher education institutions: Mangosuthu University of Technology, University of Kwazulu-Natal, the Durban University of Technology and University of Zululand;
- The Free State province has two higher education institutions: Central University of Technology and University of the Free State;
- The North West province has one higher education institution on three locations: North-West University;
- The Gauteng province has seven higher education institutions: University of the Witwatersrand, University of Pretoria, University of South Africa, Vaal

University of Technology, University of Johannesburg, Sefako Makgatho Health Science University, Tshwane University of Technology;

- The Mpumalanga province has one higher education institution: University of Mpumalanga. University of Mpumalanga is a second university that was established after the mergers of the higher education section. The university was launched on 21 October 2013 (University of Mpumalanga, 2022).
- The Limpopo province has two higher education institutions: The University of Limpopo and the University of Venda.

Picture 2.1: Map of South African Universities



Source: <http://www.dst.tokyo/study-sa.html>

2.3 Discourse on competency, competencies, competence and management competencies

This section contains a discussion on the terms competency, competencies (or competence), as well as the various definitions, antecedents and characteristics, that have been identified by scholars. This section will also cover an analysis of management competencies and their importance in the context of leadership.

2.3.1 Competency, competencies and competence.

Literature acknowledges that various scholars have found several similarities and overlapping opinions in the definition of competencies.

The Concise Oxford Dictionary of Current English states that the two words, “competency”, and “competence” can be used interchangeably and are considered nouns. It further describes competency and competence as ‘an aptitude, to do or for a task, adequacy of means of living, easy conditions, legal capacity, and the right to take cognisance of’. According to Chouhasn and Srivastava (2014), the term “competence” is derived from the Latin word “*competentia*”, which can be directly translated to “*the one who has the right to judge, or the one who has the right to speak*”.

According to Boyatzis (2011), competency research gained momentum in the 1970s, due to the quest for understanding the talent of effective people. Competency research, as stated by Boyatzis (2011), is built on the foundations of the research on skills, abilities, and cognitive intelligence. The latter is also postulated by McClelland, Baldwin, Bronfenbrenner, and Strodbeck, (1958) and Campbell, Dunnette, Lawler, and Weick, (1970).

Over the years’ numerous scholars have defined competency or competencies, and Table 2.3 below presents the submissions and timelines. Furthermore, the table provides a chronological account of their “definitions” of competencies.

Based on Table 2.3, one can deduce that the various scholars did not agree on a universal definition of competencies; however, an analysis of their common terminology reflects numerous words and phrases that are echoed by others, through the years of defining competencies.

These words and phrases are “*skill*”, “*abilities*”, “*characteristics*”, “*knowledge*”, “*capabilities*”, “*qualities*”, “*success factors*”, “*motives*”, and “*traits*” that are “*underlying*”, “*detectable and testable*”, “*observable*” that can be “*counted*”, “*tested*”, or “*measured*” in relation to “*exemplary and successful completion of tasks, work or jobs*”, “*high performance*”, “*achieving important results in specific job or work*”, “*effective and superior work/job performance*” or “*differ significantly between superior and average performance, or between effective and ineffective performers*”.

Table 2.3: Competency definitions by authors		
Authors	Year	Meaning and definitions
McClelland	1973,1985	Competencies as the key components of performance related to “clusters of life outcomes”. They can be interpreted as broadly as any kind of psychological or behavioural characteristics related to success in a person’s life
Klemp	1980	An underlying characteristic of a person which results in effective and/or superior performance on the job
Boyatzis	1982	Competencies are underlying characteristics that are causally related to the job performance of individuals. They can be trained during adulthood.
Hornby and Thomas	1989	Competency is the ability to perform effectively the functions associated with management in a work situation
Boyatzis	2008	A competency is defined as a capability or ability. It is a set of related but different sets of behaviour organized around an underlying construct, which we call the “intent”.
Spencer and Spencer	1993	Competencies are “motives, traits, self-concepts, attitudes or values, content knowledge, or cognitive or behavioural skills – any individual characteristic that can be measured or counted reliably and that can be shown to differ significantly between superior and average performers, or between effective and ineffective performers”.
Page and Wilson	1994	Competencies can be defined as the skills, abilities, and personal characteristics needed by a ‘successful’ or ‘superior’ manager. However, this definition emphasizes both the explicit (e.g., knowledge and skills) and implicit (e.g., personal attributes) detectable and testable competencies.
Parry	1996	Competencies are a set of interrelated knowledge, skills and attitudes that represents a key component of a person’s job role and responsibility, that associates with performance in a job, that can be measured against well-established standards, and that can be reinforced through training and development.
Dubois	1998	Competencies are those characteristics- knowledge, skills, mindsets, thought patterns, and the like, that when used either singularly or in various combinations, result in the successful performance
Athey and Orth	1999	Competencies refer to “...a set of observable performance dimensions, including individual knowledge, skills, attitudes, and behaviours, as well as collective team, process, and organisational capabilities, that are linked to high performance and provide the organisation with sustainable competitive advantage”.
Dragabidis and Mentzas	2006	Competencies are those direct and indirect skills and behaviours that allow individuals to perform given tasks or assigned roles effectively.
Chung and Lo	2007	Competencies are skills, knowledge, and capabilities that individuals should have possess when completing assigned tasks or achieving goals.
Dubois and Rothwell	2008	Competencies are qualities the individual can use to perform activities in an exemplary and successful manner.”
Chouhan and Srivastava	2014	Competencies include the collection of success factors necessary for achieving important results in a specific job or work role in a particular organisation
Lakshminarayanan, Pai and Ramaprasad	2016	Characteristics that permit one to accomplish his or her work/duties.

Source: Adapted from Wong (2020)

These words and phrases used by the various scholars indicate that they all believe that some fundamental characteristics (that can be counted or measured) somehow contribute to the effective, or superior completion of jobs or tasks. This ideology is perfectly conceptualised by Wong (2010); for the purpose of advancing this research project, the definition postulated by Wong (2010) will be applied.

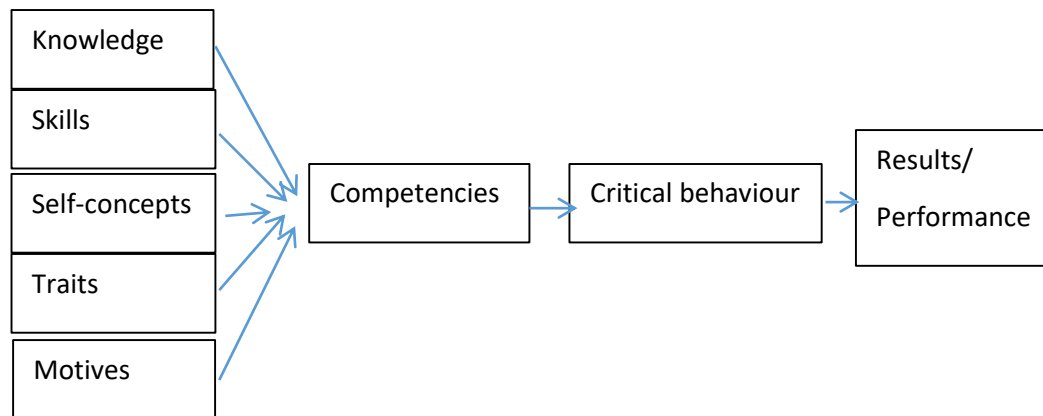
Figure 2.1 depicts all the attributes mentioned, which include: (1) personal traits, (2) motives, (3) knowledge, (4) self-concept and values, and (5) skills. In addition, the figure identifies the five major components of competency as proposed by Chouhas and Srivastava (2014).

Chouhas and Srivastava (2014) define these components and state that competencies are underlying attributes of individuals, that show ways of thinking or behaving, which remain for long periods of time and oversimplify across a broad range of circumstances.

In this context, the five attributes are:

- Knowledge, which refers to information and learning, latent in a person, such as an engineer 's knowledge of the structural integrity of certain materials.
- Skill, as embodied by an individual's capability to perform a specific task, such as a medical specialist's skill to perform highly complex surgical procedures.
- Traits, which are physical features and consistent reactions to circumstances or information. For example, good eyesight is a necessary trait for surgeons, and self-control is a capacity to stay calm under a stressful situation.
- Self-concepts and values, which refer to an individual's attitudes, values and self-esteem. An example is self-confidence, an individual's belief that he or she can be successful in a given situation, such as a cardiologist's self-confidence in carrying out complex open-heart surgery.
- Motives, which are manifestations of emotions, desires, physiological longings or similar urges that prompt action. For example, surgeons with high interpersonal orientation take peculiar responsibility for working well with other members of the surgical team.

Figure 2.1: The concept of competency



Source: Adapted from Chouhan, V.S., & Srivastava, S. (2014)

Throughout the years, competency development and assessment, have been the topic of numerous studies and these studies focused on different fields and vocations in different countries (Omran and Suleiman, 2017; Kang *et al.*, 2015; Chung and Wu, 2011). However, the use of the term ‘competency’ has generated confusion and uncertainty in many studies as reported by, inter alia, Van der Klink and Boon (2003) and Le Deist and Winterton (2005), especially when the term ‘competence’ is used instead of ‘competency’, in particular, when an explanation or context was absent to clear up the confusion. According to Wong (2020,) studies by Moore, Cheng, and Dainty (2002) and Vazirani (2010), provide evidence that no difference exists between these two terms and that the terms can be used interchangeably.

Wong (2020) states that ‘competency’ and ‘competence’ are two separate ‘approaches’ to studies, especially within the human resource management area. Furthermore, Wong (2020) adds that based on the one approach, the term ‘competencies’ was frequently used to refer to the behaviours or personal attributes supporting an area of work, and is particularly influential in the United States; this is characterised as being person-oriented. In the second approach, use of the term ‘competence’ is more popular, and often it refers to an area of work tasks or job outputs. It is prevalent in the United Kingdom and is characterised by being task-oriented.

This debate about the use and meaning of the words “competence”, “competency”, and “competencies” has been argued by several academics over the years, as

discussed above, and has led to two very unique approaches generally referred to as the US (United States of America) and UK (United Kingdom) approaches, respectively. A comprehensive search on Scopus, ResearchGate, Google Scholar and Science Direct provided no meaningful and influential studies on the concepts “competence”, “competency”, and “competencies” in a higher education context in Africa.

2.3.1.1 The US approach

According to Vazirani (2010), David C. McClelland, a Psychology Professor at Harvard University and founder of McBer and Company (later called the Hay Group), published a research study in the 1970s, entitled ‘Testing for Competence Rather Than for Intelligence,’ which ignited and provided impetus to the competency movement. In 1973 McClelland gave evidence that supported the fact that personal/individual competencies/characteristics were acknowledged as significant predictors of successful worker performance.

McClelland (1973) argues that traditional psychometrics, such as IQ and aptitude tests, were outdated, and that personal competencies are more precise in predicting success in the workplace. The research by McClelland and the McBer Consultancy Group into managerial competencies in the USA led to the introduction of the notion of individual competencies, which McClelland defined as “any characteristic of a person that differentiates performance in a specific job, role, culture or organisation.”

McClelland is regularly credited with the introduction of the competency movement (Wooi, *et al.*, 2017), whereas Yifei Gou (2018) adds that McClelland's research recognised the definition of competency as the “potential, in-depth characteristics of an individual who distinguishes a performer (or organisation, culture) from a performer and a performer.” Gou (2018) proposes that these competencies can be attitudes or values, motives, traits, self-images, cognitive or behavioural skills, knowledge in a field or whatever can be dependably calculated or measured, and can considerably differentiate individual features.

McClelland's discourse on competencies had a substantive and significant impact on HRM practices, because it opened a fresh, new perspective and initiated a movement for the investigation of more valid and reliable tools, to predict the job performance of individuals in the workplace. Consequently, leading business organisations started

using competencies for recruiting, selecting, developing and managing superior performers.

In 1982, Boyatzis added to McClelland's (1973) idea and developed the 'Job Competence Assessment (JCA) Technique' to identify the qualities that differentiate top managerial performers from average managerial performers (Omran and Suleiman, (2017); Vathanophas and Thai-Ngam, (2007). Since then, the concept of competency began to spread worldwide (Boyatzis, 1982; Simpson, 2002). The above approach was widely supported by numerous scholars, namely Rubin and Dierdorff, 2009; Brannick, Levine, and Morgeson, 2007; Schippmann *et al.*, 2000; Woodruffe, 1993.

In summary, the US approach was characterised by the fact that the term 'competencies' was frequently used, and referred to the behaviours, or personal attributes, supporting an area of work; it is characterised by being person-oriented.

2.3.1.2 The UK approach

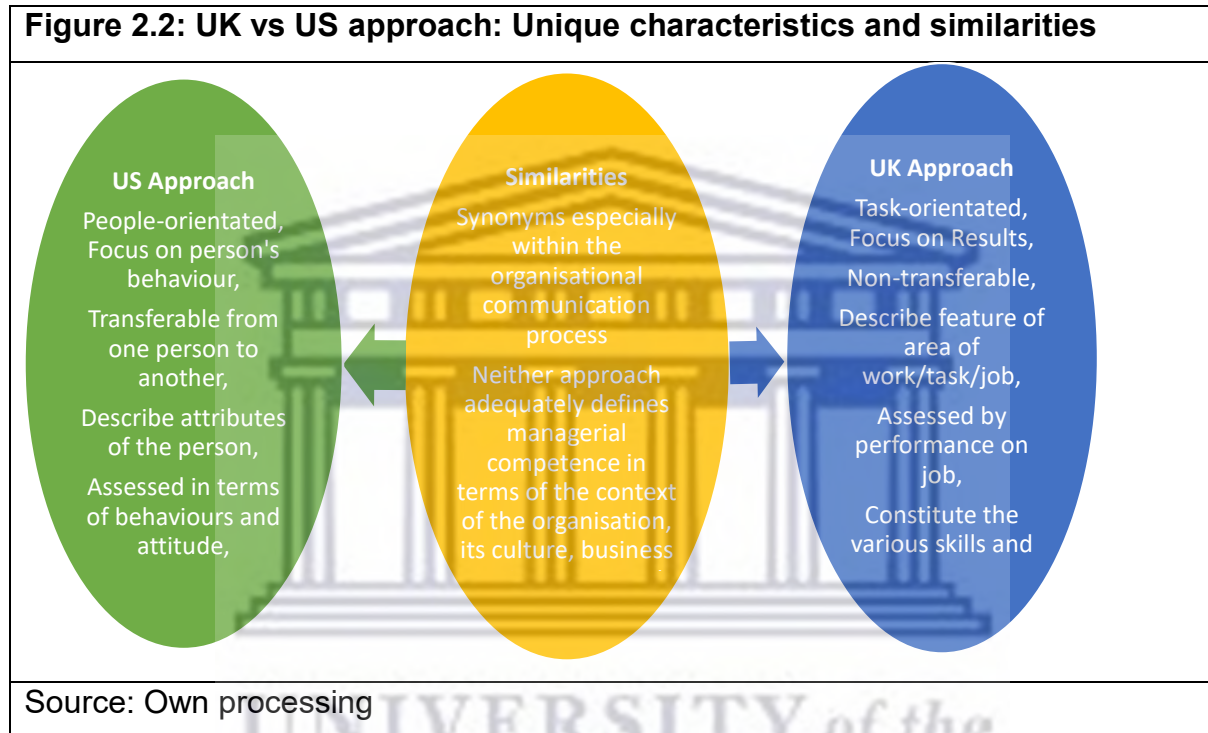
Jamil (2015) argues that human resource practitioners and scholars in the UK refer to competence as the outputs to specific minimum standards. This perception is mainly due to the influence of Handy (1987) as well as Constable and McCormick's (1987), whose research "*associated British's poor international economic performance to the country's lack of attention and formality in managerial education and development*" (Jamil, 2015) and this is supported by the Management Charter Initiative (MCI).

Jamil (2015) further states that the competence drive in the UK was developed to improve the efficiency of the British labour force, with the creation of the National Vocational Qualification (NVQ), that was responsible for the development of standards of various job-related groups. According to Mkhize (2010), the MCI recognised specific standards of performance anticipated by bosses of competent managers at various levels through research with the stakeholders (employers and managers) of small and large businesses, within the public and industrial sectors.

The UK approach is characterised by the use of the term 'competence' and concentrates on the "*functional analysis method which involves seeking opinions from industry experts to determine functions of a particular job and the minimum level its incumbent has to perform*" (Jamil, 2015). Additional characteristics of the UK approach

is that it does not seek to determine what makes individuals excellent in their job (which is the focus of the US approach), but reflects the achievement of occupational standards. In this context, competency in the UK reflects the achievement of job-related standards.

Figure 2.2 provides a representation of the differences between the two approaches as well as a few similarities, as identified by Yuvaraj (2011).



2.3.1.3 Congruence and divergence

Numerous researchers believed that the two approaches (UK and US) could be combined, and that they could accommodate each other's shortcomings. For example, Bergenhenegouwen (1996) states that the two competing competency methodologies could be combined to offer an optimal level of performance. Bergenhenegouwen's (1996) theory was supported by other academics, for example, Stuart and Lindsay (1997), who advocated that as both methodologies are incomplete, they complement each other. Furthermore, Elkin (1990) believes that as a worker moves up the professional hierarchy, the UK methodology became less important and that the US methodology increased in importance. Elkin's declaration emphasizes the corresponding nature of the two attitudes.

Yuvaraj (2011) identifies several discrepancies between the UK and the US approaches to competency. The most notable difference between the two approaches, as postulated by Elkin (1990), as is manifested by the US approach is that it is people-orientated, while the UK approach is task-orientated. Furthermore, scholars of the US approach believe that the competencies are transferable from one person to the next, which is not the case within the UK approach. The latter describes features of areas of work, or tasks, or the job, and assesses the performance within a specific job, while the US approach describes attributes of the person and assessed the person in terms of behaviours and attitudes.

The leading difference between the dual approaches is that in the United Kingdom competence is used to define a suitable standard for certification in professional organisations, whereas the US approach recognises the attributes of successful performers and superiority (Cheng, *et al.*, 2003).

Moore, *et al.*, (2002) states that a similarity of the two approaches is due to the misunderstanding thereof, and that the two approaches should be regarded as synonymous, especially within the organisational communication process. Stuart and Lindsay (1997) also believe that both the UK and US approaches do not sufficiently describe managerial competence in terms of the context of the organisation, business environment, culture and marketplace.

Based on existing literature, research has acknowledged that the various researchers have, over the years, found various similarities and intersecting views on the definition of competencies. The common ground is that competencies consist of various features comprising of abilities, experience, skills, motivation and knowledge, that allow a person to perform a task/duty/job or profession with competence, and that competencies are dimensions of behaviour that are related to superior job performance.

Based on the assessment and critical analysis of the US and UK approaches, for the purpose of this study, competency is defined as: *“a collection of underlying required abilities, characteristics, knowledge, skills, attitudes, experience, motivation, and particular abilities for a given job or position which leads to superior job performance”* (Boyatzis, 1982).

In summary of the above analysis, this study follows the US approach.

2.3.2 Discourse on management competencies

This section contains the discourse on management competencies, and the various definitions, antecedents, characteristics and examples of management competencies that have been identified by researchers and scholars over the years. This section also recognises leadership as one of the management competencies identified and, for the purpose of this study, will be acknowledged as such.

Yarmohammadian, *et al.*, (2013) states that management is the most significant requirement for organisations to obtain their organisational goals. They also add that the success of any organisation to reach its goals, is contingent upon how it is managed; thus, the organisation's success is reliant on the manager's ability and effectiveness. Yarmohammadian, *et al.*, (2013) conclude by stating that managers' effectiveness also depends on their competency, skill, knowledge, insight and abilities.

According to Kantanen, Kaunonen, Helminen (2017), leadership and management competencies refer to the knowledge, skills and attributes that a manager needs, to be an expert in her/his field. Furthermore, the above scholars dictate that management competencies refer to the proficiencies required to work and function successfully in society, and to the management of the essential knowledge, skills, values, motivations, attitudes and their associated levels of ability.

Tyranska (2016) states that appropriate managerial competencies are a necessity for good management, while upholding planned viewpoints and reconciling the authoritative efficiency. These managerial competencies are within the bounds of ethical conduct and social responsibility, and for taking suitable decisions and dedicated leadership to ensure that those decisions convert into tangible activities.

According to Mitchelmore and Rowley (2010), Nieman and Nieuwenhuizen (2009), Kanungo and Menon (2005) and Boyatzis, Golman, and Rhee (2000), managerial competencies are a group of interrelated knowledge, skills and attitudes that affect one's job, and which links to performance on the job. Darrol (2013) supports the definition of managerial competencies as a set of behaviours that empower employees to exhibit effectiveness over a given performance task in their line of work. Louw (2016) further adds that managerial competencies are a set of skills, behaviours, knowledge

and attitudes a person requires, to be effective in an extensive array of managerial jobs and (in relation to) numerous organisations.

In analysing the above definitions, there is no general consensus about a definition for management competency. However, what becomes clear from the above assessment, is that management competency is the flexibility of a person to execute a task to the required extent and desired quality.

Based on the aforementioned views, for the purpose of this study, one can conclude that managerial competencies include:

- Skills (acquired competencies),
- Knowledge (acquired mental processing skills) and,
- Experience (skills acquired from repetition).

Tarwirei (2015) defines skills, knowledge and experience within the context of management competencies as:

- Skills are capabilities attained through practice, individual ability or capacity acquired through systematic sustained effort. For example, this ability can be expressed in preparing, *inter alia*, financial statements.
- Knowledge is understanding through learning. It implies the contexts people have to know to perform a task effectively and efficiently, such as rules, policies or recruitment process. These are skills, facts or information derived through education or experience.
- Experience relates to managerial skill, practices and knowledge gained from direct observation, involvement, acquaintance or exposure and familiarity with a particular activity.

Table 2.4 presents managerial competencies into groupings as identified by Lakshminarayanan, Pai and Ramaprasad (2016). These groupings divide management competencies in six categories of: analytical skills; self-management; relationship management; self-awareness; goal and action management, and social awareness.

For each of the six managerial competencies to be effective, a series of actions are required. For example, for managers to significantly improve their efficacy of analytical skills, they need to use appropriate concepts, apply systems thinking, identify and recognise patterns from data, build theory for process improvement and troubleshooting, make use of advanced technology, be able to effectively analyse data quantitatively, afford social objectivity, and provide clear communication on important aspects of tasks and responsibilities.

A further example of how managers can significantly improve their efficacy in relation to relationship management, is that a manager will need to lead by example especially in aspects of punctuality and work ethic, positively influence and motivate their co-workers, effectively manage conflicts, be the catalysts for change, develop others within your department. and provide evidence of your dedication to change and finally promote teamwork and collaboration.

Table 2.4: Structure of managerial competencies		
Analytical skills	Self-management	Relationship management
<ul style="list-style-type: none"> - Appropriate use of concepts - Systems thinking - Recognising patterns in assorted data - Building theory for process improvement and troubleshooting - Using advanced technologies - Analysing data quantitatively - Social objectivity - Clearly communicating important aspects of tasks and responsibilities 	<ul style="list-style-type: none"> - Demonstrate self-control - Behaviour is driven by achievement and motivation - Display adaptability in a dynamic work environment - Showcase transparency in all work-related issues - Taking initiative - Evince optimism in all situations 	<ul style="list-style-type: none"> - Lead by example - Positively influence and motivate co-workers - Effectively manage conflicts - Be a catalyst for change - Develop others - Promote teamwork and collaboration
Self-awareness	Goal and action management	Social awareness
<ul style="list-style-type: none"> - Strive to understand oneself - Accurately assessing the self - Exhibit self-confidence in all situations 	<ul style="list-style-type: none"> - Plan each task meticulously - Continuously strive to achieve efficiency - Pay attention to the minutest details 	<ul style="list-style-type: none"> - Show empathy - Display continuous orientation towards service - Be aware of the organisation's processes, policies and rules

	- Exhibit flexibility with regard to process and solution	
Source: Lakshminarayanan, Pai and Ramaprasad (2016)		

The two examples above highlight that each management competency identified by Lakshminarayanan, *et al.*, (2016) relies on numerous other actions. These actions are key components within these management competencies, and the ability to master these actions accordingly lead to becoming an effective manager.

With regards to the competencies required at the different level of management, Oleksyn's hypothesis (2006) is presented in Table 2.5. In his argument, Oleksyn (2006) provides a presentation of the three levels of management competencies as high-level management competencies, middle management competencies and low-level management competencies, which indicated that the predictable competencies of managers at several levels of management are different, but in some aspects intersect. Taking the above into consideration, the specific nature of the necessities regarding dissimilar levels of management should be measured. The top management, or executive management level, is constituted by a relatively small group of people that control the organisation. With this privilege comes the key requirement of bearing the responsibility of all its operations as well.

Any organisation, company or even higher education institution operates by employing managers to manage the enterprise or business, on behalf of the stakeholders or owners. Top/executive management take strategic decisions in regards to the use of the organisation's resources and determine the sustainable development of the business or company (Tyranska, 2016). Taking the above into consideration, managers operating at this level must have competencies conducive to shaping the future of the company, as well as appropriate personal and social competencies.

Tyranska (2016) summarises these competencies and states that the top manager has a significant influence on creating the organisation's strategic objectives and developmental strategies, as well as the organisation's mission and vision. Although shaping these fundamentals of management, the manager does not deal with this exclusively, but works with the proprietors of the business, strategic management specialists, the most important line managers, heads of autonomous business units, and worker representatives.

In this context, future-looking capabilities allow the manager to formulate the organisation to function effectively and efficiently, to ensure survival and development, maximise profits, fulfil the company's community mission, and safeguard the organisation against all threats, internal and external.

Table 2.5 further illustrates that the higher the management level, the more strategic, economic and business-orientated the management competencies become. On the other hand, managers on lower levels act as integrators whose job is to organise horizontal co-operation with equivalent organisational units, while first-line managers have direct contact with those who do the work.

According to Tyranska (2016), competent managers ensure success in an enterprise by creating and consolidating customer values, refunding invested capital, and expanding long-term value for shareholders and Louw (2016) indicates that *"management must develop several competencies that enable them to perform effectively"*.

We can deduce that proper managerial competencies are conditions for good management, for example, by taking proper decisions and committed leadership to ensure that those decisions translate into concrete activities while maintaining a strategic perspective and reconciling the imperative of efficiency with ethical conduct and social responsibility (Tyranska, 2016).

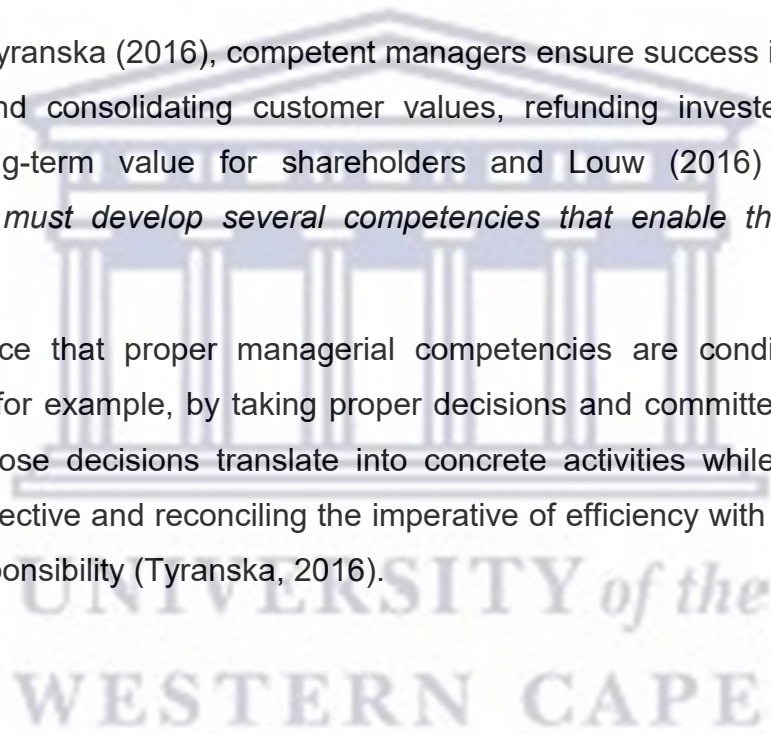
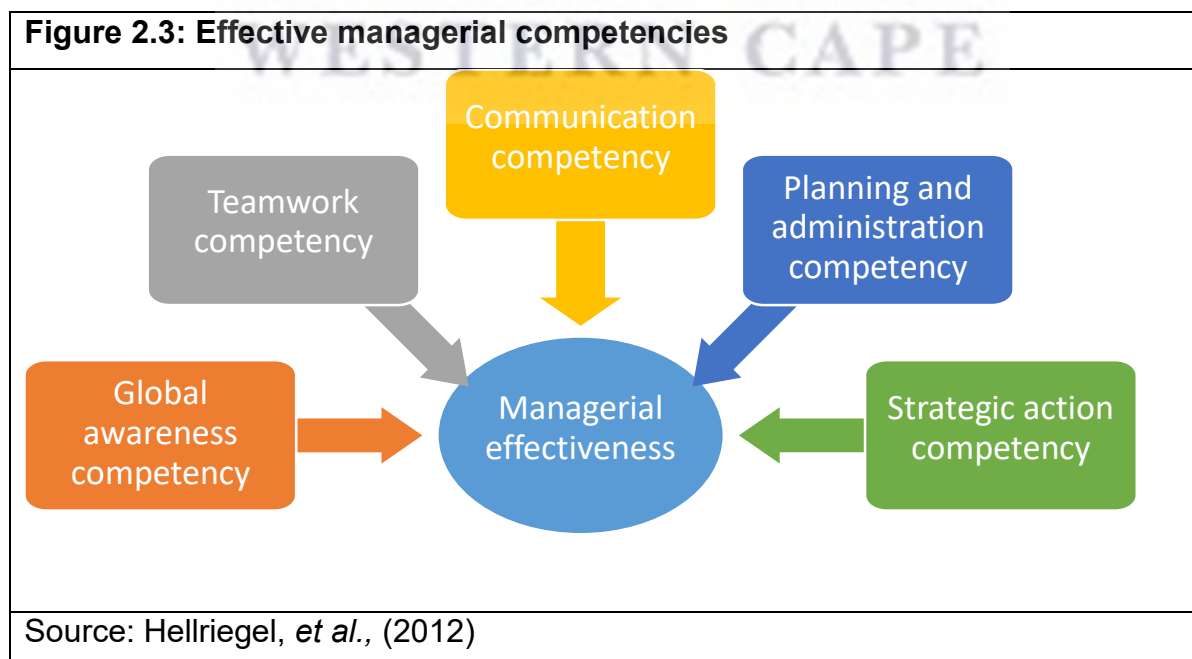


Table 2.5. High-level management competencies		
Knowledge and skills in area of strategic management	Personal competencies	Social competencies
<ul style="list-style-type: none"> - knowledge of the various types of strategy - ability to give proper direction for the enterprise's development - ability to make decisions of key importance relating to mergers and acquisitions, restructuring, outsourcing, purchase or sale of shares - proceed under the principles of business ethics - imagination and the ability to anticipate - oriented on system management - ability to generate profits 	<ul style="list-style-type: none"> - responsibility - reliability - kindness - magnanimity - self-criticism and modesty - communication skills - ease of establishing contacts 	<ul style="list-style-type: none"> - ability to recognises common interests on an organisational scale - empathy - ability to cooperate with people and have an effective influence on them - serving its interests and dignified representing the organisation outside - ability to choose people for key positions in the organisation
Middle management competencies		
Interpersonal competencies		Innovative competencies
<ul style="list-style-type: none"> - ability to choose appropriate people and build teams - integrating, inspiring and motivating employees - assessment of work and employees - professional development - communication, negotiation and conflict resolution - ability to act as a liaison officer between the chief executive officer and other people in a given area and represent them 		<ul style="list-style-type: none"> - ability to anticipate changes and have a positive attitude to them - determination in action - ability to connect overall vision with attention to every detail - participatory leadership style - perseverance combined with the ability to persuade and tact - ability to carefully observe the introduced changes
Low-level management competencies		
Managerial predispositions		Substantive knowledge in the field of management
<ul style="list-style-type: none"> - effective coordination of activities - consideration - justice - comprehensibility 		<ul style="list-style-type: none"> - knowledge of marketing management - knowledge of basic organisation management - knowledge of HR management - knowledge of finance management
Source: Adapted from Oleksyn (2006)		

Bucur (2013) added that there is a great consensus that managerial competencies are connected in an intricate way to managerial performance, as the key necessities for constant performance over time. The suitable level of competencies permits one to fulfil managerial roles competently, and at the same time permits one to attain the predetermined business objectives of the organisation. Jedrzejczyk (2013) confirmed that the specificity of the manager's work necessitates the amalgamation of many competencies.

With regards to the competencies of a successful manager, Figure 2.3 presents the viewpoint taken by Hellriegel, Slocum, Jackson, Louw, Staude, Amos, Klopper, Louw, Oosthuizen, Perks and Zindiye (2012). Hellriegel, *et al.*, (2012) identify six key managerial competencies categories that are vital for an effective manager. What differentiates the above model from the other managerial competency models is the fact that each competency category has sublevel competencies as identified by Hellriegel, *et al.*, (2012)

Hellriegel *et al.*, (2012) maintain that managerial competences comprise behaviours, knowledge, attitudes, and skills, which are needed by a manager to be effective in a comprehensive array of managerial jobs and various organisational settings. Furthermore, Hellriegel, *et al.*, (2012) state that these six competencies are transferable to various organisations. Below, effective managerial competencies are illustrated:



The following table will provide a representation of each of the six managerial competencies and sub-categories as identified by Hellriegel, *et al.*, (2012).

In Table 2.6 one can determine the intricacy of each management competency category, as within each category, a sub-category with more intricate competencies and detail of sub-competencies needed within the category, exists.

Table 2.6 provides an intricate assessment of the management competencies necessary for a successful manager. For each level, or subcategory, of the six managerial competencies to be effective, each requires a series of actions.

Table 2.6: Managerial competencies categories and sub-categories	
Communication competency category	
Informal communication	<ul style="list-style-type: none"> • Promoting two-way communication by soliciting feedback, listening, seeking contrary opinions and creating a give and take conversation, • Is flexible, and varies approach in different situations and with others from diverse backgrounds, • Builds strong interpersonal relationships with a diverse range of people; shows genuine sensitivity to the diverse needs, opinions and feelings of others, and is tolerant of their foibles and idiosyncrasies. • Makes effective use of personal networking
Formal communication	<ul style="list-style-type: none"> • Informs people of relevant events and activities and keeps them up to date, • Makes persuasive, high-impact public presentations and handles questions well, • Writes, concisely and effectively, using traditional as well as electronic media.
Negotiation	<ul style="list-style-type: none"> • Negotiates effectively on behalf of the team over roles and resources, • Is comfortable with the power of the managerial role, • Is skilled at developing relationships and exercising influence upward with superiors, laterally with peers and downwards with subordinates as well as externally with customers, suppliers and other stakeholders, • Takes decisive and fair actions when handling problem subordinates.
Planning and administration competency category	
Information-gathering, analysis and problem-solving	<ul style="list-style-type: none"> • Monitors information and uses it to identify symptoms, underlying problems and alternative solutions, • Makes timely decisions,

	<ul style="list-style-type: none"> • Takes calculated risks and anticipates the consequences.
Planning and organising projects	<ul style="list-style-type: none"> • Develops plans and schedules to achieve specific goals efficiently, • Assigns priorities to tasks, • Determines; obtains and organises necessary resources, such as materials, people and funds, • Delegates responsible for task completion.
Time management	<ul style="list-style-type: none"> • Handles several issues and projects at one time, but does not spread self too thin, • Monitors and keeps to a schedule or negotiates changes on the schedule if needed, • Works effectively under time pressure, • Knows when to permit interruptions and when to screen them.
Budgeting and financial management	<ul style="list-style-type: none"> • Understands budgets, cash flows, financial reports and annual reports, and regularly uses such information, • Keeps accurate and complete financial records, • Creates budgetary guidelines for others and works within the guidelines given by others.
Teamwork competency category	
Designing teams	<ul style="list-style-type: none"> • Formulates clear objectives that inspire team members and engender commitment, • Appropriately staffs the team, taking into account the value of diverse perspectives, technical skills needed and development goals, • Defines responsibilities for the team as a whole and facilitates the allocation of tasks and responsibilities to individual team members as appropriate, • Creates systems for monitoring team performance.
Creating a supportive environment	<ul style="list-style-type: none"> • Creates an environment characterised by empowerment, in which effective teamwork is expected, recognised, praised and rewarded, • Assists the team in identifying and acquiring the resources it needs to accomplish its goals, • Acts as a coach, counsellor and mentor, being patient with team members as they learn,
Managing team dynamics	<ul style="list-style-type: none"> • Understand the strengths and weaknesses of team members, and uses their strengths to accomplish tasks as a team, • Bring conflict and dissent into the open, and uses them to enhance the quality of decisions, while at the same time facilitating cooperative behaviour and keeping the group moving towards its goals.
Strategic action competency category	

Understanding the industry	<ul style="list-style-type: none"> • Understands the history of the industry • Stays informed of the actions of competitors and strategic partners, • Can analyse general trends in the industry and their implications for the future, • Quickly recognise when changes in the industry create significant threats and opportunities.
Understanding the organisation	<ul style="list-style-type: none"> • Understands and can balance the concerns of stakeholders, • Understands the strengths and limitations of various business strategies, • Understands the distinctive competencies of the organisations, • Understands various organisational structures, and the advantages and disadvantages of each, • Understands and can fit into the unique corporate culture of the organisation, • Understands the organisation's strategic intent and vision.
Taking strategic actions	<ul style="list-style-type: none"> • Executes specific plans that reflect cross-functional and cross-divisional knowledge, • Assigns priorities and makes decisions that are consistent with the organisation's mission and strategic goals, • Recognises the management challenges of alternative strategies and addresses them systematically, • Considers the long-term implications of actions to sustain and further develop the organisations, • Establish tactical and operational goals that facilitate strategy implementation
Global awareness competency category	
Cultural knowledge and understanding	<ul style="list-style-type: none"> • Stays informed of political, social and economic trends and events around the world, • Recognises the impact of global events on the organisation, • Travels regularly to gain first-hand knowledge of countries in which the organisation has or is expected to have an interest, • Understands, reads and speaks more than one language fluently, • Has a basic business vocabulary in each language relevant to own job.
Cultural openness and sensitivity	<ul style="list-style-type: none"> • Understanding the nature of national, ethnic, and cultural differences, and is open to examining these differences honestly and objectively, • Is sensitive to cultural cues and can adapt quickly in novel situations, • Recognises that there is great variation within any culture and avoids stereotyping,

	<ul style="list-style-type: none"> • Adjust own behaviour appropriately when interacting with people from various national, ethnic and cultural backgrounds, • Understand how own cultural background affects own attitudes and behaviours, • Can empathise and see from different perspectives, while still being secure in self and able to act with confidence.
Emotional intelligence and self-management competency	
Emotional intelligence	<ul style="list-style-type: none"> • Shows self-awareness, which is the ability to recognise one's own emotions and their effects on others, ability to assess one's strengths and limitations accurately and has a strong sense of his or her self-worth and capabilities, • Uses self-management, which means understanding oneself and how to motivate oneself as well as understand how to control disruptive emotions and impulses; maintains standards of integrity and honesty and can adapt behaviour to changing circumstances, is guided by a drive to meet internal standards of excellence and can act, • Shows social awareness - in other words, is good at understanding others and takes an active interest in their concerns at a personal level and an organisational level, and recognises the needs of customers, • Has good relationship management or social skills, which means the ability to lead others and work with others, including being sensitive to the developmental needs of others, inspiring and leading groups, wielding interpersonal influence tactics, sending clear and convincing messages, and initiating and managing change; works with others to build effective interpersonal relations, achieve shared goals and resolve disagreements,
Integrity and ethical conduct	<ul style="list-style-type: none"> • Has clear personal standards that serve as a foundation for maintaining a sense of integrity and ethical conduct, even in the face of strong pressure to the contrary, • Is honourable and steadfast, projects self-assurance and does not just tell people what they want to hear, • Is willing to admit mistakes, • Accepts responsibility for own actions.
Personal drive and resilience	<ul style="list-style-type: none"> • Seeks responsibility and is willing to innovate and take risks, • Is ambitious and motivated to achieve objectives, but does not put personal ambition ahead of the organisation's goal, • Shows perseverance in the face of obstacles and bounces back from failure, • Works hard to get things done,

Balancing work and life issues	<ul style="list-style-type: none"> • Strikes a reasonable balance between work and other life activities so that neither aspect of living is neglected, • Takes good care of self, mentally and physically, and uses constructive outlets to vent frustration and reduce tension.
Self-awareness and development	<ul style="list-style-type: none"> • Has clear personal and career goals, and knows own values, feelings and areas of strengths and weaknesses, • Uses strengths to advantage while seeking to improve or compensate for weaknesses, • Accepts responsibility for continuous self-development and learning, and develops plans and seeks opportunities for personal long-term growth, • Analyses and learns work and life experiences, • Is willing to unlearn and relearn continually as changed situations call for new skills and perspectives, • Is spiritually intelligent
Source: Hellriegel, <i>et al.</i> , (2012)	

The authors depict that for managers to significantly improve their efficacy in one of the categories identified, requires action on two levels. This could, for example, apply to a manager within the teamwork competencies, where considerable action on two levels is required. By having a clear understanding of the strengths and weaknesses of team members, the first level would be to improve managing team dynamics and use their strengths to accomplish tasks as a team, as well as to bring conflict and dissent into the open, and use these aspects to enhance the quality of decisions, while at the same time facilitating cooperative behaviour and keeping the group moving towards its goals.

While these actions are running in motion, the same actions must run concurrently within the designing teams and create a supportive subcategory. Once efficacy has been reached within the three sub-categories, the main category of teamwork competency will also be of superior quality. Of major significance from this study by Hellriegel, *et al.*, (2012) is that these management competencies can be transferable from one organisation to another.

Hellriegel, *et al.*, (2012) further state that these management competencies can be acquired through formal studies, participating in extracurricular activities, participating in clubs or associations and gaining experience through holding a certain position.

Through the research of Yarmohammadian, *et al.*, (2013) it has been established that management is the most significant requirement for organisations to obtain their organisational goals. In this context, Carson and Gilmore (2000) indicate that general management competencies are perfectly appropriate for senior management within big organisations and those management competencies will be influenced by the important features relating to precise situations.

Furthermore, Yarmohammadian, *et al.*, (2013) indicate that managers' effectiveness also depends on their competency, skill, knowledge, insight and abilities.

Based on research conducted by Abrahams, Karns, Shaw and Mena (2001), a list of twenty critical management competencies was identified. This study by Abrahams, *et al.*, (2001) was based on an MBA class at an American University; all the students were employed as managerial employees by local and national organisations. Table 2.7 presents the twenty critically important competencies identified by students without the researchers generating a list of competencies for the students to choose from. The study by Abrahams, *et al.*, (2001) indicates that the twenty management competencies identified by the study are considered to be descriptive of a successful manager by a majority of organisations.

1	Leadership skills	Takes control and exercises leadership, initiates actions and gives direction
2	Customer focus	Focused on client needs and fulfilment, setting a high standard of quality
3	Results oriented	Driving projects to results, working methodically, upholding quality procedures, sustaining productivity intensities
4	Problem solver	Analysing and assessing data, testing assumptions and examining, creating solutions, constructing decisions, demonstrating systems thinking
5	Good communicator	Writing correctly, clearly and fluently, expressive and engaging writing style, speak fluently, able to explain concepts and opinions, articulate key points of argument, be able to speak and present in public, project credibility and respond to the audience
6	Team worker	Showing tolerance and consideration, adapting to the team, understanding others, recognising and rewarding contributions, listening, caring for others, consulting others, building team spirit

		showing empathy, supporting others, developing and communicating self-knowledge and insight
7	Quality focused	Monitoring and maintaining quality, maintaining quality processes
8	Interpersonal skills	Promoting ideas, creating an impact, shaping dialogues, engaging emotions, negotiating and gaining agreement
9	Technical expertise	Applying procedural expertise, building technical knowledge, distribution of expertise, use of technology resources, indicating physical and manual skills, demonstrating cross-functional consciousness, establishing spatial awareness
10	Business expertise	Controlling costs, demonstrating financial awareness, identifying business opportunities, being aware of organisational issues, monitoring markets and competitors
11	Flexible/adaptable	Adapting to the different environment, accommodating new ideas, be able to deal with ambiguity, adapting interpersonal style, showing multi-cultural awareness
12	Staff developer	Provide a bearing or direction for staff to follow and coordinating action, empowering staff, overseeing and checking behaviour, coaching, delegating, motivating others, identifying and recruiting talent, developing staff
13	Dependable/trustworthy	Networking, connecting and communicating across all levels, dealing with conflict in a constructive way and the use of humour
14	Safety conscious	Showing awareness of safety issues and legal obligations
15	Risk taker	Taking calculated risks
16	Innovative/Imaginative	Always looking for innovating ways to improve or to make things better, seek to bring change, work strategically, developing strategy, has a vision of innovating change
17	Hard worker	Always achieving objectives, working enthusiastically, focussed on self-development and demonstrating ambition
18	Time manager	Timekeeping and attending, following directions and procedures
19	Integrity:	Ethics and values are core to self, integrity, utilising diversity and showing social as well as environmental responsibility
20	Purposeful	Planning to meet objectives, time management vital factor as well as managing resources needed and finally monitoring progress.
Source: Abrahams, <i>et al.</i> , (2001)		

As the research base on managerial competencies steadily advanced, it began to provide more evidence of the vast number of competencies needed by managers. The findings identified by numerous scholars as important management competencies,

provide evidence of these competencies in a managerial and organisational context. In some cases, there are overlapping management competencies identified with leadership competency as argued by McDermott, 1995, Saville and Holdsworth Ltd (SHL),1994, Mann and Staudenmier,1991, Boyatzis, 1982 and Mintzberg (1980).

Table 2.8 presents the various groupings from scholars ranging from 1974 to 2000 as identified by Mbokazi, Visser and Fourie (2004). These groupings are similar to groupings by Lakshminarayanan, *et al.*, (2016), Hellreigel, *et al.*, (2012), Oleksyn (2006) and Abrahams, *et al.*, (2001), discussed earlier in this chapter.

Table 2.8: Other competency groupings		
Scholar	Year	Competency groupings
Katz	1974	Human skills Conceptual skills Technical skills
Mintzberg	1980	Leadership skills Interpersonal role Information role Decisional role
Williamson	1981	Administrative Interpersonal leadership Management control Drive Decision-making
Boyatzis	1982	Leadership Human resource Directing subordinates Focus on others Goal and action management Specialised knowledge
Peter	1984	Interpersonal skills Management of meaning Management of self Administrative skills Work values
Bennis and Nanus	1985	Management of trust Management of meaning Management of self Management of attention
Schein	1987	Interpersonal skills Analytical skills
Stewart	1987	Managing other people Managing business Managing yourself
Hofmeyer	1990	Strategic planning People skills interpersonal skills Analytical skills Financial management skills Technical skills Marketing skills

Mann and Staudenmier	1991	Leadership skills Change management Team-building skills Performance management Skills to implement business strategy Quality control skills
Saville and Holdsworth Ltd (SHL)	1994	Leadership Interpersonal Analytical Business awareness Dynamism Operational
Mc Dermott	1995	Strategic leadership Team participation Personal development
Analoui	1995	Managing other people Managing work Managing self
Education Review Office	1995	Interpersonal relationships adaptability Results-oriented intellectual Technical
Cockerill, Hunt and Schroder	2000	Inspirational Thinking achieving Developmental
Profiles International Inc.	2000	Communication and leadership Relationships and adaptability Task management and production Self-development and development of others
Source: Own processing		

Of critical importance is the fact that different management tasks or duties require different management competencies which is evident by the wide range of competencies identified in Table 2.8. It is a summary of several taxonomies of managerial competencies which indicate a myriad of key competencies. What comes to the fore, are competencies like leadership, interpersonal/people skills, analytical skills, and analytical/financial skills. These skills are identified by numerous scholars and their groupings and their importance is indicated within the management competency fields. From the above table, Mbokazi, *et al.*, (2004) identifies three categories of competencies, namely: competencies to manage the task; competency to manage people; competency to manage the “self”.

2.3.3 Managerial competencies within Higher Education

Martinez, Silva and Mitanda (2016), define managerial competencies within higher education as a ‘set of observable knowledge, skills and attitudes that leaders at Higher

Education Institutions must possess, which will enable them to attain success in the performance of their roles in the worldwide context'. In an earlier study by Bush and Glover (2003), management within higher education institutions is defined as "the efficient and effective upkeep of the enactment of policies and the organisation's present undertakings".

Thus, one can deduct from the above definitions that management competencies within higher education refer to essential management competencies needed to effectively and efficiently manage higher education institutions, not just from a local, but global perspective.

Smith and Wolverton (2010) propose that the complexity of higher education institutions make them difficult organisations to manage. as they are diverse organisations that need leaders to be knowledgeable about various organisational essentials. In an earlier study, Petrov (2006) points out that the nature of university leadership is ambiguous and contested, as it consists of organisational complexity, multiple goals and the fact that it has traditional values.

This notion is supported by Smith and Wolverton (2010) who specify that university leadership often has to balance the various competing interests from stakeholders like students, trustees, donors, government and the community. Balyer (2020) further adds to this discussion by stating that higher education administration comprises managing a group of amenities ranging from technological, social, scientific contexts inside the higher education institutions and social partners outside the higher education institutions. Bell, Warwick and Galbraith (2012) emphasise that higher education institutions are presently working within a climate of pressure from uncertainty and change. These findings by the above scholars indicate how challenging managing higher institutions is, in terms of all the factors they have identified.

Kulati (2003) expresses that: "the importance on institutional effectiveness, efficiency and responsiveness within the new higher education dispensation has thrust the role of leadership – and in particular that of the vice-chancellor, onto the centre stage of institutional change agendas." In an earlier study, Smith, Bargh, Boccock and Scott (1999) proclaim that vice-chancellors have progressively been playing a much more dominant role in institutional change, and in outlining and modelling the culture and mission of their respective institutions. Taking into consideration the various crises

university management has had to deal with, just from a South African perspective, firmly puts the limelight on the executive management of universities and their competencies.

Botha and Camphor (2008) regard the advancement of management attributes and competencies in higher education institutions as indispensable. Botha and Camphor (2008) further add that the emphasis of management development and training should be on evolving the management skills and competence essential in backing of the university's vision, mission, and strategy. Meek, Goedegebuure, Santiago and Carvalho (2010) support this notion and state that university administrators, which include rectors, vice-rectors, deans, vice-deans, department heads, directors and vice-directors, must be able to demonstrate professional competency such as being able to define the vision, mission, objectives as well as strategies to manage finances and human resources. Balyer and Ozcan (2017) indicate that the quality of university management should be enhanced by altering the techniques, styles, mechanisms and competency of leaders. As higher education institutions are facing growing demands from both internal and external environments, thus emphasizing the importance of higher education administrators' competency. It is clear from the above discussion, that a need for the development of managerial skills is an essential competency for university executive management.

Managerial competency depends on both skills and knowledge based on understanding. (Warn and Tranter, 2001) state that these management competencies should include the capacity to transfer information and abilities to new tasks and situations. According to Smith (2000), professionals and leaders need to be able to use a combined set of managerial competencies, especially in decisional, interpersonal, and informational roles within their managerial duties. The previous statement is reinforced by Gentry, Harris, Baker and Brittain Leslie (2008) who believe that managerial skills are vital at different levels and across different functions, especially at higher education institutions. Smith and Wolverson (2010) propose that it is imperative to develop a framework of competence that classifies what underpins performance in leadership and management roles in higher education.

Aziz, Mullins, Balzer, Grauer, Burnfield, Lodato and Cohen-Powless (2005) maintain higher education institutions experienced a need for managerial training as the bulk of

managers are employed due to their academic qualifications and/or length of service. Balyer and Ozcan (2017) quoted Altbach (1996) who identify that higher education administration will progressively become a competency profession. Potgieter, Coetzee and Basson (2011) add that obtaining a management qualification, degree or MBA does not automatically qualify anyone as a competent manager. Potgieter, *et al.*, (2011) stated that *“only when the management qualification is coupled with the right values, attitudes, knowledge, skills and managerial competencies, and when these are displayed and practised at work, can it be said that one has the makings of a competent professional manager”*. Aziz, *et al.*, (2005) indicate that effectiveness in management competencies would eventually lead to successful and efficient task success. In the same vein Wahab, Mahmood and Ahmad (2015) state that within their research study, managerial competency was found to have a positive impact on the performance of university leaders.

Balyer and Ozcan (2017), conclude that future academic leaders must have knowledge and competency to manage the 21st century higher education system. Higher education institutions require leadership that honour the traditions and policies of these unique institutions, yet these leaders or management members are required to meet a set criterion of effectiveness and superior work performance in their roles as management or leadership of higher education institutions. Furthermore, higher education institution leadership must meet these key performance areas within a work climate of uncertainty and change pressure (Bell, Warwick and Galbraith (2012).

Higher education institutional leadership or the position within leadership that the vice-chancellor portrays, has been highlighted by the study of Kulati (2003), especially their influence in defining and shaping the culture and mission of their institutions onto the centre stage of institutional change agendas (Smith, *et al.*, (1999). Studies have indicated that university administrators [(rectors, vice-rectors, deans, vice-deans, department heads and directors and vice-directors– Meek, *et al.*, (2010)] require a wide range of management competencies as they are also recognised as administrators. On the other hand, the study by Botha and Camphor (2008) emphasize the development of management skills and competencies in higher education institutions as essential. A study by Balyer and Ozcan (2017) emphasises the importance of higher education administrators' competency. Botha and Camphor (2008) stress the focus of management training and development, and indicate that

the development of management skills and the competence required in support of the university's vision, mission, and strategy correlate with the influence of the vice-chancellors in defining and shaping the culture and mission of their institutions onto the centre stage of institutional change agendas (Smith, *et al.*, 1999).

Studies by Vuori (2014) and Hamlin and Patel (2017) claimed that there is a growing reliance on competence, managerial and leadership skill, and effectiveness within higher education institutions, which indicate the importance of the managerial competencies needed by university administrators. This is emphasised by the studies by Balyer and Ozcan (2017), Wahab, *et al.*, (2015), Aziz, *et al.*, (2005), Gentry, *et al.*, (2008), who point out the importance of managerial competencies within the higher education sector. Furthermore, one needs to address the fact that rectors, vice-rectors, deans, vice-deans, department heads, directors and vice-directors are deemed university administrators who need to portray the various managerial competencies that are required, to ensure that the higher education institutions are managed as effectively as possible. The above literature emphasises the importance of managerial competencies within the higher education sector. One can deduce that the executive management has a daunting task, considering that higher education institutions are intricate or unique workspaces (Bush and Glover (2003); Gosling, Bolden and Petrov (2006), that have a plethora of stakeholders (Smith and Wolverton (2010)) which need to be considered daily.

The study by Wahab, *et al.*, (2015) has established that managerial competencies have a positive effect on the higher education institutions, but what has not been established is which management competencies are needed by higher education institution's leadership or management, to effectively manage higher education institutions within South Africa. This is one of the objectives of this study; results will identify and provide reasons why certain management competencies are important when effectively managing an UoT within South Africa.

2.4 Conclusion

This chapter presented a review of the South African Higher Education environment, which was established through The Higher Education Act of 1997 with the formation of the current higher education institutions from 120 colleges of education, 21 public

universities, 15 public technikons, 24 nursing colleges, 11 agricultural colleges and numerous small private providers of higher education into a system of 26 public universities consisting of traditional, comprehensive universities and universities of technology. Furthermore, a review of the current literature on the main concepts of competencies, management competencies, as well as management competencies in higher education was also presented. This section discusses the origins of the term competencies and its underlying attributes identified by Chouhas and Srivastava (2014) as knowledge, skill, traits, self-concepts and values and lastly, motives.

A discourse on the US and UK approaches of competencies was included. Additionally, the researcher also elaborated on the similarities of the two approaches, especially Bergenhenegouwen who believed that the two approaches can be combined to offer an optimal level of performance. The researcher was in support of the definition from Boyatzis (1982) about competencies as: *“a collection of underlying required abilities, characteristics, knowledge, skills, attributes, exigence, motivation and particular abilities for a given job or position which leads to superior job performance.”* The above definition is in support of the US approach, as well as this research project.

The literature review highlighted the fact that several scholars could not agree on a universal definition of competencies (Table 2.3), but for the purpose of this study, the definition by Wong (2020), who states that competencies are *‘a set of observable and measurable ‘attributes’ or ‘success factors’ required for individuals for effective work performance’*, will be used.

Within this chapter, we discussed what managerial competencies are and that they regulate the effectiveness of managers in their job performance. The researcher also discussed various managerial competencies groupings from authors like Lakshminarayanan, *et al.*, (2016), Hellriegel, *et al.*, (2012), Oleksyn (2006) and Abrahams, *et al.*, (2001). The findings of the review identified by numerous scholars as important management competencies, provide evidence of these competencies in a managerial or organisational context. Additionally, Hellriegel, et al (2001) believed that these managerial competencies can be attained through formal studies, participating in extracurricular activities, in clubs or associations and gaining experience through holding certain positions.

The final section of the chapter discussed the managerial competencies in Higher Education. The section commenced with a definition by Martinez, *et al* (2106) of managerial competencies, as follows: “*set of observable knowledge, skills and attributes that leaders at Higher Education Institutions must possess, which will enable them to attain success in the performance of their roles in the worldwide context*”.

In this section the researcher established that the nature of university leadership is ambiguous and contested, and consists of organisational complexity, multiple goals and the fact that it has traditional values (Petrov, 2006), furthermore Smith and Wolverton (2010) state that university leadership often has to balance the various competing interest of stakeholders, such as students, trustees, donors, government, and the community.

In this section the importance of management competencies for Higher Education Institutions and its leadership was also discussed; Botha and Camphor (2008) stressed the fact that the advancement of managerial attributes and competencies in higher education institutions as indispensable, and highlighted that management development and training should be on evolving management skills. Competence focussed on the support of the university’s vision, mission and strategy.

In summary, the section provided a background to the higher education landscape in South Africa and the establishment of its current system of traditional universities, comprehensive universities and universities of technology. Furthermore, the researcher defined competencies, the researcher’s support of the US approach to competencies, and highlighted this study’s support of the definition of competencies by Wong (2020). A discourse on management competencies followed, with a discussion on the various definitions, as well as an in-depth discussion on the groupings by Lakshminarayanan, *et al.*, (2016), Hellriegel, *et al.*, (2012), Oleksyn (2006) and Abrahams, *et al.*, (2001) to provide context to the managerial and organisational context of these identified competencies.

In closure, the researcher discussed the management competencies in higher education and identified several studies on leadership, but none identifying important management competencies for higher education institutions. The researcher noted the concerns raised by numerous authors about the importance of management competencies for university leadership.

CHAPTER THREE: DISCOURSE ON CRISIS, ORGANISATIONAL CRISIS AND CRISIS MANAGEMENT

3.1 Introduction

This chapter continues the theoretical discourse on institutions of higher education, with specific reference to the concept “crisis”, its various definitions, antecedents and characteristics, as identified by researchers and scholars over the years. In addition, it will cover clarification on “organisational crisis”, its definition, and the importance of crisis management and crisis management competencies.

3.2. The term “crisis” and its manifestations

In the preliminary literature review in Chapter 1, Paraskevas (2006) states that the word “crisis” is derived from the ancient Greek term “Krisis” meaning judgement, choice or decision. The Business Dictionary (2017) defines a crisis as a serious occurrence that, if not handled properly and correctly or if not handled at all, may grow into a disaster or catastrophe. According to McConnell (2011), the term crisis acts as an umbrella term that helps to capture all unusual occurrences such as “pandemic viruses, volcanic ash clouds, oil spills, animal welfare diseases, hurricanes, tsunamis, terrorist bombings, school shootings, urban riots, water contamination episodes, chemical explosions, policy failures and institutional fiascos”. Coombs (2014, p3) states that “*a crisis is a perception of an unpredictable event that threatens important expectancies of stakeholders related to health, safety, environmental and economic issues, and which can seriously impact an organisation’s performance and generate negative outcomes*”.

Chebbi and Pundrich (2015) outline a crisis as a precise, unforeseen, and non-planned event or sequence of events that produce high levels of vagueness and threat or supposed threat to an organisation. Bundy, *et al.*, (2017) support this notion, and stated that through the vast research by various scholars through the decades, organisational crisis has been identified and perceived by managers and stakeholders to be highly salient, unexpected and potentially disruptive to daily operations. Keown-

McMullan (1997) states that regardless of the definition, it was clear that a crisis had a profound impact on organisations, people, or even entire countries.

Bundy *et al.*, (2017) further add that a crises have four primary characteristics; they are:

- sources of uncertainty, disruption and change;
- harmful or threatening for organisations and their stakeholders, many of whom may have conflicting needs and demands;
- behavioural phenomena, meaning that the literature has recognized that crises are socially constructed by the actors involved rather than a function of the depersonalized factors of an objective environment; and
- parts of larger processes, rather than discrete events.

Since the focus of this research study is from an organisational crisis point of view, a review of the literature identified a rich set of views of the term. Table 3.1 summarises the definitions forwarded by numerous scholars, on the concept of an organisational crisis.

Author	Year	Definition
Milburn, <i>et al.</i> ,	1983	“Organisational crisis is an opportunity for the organisation to attain its current goals or demand or threat on the organisation which either prevents the organisation from attaining its goals or removes or reduces an organisation’s ability to attain its goals that the organisation seeks to resolve because the outcome at stake is important and the resolution strategy uncertain”
Mitroff, <i>et al.</i> ,	1987	“Corporate or organisational crises are disasters triggered by economies, organisational structures, people and/or technology that cause widespread damage to the natural and social environment”
Pearson and Clair	1998	“An organisational crisis is defined as “a low probability, high impact event that threatens the viability of the organisation and is characterized by ambiguity of cause, effect, and means of resolution, as well as by a belief that decisions must be made swiftly”
Fink	2002	“An organisational crisis also has been described as “a fluid, unstable, dynamic situation”

Lucero, <i>et al.</i> ,	2009	“Crisis can be defined as unpredictable specific events and out of current procedures of organisation which results in a high level of unreliability and threatens to achieve goals and the strategies of understanding and the detection of the organisation”
Van Wart and Kapucu	2011	“Organisational crisis is a situation that threatens the important objectives of a business or organisation, surprises executive management by its manifestation, and it further curbs the amount of time for response thereby causing high levels of stress”
Institute for Crisis Management	2014	“An organisational crisis is any concern, problem or disturbance that triggers negative stakeholder responses that influence the organisation’s commercial and financial position”
Kuipers, <i>et al.</i> ,	2017	Generally, crisis management teams are equipped to respond to a crisis in their environment, but in some cases the crisis affects the organization itself, questioning its capacity and legitimacy.
Bundy, <i>et al.</i> ,	2017	All definitions of risk are agreement that risk has two characteristics: uncertainty: an event may or may not happen; and loss: an event has unwanted consequences or losses
Kuipers and Wolbers	2021	“Organizational crises are all those threats or negative incidents that require an urgent response by the organization under conditions of considerable uncertainty as to the precise causes and probable consequences of the situation at hand”.
Brand and Pohl	2021	Any event that threatens an organization’s reputation or credibility due to actions by employees or leadership of the organization.
Kafa	2022	An unpredictable event that disrupts the normal operations of the organisation that requires an immediate response.
Source: Extracted from referenced literature		

Based on an assessment of the definitions of the term “organisational crisis”, one can now deduce that there is no generally accepted agreement on a definitive definition for this concept.

However, from the assessment, one can extract similarities within the definitions and establish terms and key phrases such as: disturbance, threat or threatens, concern, unstable, attainment of organisational goals, influence organisation’s commercial and financial position, damage to social and natural environment, reducing an organisation’s ability to attain its goals.

Furthermore, from the above definitions, these instances are a “surprise”, “unpredictable specific events” and must be “swiftly” dealt with as it “further curbs the amount of time for response”.

Taking the above interpretations into consideration, the definition by Milburn (1983) presents a holistic definition that this study will use as the definition of organisational crisis. Milburn (1983) states that:

“Organisational crisis is an opportunity for the organisation to attain its current goals or demand or threat on the organisation which either prevents the organisation from attaining its goals or removes or reduces an organisation’s ability to attain its goals that the organisation seeks to resolve because the outcome at stake is important and the resolution strategy uncertain”.

Scholars have, however, agreed and identified that an organisational crisis consists of specific characteristics. These scholars identified seven key characteristics of an organisational crisis as listed in Table 3.2.

Characteristics	Researcher/Scholar
1. Organisational crisis leads to stress (individual crisis)	Hall and Mansfield, 1971; Hermann, 1972; Milburn, 1972.
2. Positive and negative conditions are associated with organisational crisis	Smart and Stanbury, 1978
3. The positive or negative conditions have a gain or loss value to the organisation.	Billings, <i>et al.</i> , 1980
4. Organisational crises can be triggered quickly or in certain situations can develop over time and are predictable.	Hermann, 1972; Billings, <i>et al.</i> , 1980; Lippitt and Schmidt, 1967; Whetten, 1979.
5. Crisis resolution is urgently necessary regardless of the type of crisis.	Billings, <i>et al.</i> , 1980.
6. There are probabilities linked to organisational crises in terms of their occurrence and resolution.	Billings, <i>et al.</i> , 1980.
7. Crises involve a wide range of stakeholders.	Shrivastava P., 1987; Smith, 1990. Pearson and Clair, 1998
8. All definitions of risk are agreement that risk has two characteristics: uncertainty: an event may or may not happen; and loss: an event has unwanted consequences or losses	Mikusova and Horvathova, 2019
Source: Pharaoh (2019)	

3.3. The life-cycle of a crisis

To better understand a crisis, one must comprehend the lifespan of a crisis, how it comes about, how it expands and what lessons to learn after it has dissipated. Numerous scholars have studied crisis events and have, over the decades, recorded a number of crisis life-cycles (Fink, 1986; Pearson and Mitroff, 1993 and Coombs (2007).

According to Coombs (2007), three influential classifications of the crisis life-cycle can be found in the literature. These are:

- The Four stages crisis life-cycle (Fink, 1986);
- The Five stages life-cycle (Pearson and Mitroff 1993); and
- A basic three-stage model (Coombs 2007).

Each of these models is discussed below.

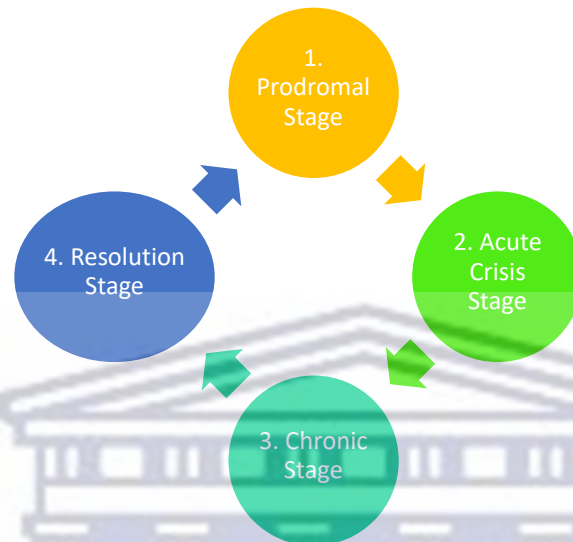
3.3.1. Fink's Four stages' crisis life-cycle:

As depicted in Figure 2.5, this model consists of four stages, namely, (1) prodromal, (2) acute crisis, (3) chronic crisis, and (4) resolution. Fink's four-staged crisis life-cycle model is based on the marketing product life-cycle model, which characteristically plots sales or consumption data over time. Fink's model was one of the primary approaches to treat a crisis as a comprehensive occurrence.

The identification of the forthcoming crisis and the launch of steps for the prevention and necessary arrangement, are made during the first, or prodromal phase, which is also referred to as the "crisis build phase" or the warning phase.

During this stage, according to Fink (1986), prodromes appear as small news stories, or trigger events or themes which Sturges (1994) has identified as a potential threat to an organisation. These prodromes are symptoms or precursors to the crisis, and if the precursors are recognised by the organisation, it can activate preventative measures that can reduce the negative impact of the possible crisis (Barton, 1993; Mitroff, 1996). If the precursors are not recognised, then the consequences of the pending crisis could reach its maximum impact.

Figure 3.1 Fink's Four Stages' crisis life-cycle



Source: Adapted from Fink (1986)

The second phase, named the acute crisis stage, is when the real crisis exposes itself. This is the shortest and most intense stage of a crisis, when the crisis reveals itself and precursors lead to the main crisis event. One major struggle in dealing with a crisis during this stage is the speed at which damages increase. Once a crisis develops into the acute crisis stage, there is no return, and an organisation can almost never recover the loss and resulting damages.

The brutality and the destruction of the crisis are subject to the success of the prodromal stage. Effective practical identification of a crisis can decrease the effect of the crisis in the acute stage. Unsuccessful recognition in the prodromal phase generates a responsive condition, instead of a proactive involvement.

The third phase, according to Fink (1986), is the chronic crisis phase which is identified by the enduring effects of the crisis. The chronic crisis stage is also referred to as the “clean-up phase of a crisis situation”. It is a period of self-audit, self-recovery, and healing. Although singular crises may occur quickly, the lasting effects of the incident can spread beyond the life-cycle of the crisis. Furthermore, this stage may contain a salvo of questions about the crisis which will keep the event noticeable in the public domain.

During the resolution phase, as the final stage of a crisis, an institution may undergo processes of resolution and learning (Mitroff, 2004). Paraskevas (2006) states that it is important for an organisation to recognise its susceptibilities, and learn from the disappointments and accomplishments of its reactions.

The resolution phase exemplifies a clear end to the crisis event. Although organisations see this as the goal, it is not one to be hurried to. An organisation's early deduction that the chronic stage has concluded, can leave them susceptible to the reappearance of the crisis.

Furthermore, Fink's four-stages crisis life-cycle model was the first to treat a crisis as an extended event.

He believes that warning signs precede any trigger event and that the duty of a crisis manager is to identify and resolve warning signs in order to nullify some of the impact of the crisis.

This view is supported by Darling (1994), who states that the purpose of crisis management is to recognize early warning indications for a crisis, since it is much easier and more dependable to take care of the problem before it becomes acute, erupts and causes conceivable difficulties.

Fink also takes the crisis event itself and divides it into three stages, namely, acute crisis stage, chronic crisis stage and the resolution stage. Fink acknowledged that each stage requires a different action from a crisis manager.

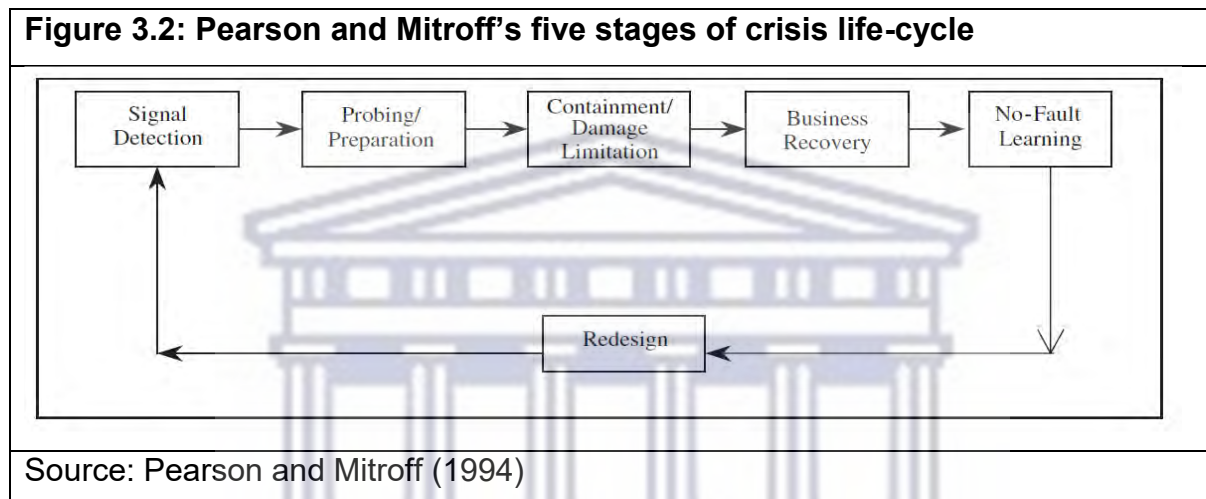
3.3.2 Pearson and Mitroff's five stages of crisis life-cycle:

The following model has been developed by Mitroff (1994). This crisis life-cycle comprises five stages:

- signal detection, when warning signs can be identified and acted upon to prevent a crisis;
- probing and prevention, when organisation members should be searching for known crisis risk factors and working to reduce potential harm;
- damage containment, the onset of crisis during which organisation members try to limit the damage;

- recovery, working to return to normal business operation as soon as possible; and,
- learning, reviewing and critiquing the crisis management process.

Within this model, the approach focuses on prevention and learning throughout the five stages. According to Bhaduri (2019), the Pearson and Mitroff five stages crisis life-cycle has been empirically studied the most.



The first stage of this model, entitled the Signal Detection stage is characterised by the appearance of small warning signs within the organisational setting. Of critical importance, is to take note of these warning signs, as they could prevent the crisis, or at least lessen the consequences of a crisis.

For the second stage, or Preparation/Prevention Stage, the key aim is to uphold a regular routine of tasks by management or the organisation in the prevention of the crisis. Hutchins and Wang (2008) describe this stage as the methodical planning to prepare the organisation to manage a crisis event, dedicating resources, personnel, and actions, to be allocated during a crisis situation.

For the third stage or Damage Containment stage, the main goal is to look at the minimisation of the overall impact and damage caused by the crisis event. Pearson and Mitroff (1993, p53) indicated that “*Effective management of this phase would detail plans for preventing a localized crisis from affecting other uncontaminated parts of the organisation or its environment.*”

In terms of the fourth stage entitled the Recovery stage, Hutchins and Wang (2008) stated that this stage is characterised by the organisation developing short-term and long-term plans, which would enable the organisation to return to a normal operating status. Pearson and Mitroff (1993) proposed that this stage answers two very important questions, namely:

- “What are the minimal procedures and operations that we need to recover and conduct normal business?” and
- “What are the key activities and tasks that we must perform to serve our most important customers?”

The final stage of the crisis life-cycle is the Learning Stage. Hutchins and Wang (2008) suggested that this stage emphasises the fact that a critical reflection of the crisis event, as well as an examination of the impact on essential and supplementary systems procedures, and improvement of the crisis management practices of the organisation must be done.

Wang (2008) highlights that learning during a crisis event is very crucial and that it should be implemented into every stage of the crisis life-cycle. Learning should be a continuous process of reflection and evaluation of crisis management actions.

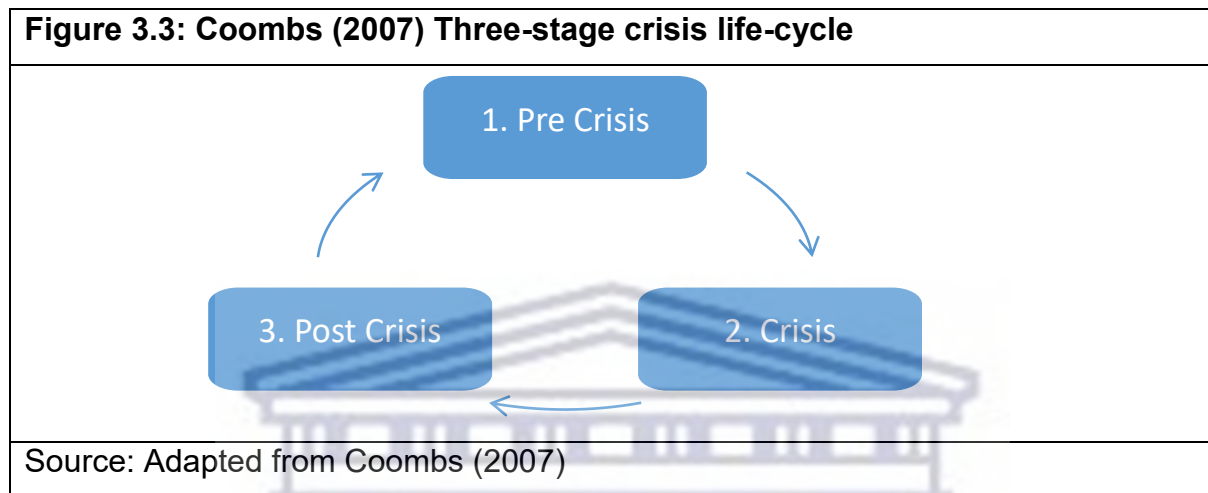
3.3.3 Coombs' Three-stage crisis life-cycle:

Developed by Coombs (2007), the third model, entitled the stage model of the crisis life-cycle is presented in Figure 3.7. Its three phases are identified as the pre-crisis, crisis, and post-crisis stages.

The first stage is defined by the identifying, or examining of an imminent, or possible crisis to ensure that organisations may plan and prepare measures to prevent the crisis from taking place. Lauge, *et al.*, (2009) indicates that management actions are concerned with the steps that must be taken to lessen the threats which could lead to a crisis. This phase is characterised by signal detection, crisis prevention and crisis preparations.

The crisis event phase is characterised by the crisis taking place, and causing havoc and destruction. According to Coombs (2007), this phase is characterised by an order of events in an unsteady, or crucial time in which a decisive change occurs. During

this phase, management is trying to lessen the damage caused by the crisis. Lauge, *et al.*, (2009) propose that this phase is characterised by quick, accurate and consistent responses from managers. Managers implement crisis response plans which need to be implemented without any delays.



Finally, when the crisis has passed, this is called the post-crisis stage. During this phase recovery efforts have been implemented and valuable lessons are learned from the crisis, to better prepare for any similar future crisis. Lauge, *et al.*, (2009) state that the organisation must implement recovery processes from the crisis, proceed with an evaluation of crisis management processes, improve any outdated processes, and prepare for any future crises.

3.3.4 Summary of crisis life-cycle models

In summary, the three models share a number of similarities. For example, each model identifies the warning signs of the crisis within the first stage, which is the first opportunity for organisations to evade the crisis by evaluating the warning signs and taking corrective measures.

Within the Coombs (2014) model, warning signs and corrective measures occur all within the Pre-crisis phase.

In Fink's Model (1986) the process of identification and planning occurs within the prodromal phase.

in Pearson and Mitroff's model, the crisis signal detection and probing/preparedness phase applies.

Within all three phases the identification of warning signs is a crucial part.

Another major similarity of the three models is that all three-crisis life-cycle models are never-ending. Once a crisis moves into the last stage, whether it is the Coombs' Post-crisis stage, Pearson and Mitroff's Learning stage, or Fink's Resolution Stage, the next stage will always be the first stage, which will be pre-crisis, signal detection or a prodromal stage, as a new crisis forms.

Therefore, for the purpose of this study, the researcher will focus on crisis as a whole. The study will not focus on any of the individual stages, but on the crisis event itself. Based on the analysis of the three models above, it is clear that the duties of crisis managers vary as the crisis unfold.

At the start of the crisis, crisis managers focus on signal detection, crisis prevention and crisis preparation (Lauge, *et al.*, 2009).

Lauge, Sarriegi and Torres (2009) postulate that during the middle stages of the crisis, the duties of crisis managers focus on the crisis, and how to resolve it. Crisis managers must then implement crisis management processes quickly, accurately and consistently.

In the final stages, the focus is on recovery processes, evaluating of the crisis management processes, learning valuable lessons from the crisis and (most importantly), preparing for the next crisis. (Lauge, *et al.*, 2009)

Coombs (2007) suggested that organisations can recognise the failures of other organisations as warning signals that have the potential for a similar crisis experience, whereas Ulmer, Sellnow, and Seeger (2007) state that organisations can learn vicariously from the failures and crises of other organisations, and enact changes in the pre-crisis stage.

3.4 Examples of organisational crises from an international perspective

From an international perspective, modern history presents numerous examples of organisational crises. The following is a selection of events of organisational crises and their consequences.

3.4.1 BP Deepwater Horizon Catastrophe 2010

On 20 April 2010, the BP Deepwater Horizon oil rig exploded and sunk in the Gulf of Mexico (Pallardy, 2021). The explosion killed 11 workers and 17 were injured. Besides the loss of life, an estimated 3.19 million barrels of oil had leaked from the sunken oil rig and BP was fined \$20.8 billion. According to Pallardy (2021), this was the largest financial penalty ever given to a single company by the U.S. government. According to the National Environmental Trainers (2021) the oil spill not only affected the groundwater supply in the Gulf of Mexico, but also the marine and birdlife within the affected area (Pallardy, 2021).

The aftermath of the crisis saw several of the high-ranking officials of BP charged and sentenced for their part in the incident (Pallardy, 2021). In the official final report, it stated that: *“This disaster was preventable if existing progressive guidelines and practices had been followed, but BP did not possess a functional safety culture plus BP knew about the fault in the blowout preventer which caused the explosion”* (The Guardian, 2011). According to Pistilli (2021), BP spent a total of \$70 billion in federal fines, lawsuits pay-outs and clean-up operations throughout the Gulf of Mexico. Another consequence of the oil spill was the drop in BP’s share price; it declined to a total of 54% of its value (Pistilli, 2021).

The above (environmental disaster), makes it clear that a crisis can affect anyone or anything. A big multinational oil and gas giant, one of seven supermajors in the world was brought to its knees. (BP, 2021). The outcome reflects not just loss of revenue, fines, loss of stock market position or even loss of reputation, but more so the loss of 11 lives due to the neglect of *“existing progressive guidelines and practices”*. In one of the interviews after the oil spill, BP confessed and stated that *“BP was not prepared for the crisis”* (Fernandez, 2009).

3.4.2 Examples of organisational crises at higher education institutions

Modern history provides numerous incidents where higher education institutions are involved in crisis events. In general, these events are cases of students protesting to highlight educational, economical and even political issues.

The following crisis events are examples of student crises that have shaken the very core of their respective higher education institutions, as well as their respective countries.

3.4.2.1 Sorbonne University student protests, 3 May 1968, France.

In May 1968, students from the Sorbonne College of the University of Paris, joined by labour unions, protesting for educational reform and upgrading of the French university system led to violent clashes with police. More than 20 000 students set up barricades to repel advancing police forces (Steinfels, 2008). The strike, which saw millions of workers joining the protest, caused the shutdown of newspaper distribution, air transport and major railroads across France, and the protests spread to other French universities. The violent clashes resulted in more than 400 casualties and the death of one police officer. The protest lasted until June 1968 when President De Gaulle announced a national election. President De Gaulle made numerous concessions which included increased wages and improved working conditions; he passed a major education bill that would modernize the French higher education system.

3.4.2.2 Tiananmen Square Massacre 1989, China

In May 1989, approximately a million Chinese students, parents and supporters assembled in Beijing at Tiananmen Square to protest for democracy and call for the resignations of the Chinese Communist Party members. This was the biggest political demonstration in China's history, which ended with more than 7000 students and protesters killed, and over 40000 activists arrested and imprisoned (Chan, 2009).

In response to the brutal violation of human rights, the events of 4 June 1989 had a devastating effect on the international world, even leading to economic sanctions against the People's Republic of China

The Chinese government still does not publish or acknowledge any information of the incident even to the point where the National Museum of China, which is housed in Tiananmen Square, was renovated and opened to the public in April 2009, had no display or exhibits of the events of June 1989. The 20th anniversary of Tiananmen Square saw thousands of people gathered in Hong Kong but in Beijing, international news sites and Twitter were barred, and no journalists were allowed on the Square (CNN, 2016). One of the most iconic photos still under censorship in China is the "Tank Man" photograph, also referred to as the Unknown Protester or Unknown Rebel photo. The photograph shows an unidentified Chinese man standing in front of a column of tanks leaving Tiananmen Square on June 5, 1989.

3.4.2.3 Trisakti University protests, 1998, Indonesia.

On May 12, 1998, a non-violent protest against the Suharto government consisting of over 6 000 students, lecturers and staff assembled at the Trisakti University and marched towards the People's Representative Council Building in Jakarta. The protest turned violent as four students were shot dead and 18 wounded by police and security forces in Jakarta (Landler, 1998). The illegal actions by the security forces activated widespread riots and mass rapes. which led to the deaths of over 1000 people (The Jakarta Post, 2014). Property damage exceeded \$400 million (Beerkens, n.d.).

On 21 May 1998, President Suharto of Indonesia resigned due to the illegal action of the security forces during the Trisakti University protest. Furthermore, two police lieutenants were prosecuted for their actions. with further prosecutions promised by Deputy Attorney General (Stopimpunity, 1998). After the resignation of President Suharto, the political, legal, economic and education system in Indonesia was reformed; also of note was the abolition of the army's dual function within the government of Indonesia (NonViolentDatabase, 2015).

3.4.2.4 Iran student protests, 1999, Iran

Students in the Teheran University dormitories were vigorously protesting the closing of the reformist newspaper and parliament's passage of a new law limiting freedom of speech in Iran (Gorgin, 2008). On 8 July 1999, police, supported by the Islamic conservatives within the Iranian government (The Guardian, 2009), raided the Teheran University dormitories. This action by the conservative Iranian government ignited violent protests that lasted for several days across Iran. During the raid, 125 students were arrested and 20 people hospitalized.

On 9 July 1999, more than 10 000 students demonstrated in Iranian cities, which led to 1500 students being arrested by the Iranian security forces, and several killed during this period. The higher education Minister and the Teheran University Chancellor resigned in disgust and utter outrage at how the matter was handled by President Khatami (REUTERS, 1999).

The above examples from an international context present clear evidence of such crises on organisational well-being. In the same way a similar crisis in a South African context is present. Examples of the impact of such crises are discussed below.

3.5 Examples of organisational crises at higher education institutions within a South African context.

This section provides a background to two major crises which critically impacted the South Africa Higher Education Sector and forced the management of universities to deal with the crises and their consequences.

3.5.1 #FeesMustFall, 2015.

The #FeesMustFall (FMF) movement started after the #RhodesMustFall (RMF) movement was launched on 9 March 2015 at the University of Cape Town (UCT). (Cornell, Ratele, & Kessi, 2016). Students at the UCT campus demanded the removal of a statue of Cecil John Rhodes as he was a symbol of colonialism, and pledged to address contract worker rights, curriculum change and several other issues presented by students, workers and staff to UCT management (Kamazi, 2015).

The #FeesMustFall (#FMF) student movement was officially launched after the University of Witwatersrand (Wits) declared an increase in tuition fees for 2016 (Pillay, 2016). The protesting students were dissatisfied by the inflexible nature of negotiations and moved to more combative actions to show university management the significance of their demonstrations. University management was publicly criticised for their management of the crisis.

Naidoo (2016) condemned university management who, under orders from their senates and councils, empowered police and security firms via court interdicts to protect universities “*against anyone else participating in disruptive actions*”. Naidoo (2016) further stated that, instead of supporting the movement for free education and decolonising of the higher education systems, police and security firms victimised students and even noted that violence amplified at university campuses when interdicts had been issued against protesters.

Table 3.3 provides an overview of how the #FMF movement disseminated throughout the South African Higher Education Sector, and how it escalated into a crisis of national proportion.

Table 3.3 Spread of #FMF throughout South Africa

Date	Action
14/10/2015	Students at Wits protest against a 10.5% increase in student fees. Students arrange to sit in and lockdown of Wits University. (Sello, 2015)
19/10/2015	Student protest actions spread from Wits to UCT and Rhodes University. Students block entrances to UCT campus. Riot police called in as RMF students illegally occupy the administration building at UCT and 25 students are arrested. (EWN, 2015)
20/10/2015	CPUT and University of Fort Hare students start protesting and barricading entrances to campuses. (EWN, 2015)
21/10/2015	CPUT and UCT students join forces and march onto Parliament on the day of the meeting of the National Assembly with President Jacob Zuma and Higher Education Minister Blade Nzimande in attendance. Students demanded that Minister Nzimande address them and violent clashes with police erupted. (Merten, 2015)
22/10/2015	Students of the University of Johannesburg clashed with a private security company. (EWN, 2015)
23/10/2015	NMMU students join the movement with the blocking of campus entrances. (PE Herald, 2015), President Zuma met with vice-chancellors and student representatives at the Union Buildings. Student protests outside the Union Buildings turned violent as portable toilets were set alight and fences were broken down. Police used tear gas, stun grenades and rubber bullets to disperse the protesting students. President Zuma announced no increase in university fees for 2016. (Hosken, 2015)
11/11/2015	Protestors shut down all operations on UWC campus with violent protesting. Various buildings were damaged and personnel were treated for various wounds. (Herman, 2015)
17/02/2016	UCT seeks interdict to prevent violent protests after a bus, paintings and Vice Chancellor's office is petrol bombed. (Evans, 2016)
14/08/2016	The South African Union of Students calls for students to shut down universities on 15 August 2016 after the Council on Higher Education concluded that a 0% fee increase would be unsustainable and recommended an inflation-related increase. (EWN, 2016)
15/09/2016	Student protests break out at Walter Sisulu, University of KwaZulu- Natal, Mangosuthu University of Technology. (Potelwa, 2016)
19/09/2016	Minister Blade Nzimande announced that university fees will increase by 8%. Students at the University of the Witwatersrand mobilised and violent protests followed, further protests at the University of the Free State and Pretoria erupted as well. UCT suspended their academic year. (SABC News, 2016)
10/10/2016	Violent protests break out at the University of the Witwatersrand as protesters take protests into Braamfontein. (EWN, 2016). Various shops and a bus are damaged during the confrontation with the police. Vehicles were set alight on UCT campus. (News24, 2016)
3/10/2016	Students close UWC and CPUT campuses for the second day in a row (Furlong, Contsana, and Ntongana, 2016).
7/10/2016	FMF detonates a nail bomb on UCT's Jamieson Plaza. (Hodes, 2016)
10/10/2016	UCT crèche evacuated after an anonymous threat. (Doochin, 2016)
10/2016	Police in clashes with protestors at UWC campus. UWC management released a statement that the management will only meet with representatives of the SRC and FMF to discuss their demands. (Brandt, 2016)
07/11/2016	Violent clashes between police and protesting students on the UWC campus as students overturned campus security vehicles and graffiti scribbled on-campus buildings. (Petersen, 2016)
The total cost of FMF exceeds R600 million in damages to universities. (Kiernan, 2016)	
Source: Pharaoh (2019): Own processing	

In 2016, the Higher Education Minister, Blade Nzimande, estimated that the initial costs for the #FMF movement for 2015 and 2016 was approximately R600 000 000 (Sowetan, 2016) and that this valuation could increase as some universities were still awaiting the assessment from their insurance carriers for the final assessment. The cost of overtime for police officers in Gauteng alone was confirmed at more than R3 million. In 2018, the Minister of Higher Education and Training, Naledi Pandor reported to the South African Parliament, that the #FMF movement, which lasted over three years, accumulated damages to the amount of R786 million (Kahn, 2018). The cost of the #FMF movement was felt throughout the South African Higher Education sector. Table 3.4 provides details of the damages caused to higher education institutions:

Table 3.4: The #FMF cost per university: cost summary (including infrastructure damage)	
Higher Education Institution	Damages
University of Johannesburg	R120, 295, 000 – Auditorium and computer lab burnt down, damages to 3 cleaner change rooms, guardhouse and various properties vandalised
University of KwaZulu-Natal	R82, 000, 000 – Law library at Howard College, William O'Brien residence, coffee shop.
North-West University	R54, 046, 169 – Damage to Administration building, science centre, entrance and house parents' residence, main gate, gate monitors and cameras.
University of the Western Cape	R46, 000,000 – burnt and damaged residence buildings, vandalising of electronics in buildings, fire damage, broken doors, windows and gates.
University of Fort Hare	R8 000 000
Vaal University of Technology	R7 000 000
Nelson Mandela University	R6 600 000, Xanadu Melody clubhouse was torched.
Tswane University of Technology	R5 073 747
University of Zululand	R4 500 00, fire damage to buildings and university vehicles
University of Limpopo	R4 000 000
University of Cape Town	R3, 200, 000 – University vehicles (bakkies and bus), air filtration system, broken doors and windows, private vehicles set alight, Vice-Chancellor's office sustained fire damage, historical paintings and statues destroyed.
University of the Free State	R2 800 000, damages to statues
University of Witwatersrand	R2, 044,000 – Damage to lecture room due to fire, plus lecture theatre, fire hydrants, fire hose reels, toilets, benches, bins and graffiti on various buildings and broken windows and doors.
Stellenbosch University	R1 400 000
Walter Sisulu University	R351 287
Rhodes University	R250 000
Source: Adapted from Businesstech (2016)	

3.5.2 The COVID-19 Pandemic and its effect on the South African Higher Education Sector

According to the World Health Organisation (WHO, 2021) COVID-19 is the disease caused by a new coronavirus, called SARS-CoV-2. COVID-19 has been classified as a respiratory system-related infectious disease, namely Coronavirus 2 (SARS-CoV-2) or COVID-19 and was declared a pandemic by the World Health Organisation (WHO, 2020). The first cases were reported on 31 December 2019, following a report of a group of cases of 'viral pneumonia' in Wuhan, The People's Republic of China. According to WHO (2021), a total of 6 308 976 people lost their lives due to the pandemic and 535 062 191 active cases were reported by 13 June 2022.

On 26 March 2020, President Cyril Ramaphosa declared a state of disaster and confirmed that South Africa would enter a nationwide lockdown as a preventative measure against the spread of the COVID-19 Pandemic (SANews GOV, 2020). This pandemic prompted countrywide lockdowns which impacted trade, businesses and even education sectors throughout the world. The lockdown allowed that only essential services were permitted to continue. During this period, as mentioned above, South Africa recorded a total of 101 484 deaths and 3 978 590 active Corona cases as of 13 June 2022 (SACoronaVirus, 2022).

As part of the lockdown declared by the South African President, to curb the spread of COVID-19, all schools and universities were closed with immediate effect, as these were public spaces with high movement and concentrated populations.

Toquero (2020) indicates that higher education institutions worldwide were affected by the COVID-19 pandemic. which resulted in campus closures to enforce social distancing measures. Naidoo and Cartwright (2022) are of the opinion that, due to the closure of the South African higher education institutions and postponement of the academic calendar, the South African higher education institutions and the Department of Basic Education (DoBE) held several meetings with experts and opted for an official shift to online teaching and learning as well as various forms of blended learning to salvage the academic year.

This decision was met with mixed responses, as it meant that students and lecturers had to rely on their own internet access from their isolated environments.

Funk (2021) identifies three areas which caused concern in higher education institutions since the pandemic began in early 2020, namely, financing, issues related to the logistics of learning, and inequality. Govindarajan and Srivastava, (2020) added that the COVID-19 pandemic changed students' lives by, inter alia, the dislocation from their campuses and homes, financial issues, loss of scholarships and internships, the necessity to learn novel technologies in addition to the content of their subjects. Mathiba (2020) highlights that one of the financial issues related to the fact that numerous students were supported from entities that require bursary holders to excel academically, and failing that, the students faced full repayment of funds, for example, in case of failure or an average pass.

Ncwane (2020) proposes that the lack of technology devices and the support thereof, emphasised the systemic inequalities among Higher Education Institutions (HEI) in South Africa. This notion is supported by Van Lancker and Parolin (2020) who state that there were learners and lecturers in South Africa who lived in social conditions that was not conducive to home-schooling and remote teaching and learning.

Du Plessis, Janse van Vuuren, Simons, Frantz, Roman and Andipatin (2022) indicate that political parties initiated pressure on the Department of Higher Education by stating that *"it is the duty of a responsible government to look out for the poor and historically disadvantaged... the State could not hesitate to purchase laptops and data for all students in historically black universities so that their learning can continue virtually"*.

A further issue presenting major concerns to all universities, was the transportation of students during the Covid period. Mathiba (2020) highlighted the fact that there would be no university without international students. These stranded international students could not travel back to their home countries during the critical times, due to lockdown restrictions on international travel. These students had to be housed by their respective universities, which led to challenges for administrators to ensure food, accommodation and safety services for those foreign/ international students. Students also needed to be educated on how to protect themselves from any person-to-person contact and to live in self-isolation until the situation could return to normal.

Du Plessis, *et al.*, (2022) indicate that numerous institutions were obligated to detect and implement various strategies that contributed to supporting the academic projects

and these included engaging in emergency *“remote learning and teaching, working from home arrangements for staff, finding alternative ways to support students and reallocation of budgets to address the emerging needs”*.

Rashid and Yadav (2020) stress that prior to, and during this pandemic, no best practices for higher education institutions were implemented and no known models seemed relevant due to the situation.

Coombs (2014) states that *“a crisis is a perception of an unpredictable event that threatens important expectancies of stakeholders related to health, safety, environmental and economic issues, and which can seriously impact an organisation’s performance and generate negative outcomes”*.

From this definition, we can clearly state that the Higher Education Sector in South Africa, like all sectors world-wide, did not possess a plan to accommodate and counter this unpredictable event. It threatened the important expectations of the stakeholders (in this case the world population) related to health, safety, environmental and economic issues, seriously impacted all organisations’ performance and generated negative outcomes.

3.6 Crisis management

Given the nature of the existing industry environment, Vasickova (2019) states that crisis management had become a mutual issue for managers of organisations, prejudiced by the effect of globalisation and high market undercurrents. Furthermore, Bilic, Pivcevic and Cevra (2017) believed that crisis management has become a significant part of modern commerce, as the knowledge and readiness of a company’s management for a possible crisis plays a decisive role in the avoidance and successful crisis management throughout, and after a crisis ensues.

In an earlier study, Kuzmanova (2016) proposes that executive management should be organised to confront any conceivable crisis and see such a crisis as a phenomenon that would conceivably endanger the achievement of the organisation’s goals, and that goal achievement required a speedy reaction.

Within his research, Mitroff (2001) indicates that institutions could limit the duration of a crisis as well as the damage, by pre-emptive planning and preparation. If efficient

and effective planning for a crisis event has taken place, we can deduce that crisis management can reduce the loss of life and the severity of the damage caused to property.

Coombs (2015) defines crisis management as a set of elements planned to battle crises and reduce the actual damage imposed. In support of the above definition, Bundy, *et al.*, (2017) articulate their definition by stating that crisis management involves the synchronisation of intricate technical and relational structures and the design of organisational arrangements in order to avoid the occurrence, thereby lessening the effect and acquiring the necessary lessons (learnt) from a crisis event.

Vasickova (2019) adds that crisis management should be understood as a route with connected steps and procedures, which leads to an early forecast of probable crisis events, detection of the source of the crisis condition, successful resolution within time and the facilitation of crisis prevention. Van Wart and Kapucu (2011: 496) add that *“crisis management is a special type of change management typified by surprise due to unexpectedness of the size of an incident, short time frame, criticality in terms of life-or-death consequences or organisational threat.”*

The above statements indicate that these scholars agree that crisis management is the plan to reduce and recover from crisis situations. In addition, Van Wart and Kapucu (2011) maintained that crisis management is related, but not identical to change management, transformational leadership, as well as emergency management.

In consideration of the statement by Van Wart and Kapucu (2011), Table 3.16 presents the definitions of change management, transformational leadership and emergency management. The aim is to differentiate the terms from crisis management; for the purpose of this study, transformational leadership and emergency management will not be dealt with any further.

Yarmohammadian, *et al.*, (2013) points out that crisis management consists of ideal planning, organising and controlling of a crisis, with the inclusion of four rudimentary components, namely readiness, damage reduction, emergent response and rebuilding.

1	Emergency Management (Disaster Management)	Involves avoiding and dealing with risks. At its best, it prevents or minimizes emergencies, and then routinely handles emergencies with plans, training, and resources when they do happen.
2	Change Management	Is a general term for systems design that has both engineering/structural and human aspects. It is basic management competency even in stable times because of the importance of successful change to all organisations.
3	Transformational Leadership	Is leadership that facilitates and inspires successful organisational change of all types.
Source: Van Wart and Kapucu (2011)		

Sahin, Ulubeyli and Kazaza (2015) opine that the aims of crisis management are about informing (participants) about the level of the crisis, giving some time to managers to define and evaluate the crisis, providing alternative methods to improve plans for escaping from the crisis, creating crisis management abilities, and always being ready against possible crises. They also noted that the purpose of crisis management is not to try to prevent crises unequivocally, but to lessen negative results, to have quick and high-quality responses, and make arrangements against all types of crises as much as possible. Vasickova (2019) stated that crisis management can be identified as sets of approaches, measures and procedures used in circumstances where managerial skills are no longer adequate.

Kapucu and Ustun (2018) believe that due to the delicate environments created by crises, managers with the aid of limited data must make sudden and effective decisions. The impact, or consequences, of crises can be measured in terms of the death toll (not in all crises) and critical damages to infrastructure and public institutions. McConnell (2011) emphasises that such threats, with added high uncertainty, place a massive burden and accountability on crisis managers.

Taking the above statement into consideration, Lukic, Jaganjac and LAzarevic (2020) believe that it is essential to have employees that will devote their energy, minds and hearts to support the organisation to overcome all the damaging outcomes of a crisis event.

Sherman and Roberto (2020) further add that crises create high levels of uncertainty that may overpower responders until crisis managers provide a reasonable account of

what has and will occur during a crisis, creating an outline for organised crisis reactions within the organisation.

It is clear from the above research and discussion that the high level of damage/destruction or loss of life can overwhelm certain employees and that dedicated, trained crisis managers with the right competencies (crisis management competencies), are crucial in times of crisis to manage a crisis.

Vasickova (2019) discusses two main domains of crisis management, one that focuses on crisis management as a process, and the second, that highlights the main reactive and proactive approaches of crisis management.

Table 3.6 outlines a chronology of the main contributions to research that provide and discuss the crisis management process and framework within the two main approaches (i.e., reactive and proactive).

According to Vasickova (2019), crisis management (as a process) has associated steps and procedures, leading to an early forecast of a potential crisis, detecting of the type of crisis event and timely effective resolution, and also, enabling of crisis prevention. Numerous researchers (Antušák, 2009 Zuzák and Konigová 2009; Mitroff, Pauchant and Shrivastava, 1988; Shrivastava, (1988) consider all crisis management actions as a perpetual continuous process which begins with the prevention of the crisis by the organisation, and ends with organisational participants learning from the crisis event. As argued by Shrivastava, Mitroff, Miller and Miglani (1988) and Valackiene, (2011), the purpose and procedure of crisis management include the formation of anticipatory processes or mechanisms, that prevent a possible crisis, restore business performance and successfully manages losses and damages.

Shrivastava and Mitroff (1987) indicate that organisational strategy should fully incorporate the crisis management procedures and strategies that should be updated after every new crisis event. This notion was supported by numerous scholars over the years, which include Mikusova and Horvathova (2019) and Vasickova (2019); Antušák (2013), Crandall, Parnell and Spillan (2013); Spillan (2000) and Preble (1997).

Table:3.6: Chronological summary of the literature on crisis management approaches

Author (s)	Contribution to research	Methodology
Shrivastava and Mitroff, 1987.	Description of corporate crises and examines the strategies for dealing with them. The role of the crisis management team.	Exploratory, empirical Research.
Mitroff, Pauchant and Shrivastava, 1988.	System approach to crisis management from using a process model which identifies phases that are necessary for effective crisis management from a process standpoint.	Empirical research.
Pearson and Mitroff, 1993.	A crisis management framework is a process leading to organisations` crisis preparedness. The stakeholders` roles are highlighted too.	Explorative, conceptual research.
Frybert, 1995.	Algorithm for crisis solutions emphasizing the strategy revitalization.	Explanatory research.
Pearson and Clair, 1998.	A descriptive model of the crisis management process and multidisciplinary approach to crisis management research.	explorative research.
Shrivastava, Mitroff, Miller and Miglani, 1998.	The conceptual framework for understanding industrial crises. Organisations must minimize their destructive potential, therefore, the impact on stakeholders is evident.	Exploratory, empirical Research.
Spilan. 2000.	The necessity of developing the strategies for proper decision making before, during and after a crisis occurs. Two models of the crisis management process.	Empirical, exploratory research.
Pollard and Hotho, 2006.	Highlighting a strategic position of crisis management. Crisis management with the scenario planning process to provide a mechanism for managing a future crisis.	Exploratory, conceptual research.
Jaques, 2010.	Issue and Crisis Management Relational model exploring crisis management activities such as clusters of related and integrated activities occurring simultaneously. CM as a cyclical construct.	Conceptual research.
Valackiene, A. 2011.	Conceptualization of crisis management model concentrating on individual`s social identification and perspective of communication.	Conceptual research.
Sahin, Ulubeyli, and Kazaza, (2015).	Description of the activities of the crisis management process highlighting the importance of warning signals detection. Authors define some approaches to crisis management also.	Exploratory research.

Source: Adapted from Vasickova (2019)

A requirement for an effective crisis management mechanism is the merger of the employees' and stakeholders' interests (Shrivastava and Mitroff, 1987; Shrivastava, Mitroff and Miglani, 1988; Pearson and Clair, 1998; Valackiene, 2011; Sahin, Ulubeyli and Kazaza, 2015; Mikusova and Horvathova, 2019). This is also necessary when defining crisis goals, which can be modified from the strategic goals (Khodarahmi, 2009). Gundel (2005) and Khodarahmi (2009) link crisis management and strategic management by stating that crisis management can be critical, if not a significant part of strategic management. Similarly, Vasickova (2019) proposed that several common features overlap within crisis management and strategic management, such as top management activities, collaboration with stakeholders, and the consistent analysis of the environment. Another overlap identified by Schoemaker (1993), as found in both crisis management procedures and as a central part of the strategic planning process, is the common efforts that lead to the creation of crisis scenarios and plans.

Crisis management has also been identified as a reactive and proactive approach. In her research Vasickova (2019) identified several authors who have commented on and developed these approaches: (Mikusova and Horvathova, (2019); Sahin *et al.*, (2015); Sahin, Ulubeyli and Kazaza (2015); Valackeine, (2011); Zuzak and Königova, (2009); Antusak, (2009); Pollard and Hotho, (2006); Paraskevas, (2006); Wagner, (2005); Bertnard and Lajtha, (2002); Spillan, (2000); Pearson and Clair, (1998); Frýbert, (1995); Shrivastava, (1994); Mitroff and Pearson, (1993); Mitroff, Pauchant and Shrivastava, 1988).

Sahin, Ulubeyli and Kazaza (2015), Zuzak and Königova (2009), Zapletalova (2012) and Loosemore and Hughes (1998) indicated that the crisis management reactive approach is a set of procedures and principles to help bring the affected business out of the crisis and stabilise it. This approach begins with the identification of the crisis, followed by crisis management itself, with the aim of stopping the crisis. The crisis is assessed and based on the assessments, counteractive actions are decided on. Zuzak and Königova (2009), Shrivastava (1988), and Mitroff and Pearson (1993) highlighted that a pivotal part of this process is learning from the crisis, which provides the company with important data for further crisis measures and management.

In a proactive style, all the undertakings are aimed at a methodical exploration of the warning indicators that enable early detection of a possible crisis, and the design of

systems for early detection of a potential crisis.(Mikusova and Horvathova, 2019; Sahin, Ulubeyli and Kazaza, 2015; Jaques, 2010; Zuzak and Konig, 2009; Kouzmin, 2008; Mitroff and Pearson, 1993; Mitroff, Pauchant and Shrivastava, 1988).The proactive crisis management approach is viewed by discussing the necessity of anticipating and analysing a crisis during an organisation`s stability. To reiterate, there are two approaches of crisis management (proactive and reactive).

Researchers like Mitroff, Pauchant and Shrivastava (1988) Sahin, Ulubeyli and Kazaza (2015) believed that crisis management is not always probable to avoid the crisis, but can be managed much more competently with minimal loss. Crisis preparation is becoming an increasingly important issue, as organisational leaders seek to prevent, or effectively cope with impending crises. At no point should an organisation be left unprotected from a crisis that could have been avoided. Every organisation should have procedures and action plans established for crisis prevention and crisis management, whether the crises or events are economic, political, structural or environmental (Taneja, *et al.*, 2014).

3.7 Crisis management competencies

Mikusova and Copikova (2016) state that to manage a crisis efficiently, it is essential to have a systematized methodology based upon intelligence, managing sensitivity, and a suitable understanding of the significance of a comprehensive plan and organisational willingness. Therefore, in a crisis and emergency, the organisational leadership requires skills, individual and collective abilities, a high level of self-confidence and in other words, specific competencies.

According to Mikusova and Copikova (2010), the competencies of a crisis manager derive from the competencies of a general manager that are insistently requested just in time of crisis. Thus, the two researchers above believe that managers learn these competencies through experiencing a crisis situation; they learn how to deal with the crisis situation by experiencing the crisis first hand. Holsti (2002) adds that crisis managers must have competencies and need to learn to arrange compound complications, use their judgement and may benefit from collaboration.

Shrivastava, Mitroff and Alpaslan (2013) highlight that developing crisis management abilities and understanding a crisis has never been more significant. Szczepanska-Woszczyna (2013) stated that the effectiveness of management in times of a crisis is determined by the managerial competencies of managers. Skorkova, Jankelova, Joniakova, Blstakova and Prochozkova (2021) support the above statement and added that the managers' competencies of self-government organisations and establishments can guarantee their steady performance even during a crisis. Szczepanska-Woszczyna (2013) proposes that given the growth of a crisis, crisis management has become a vital skill of managers, and the crisis a test of leadership skills; it highlights that competency is useful in the daily work of managers but may be insufficient during the time of crisis. The creation of the capacity through human resources development by the organisation to manage the various crisis management activities, was highlighted by Wooten and James (2008).

Herbane (2013) believes that a crisis manager should know the company and its environments, the possibilities and the resources at his or her disposal for the rescue of a company, as well as its threats and opportunities. Mikusova and Copikova (2017) supported this notion, and added that a crisis manager would need to know the organisations' strengths and weaknesses. The latter are the underlying requirements for the function of the crisis manager.

Based on the above, we can deduce that managers dealing with crisis events need specific management competencies. These competencies must be very specific. Over the years, numerous scholars and researchers have identified crisis management competencies needed by crisis managers.

Table 3.7 Crisis management competencies	
Authors	Crisis management competencies
Fotr, <i>et al.</i> , (2006)	Financial management, cost management, performance improvement or change management.
Evecova, <i>et al.</i> , (2006)	Strategic management, project management, change management, process management, time management, conflict management, performance improvement, organisational management and leadership.
Wooten (2010)	An ability to reflect, learn and adapt in times of the crisis; the ability to seek opportunities; the ability of quick and ethical decision-making; a belief that the crisis can be an opportunity, managers often focus on the negative aspects of the crisis and do not recognize the opportunity, the possibilities in a given situation;

Van Wart and Kapucu (2011)	Willingness to assume responsibility, Flexibility, Decisiveness, Communication, Analytical Skills, Self-confidence, Delegate, Manage teams and team building, Network and partner and Resilience
Herrera (2011)	Leadership skills, skills to manage, control and help employees, the ability to quickly resolve unexpected problems, resistance to a long-term physical and mental effort as well as to stress, the ability to recognize in unusual situations what is the most appropriate in a given situation, independence, decisiveness and responsibility, professional competence and knowledge of specific issues in crisis management, the ability to organize and coordinate tasks and activities of team members, management skills, ability to use information, knowledge of database systems, the ability to use them to the full extent, knowledge of law, regulations and other standards that restrict tasks and activities, communication skills, listening skills, understanding information and signals, negotiation skills, influencing and persuasion skills, the ability to take feedback, to formulate decisions and commands clearly and concisely, and experience in handling the non-standard situation
Rakowska (2011)	Flexibility, ability to manage people, creativity, experience ability to take risks
Coombs, (2014)	Strategic planning, problem-solving, message production, information management, communication management and issues management
Mikusova and Copikova (2017)	Resilience, problem-solving, independence, flexibility, finance management, leadership, strategic thinking, focus on output, communication, teamwork, creative thinking, time management, focus on human, sense of belonging, focus on the customer, focus on standards, human management, product/service management, finance management, planning and work organisation.
Source: Own processing	

Some of the crisis management competencies overlap and others are specific due to the needs of the crisis. Some scholars were very specific and named competencies in fields like organisational management, financial management, even conflict management, while others indicated competencies like the use of judgement, problem-solving and the use of collaboration. Table 3.7 provides further evidence of scholars' contributions through the years.

Mikusova and Copikova (2016) stress that crisis management competencies often come from competencies of 'general' managers that are urgently needed in crisis times. The above table demonstrates that during a time of crisis, crisis management

professionals rely more on specific skills, attributes and knowledge (competencies) than other competencies.

Tomastika *et al.*, (2014) state that managerial competencies, which entail skills and abilities, add to the performance level of a crisis manager, and that a crisis manager is different from the typical manager due to the fact that he not only has to cope with “*potential technological malfunction, but also has to carry out saving of people, property, protect his good name in the market which could be, in the case of production drop out, replaced by another*” (Tomastika, *et al.*, 2014). It is clear from the above literature that during a time of crisis, management relies on certain specific competencies identified as crisis management competencies. Despite this diversity, the activities of crisis managers are united by one factor which is the effort of crisis managers for a quick and effective end to the crisis (Mikusova and Copikova, 2017).

3.8 Conclusion

Crises are a possibility, from the humblest of environments to the most technologically advanced conglomerates and unleash devastating consequences. Whether it is by accident (human made means), or “acts of nature”, a crisis has the power to affect all. Various scholars have defined and coined terminology to describe a crisis, but from differing points of view. However, all the scholars agree on the characteristics of a crisis. As described earlier in this section, these characteristics are:

- (related to) specific events;
- time-sensitive;
- able to potentially threaten and interrupt working routines of society;
- human-made, or of natural origin; and
- last between hours to several months, but requires specific competencies to manage.

Coombs (2014) states that ‘*a crisis is a perception of an unpredictable event that threatens important expectancies of stakeholders related to health, safety, environmental and economic issues, and which can seriously impact an organisation’s performance and generate negative outcomes*. McConnell (2011) further suggests

that the term crisis conveniently captures all unusual occurrences such as *'pandemic viruses, volcanic ash clouds, oil spills, animal welfare diseases, hurricanes, tsunamis, terrorist bombings, school shootings, urban riots, water contamination episodes, chemical explosions, policy failures and institutional fiascos.*

For the purpose of this study, a crisis will be viewed from an organisational point of view. Van Wart and Kapucu (2011) define an organisational crisis as a situation that threatens the important objectives of a business or organisation, surprises executive management by its manifestation, and it also curbs the amount of time for a response, thereby causing high levels of stress. The Institute for Crisis Management (2014) supports this definition and adds that organisational crisis is any concern, problem or disturbance that triggers negative stakeholder responses that influence the organisation's commercial and financial position.

The example of an organisational crisis introduces us to the reality of the after-effects crises can have, not only on the stakeholders within that crisis environment, but also on the natural environment, and most importantly, on the loss of life.

To conclude this section, the definition of crisis management and crisis management competencies, and their importance to any organisation is emphasised. Bundy, *et al.*, (2017) stated that crisis management involves the synchronization of intricate technical and relational structures, and the design of organisational arrangements to avoid the occurrence, lessen the effect, and acquire the necessary lessons from a crisis event. This definition highlights not only the importance of the need for organisations to prepare for the pending crisis, but to look at the origin of the crisis and try and prevent it. In addition, it is necessary to minimize the effects of the crisis and to obtain knowledge about it to enable the organisation to have better contingency plans in case a similar crisis strikes again.

Mikusova and Copikova (2016, p) state that "*crisis management competencies often come from competencies of general managers that are emphatically requested just in times of crisis.*" This statement articulates the idea or notion that very specific crisis management competencies are needed by managers during a time of crisis. Zczepanska-Woszczyzna (2013) states that given the growth of crises, crisis management has become a vital skill of managers and the crisis has a test of

leadership skills; these competencies are useful in the daily work of managers but may be insufficient during the time of crisis.

In summary, a crisis can affect any person or organisation at any time and can have dire consequences. In the case of crisis management in higher education, no plan can address all crises. Crisis management plans must become the standard for universities because man-made and/or natural-made crises are becoming progressively common at institutions of higher education. (Williams, 2021) To be able to lessen the damage from crises, crisis managers (management) with the right crisis management competencies, are needed.



CHAPTER FOUR: RESEARCH DESIGN AND METHODOLOGY

4.1 Introduction

Chapter four centres on the research study design and philosophical stance, as well as the methodological approach, which contains data collection and analysis techniques. Additionally, the section will detail the general research methodology in respect of how the researcher will respond to the central study question on what the management and crisis management competencies require by executive management members of universities of technology (UoTs), to effectively manage these. Leedy and Ormrod (2019) indicate that this chapter must validate the relationship of the research approaches by comprehensively responding to the questions raised within the research study. Lastly, the researcher will present approaches intended to improve the trustworthiness and credibility of the research study, the research limitations, as well as the ethical concerns applied.

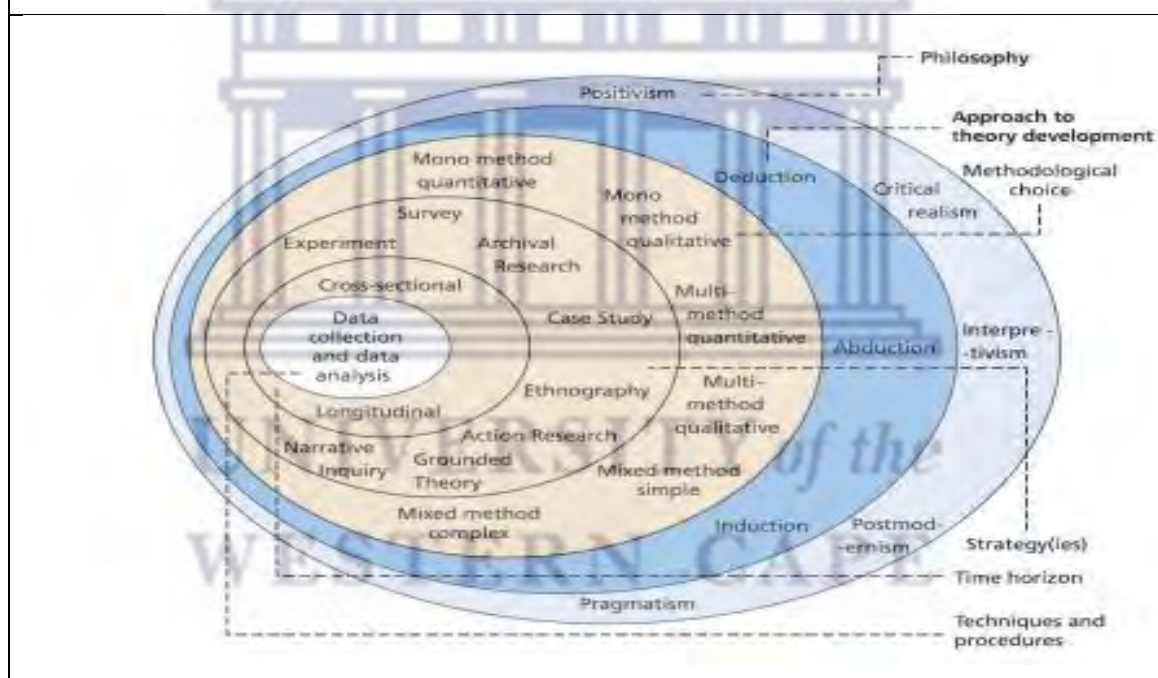
4.2 The research process

The research process onion is the ideal starting place for the research process as it raises awareness when making choices concerning the research philosophy, method, strategy, approach, and succeeding techniques. With the research onion, just like with a real onion, the layers must be peeled off to reveal the next layer. According to Saunders Lewis, Thornhill and Bristow (2019), as you unpeel the research onion, the following layer will be exposed and will guide the research project when a decision is made regarding appropriate data collection and analysis techniques. Crotty (1998) indicates that before deciding on the data collection and analysis techniques, one should clarify why you made the decision, so that others can take your research seriously. Saunders, *et al.*, (2019) point out that one cannot just peel and throw away some of the outer layers, as these are vital and need to be understood and clarified.

Figure 4.1 presents the research onion as identified by Saunders (2019), from which we can identify six (6) clear layers identified by Sanders (2019) as a:

- Philosophy layer,
- Approach to theory development layer,
- Methodological layer,
- Strategy layer,
- Time horizon layer, and
- Techniques and procedures layer.

Figure 4.1: The research process onion



Source: Saunders *et al.*, (2019)

4.3. Philosophical perspectives

According to Tamminen and Poucher (2020), research philosophies are a collection of rudimentary beliefs that directs the design and application of a research study, and the numerous research philosophies offer differing means of understanding research. Furthermore, Tamminen and Poucher (2020) state that research philosophies symbolise a worldview that outlines the nature of the “world,” the person’s place in it, and the assortment of probable affiliations to that world and

its parts to the researcher. Saunders, *et al.*, (2018) indicate that as a researcher you will not think of the research philosophies throughout every stage of the research process, but will make certain assumptions which will affect the decisions you make concerning your research project. Saunders, *et al.*, (2018) identify the three main categories of these assumptions, which are ontology (reality), epistemology (knowledge), and axiology (values and ethics).

4.3.1 Ontology (Reality)

Ontology, as described by Hesse-Biber (2016), is a philosophical belief system about the landscape of social reality, of what can be known and how. Hesse-Biber (2016) adds that a researcher's ontological expectations influence topic choice, creation of the research questions, and approaches for conducting the research. The previous statement is supported by Saunders, *et al.*, (2019) who propose that the researchers' ontology governs how the scholar sees the world of business and management, and would also affect the scholar's options of what to research in the study. Saunders, *et al.*, (2018) propose that ontological expectations mould the way the researcher sees and observes research objects.

4.3.2 Epistemology (Knowledge)

Saunders, *et al.*, (2018) state that epistemology concerns knowledge and what establishes suitable, binding and valid knowledge, and how the academic translates knowledge to peers. Saunders, *et al.*, (2019) point out that due to its multidisciplinary nature, business and management investigation have several different knowledge aspects, which includes mathematical data, to written and graphic data, actualities to interpretations, and accounts, and stories as well as imaginary explanations, which are all considered valid knowledge.

4.3.3 Axiology (Values and ethics)

According to Saunders, *et al.*, (2019), axiology brings the significance of values and ethics within the research process to the fore. The values being referred to are the values of the researcher and research participants. The importance of the researcher's values plays a valuable role, especially when deciding what research project to undertake as well as the choice of data collecting and analysing strategies. The above statement is supported by Saunders, *et al.*, (2019.p128) who

state that: one's choice of philosophy and data collection techniques are reflected in your values.

4.4 Research paradigm

Zukauskas, Vveinhardt and Andriukaiteine (2018) indicate that the research paradigm helps to outline scientific research philosophy. Alghamdi and Li (2013) point out that the research of paradigms depends on philosophical, theoretical, instrumental, and methodological foundations. In addition, Cohen, Manion and Marrison (2007) describe a research paradigm as a broad structure which include perceptions, views, and consciousness of diverse philosophies and practices used to perform scientific research. According to Saunders, *et al.*, (2019) the dimensions that assist the philosophical choice of academics/researchers or scholars and the assumptions about the research made by the academic/researcher is the research paradigm, which Saunders, *et al.*, (2019) refer to as a research philosophy.

4.4.1 Positivism

Saunders, *et al.*, (2018) state that positivism, as a research philosophy, is comparable to those used in the natural and physical disciplines, as exceedingly organised techniques are used to assist duplication, resulting in law-like generalisations. Saunders, *et al.*, (2018) further indicate that when adopting a positivist approach, you may use present theory to develop some hypotheses, test these hypotheses in the way that they would be established (wholly or partly). When refuted, the hypothesis would then need to be further developed. Furthermore, Saunders, *et al.*, (2018) specify that the positivist researcher does not have to start with existing theory, and could develop hypotheses which could lead to collecting evidences; these could be the bases for ensuing hypothesis testing.

This research deems the positivist research paradigm as unsuitable for this study as stated by Creswell and Clark (2017), as the positivist endeavours to clarify the world exactly and methodically because of their belief that it works by allowing for cause-and-effect laws. The study examined a phenomenon that has not been examined before, thus no statistical information or parameters existed at the time. Furthermore, this study was not intended to get interviewees to provide their statistical or scientific opinion on certain scientific expectations in the identification

of the management and crisis management competencies needed by executive management members of UoTs. The research study probed the life experiences of executive management members of UoTs to provide their insight, their recollection and their perspective of management and crisis management competencies at the executive management level.

4.4.2 Pragmatism

According to Saunders, et al., (2018, p111): "*Pragmatism is a philosophy which argues that the most important determinant of the research design adopted are the research question(s) and objectives, the aim often being the contribute practical solutions.*" Saunders, et al., (2019) believe that for the pragmatist researcher, the review begins with a problem, and its objective is to add practical answers that advise future practice. Saunders, et al., (2019) also suggest that the researcher's values urge the philosophical process of inquiry, which originated from uncertainty and a sense that something is wrong or out of place, which rebuilds the belief when the problem has been fixed.

Ngulube (2015) argues that pragmatism was created in an attempt to bridge the gap between interpretivist and positivist epistemologies. The above statement supports the sentiment by Sekaran and Bougie (2016), who indicate that the pragmatist paradigm trusts that a study can achieve good research even when there is more than one position involved. It is also of note that researchers like Ngulube (2020) and Creswell and Creswell (2018) indicate that the pragmatist approach allows for both qualitative and quantitative research methods, taking into account contrast in terms of its suitability for this study. Only qualitative methods were applied.

The objective of this study was for the executive management members to share their experience as members, in identifying the management and crisis management competencies needed by executive management members and to provide, in their own words, the reasons why competencies are important. The unsuitability of the positivist and pragmatist paradigms has resulted in motivation for the utilisation of the interpretivist research paradigm for this research study.

4.4.3 Interpretivism

Saunders, *et al.*, (2018) delineate that interpretivism is a philosophy which supports the need to comprehend the inconsistencies between humans in their role as social actors. Saunders, *et al.*, (2019) add that interpretivism brings to the fore that humans are unlike physical phenomena, because they form meaning. Saunders, *et al.*, (2019) also propose that the goal of interpretivism is to generate novel, richer clarification, and understandings of the social domain and its contexts. From a business and management perspective, this means observing the organisation from different groups' viewpoints. Saunders, *et al.*, (2019) indicate that interpretivism tries to take account of the intricacy by gathering what is significant to their research participants.

Rashid, Rashid, Warraich, Sabir and Waseem (2019, p4) point out that: "*the Interpretivist aims to achieve a deep understanding of the social phenomenon under study and recognises the importance of the participant's subjectivity as part of the process. The research participants use their own words while relating their experiences and beliefs.*" This research study followed an interpretivism viewpoint. It emphasises perceptions, stories, narratives and interpretations of the executive management members and their (lived) experiences in relation to the management and crisis management competencies needed at the executive management level at UoTs. Interpretivism allows the researcher to have multiple views of a problem and to perceive the world through the participants' perspective (Rashid *et al.*, (2019); Creswell and Creswell, 2018).

This philosophy fits the needs of this study as the aim is for the executive management members to share their lived experience as executive management members in identifying the management and crisis management competencies needed by executive management members and to provide, in their own words, the reasons why these are important. Furthermore, Saunders, *et al.*, (2019) state that a subcategory of interpretivism is phenomenology, studying existence, and focusing on participants' lived experiences which, as mentioned above, is ideal for this study.

4.5 Research approach to theory development

There are three approaches to theory development as identified by Saunders, *et al.*, (2019) namely the deductive, inductive and abductive approach. Each approach is briefly analysed below:

4.5.1 The deductive approach is defined by Saunders, *et al.*, (2018) as a research approach which comprises the examination of a hypothetical suggestion, by utilising a research approach explicitly intended for the gathering of data and for examining. The deductive approach is characterised by the advancement of a theory that is then exposed to demanding tests through a succession of propositions. Saunders, *et al.*, (2019) identify certain features that the deductive approach possesses. The first feature is the search to explain the causal relationship between variables and concepts. The deductive approach makes use of a highly structured methodology to facilitate replication as well as reliability. A second feature is that the concepts need to be managed in such a manner that philosophical choice enables evidences to be measured, often quantitatively. The last distinguishing aspect of the deductive approach is generalisation, which occurs when a sufficient size sample is selected.

4.5.2 The inductive approach is a research approach which involves the building of theory by analysing data already collected (Saunders, *et al.*, 2018). The inductive approach has its origins in the social sciences. Social scientists critically scrutinised the motive that permitted a cause-effect link to be made between specific variables, without considering the way in which people construe their social world. Saunders, *et al.*, (2019) state that the strength of the inductive approach is the development of such an understanding. A research project using an inductive approach is likely to be mostly concerned with the context in which such a study takes place. Small sample size studies and the use of qualitative data are ideal for the inductive approach. Furthermore, the inductive approach is open to the use of an assortment of strategies to collect qualitative data in order to create different views of the phenomena.

4.5.3 The abductive approach is defined by Saunders, *et al.*, (2018:113) as: *“an approach to theory development involving the collection of data to explore a phenomenon, identify themes and explain patterns to generate a new - or modify*

an existing - theory which is subsequently tested.” The deductive approach is defined by moving from theory to data, and the inductive approach from data to theory. The abductive approach, however, combines deductive and inductive approaches by moving back and forth between the two. The importance of the decision of approach to theory development is summarised by Easterby-Smith, Thorpe and Lowe (2012) who indicate that it permits the researcher to take more knowledgeable decisions about the research design; it would also allow the researcher contemplate the research methodologies and strategies selections more closely. The familiarity of the diverse research customs allows the researcher to adjust the research design to accommodate any constraints. An inductive approach to theory development was implemented, owing to the qualitative approach and the small sample size of the study.

4.6 Research methodology

Patel and Patel (2019) describe the research methodology as the theoretical and systematic investigation of the approaches applied to a field of study, and also suggest that the purpose of the research methodology is to:

- describe and analyse methods,
- highlight their limitations and resources,
- clarify their limitations and resources,
- clarify their presuppositions and consequences.

4.7 Objectives of the study

According to Saunders and Lewis (2018), research objectives ought to be clear, specific declarations, that detect what the research process seeks to attain as an outcome of doing the research.

This research study was guided by the following research objectives:

- To identify the management competencies needed to manage a UoT within South Africa;

- To determine why the management competencies identified above are important to manage a UoT within South Africa;
- To identify the management competencies needed by the executive university management to manage a UoT within South Africa, during times of crises;
- To ascertain why the above-identified management competencies are important during times of crises;
- To ascertain how executive management members will have to adapt managerially from a time period of non-crises to a time period of crises.

4.8 Research questions

Saunders and Lewis (2018) specify that the research question may be one inclusive question or several questions that the research process addresses. Dudovskiy (2022) supports the above statement by Saunders and Lewis, by adding that the central question of the research study has to be answered on the basis of the research findings. Also, Dudovskiy (2022) adds that the research aim needs to be achieved within the scope of the research, and that the achievement of the research aim/s provides the answer to the research questions.

Consequently, this research study was directed by the subsequent research questions:

- What are the management competencies needed by executive management members to manage a university effectively within South Africa?
- Why are the management competencies identified above important?
- What management competencies are needed by the executive management of UoTs, to effectively manage a crisis?
- Why are these competencies important during times of crises?
- How do these crisis management competencies differ from the management competencies in non-crisis times?

4.9 Revisiting of the background of the study

The research problem was premised on the challenges executive management of universities endured during the #FMF movement. They were publicly criticised for the management of the #FMF crises and their management thereof. Subsequently, the tertiary education sector faced a re-insurgency of student protests as well as a worldwide pandemic, during which various stages of lockdown were enforced throughout South Africa from 27 March 2020.

Bilic, *et al.*, (2017) believe that crisis management has become a significant part of modern commerce, as the knowledge and readiness of a company's management for a possible crisis plays a decisive role in the avoidance and successful crisis management, throughout and after a crisis ensues.

Szczepanska-Woszczyna (2013) argue that the effectiveness of management in times of crisis is determined by the managerial competencies of managers. She proposes that given the growth of crisis; crisis management has become a vital skill of managers; and the crisis is a test of leadership skills. Furthermore, she highlights that competencies useful in the daily work of managers may be insufficient during the time of crisis.

The purpose of this research was to establish what management competencies executive management members at UoT need during a time of crisis. Currently, no literature comprehensively answers or lists any management competencies needed to manage a UoT, especially during a time of crisis at any university.

It must be noted that the population of this study included the following executive management members: The Vice-Chancellors/Rectors/Principals, Deputy Vice-Chancellors, Registrars, Executive Directors, as well as the Executive Deans of Faculties, as prescribed by the statutes of the individual UoTs. The highest level of management includes a relatively small group of people that control the organisation and bear responsibility for all its operations (Tyranska, 2016).

The study produced a list of management competencies needed to manage a UoT within South Africa during a time of normality, and a list of management competencies needed during a time of crisis. Additional value was added to the study as executive members gave reasons for their decisions as well as elaborated on the process the

executive management would follow, to adapt managerially from a time of normality. to a time of crisis.

4.10 Theoretical framework

As they aimed to explore the management competencies in normal operating times as well as within times of crises, the crisis management competency and management competency theories provided the theoretical framework for this study.

Szczepanska-Woszczyna (2013) suggests that the effectiveness of management in times of crises is determined by the managerial competencies of managers. She also adds that given the growth of crisis, crisis management has become a vital skill of managers and the crisis a test of leadership skills and highlights that competency useful in the daily work of managers may be insufficient during the time of crisis. Current literature does not comprehensively list any management or crisis management competencies needed to manage a UoT in South Africa during normal operating times, and especially during times of crises.

The second theory framing of this study was the exploratory theory, which aims to highlight and explore an un-explored and un-interpreted phenomenon to better understand the problem (Marshall and Rossman, 2006; Cavana *et al.*, 2001). Thomas and Lawal (2020) express that exploratory research is supple and offers the preliminary foundation for forthcoming research. They further add that exploratory research requires that the researcher should examine other sources such as opinions about a phenomenon, data of other surveys, observation of research items, and published secondary data. Lastly, Thomas and Lawal (2020) add that exploratory researches in management sciences can be described as an effort to learn something new and produce information. Khan (2014) adds that this kind of research offers rich and in-depth data and description.

The exploratory theory fits the aims of the study, as stated above, in the sense that current literature does not comprehensively list any management or crisis management competencies needed to manage a UoT in South Africa during normal operating times, and especially during times of crises.

4.11 Research design

The research design of a study refers to the practical manner in which the research was managed according to a methodical system, with the objective of producing evidence to answer the research questions.

Bryman and Bell (2016) believe that the research design is the framework for the gathering and analysis of the gathered data, which essentially intends that the research design provides a directorial framework for the use of the research methods and the analysis of the data collected. Akhtar (2016) adds that research design is essential because it makes possible the smooth operation of several research procedures, thereby forming a professional research study that will yield maximum information with the least expenditure of effort, time and money.

According to Jamia (2016), a research design may be considered a good research design, especially within management research, if it is appropriate, efficient, economical, and minimises bias in data collection. Akhtar (2016) supports this statement, and contends that the characteristics of a good research design are that it should be flexible, efficient, economical and appropriate. Akhtar (2016) further adds that a research design which yields maximal information from the different aspects of the problem, is considered most appropriate and efficient.

The study is based on an exploratory research design that will focus on a qualitative research methodology. Exploratory research aims to highlight and explore an unexplored and un-interpreted phenomenon to better understand the problem (Saunders and Lewis, 2018; Marshall and Rossman, 2006; Cavana *et al.*, 2001). Furthermore, exploratory research provides in-depth, rich data and descriptions. But sometimes it focuses on some unknown problems and tries to solve these in order to provide and identify a future research direction (Phillips and Pugh, 2000).

According to Saunders and Lewis (2018), exploratory studies are well-suited to qualitative methodologies such as semi- and unstructured interviews or unstructured observation. Brown (2006) conveys that exploratory research focuses on research areas where little or no previous research has been published. The motivation by Brown (2006), supported by Burns and Bush (2010), is that exploratory research design is applicable when the researchers have partial knowledge about the phenomenon or research area. The above statements are supported by Saunders and

Lewis (2018), who are of the opinion that exploratory research is about gathering new data about an issue that is not understood clearly by the scholar, and lends itself well to a new phenomenon where one may have adequate information, but want to add more understanding that will enlighten the researcher.

Exploratory research in management sciences can be defined in different ways, but primarily, it is an effort to discover something novel and produce information (Saunders and Lewis, 2018). Thus, exploratory research is valuable for researchers when carrying out a study where there is insufficient data or no previous examination to refer to.

As a result, it is more suitable in the case of a research problem in which little research knowledge is existing. Academics in management studies might probably have an interest in such a problem, and wish to obtain insights into the little knowledge that is available (Bass, Beecham and Noll, 2018). Mouton (1996) highlights the purposes of exploratory studies as: to embrace the establishing facts, gathering new data and determining meaningful patterns or themes in a relatively unknown research area, in the hope of gaining new insight into the phenomenon being researched. In the next section, qualitative research will be discussed.

Malterud (2001) states that qualitative research is utilised in the examination of the significances of social occurrences, as lived by individuals themselves, in their natural context. Ryan, *et al.*, (2007), underline that qualitative research methods deal with the experiences, attitudes, and emotions of the respondents of a research study. Devers and Frankel (2000) state that the main goal of qualitative research is to understand the lived experiences of the persons who share this notion together (time; space and culture). Furthermore, Holloway and Wheeler (2002) add that qualitative research enables researchers to deeply explore behaviours, diverse perspectives, and life experiences, and to discover the intricacies of the situation through an all-inclusive framework.

According to Brynard and Hanekom (1997), qualitative research is research that yields descriptive information, which normally presents the respondents own written or spoken words, and thus the reason for its use in this study was to explore the views or perspectives of executive management members towards the management competencies needed to effectively manage a UoT during non-crisis times as well as

crisis management competencies needed during a time of crisis. Wilmot (2005) states that the qualitative research intention is to offer a comprehensive understanding of the world, from the respondents' perspective.

Mohajan (2018) indicates that flexibility and adaptability to change, the fact that it will lay the groundwork that will lead to future studies, and will be used to develop techniques for measuring and locating future data, are all major advantages of exploratory research design. Mohajan (2018) however, also warns that the qualitative data and the interpretation of the data is subject to bias, due to a modest number of samples and the results cannot be generalised to a wider population. Also, this type of study is not usually useful in decision-making at a practical level, which is another major disadvantage.

Grossoehme (2014) suggests that qualitative research methods are a systematic grouping, organisation, and analysis of textual material derived from talk or conversation. Erickson (2012) expresses that the emphasis in qualitative research is on "*qualitas (rather) than on quantitas*"

A qualitative research methodology is perfect for this study as the researcher's goal is to investigate the management competencies and crisis management competencies required by executive management members of UoTs during normal operating times and during times of crises. Secondly, the chosen research design/ methodology was ideal for this study as there is no current literature that comprehensively speaks to this research project or can answer any of the research questions.

In the preceding paragraphs on research design, the literature presented the following components and elements for exploratory research. Therefore, for the purpose of the study, exploratory research was followed.

4.12 Population

Matthews and Ross (2010) indicate that the population of a research study is the total number of cases that can be included as research subjects. This statement is supported by Majid (2018), who believes that the population of the research study is the target population that it intends to study or treat.

The population of this study includes all executive management members of the South African UoTs. The Deans of Faculties and Directors of Business Units are excluded from this study if they are not executive management members. The researcher obtained the total number of the population from published information, which comprises 75 executive management members that met the criteria as per the information obtained.

4.13 Sample (Sampling)

Saunders and Lewis (2018) define sampling as follows: “sampling as a sub-group of all group members or the whole population”. Kothari (2004) simplifies sampling by stating that sampling is a method of selecting a sum of individuals for a research study in such a way that the individuals that are selected represent a larger group. Due to the cost, time and other resources involved (Saunders and Lewis, 2010), sampling is preferable to studying an entire population of a study. Thus, researchers apply sampling as a remedy.

4.13.1 Research setting

Polit and Beck (2010) state that the research setting indicates one or more specific settings, where data for a particular research study is gathered. The research study intends to establish the management competencies needed by executive management members at UoTs during a time of crisis. Taking the above into account, it was practical that the study should be conducted within the tertiary sector of South Africa.

4.13.2 Purposive sampling method

Sampling allows researchers to gather information about the sample population without investigating every individual. This is a practical method that reduces the cost, time, and workload of the study, and increases the possibility of collecting data-rich information. According to Bryman and Bell (2016), a population is defined as the universe it bonds, such as people, cities, nations, regions, firms etc. from which the sample is to be nominated.

The study will employ a purposive sampling method; according to Saunders and Lewis, (2018) this sampling method is the most frequently used technique within non-

probability sampling. The authors also state that the purpose of a purposive sampling method is that it is commonly used within a small sample when collecting qualitative data. Similarly, Matthews and Ross (2010) motivate that purposive sampling is concerned with selecting fewer cases that would best aid the researcher to explore the study questions in-depth, and work with the data retrieved, to identify and explore abstract ideas. Etikan and Bala (2017) state that the purposive sampling method is based on the decision of the scholar in terms of who would offer the best data to (be able to) fulfil the objectives of the research study. Etikan, *et al.*, (2016) indicate that participants in the purposive sampling method are chosen due to the qualities they possess, whereas Etikan and Bala (2017) propose that the researcher or scholar must focus on those with the same view, who are willing to share their information.

From the above statements, it is clear that the purposive sampling method is used when the researcher selects what requirements are known and sets out and finds people that agree to provide the information based on knowledge and experience. Etikan, *et al.*, (2016) specify that the purposive sampling method is typically used in qualitative research studies, to ascertain and select information-rich cases for the most correct use of accessible resources, which involves the identification and assortment of persons or groups of persons that are capable and well-informed of the research phenomenon.

The purposive sampling method would be ideal for this study as the study focuses on the seven UoTs within South Africa. Each UoT has a limited number of executive management members, which limits the potential participants from whom to collect the information needed, to fulfil the objectives identified within this research study. Each UoT was contacted in the hope of interviewing as many executive members as possible.

4.13.3 Sample frame

Matthews and Ross (2010) indicate that a sample frame is a list of all the members of a population from which a sample may be drawn. DiGaetano (2013) supports this notion and states that a sample frame is normally thought of as a file from which a sample can be drawn. The sample frame for this research study consists of executive management members of UoTs within South Africa.

As this study is intended to establish the management competencies needed by executive management members at UoTs during a time of crisis, the second-tier management of the university management which comprises deans of faculties and strategic business unit directors were excluded from the study, if they were not officially mandated by the statutes of the executive management committees of the individual UoTs. The researcher obtained information from the official websites from the selected UoTs, which constitute a reliable sample frame.

4.13.4 Sample size

The target population of the study included all the executive management members of UoTs in South Africa which could include any second-tier management members of the UoTs, including the deans of faculties and business units' directors only if they were official members, as per the individual university statutes on the membership of the executive management committee.

The total population of 68 executive management staff members was calculated and derived from published material from the various UoTs. As only five of the six UoTs provided permission to use the university within the study, the total population decreased to 53 executive management members. The aim of the researcher was to interview as many executive management members as possible, taking into consideration their availability, and any difficulty in arranging interviews with executive management members.

4.14 Procedure

Research protocol prescribes that before data collection can begin, ethical clearance must be requested at the university where the student is registered. In compliance with the doctoral degree requirements, once approval was received from the Higher Degrees Committee at faculty level, ethical clearance must be applied for at the Humanities and Social Sciences Research Ethics Committee (HSSREC), which is the final stage of approval at the University of the Western Cape (UWC).

4.14.1 Ethical consideration

The research was guided by the ethical values recommended by UWC, and the data collected through the interviews has remained strictly confidential. The researcher complied with all the UoTs' respective ethical/governance committees' criteria for approval to collect data via interviews with executive management members, by applying for and receiving formal ethics clearance from UWC (at which he was registered) (see Appendix A). The researcher received ethical clearance from the HSSREC on 3 December 2021. The ethical clearance was valid from 30 November 2021 until 30 November 2024. Furthermore, the researcher applied to the six (6) UoTs' registrars, requesting permission to use their respective universities as sites for this research project. This email consisted of:

- a letter of introduction (Annexure A),
- information sheet (Annexure C),
- consent form (Annexure D), and
- the UWC Ethical Clearance Certificate (Annexure E).

The researcher obtained permission to conduct the study on five (5) out of the six (6) UoTs. Throughout the data collection process, the respondents were informed that their participation in the study was voluntary and could be withdrawn at any time, and that their identities as well as the institution they represented, would remain confidential. No participant's identity was used anywhere within the study, and pseudonyms were used to identify the individual participants, as well as their institutions, thus the confidentiality of each participant was maintained throughout the research project.

Before the start of the interview, the researcher double-checked regarding approval with the participants, to record the interview, even though the participants had consented to the recording on the signed consent form. Participants were also informed of their right to stop the interview, or request that the researcher moves to another question if they felt uncomfortable. Both the researcher and participants signed copies of these agreements. The recordings were saved for analysis on a password-protected hard drive until interviews were analysed and findings noted. The recordings would be destroyed after a period of five (5) years.

No degree of deception was used in this research study, as participants were informed of their rights through a disclaimer on the information sheet provided to all, and that the data gathered would not be made obtainable to any third parties. The POPI Act of 2013 states that the data collected during a research study may only be retained for the reason it was collected (Bryman, *et al.*, 2014). The researcher, to express appreciation and recognition for their participation, would inform the respondents of the findings.

4.14.2 Data collection phase

The data collection phase started on 7 February 2022 and was divided into six different applications to the six different UoTs' Ethics Committees. Each UoT had its own Ethics Approval Process, and the researcher had to comply with each one of the UoTs' guidelines and processes.

The researcher complied strictly with all guidelines as stated by the respective Ethics Committees of the UoTs and submitted the necessary information for their approval. Table 4.1 summarises the differences in time, process, and communication for each of the six UoTs.

Table 4.1: Representation of Application to UoT				
UoT – Pseudonym	First Contact via email to Registrars	Additional Information requested by UoT	Number of emails sent to UoT	Date of Permission Granted
UoT A	07/02/2022	None	3	09/02/2022
UoT B	07/02/2022	Completion of Application for Ethical Clearance; Full research proposal	10	03/03/2022
UoT C	07/02/2022	Research Proposal; Research Instrument	6	25/03/2022
UoT D	07/02/2022	Full research proposal; Questionnaire/Interview questions; Letter of Information/Introduction	11	21/04/2022
UoT E	07/02/2022	Completion of Application for Ethical Clearance.	13	09/05/2022
UoT F	07/02/2022	Completion of Application for Ethical Clearance; Research Proposal.	18	No feedback at all on the application. 10/08/2022
Source: Own processing				

Once a UoT granted official permission, the researcher emailed each of the executive management members of the respective UoTs and invited them to participate in the research project, by availing themselves to be interviewed. Accompanying this email to the executive management members were:

- the official approval from the individual UoT,
- a letter of invitation addressed to the executive management member (Annexure B),
- the information sheet (Annexure C),
- a consent letter (Annexure D)
- the UWC Ethical Clearance Certificate (Annexure E).

When an executive member agreed to be interviewed, the member had to complete, sign, and return the consent form to the researcher. At one UoT, the researcher had to submit all the supporting documents mentioned above to a central office and this office took responsibility for notifying the executive management member. This process was very productive as two members from the UoT made appointments within a week of the notification. This sped up the communication process, and assisted the researcher with confirmed interviews with executive management members.

As was expected and anticipated, the data collection process was frustrating and time consuming. In some cases, official permission was granted within days of the request being sent to the UoT, which enabled the researcher to email the executive management member with the above information on 9 February 2022. Although some approvals were swift, the responses from some executive management members were unpropitious. The researcher had scheduled the first interview for 13 April 2022.

This delay in the data collection process prompted the researcher to change his mode of communication to include a follow-up telephone call to each of the executive management members of the UoTs to request an appointment for an interview.

This change prompted an increase, after which a total of 13 interviews were finalised by the end of June 2022. As stated, five (5) out of the six (6) UoTs granted permission for the researcher to conduct the project. The data collection phase was concluded at the end of July 2022, at which date, Institute F had not responded to the request, even

after this matter was reported at the Rector's office. The researcher also realised and noted the difficulties of scheduling appointments with respondents on the executive management level (refer Section 4.15).

4.15 Data collection instrument: Online semi-structured interviews

(Video conferencing)

Saunders and Lewis (2018) indicate that exploratory studies are well-suited to qualitative methodologies, such as semi- and unstructured interviews or unstructured observation.

For this study, the researcher made use of semi-structured online interviews. Qu and Dumay (2011) state that the most important qualitative data collection method is the research interview. They are also of the opinion that interviews provide a convenient means for researchers to acquire about the world of others, although real understanding may sometimes be challenging.

DeFranzo (2022) states that qualitative research is predominantly exploratory research, and that it is used to improve an understanding of causal opinions, reasons and motivations. It affords comprehension of the problem or helps to grow ideas or hypotheses for possible qualitative research. It may also be used to expose developments in opinions and thoughts, and delve deeper into the problem. There are a variety of qualitative data collection methods but for this study, the researcher chose semi-structured interviews. The lockdown conditions during the COVID 19 pandemic necessitated that these interviews were held online.

According to Alvesson and Deetz (2000), semi-structured interviews are the most common of all qualitative research methods. This method involves the interviewer preparing questions that guide the dialogue towards the issues and topics identified under broad themes, in a consistent and systematic manner, interjected with enquiries designed to produce richer responses. The popularity of semi-structured interview stems from the fact that it is flexible, capable of revealing significant and often obscure aspects of human and organisational behaviour; it is also accessible and understandable. Kvale and

Brinkmann (2009) describe this method as the most effective and convenient means of gathering information.

As stated above, due to the restrictions and strict protocols enforced by the Covid-19 Pandemic, face-to-face meetings were prohibited and the researcher opted to arrange online interviews via videoconferencing with respondents, to ensure safety for all parties. According to Salmons (2012), videoconferencing permits a real-time, online conversation to take place, with the capability of receiving and sending audio-visual data. Tuttas (2015) suggests that video conferencing closely resembles the in-person qualitative interview compared to email interviews, online forums, and instant messaging. Irani (2019) highlights that video conferencing decreases the geographical limitations associated with in-person interviews, and offers researchers greater prospects to reach geographically dispersed respondents. Irani (2019) also proposes that video conferencing allows the respondent to be more relaxed as she/he is interviewed in a comfortable and familiar environment, and it adds the flexibility of scheduling interviews at the convenience of the respondents.

4.16 Challenges/roadblocks during data collection stage

During the data collection phase of this study, the researcher endured numerous challenges or roadblocks that delayed the data collection at the UoTs. The most critical challenges to extract data could be attributed to:

- Busy schedules of the executive management members;
- Numerous interviews were cancelled due to pending load-shedding and had to be rescheduled, causing delays;
- Some of the UoTs experienced student protests and could not be reached via email or telephone;
- Due to those student protests, scheduled meetings had to be cancelled and rescheduled, even up to a month later;
- Numerous executive management members, as per Covid-19 protocols, were working from home and not in the office, and this made it difficult to follow up with these members;

- One of the UoTs experienced a campus-wide water interruption which led to emergency meetings and led to the rescheduling of interviews; and
- Some UoTs did not have their executive management member's work emails advertised on their respective university websites and correspondence was managed by personnel/administrative assistants.

4.17 Data saturation

As stated earlier in this chapter (p. 116), the researcher used semi-structured interviews as the main data collection method. Fusch and Ness (2015) state that interviews as a data collection method is one of the methods in which results could reach saturation. Furthermore, all interviewed executive management members were asked the same questions, which, according to Guest *et al.*, (2006) would help achieve data saturation.

Although Bernard (2012) could not quantify the number of interviews needed for a qualitative research study to obtain data, researchers had to be satisfied with the amount they could obtain. In this study, the population consisted of 53 executive management members but only 13 members agreed to be interviewed, resulting in a response rate of 24.5%. Conversely, Quest *et al.*, (2006) state that data capacity may be obtained by as little as six interviews, subject to the sample size of the research population.

The data collected from the 13 interviews were “thick” and “rich”. According to Fusch and Ness (2015), the easiest way to distinguish between rich and thick data is to think of thick as quantity and rich as a quality, which meant that the data collected during the 13 interviews were many-layered, intricate, detailed, and quite substantial.

From a theoretical perspective when data saturation was reached:

- the ability to obtain additional new information had been achieved (Guest *et al.*, 2006);
- there is sufficient data to reproduce in the study (O'Reilly and Parker, 2012; Walker, 2012); and
- further coding is no longer possible (Guest, *et al.*, 2006).

In this study, the researcher reached the capacity to acquire (further) new information through the variety of executive management members that were interviewed. The researcher obtained information from a variety of perspectives from the executive management level. Furthermore, the interviews produced more than 68 transcribed pages. Lastly, all the interviewed executive management members were asked the same questions, which, according to Guest, *et al.*, (2006) would help achieve data saturation. The data collected answers all the research questions of this study, which meant that further coding was no longer necessary.

4.18 Trustworthiness of qualitative research

Guba and Lincoln (1994) suggest that trustworthiness is a viable criterion to judge qualitative research. In this context, trustworthiness is made up of four criteria, namely:

4.18.1 Credibility

Bryman and Bell (2016) indicate that to create credibility, the researcher must guarantee that the research study is carried out according to the 'canons of good practice' and to make use of respondent validation, by submitting the findings to the people who were studied, to confirm that the researcher properly understood their social world.

The data collected and analysed are the true reflections of the respondents and were highlighted by the verbatim responses from the respondents. Krefting (1991) indicates that qualitative research is considered credible, when the study offers a precise account or interpretation of human experience, that people who also share the same experience would instantly identify. In addition, Thomas and Magilvy (2011), state that protracted and diverse time spent with the respondents, the transcripts, interview techniques used during the writing phase of the final report and the use of the words of the participants, are strategies used to strengthen the credibility of a study. This is supported by Noble and Smith (2015) who identify that the use of rich and thick, verbatim extracts from respondents and semi-structured audio-recorded interviews allow for the repeated revisiting of the data, to help with the assessment of the reader, to make judgements about whether the final themes are true accounts of the participants' testimonies. Golafshani (2003) states that when quantitative scholars speak of research validity and reliability, they typically refer to a study that is credible

while the credibility of a qualitative study rests on the ability and effort of the researcher.

The researcher opted to make use of a technique called triangulation, to crosscheck the findings of this research study. Bryman and Bell (2016) define triangulation as a process of using more than one technique of data collection to validate the findings of the researched phenomena. By amassing a thorough literature review of current literature of the various components of this research study, the researcher established triangulation. Furthermore, the researcher had interviews with university executive management members and documented their views on management competencies at the executive management level, and also identified crisis management competencies considered as important during times of crises. The research objectives and questions were developed through the in-depth literature review, and semi-structured questions raised within the interviews were directly linked to answering the research questions which were developed to meet the research objectives.

4.18.2 Transferability

Lincoln and Guba (1985) opine that the capability to transfer research results or approaches from one group to another, or how one defines the extent to which the results of a specific study are applicable in other contexts or with other topics, is called transferability in qualitative jargon, equal to the external validity in qualitative research. Thomas and Magilvy (2011) state that a strategy to establish transferability is to offer a comprehensive description of the population studied by providing descriptions of the demographics and geographic confinement of the research study. This study aims to identify and describe what management competencies are needed by executive management members at UoTs in South Africa during a time of crisis. The population of this study includes all executive management members of these UoTs. The deans of faculties and directors of business units were included in this study subject to being executive management members. Furthermore, the researcher will provide thorough demographical information of the respondents of the study.

4.18.3 Dependability

Ryan, *et al.*, (2007) depict dependability as an essential component of rigour and define the researcher as giving the reader(s) satisfactory knowledge to determine how trustworthy the research study and researcher are. Thomas and Magilvy (2011) claim

that dependability follows when another scholar can follow the decision trail used by the researcher. Furthermore, Thomas and Magilvy (2011) indicate that, to establish an audit/decision trail the following needs to be addressed:

- a description of the specific purpose of the study;
- how and why participants were selected for the study;
- how the data were collected and how long the data collection lasted;
- how the data were reduced or transformed for analysis;
- the interpretation and presentation of the research findings; and
- specific techniques used to determine the credibility of the data.

The researcher has expansively documented every step of this research process in detail: how and why the participants were selected, how long the data collection process took, the data analysis process, interpretation and presentation of the research findings and lastly, comprehensively communicating which specific techniques were used to establish the credibility of the data.

4.18.4 Confirmability

Confirmability ensures that, while accepting that complete impartiality is not possible in social science, the researcher must indicate that he or she did not competently allow individual values to impact the research study. Tobin and Begley (2004) propose that confirmability is primarily concerned with establishing that the findings are derived from the data collected for this study. According to Thomas and Magilvy (2011), credibility, transferability, and dependability must first be established and confirmed before confirmability is achieved. As stated above, complete objectivity is impossible, and the researcher ensured confirmability by detailing and recording each step of the data collection and analysis process accurately to portray the findings based on responses from the 13 executive management members interviewed.

Thomas and Magilvy (2011) further add that qualitative research must be thoughtful, maintaining a sense of frankness and consciousness to the study, and unfolding results. The above scholars expand on confirmability by stating that the researcher should make a mindful effort to follow, rather than lead, the direction of the interviews

by asking the contributors to clarify definitions, slang words, and metaphors used during the interview. Drisko (1997) establishes that recurring occurrences of some singularities, acquired from direct observation or reports from key sources, heighten both confirmability and credibility.

This study collected data straight from primary sources; in this instance, the executive management members of UoTs. Drisko (1997) further adds that the reliability of what is testified as seen and heard with other substantial sources, also establishes confirmability. As noted earlier, the researcher completed a comprehensive literature review of all the main components of this study. These components are crucial in the development of the research questions and objectives, and in this case aided with the development of the open-ended questions for the interview.

4.19 Data analysis method

For this study, a Qualitative Content Analysis (QCA) was used. Bengtsson, (2016) states that Content Analysis recognizes and clusters categories together in text such as verbatim transcripts of participants' experiences, to ultimately gain a sense of understanding. Hsieh and Shannon (2005), consider Content Analysis as a flexible way for analysing text data. Krippendorff (2004) describes QCA as a technique that allows a researcher to make replicable and effective inferences from texts and to ultimately define and quantify phenomena. White and Marsh (2006) add that this type of analysis concentrates on producing a picture of a specific phenomenon that is rooted within a specific context, and not on an objective account of reality.

Kondracki and Wellman (2002) highlight that data might be verbal, reproduced or in electronic form and might have been attained from historical answers, which could have been from focus groups, interviews, open-ended questions, even books, manuals or articles. Weber (1990) specifies that QCA does not only count the words but scrutinises the language intensely for the purpose of grouping large masses of text into structured measured groupings that represented comparable meanings. Schreier (2012) indicates that QCA as a research method, represents a systematic and objective means of describing and quantifying phenomena and for analysing data and interpreting its meaning.

Content Analysis was deemed suitable for this study because firstly, it helped to describe the phenomenon being researched (Elo and Kyngäs, 2008) viz. the important

management and crisis management competencies. Secondly, it lends itself to easy reporting of common threads surfacing in the data (Vaismoradi, *et al.*, 2013) viz. the categories and sub-categories. The researcher extracted categories and then grouped the information under similar headings as recommended by Elo and Kyngäs (2008).

A three-phased process was followed as set out by Vaismoradi, *et al.*, (2013), i.e., preparation, organisation and reporting, as presented in Fig 1.1, p.21.

Preparation meant that the researcher read and re-read the transcripts to become familiar with the content. The researcher was cognisant of how each re-reading might provide new insights into the participants' experience. Iterative reading enabled the researcher to identify salient concepts and patterns (White and Marsh, 2006). The fact that interviews were conducted contributed to preparation as well. The transcripts were verified against the audio recordings which formed part of the preparation phase.

Organising: As categories and sub-categories started to emerge, codes were grouped under them to organise the data set until no new codes or categories appeared (data saturation).

Reporting: During reporting, the researcher described categories and sub-categories qualitatively, using the research questions of the study. During this phase the focus was on displaying conceptual depth through arranging the detailed observations, to depict a comprehensive picture of the phenomena being studied consistently, with the recommendation of White and Marsh (2006)

4.20 Conclusion

The goal of this chapter was to introduce and provide in-depth discourse on the research design, philosophical stance, the research strategy, the research design as well as the methodology, which covers the research instruments, data collection as well as data analysis techniques. Additionally, the section also covered the overall research approach - how the researcher answered the central research question on management and crisis management competencies needed by executive management members of UoTs to effectively manage a UoT.

The participants of the study were executive management members of UoTs South Africa which included Vice-Chancellors, Deputy Vice-Chancellors, Executive Directors, Senior Directors, Chief Financial Officers, Deans of Students, Executive

Deans, and Campus Directors, and any other positions mandated to serve as a member on the Executive Management Committee of a University of Technology.

This exploratory study used a qualitative design nature and incorporated semi-structured interviews as the main data collection tool. The purposive sample method was used within the study. Thirteen executive management members were interviewed from a population of 53 possible respondents, within a 6-month data collection period, which is a 24.5% response rate. Furthermore, the chapter provided details of the analysis of data which was done through qualitative content analysis of research questions. Ethical considerations were also highlighted in this chapter.



CHAPTER FIVE: PRESENTATION OF SUMMARY OF RESPONSES

5.1 Introduction

The previous chapter presents the research methodology used to collect the data for this study. This chapter presents the responses from the 13 interviews with executive management members of universities of technology (UoTs). In the chapter, the biographical information of the executive management members is analysed and discussed.

To provide a comprehensive and coherent description, these key findings are framed by the aim of the study, which was to ascertain which management and crisis management competencies are needed by executive management members to effectively manage a UoT in South Africa. The findings were drawn from data gathered from the semi-structured interviews conducted with 13 executive management members of UoTs in South Africa.

Only sections of the narratives that were most appropriate and pertinent to the aims of this study were included, and direct quotes from the transcription are presented to substantiate the general findings. In keeping with ethical guidelines of anonymity and confidentiality, the research participants are identified only by generic abbreviations and the universities of technology they present. Table 5.1 below provides a demographic representation of the 13 interviewees:

Candidate Pseudonym	Interview date	Age	Race	M /F	Qualification	Post	Years in Post	Years in HE
CA1	03/05/2022	45	B	M	CA	CFO	2	3
CB1	25/05/2022	54	B	M	PhD	DVC: Research and Innovation	2,5	3
CC1	31/05/2022	55	B	M	BTech: Eng	Senior Director: Ops	1	4
CD1	02/06/2022	52	B	M	PhD	Campus Director	2	7
CE1	07/06/2022	53	I	M	Masters	Senior Director: Office of the VC	3	26
CF1	08/06/2022	53	B	M	Masters	Executive Director: Operations and Logistics	2,5	4.5

CG1	16/06/2022	59	W	F	PhD	Executive Director: Office of the VC	3	30
CH1	22/06/2022	58	C	M	PhD	DVC: Resources & Planning	3	25
CI1	22/06/2022	55	B	M	PhD	Dean of Students	0.5	23
CJ1	23/06/2022	60	W	F	PhD	DVC: TL& Student Affairs	3	23
CK1	23/06/2022	55	B	M	PhD	VC and Principal	5	30
CL1	29/06/2022	52	B	F	PhD	DVC: Research, Innovation and Engagement	5	25
CM1	29/06/2022	51	W	F	PhD	Executive Dean:	1	26
Source: Own processing								

The table above provides the researcher with biographical information about the interviewed executive management members, their academic qualifications, as well as their years within their respective portfolios, plus their total years working within the higher education sector.

5.2 Results of the biographical section of the interview

Table 5.2 presents the current demographics of the executive management members within the UoTs in South Africa who provided approval for this study. The 13 members interviewed are representative of the demographics of the UoT landscape as 8 members were black, 1 was Indian, 1 was coloured and three were white. Furthermore, 9 members were male and 4 members were female. Table 5.3 provides a breakdown of the demographics of the interviews with executive management members.

Race	Black	White	Indian	Coloured
	37	4	7	2
	74%	8%	14 %	4 %
Gender	Male	Female		
	38	12		
	76%	24%		
Source: Own processing (Information provided from UoTs' Websites)				

Table 5.3: Demographic composition of interviewed executive management members

Race	Black	White	Indian	Coloured
	8	3	1	1
	62%	23%	7%	7%
Gender	Male	Female		
	9	4		
	69%	31%		
Source: Own processing				

The 13 members comprised 1 Vice Chancellor, 4 Deputy Vice Chancellors, 2 Senior Directors, 2 Executive Directors, 1 Chief Financial Officer, 1 Dean of Students, 1 Executive Dean, and 1 Campus Director.

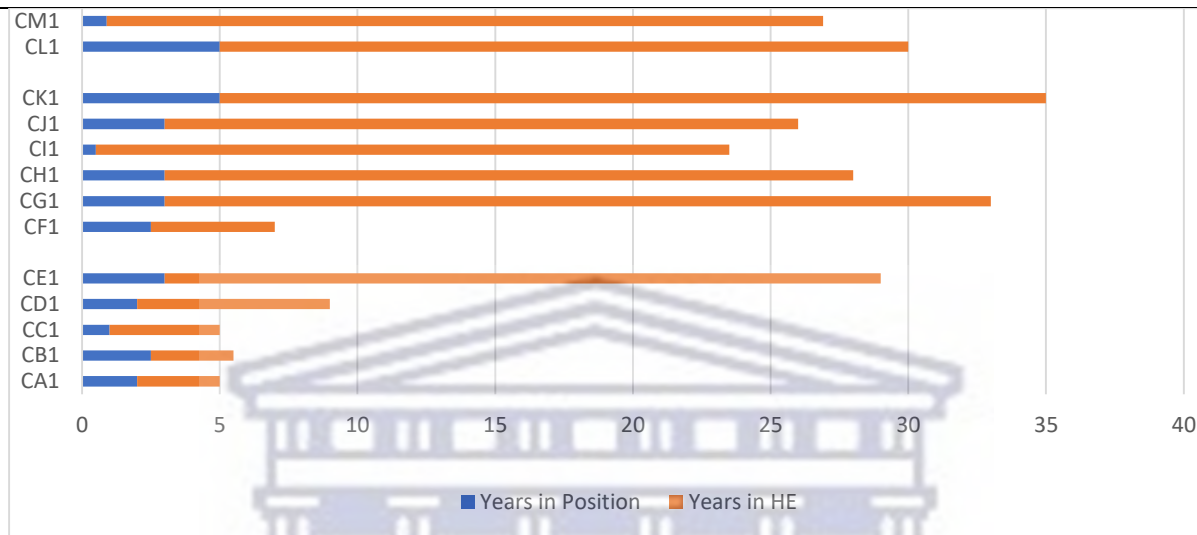
Chart 5.1 provides a visual representation of the number of years the interviewed executive management members have within their current portfolio, versus the total years employed within the Higher Education sector within South Africa. Chart 5.1 presents the 13 members, years of experience within higher education versus their years of experience within their respective current position. In some cases, a respondent had more than one tenure within a specific position or positions within the executive management portfolios. The combined higher education experience of the 13 executive management members' totals 225 years. This provides adequate experience for their responses in relation to the questions asked within the interview, as the members have the necessary experience within the higher education sector, as well as in their respective positions.

The following research objectives establish the basis of the research study, namely to:

- identify the management competencies needed to manage a UoT within South Africa;
- determine why the management competencies identified above are important to manage a UoT within South Africa;
- identify the management competencies needed by executive university management to manage a UoT within South Africa during a time of crisis;
- ascertain why the above-identified management competencies are important during a time of crisis;

- ascertain how executive management members would have to adapt managerially from a time of non-crisis to a time of crisis.

Chart 5.1: Representation of the years in position vs total years in Higher Education



Source: Own processing

The research questions below aim to fulfil the research objectives listed above:

- What are the management competencies needed by executive management members to manage a university effectively within South Africa?
- Why are the management competencies identified above important?
- What management competencies are needed by the executive management of UoTs to effectively manage a crisis?
- Why are these competencies important during times of crisis?
- How do these crisis management competencies differ from the management competencies in non-crisis times?

5.3 Presentation of the executive management member's responses.

The following tables (Tables 5.4 – 5.11) represent the responses provided by the executive management members interviewed for this study.

The questions posed within the interview were developed to answer the research questions for this specific research project.

Each table represents the answer of the interviewed executive management members to each of the eight (8) interview questions posed to all the executive management members. The same questions were presented to each of the 13 executive management members. Furthermore, the answers are verbatim responses from the interviewed executive management members.

Table 5.4: Response to Question 1: As an executive management member, what skills are important or needed on a day-to-day basis to manage a UoT in South Africa?	
Candidate Pseudonym	Answers
CA1	Stakeholder management, risk management, policy implementation, policy management, and people management.
CB1	Negotiation skills. Decisive decision-making, communication, ability to engage with all people (different levels), leadership.
CC1	Planning, People management, communication, financial management and budgeting
CD1	Strategy formulation and implementation, leadership and coaching, technology savviness
CE1	Familiarity with the institutional/sector legislative instruments (Statutes and policies governing universities), and ability to analyse, and synthesize those legislative instruments.
CF1	Strategic thinking, strategic management, leadership, facility management skills, project and portfolio management,
CG1	Leadership, Adaptive, Agile, future-looking, strategic, excellent administrative managerial skills, aware and identify your cutting edge and aware of your competition.
CH1	Planning, organising, monitoring, implementation of plans, reporting, strategic leadership, social interpersonal skills, leadership, problem-solving, monetary monitoring, quality control, report writing,
CI1	Effective communication, emotional intelligence, leadership, adaptive and agile,
CJ1	System thinking, decision making, Strategic view, ability to consult, building trust,
CK1	Leadership, communication, strategic thinking, and ability to motivate.
CL1	Leadership, management skills, communication
CM1	Leadership, communication, ability to make decisive decisions, lead humane manner, emotional intelligence

Table 5.5: Response to Question 2: You have identified several skills/characteristics in the previous question. Can you provide me with a reason why these skills/characteristics mentioned in the previous question, are important in assisting your daily tasks as an executive management member?

Candidate Pseudonym	Answers
CA1	<p>Stakeholder management, as an executive member you need to understand the client you serve, internal and external, and understand how important the stakeholders are in relation to your vision as an institution. If you don't, you won't achieve the target that you set. As well as to stay relevant, and remember this is why you exist, service delivery issues. Secondly, financial management and reporting as well as budget reporting; without this function, you would have chaos, as with financial sustainability. You need that background and skills, and you need to be like a chief financial evaluator, giving that value in terms of the financial implications, for the client to make the decision based on that. That is when we talk about financial positions which can be an investment or improvement, or expansion of the financial skills we have. People management, even though like stakeholder management, because you need to be able to manage your staff and those reporting to you even from other portfolios. This is important to reach those goals you have set. Risk management is a crucial part of my portfolio, as I need to assess any financial risks to the institutions which may be internal, or it might be external. Policy implementation and management as well because whatever you drive mostly at executive levels, some policy will govern the management of that tasks and you need to understand and be able to implement those policies holistically throughout your portfolio. Some policies are also there to guide our decision-making at the executive management level, and we even have legislation that guides our decisions. A good understanding of policies and even legislation that govern the higher education sector are key skills.</p>
CB1	<p>Effective communication, the ability to listen and to make decisive decisions adequately at the right time to show that you are in charge and aware of the situation. Decisive decision-making is key in identifying what needs to get done and done urgently and without delay so that you don't delay way and functioning of the institutions. Efficient and effective leadership, and even though you have to be deliberate, especially it comes authorisation, but you need to be decisive. Ability to engage with all people and negotiate whether it's students or unions or even your favourite executives. To inform all stakeholders of the situation and that you are working on fixing what is wrong.</p>
CC1	<p>One is planning, I've got a portfolio that oversees capital program maintenance. Planning is an important aspect of my portfolio, taking into consideration the extent of the capital program and maintenance plans of the university. Planning ensures that I have the right resources for each of the prioritised maintenance projects which have specific completion dates. People management is another skill that is important within my portfolio. As I need to assess performance, deal with people discipline, and deal with people's commitment to ensure that they understand their responsibilities as well as hold people accountable. Communication, especially writing skills as you need to</p>

	<p>write reports that serve on the council committee meetings. I had to present the quarterly report for each quarter at Council, which meant preparing the reports prior to the meeting and sharing with the committees and then taking the committees through the report. Communication skills not just writing but verbal communication as well is important for you to be able to get the message across to Council. Financial management, budgeting and financial forecasting is important, especially for each of the maintenance projects. This ensures that you stay on the project and any amendments to the budget or financial spending is captured and recorded and reported. This ensures no misadministration of the project funds.</p>
CD1	<p>The first one is how to formulate a strategy. At my organisations, we are going through change by implementing a new strategy which is very new so that strategy needs to be formulated. My opinion and my approach in terms of strategy conversation you have to understand the context in which you operate you have to understand the players which are there. You have to understand how things are changing.</p> <p>Leader should be able to engage with people from different levels and be able to communicate appropriately at any level so people can understand what you are trying to communicate, and sense where the people are in terms of their understanding.</p> <p>Coaching of staff, which takes up extensive time as you need to sit down with them and make sure that the staff members understand their responsibilities and are on board in relation to their performance targets and what is expected of them.</p> <p>The fourth competence is your technology savviness and you're understanding and the use of various software tools. These tools assist you and your team by saving time.</p>
CE1	<p>Analytical skills and the knowledge of procedures and processes. Remember we governed largely by statutes and policy etc and when decisions need to be taken, it's taken in conjunction with the what the statutes/legislative documents allow. Another skill executive member should be familiarity with is the institution sectors legislative instruments and be able to analyse and synthesize whatever is required because generally recommendations which are asked of you as executive member, you would know if it deviated from a particular policy, or it's not contained in a particular policy. how do we apply our client consider that favourably or not and you would, and you would probably know that that you during the pandemic because we would not have had policies and other guiding use and our decision-making?</p>
CF1	<p>Certainly, at the executive level, you got to be on a strategic thinking level so strategic management competencies need to come to the fore. Your leadership skills in terms of leading your portfolio and your team needs to come to the fore. Financial management because you are dealing with a lot of funding, coming through from operational and from the funders like DHET. Must have a very good grip on facilities management. As part of my portfolio, I manage various facilities within the university. I need to be able to understand and implement the various policies that govern those</p>

	<p>facilities, the appointment of contract workers, the hiring of those venues as well as the health and safety requirements associated. Very good grip on project and portfolio management because we also develop new projects. Where with dealing with different settlements. I joined the university as it was going through a crisis and my aim was to help pull in a team that is going to take the university out of the of the crisis which I think from where I'm sitting where out of the crisis now. From leadership view, I needed to steer my team, our understanding of the vision and also the strategic objectives of the university from the strategic plan. My leadership role, ensuring good governance, as we deal with money, budget that comes from the department of higher education. I need to ensure that I bring in some ethical leadership to make sure that money is used for what it was meant for.</p>
CG1	<p>Ability to make people follow (ability to lead), in other words, your emotional intelligence, and social intelligence, play a critical role. Because if you can't, people don't respect, based on consistent, ethical, fair, just, and caring, that is the human element is all about. Then they won't follow, won't take you seriously, that ability to not the rigid bureaucratic way but to make them feel part of the sessions being taken, consult with them to pat on the shoulder, also timeously draw their attention to areas of poor performance, but in a developmental approach, that is a skill in itself. Not everyone has that skill. Apart from that the ability to also to be adaptive and agile, we live in volatile time, the ability to adjust timeously to a changing environment, and also to foresee it, to also be future looking, and strategize, I think that is very important in today's world. Agility and resilience, to be strategic, to have a kind of mindset, by reading, by observing, knowing what's out in world out there, to pre-empt where the world is going, especially in Higher education, a lot of changing that we don't know what's going to happen, in terms of modes of delivery, how universities going to operate in future, Excellent administrative managerial skills, because if you don't manage your line, and follow up regularly. What I sometimes find lacking, is the act of execution and implementation, one must always read and be aware of your competition, the need to always of aware and identify your cutting edge, that thing that makes you different from others, and not try and imitate others</p>
CH1	<p>Ordinary skills, like planning, organising duties, monitoring, monitoring the implementation of plans and of course reporting. Report on what you've done, as you need to be accountable is an important responsibility because whoever especially in this portfolio must be accountable for all directorates belonging to this portfolio. Abilities like leadership especially, because I operate on the strategic level, it will be strategic leadership to all the directories. Strategic leadership, not on day-to-day basis because there's some operational aspects that have specific timelines that come into play but my task is to provide direction to my subordinates. Provide and explain the directions of the unit, what is the vision of the university and of this particular portfolio. Then to guide those reporting to me and how to achieve their responsibility. Other</p>

	<p>general skills like social interpersonal skills and a big element of problem solving. When an issue arises, to assist my staff in solving the problems by coming up with solutions. Important skills are the monetary monitoring and proper recordkeeping of spending within the portfolio. This provides the grounds for accurate reporting to higher ups. This goes hand in hand with quality control. Quality of reports are critical so it is important that I also coordinate and oversee quality.</p>
CI1	<p>I think effective communication will be one of them and also making it a point that one uses emotional intelligence. Within my portfolio, i deal with lots of misunderstandings especially with the student leadership and that adds to stress and conflict management. Hence effective, clear and concise communication is vital to effectively nullify confusion and miscommunication. Which will lead to less stress and conflict. I also think the leadership style that one uses also plays a very important role because you need to be understood. For example, I've got five different departments and if one department or manager does not understand what is expected of the department, then conflicts arise Leadership and communication go a long way in terms of trying to create stability and a good environment. I also believe that you need to be flexible and agile, to adapt to any situation that arises. Especially within the higher education sector. Taking into consideration the #FMF, the push for decolonisation, and free education.</p>
CJ1	<p>You need to be able to apply systems thinking and because you can't see or understand the system, you can't do anything else. On a day-to-day basis, you actually need to have a strategic view. You always need to know where you're going and how you're getting there. You must have an idea of what is next and where we are, what you doing and how much time you need to make decisions. People who can't make decisions should not be in any position of management but you know that's why system thinking is important because you need to be able to write everything you've got before you make a decision. You need to be able to consult. You will also need, what I call the softer skills on a day-to-day basis. Able to build trust with people, most important to the people trust you. When you talk to them, they can share the honest truth with you. People relationship is critical, you as a manager won't get anywhere in life if people don't trust you. Once you have their trust they will contact you with new ideas, as they have a safe space even knowing that you might disagree with them but you're not going to shut them down. When you need to make decisions, you need to be able to consult you can trust.</p>
CK1	<p>I would say leadership is very important, as you were appointed to lead the institution and to lead your executive team in reaching the institutional goals. Another important competency would be communication. On this level, clear and concise communication is crucial and is the basis of any negotiations, be it with student leadership, or the unions. The ability to motivate others is also very important. As the face of the institution, you need to be able to motivate those around you in following your vision to meet the organisation's goals, as well as your executive management team. The</p>

	ability to think strategically, and have some sort of foresight for the institution is very important.
CL1	I think that the first one is really you know there are two parts to eats there's the leadership skills yeah and then management skills right so the leadership skills you can break them down I think there's many books which tell you what doesn't need a two what does it and manage it too so there's issues around you know strategy as a leader you need to understand the strategy you need to go for people skills I think which are very important communication skills how to go to that teams and you know how to plan all these workflows yeah engagement across the institution and then the management part obviously is more the implementation side yeah and just making sure that your team is able to deliver so that daily basis I think I use a combination of both you know trying to I mean I understand the strategy what needs to happen I need to make sure my team is following a particular direction yes but I use a combination of leadership and management because sometimes you know sometimes you have to also manage other to make sure that the people able to implement the projects but I think communication that means my job communication is really the big thing how I communicate and how I am able to modulate the teams to do what they need to do yes no yeah I need their mouth stops yeah.
CM1	Leadership is a quality that provides direction in terms of understanding where the university itself is going. Translating that to everyone so that they also have a shared understanding of where the university is going. We currently have a very strong vision which I really love, it's not an issue for me because I really buy into that. My first responsibility would be to inform and secondly to guide all members of our faculty to buy into that vision, so that's the leadership part in terms of the visionary aspect but another very important thing to do is to ensure that systems and processes are running smoothly. The ability to, first of all, communicate, examples to communicate any university information to my ManCom with the understanding that they also communicate that to the departments. For me communication is very important between the higher executive management and my faculty. I need to be able to take decisive decisions based on you know whether I think I have my faculty up to speed. I think my responsibility is also to weigh up options to make tough decisions and to convey those decisions and the reasons for those decisions to everyone in my very varied faculty. So clear communication as people needs to know what's going on and what decisions the university has made. Further, competencies during a crisis are the ability to make the right judgment, take all the information and make the best decision that has the minimum consequences for all stakeholders. When making this decision make use of emotional intelligence to understand all stakeholder's positions within that decision.

Table 5.6: Response to Question 3: What skills are important or needed by an executive management member in times of crisis?	
Candidate Pseudonym	Answers
CA1	Leadership, Change Management, adaptability, resilience, judgement/decision making
CB1	Capacity to confront the crisis, articulate the crisis, effective communication, problem-solving, moral character to address the crisis, ability to follow up, learn from experience.
CC1	Problem-solving, analytical ability, emotional intelligence/empathy
CD1	hope and faith, separate the short term from the long term, adaptability and innovative
CE1	thinking on your feet, empathy
CF1	Focus, resilience, prioritise, decision making,
CG1	risk management, and business continuity, pre-crisis planning, communication, leadership and problem-solving.
CH1	Self-confident, resilient, problem solve, ability to consult and involve others, influence others, leadership skills, interpersonal skills, remain calm,
CI1	Effective communication, monitoring of staff, emotional intelligence
CJ1	Stay calm/don't panic, get trusted information, fast decision-making, communication
CK1	emotionally intelligence, not to panic, leadership
CL1	Taking risks, taking hard decisions, negotiating skills; communication
CM1	judgment and Emotional intelligence

Table 5.7: Response to Question 4: You have identified several skills/characteristics in the previous question. Can you provide me with a reason why the skills (mentioned in the previous question) are important or needed in times of crisis and provide me with an example of how these skills assisted you during a time of crisis, as an executive management member?	
Candidate Pseudonym	Answers
CA1	I think leadership skills are extremely vital during a crisis, as the stakeholders will need to know that you as an executive management member are in control of the situation and actively trying to solve whatever issues are troubling the institution. Another vital skill is change management, you see that you might have a problem with the start of change management and also the adjustment to the change. We have to change and

	<p>adapt immediately, especially in a crisis period. As within the crisis, normality is surpassed by the crisis and many normal activities are pushed back to deal with the crisis. Another important skill is to be resilient and has the ability to fair judgements. There was a case of the students wanting cash in their pockets in regards to a certain bursary, but the bursary is governed by a policy that dictates how the bursary must be applied, and this policy was approved by the council at the highest decision-making structure. Executive management is led by numerous policies and even legislation to help with the decision-making process.</p>
CB1	<p>The capacity to confront the crisis not to deny it, articulate what the crisis is to all the relevant stakeholders and not just highlight the crisis and admire it but also provide viable solutions. Be it getting input from the relevant people but we have to be brutally frank in terms of what the crisis entails and what would be the way forward to resolve that crisis by taking your stakeholders along irrespective of how unpleasant the remedy is. They have to be ways where you articulate the crisis and you find the way to address it so you first need the capacity to address a crisis but secondly, you need to have the moral character to address the crisis no matter unpleasant it is. I said that capacity and character and to understand where things have gone wrong and understand the lessons learnt and articulate those lessons learned to all in sundry to ensure it never happens again.</p>
CC1	<p>Problem-solving is one of the skills that you need to have as well as the ability to analyse and assess things. Analytical ability comes out quite prominent and maybe the other one is more related to emotions which is emotional intelligence. With analytical ability or skill in case of crisis, you need to be able to identify the problem that you are facing and even identify possible solutions or interventions that can be implemented to deal with that problem whether they are short, medium, and long term. identify these and be able to select the appropriate measure intervention at the stand it's not always easy to identify the appropriate measure because you may think that there is a correct one to only find that it's not. We need to learn from this experience and gather as much information.</p>
CD1	<p>Well, the first one, as a leader you have to have hope and faith that things will turn around because nothing lasts forever in crisis because most people tend to panic and take things out of proportion. Another skill is to be able to separate the short term from the long term because in the short term during a crisis some of the deliverables and targets will be affected. Also, when you see your finances going down, you know that in the long-term things will turn around. So, to put things into perspective, changes will occur and then you need to adapt your strategy which is the third skill. In our case, for example, fees must fall has affected government income, now we have to increase our innovation and entrepreneurship angle. We need to connect more with the industry to activate our intrapreneurship.</p>
CE1	<p>Thinking on your feet because there are certain responses you would need to undertake which might not necessarily have the convenience of time and comprehensive information. You also need to be an empathetic executive manager for example, we recently had a water crisis at our campus and students were without water for five days. You need to be empathic to the student's needs in this situation. You need to appreciate how another person who might not have access to your amenities will deal with that situation in the student context and therefore your decisions need to be very appreciative of different contexts. it's that empathetic, sort of broad-view lens which you would need as an executive manager to appreciate all the different circumstances that might occur within a crisis situation.</p>
CF1	<p>One skill is that you must not to lose focus, you must be resilient, and a third skill for me is being able to identify issues that need urgent attention to turn the ship around.</p>

	Decision making, as a leader you are under pressure within a crisis situation. You need to analyse the situation, you kept your focus make decisions because if you lose are making decisions then you certainly not going to be able to turn the ship around and advocacy on the part of your team to assist the new direction it's very important because under crisis you have people that become you know didn't want to mate it yes you have people that are resistant to the change you've got people that affected by the change and that will certainly try to the right yeah so you need to also do a bit of advocacy in terms of the new direction
CG1	First of all, risk management and business continuity, on the executive level have all your pre-crisis work in place, must know, have, for instance, a set of media releases, teak here and there, so no is running around, any kind of event, scenario planning, with that outline the reactive plan/ media release. Evacuation plans, etc., MOU with vendors/residences, pre-work must be done. Communication is important, need to communicate with internal and external stakeholders. Demonstrate that you are in control, that you have a plan, put at ease, must be supportive of regular updates etc. Strong leadership, stay calm and in control, ability to stay calm in the eye of the storm, going into crisis mode – find solutions, pre-empt – thinking what could go wrong, anticipate next actions. Be aware that people will be spreading false information during this time. Problem-solving, pull in resources during a crisis, can't manage the crisis alone, must be open-minded, bring in experts. Find the solutions.
CH1	As a leader when you are faced with a crisis, you need to be first and foremost, confident. Secondly, whether it's institution-wide or it could even be in terms of your portfolio, or your department but you need to be resilient. You need to be able to say if their a crisis, accept that it is a bit of a setback. A very important skill is the ability to problem-solving and resolve whatever the problem is. But this could also depend on your ability to consult and to involve others because you word unilateral try and solve the problem well it might involve others. The ability to influence those that are your subordinates because you want them to cooperate and work together with solving that particular crisis. This will be related to your interpersonal skills and leadership skills.
CI1	I think essentially one needs to be to ensure that the information is properly managed. As an executive management member, you need to be very hands-on when it to managing operations because, you have some members within the team working remotely. If you are not hands-on with those functional competencies, you know you might not deliver on the project because when working remotely, it's challenging and its human nature that at times if people are not on site, they might end up relaxing. Thus, one needs to have a very good strategy in terms of ensuring goal delivery with a remote team. One strategy is the use of regular Teams meetings. Furthermore, you need to ensure clear communication, especially when a crisis hits. You need to check updates from the different managers and the different deliverables that are set within the departments. You as a manager must also monitor your staff's physical and mental condition and your emotional intelligence plays a very active role during this process.
CJ1	The first one is to stay calm because sometimes it's overwhelming, so I think the most important thing is to stay calm and not panic. Then get as much information about what's actually going on, as fast as possible from the same people you trust. Once you have gathered the necessary information, the next skill is to be able to make decisive decisions to confront the pending crisis. Get your team into an emergency meeting, physically or online on phone anywhere and try and fix whatever the crisis is. Get all viable options or solutions on the table, understand the impact of each solution and make a decision to avert the crisis as fast as possible. Within a crisis situation, you need to communicate internally, with my team, within the university, as fast as possible and communicate whatever decisions were made. Make sure that the

	message is clear and that everyone understands and that they do not panic. You must communicate with stakeholders, council, chancellor and parents to ensure them that you are aware of the situation and that you are actively busy trying
CK1	Ok, now in terms of a crisis, you as an executive member, the most important competency to have when that crisis hits the university, is be emotionally intelligent. Being emotionally intelligent will allow you to address the crisis in a calm and thought-out manner and not on a crisis level. You should also not panic and address the crisis in a calm way to ensure you have time to assess the crisis and then address the institution with the plans to address which ever crisis it is. We appoint leaders for tough times not just for the nice times. I was appointed to lead the university, especially in times of crisis, when times get tough, then we as executive management need to display our leadership strength.
CL1	I think in a crisis time is really there to take risks. Ability to motivate the teams that you're working with so for example this COVID-19 pandemic is very difficult but we had to be very creative and even innovative in the way we do things. The way we managed emergency meetings, trying to adjust our strategy, to be flexible as well. The ability to make the hard decisions because some companies had to also layoff people due to COVID. As an executive management member, you are very much in dire need of negotiating skills, especially in certain portfolios. I also believe that communication skills especially coupled with negotiating skills are crucial g a crisis. It is key to make sure that people understand why this is happening, why we going in this direction and what the management is planning on doing to resolve the issues around the crisis.
CM1	I think I don't know small situations or conditions you have the option of time that for me is there anything that really changes because I don't normal circumstances also have to have judgment and EQ yes it's just a question of time frames so to give you an example it was an award evening on Saturday yes four people in my faculty won awards and it was important for me to send out a general message congratulating them and giving information so now obviously it wasn't an emergency for me to do that it's just important but not an emergency so I took a day or so to do that yes because based on my judgment is important to acknowledge and based on my EQ as well yes the only different thing would be if there's a fight or violent crisis is obviously have to make immediate decisions and judgments and you have to communicate immediately yes and emotions are higher.

Table 5.8: Response to Question 5: In times of crises, do you change your pattern/manner of management to adapt to the crisis?

Candidate Pseudonym	Answers
CA1	Yes, my management style changes, as during times of crises you need to get things done quicker than before. Your style adapts to the priorities that the crisis situation brings and must be flexible to handle the change from the normal to crisis times. You might even be more micromanager due to this crisis as you understand the importance and the urgency of each task during the crisis time.
CB1	The fact that you are in leadership positions demands that you develop the capacity to address the crisis, and your leadership skills evolve with time but actually, I found that leadership actually comes to the fore when you need it the most in terms of crisis. Depending on the magnitude, I find that I can adapt and engage to find new solutions.

	I have found that I can connect the dots very quickly and find solutions. It seems the notion that true leaders come to the fore exactly in times of crisis. That is when you are tested, you can either fall back or find the solutions. I found that the creative aspects of my character come to the fore, especially in terms of crisis and I tend to find solutions by connecting the dots in terms of how do you resolve this crisis but I seem to embrace a crisis situation.
CC1	There is a sense of urgency in certain things that you do or even in some cases, you prefer not to delegate certain work. You need to do it yourself cause of the crisis, there is impending risk and urgency to all your duties. Me, as a leader you need to lead from the front.
CD1	Yes, like I said for example when you're operating normally chasing KPIs, you are operating on a day-to-day basis, normal, planned meetings. Discussions on reaching strategic goals etc. But when a crisis arises, all actions are focused on the crisis and trying to the resolve crisis. You are urgently looking for solutions, making decisions and communicating with stakeholders to inform them of the crisis and your actions to resolve it.
CE1	Under normal circumstances management would meet on a regular basis as outlined in the university calendar of the university. That goes out the window when you're dealing with the crisis because you meet because the need arises and assuming a crisis happens and you can deal with that during a regular meeting then what you do is you actually foreground those items in your agenda for example. The crisis takes precedent within that normal meeting. this now becomes item number one as we need to make a decision. Yeah, timing is critical.
CF1	You cannot be keeping the same pace if we are in a crisis. Normal leadership, under normal circumstances you try not to interfere in terms of the operational functioning of the departments and portfolio manager or as a leader you normally deal with strategic issues and then all operational stuff you push to the relevant managers or heads of your sections. When you are under crisis, you have a blending or hybrid between your macro and micromanagement but somewhere micro does come in more because you want to see the results at that level which means you even increase the number of contact sessions with your management.
CG1	I have been in my career in many difficult situations, Attention and focus on crisis, meetings will be focussed on the crisis and how to solve the crisis, or manage the crisis event, time is of essence, and actions and decisions are made with the crisis in mind. During this time, you sleep less as the crisis takes precedent, and must have a problem-solving mindset, and be open-minded during any negotiations, and that communication is important, also takes time to manage people to communicate.
CH1	definitely there will be some changes in the sense of and especially if you mentioned what do you more priority for particular aspect where certain things you have just taken it as you know ordinary as normal yes my love specific evidence one aspect of leadership and how you manage your department and also to prepare your normal stuff depending on the nature of the crisis, in fact, it's the sense of change management yeah because it pending on what the fact that crisis would be yeah it's important that you prepare those in your book holy you know to be able to deal with it so that's yes there will be some changes but it's more in terms of what to emphasize more yeah but why becomes more critical
CI1	Definite yes, your management style will need to change because each situation needs to be done on its own merits so one must be agile. You cannot use the same techniques and strategies in a crisis situation which you used in a normal situation.
CJ1	During normal operating time, I'm very much a person who tries to encourage people to let people take their own decisions and I delegate and listen to my staff but it's a

	time-consuming process. But during a crisis, time and speed are of the essence. I am not going to be sitting around waiting for decisions to be made or standing around wait for someone to get back to me two days later. I will speed up the process up. I still take people along and realize they're importance but I don't have lots of time to check with you and make jokes and talk about the weather while we've got a crisis on your hands. My normal style might be slow but it's very effective so I basically put my normal style on Top Gear and fast speed and take decisions. I won't delegate.
CK1	How to adapt to the crisis is by realising you don't just need your experiences but you have to bring in as much experience as you can. Your time of reaction is very important and crucial. Your management style has to change as time is a key factor in your reactions, your decision making and your response to the crisis.
CL1	I believe that you need to be more flexible in your management style because a lot of things are changing due to the crisis. I think what's important is that my team can deliver by adapting to the crisis situation, and by setting hybrid meetings, either virtually or physically. This way we still ae able to meet our goals and be up to date with the crisis situation. We are able to adapt in that way.
CM1	More urgency in regards to deadlines, and timeframes. So yes, more urgency is emphasized due to the crisis.

Table 5.9: Response to Question 6: In your view/related experience, how do the management competencies identified as important during times of crises, differ from the management competencies identified during times of standard procedures?

Candidate Pseudonym	Answers
CA1	No real change, just more focussed on the tasks or duties to facilitate the management of the crisis.
CB1	Very much more under pressure when it is a crisis situation. Emphasise is put on time and priorities during crisis times and more pressure from you superiors to get things done quicker and to get feedback back to them. Normal operating times, its back to normal, day-to-day operations with your normal set deadlines.
CC1	Under normal circumstances, the time frames would be very long or will be longer. You got sort of more time to implement whatever you have to do. In crisis times you don't have that luxury of time, you have to think on your feet. You really have to move fast because it is on you to come up with a solution to the whatever the problem you are facing is and there's no luxury of time. Secondly you are relaxed, there's no pressure and no stress in normal times. In times of crisis, the stress levels are high, sometimes the emotions are also because when things don't get done the way do you think then everyone gets frustrated and the emotions get out of control. You also need to find a way of still managing the emotions even under those very stressful environments.
CD1	They're not different is more situational leadership and adaptability. If you have to communicate during times of crisis, then adopt technology tools maybe people are not get out is to continue but in a different style yes similarly with your targets you got targets then you will meet us executive and say OK this five key tickets will be affected

	severely how do we then you know even if they drop less give ourselves an hour and a time frame so yes maybe this year this tiger don't perform as opposed to just keep stressing on the thing that you plan when things were normal yeah
CE1	No, I don't think the competency is in my view differs significantly. What I do think though is the issue of creating some sort of order in your mind. That's the issue which you need to deal with when you're dealing with crisis as opposed to let's say something regular and operational. In your own mind you know that there is something that needs to be dealt with first and this can't be moved back. You know the most important thing during a crisis situation is the issue of rigidity. You cannot be structured as you would be during a normal time but you would have had to have that competency in the first instance.
CF1	Your management competencies in question one, I would say it's more relaxed because of the urgency of crisis it is a time sensitive nature. Under normal circumstances when you don't have no crisis, your normal reporting meeting with your team takes place as per usual but when under crisis I need to increase the intensity of the meetings. I need to bring it on to either on a weekly basis every Friday as an example to review what we were able to change for that week and then plan what needs to be built up for the following week so the intensity becomes an issue that differentiates between the two sets of competencies.
CG1	The difference is the urgency to resolve the crisis. It takes priority over the day-to-day tasks. Meetings will be focussed on the resolution of the crisis, and dealing with its consequences. Once this has been resolved, then normal day to day tasks takes priority.
CH1	It's definitely related to what you asked earlier on your day-to-day management you do the normal management day to day, example planning, leadership, monitoring, reporting etc During a crisis one would particular be focus on dealing with a crisis and problem-solving skills. These skills would take priority
CI1	They are different in the sense that one set of competencies has to do with your personal competencies, also the functional competencies which will allow one to be more productive in terms of your portfolio. The set of competencies one needs to have during times of crisis.
CJ1	As an executive management member during normal operating time, you run your department on a day-to-day basis, taking into consideration your departmental goals. When a crisis hits your organisation, your priorities change and your decision making must be quick and efficient in dealing with the consequences of the crisis. In other words, you only use your crisis management skills during times of crisis, but your generic management skills, on a day-to-day basis.
CK1	When there's no crisis to manage, you are focusing on your strategic objectives and your day-to-day operational duties. During crisis, your priorities change, during the crisis, students must feel that they come first, in terms of its stakeholders of the university.
CL1	I think that when there are no crises people tend to be more relaxed and then more rigid. They kind of take things for granted but I think in crisis times, things can change very quickly and then that you know we shouldn't take anything for granted. You are more under pressure and things need to be done quickly.
CM1	I always have to make judgments every single day, every e-mail that comes through after judging tits urgent, what is this event and what am I going to do about it and how does it affect my faculty. Is it a good opportunity, and then I judge it based on my EQ and my people-centered approach as well, but the only difference again is the urgency with which I need to respond to things there's not really any other difference than that.

Table 5.10: Response to Question 7: In hindsight, is there anything you would have done differently in terms of how you managed #FMF or the COVID-19 Pandemic?

Candidate Pseudonym	Answers
CA1	In hindsight, we need to actively look at our risk assessments as well what we perceive as risks. Then we need to plan for each possible risks scenario and have guidelines how to manage the perceived risks. Covid-19 caught us all off-guard and we should be learning from this experience and prepare much better for future risks.
CB1	Looking back there are a couple of things that I think we could have done differently for example we could be more proactive in terms of even though we're in hard lockdown, we could have had more practical solutions to ensure that students are safe. In my case, my portfolio involves also postgraduate students, and my department have been more proactive in terms of keeping postgraduate students engaged online. The use of seminars, online workshops and so that even during lockdown there was progress. There could have been more focused on self-study, make use this opportunity to optimize your literature. This is the benefit of hindsight, no none of us have dealt with a global event of this magnitude which was global, so there's a kind of things that could be more reactive. Also bring in Wellness. So, we should have this conversation. That within the benefit of hindsight because of the unfolding crisis and those structures to travel the restrictions, we should have been getting things like our MS Teams and our things on board and used those opportunities to engage with staff. I know from research directory to strategic partnership; we could have engaged more. I think we could have pushed ourselves more to collaborate with other departments, other institutions, local and internationally.
CC1	My only issue is the manner in which the university, implemented the idea of working remotely. It was well understood that if staff come in to work, that would increase the risk of infections. There was also a negative element developed. Where some people saw that as an opportunity not to anymore report for work but still look forward to a pay check at the end of the month. The arrangements to work remotely should be made to supervisors and managers but many people hid behind the fact that there was a university communication that said they can work from home. I felt that remote working should have been dealt more strategy and that communication should have been more concise and also mentioned the requirements when working from home. Especially that each staff member must arrange working from home from their supervisors or managers.
CD1	I think the first one is planning in advance is key. In our case we started scenario planning and I am part of the group that developed various scenarios to say what could come and when and how you going to handle those scenarios. We plan each scenario to look on the effects on the day-to-day operation. What actions to implement, what resources to make available.
CE1	COVID 19 hit us like a bolt from the sky and we had to react and it wasn't that we had a reference book in terms of or some sort of manual to say right in the event this happens this is the action to take. Suddenly, we had to vacate residences to fall in line with the with disaster management regulations. We then had to arrange transportation, during transport restrictions. The poorest of the poor students and then you add to take them back to the rural areas, how do you deal with that and then you add those who had to stay on campus. I can safely say it, many executives pull their hair out and I don't blame them it was something which was extraordinary and we need to

	appreciate that people did the best they could do. Most importantly, the experience of this crisis gave us the tools to say right when this happens are you start prioritizing against time is really what needs to be done on a Tuesday at 9:00 o'clock needs to be deal with the next crisis.
CF1	My team mostly is within the services space and the issues relating to the exposure of the services team because they were their part of the frontrunners in making sure that the university is safe. This includes the whole issue of sanitizing and fogging the venues and getting them ready. If there's an issue, a case that was reported in a certain building it was my team that needed to run there and get things moving. I think we missed an opportunity at that time. We did the training, we also bought some machinery, but I think we missed an opportunity to manage the working terms more efficiently than we did. We also could have completed outstanding maintenance during the lockdown period, if we managed the Covid protocols, more maintenance project could have been completed.
CG1	I was not directly responsible for managing Covid-90 Pandemic on campus, I did see that we needed someone to directly oversee the pandemic, I advise the VC, but University processes are so slow, I suggested a COVID command centre, Speed, I was frustrated, working in team is difficult, on Executive Management very slow, especially if it is their domain or portfolio, and the members do not exactly know what is going on. You feel that you can't help because it is not in your mandate, When it was decided that all students should leave the residence, which was difficult as we had student living across South Africa, and we did not factor in the transport of those students. Decision had to be made to accommodate these students etc. How do we determine which students stay and who must leave, better decision should have been made in regards to those instances? I would have suggested that better planning around this decision and the various consequences that this decision had.
CH1	When the pandemic started, we all were taken by surprise. We didn't know it was here and of course if we knew some of the things that we know now if we would have been better prepared. As the pandemic evolved, we wore masked, sanitised, enforced social distancing and later, the vaccination came in. If we knew all these steps in preventing the pandemic, we would have introduced those type of principles from the beginning and educate our staff and those affected well in advance.
CI1	I think one key take away from this pandemic, is that we should have invested more into digitalization and even have done it long before the pandemic. I've realized for instance that there is more that is being achieved when we use digitalization. The human factor is not there but people attend meetings and submit reports. Doesn't matter the geographical presence, even team members when they might not be well but still attend meetings. I think using digitalization optimally it's one it's one thing that one could take away from the experiences of the pandemic.
CJ1	That's what we currently doing is looking at the two years of COVID and saying what did we learn from it. That goes all the way back to fees must fall student protest crisis, as well and I think it was bad because we didn't actually learn #FMF. We should have learned certain basics, like if you send students home, make sure that they go home with their textbooks. We should have a process in place immediately to be able to send students data which we didn't have, especially when you shut down the university for three months. This is exactly what my team and I are doing it now. We're actually putting plans in place for unforeseen crisis or pandemics or a protest should happen and then we will have practical alternatives to manage the situation. The next time we get closed down we will be better prepared.
CK1	As it never gave anybody notice it is coming. In terms of institutions, nobody was ready or prepared for this pandemic. We should have switched over to online teaching

	and learning format but we were not ready and that's what COVID-19 found us out on. We were motivated during the stretch that we went forward with online learning but we should have been ready.
CL1	I would have done things differently. I wouldn't have panicked to close down the university but I think we could have managed it better. by if we knew then we would have had masks, taken precautions, smaller classes physically on campus but then, on the other hand, we don't have to expand our technology-based because I think what the pandemic has helped us to really advance technology both for teaching and learning and for management. I would have brought back the people back to campus area.
CM1	I think there was a lot of things I didn't understand in the beginning and I didn't understand how this institution approached because it turned out that this institutions approach was very different from my previous institution approach. It really took me quite a while to figure out how it is managed and now in hindsight with things, I know now I think I would have done things differently. I would have been a bit more hands-on, as it seems it was being managed quite high up with decisions being made. I would have handled for instance our free choice vaccination policy and monitored people and students much closer.

Table 5.11: Response to Question 8: In your opinion, what have you learned with regards to managing in times of crisis?

Candidate Pseudonym	Answers
CA1	We need to adapt to the change and adjust to the current situation. We need to deal with the realities and not the emotions. Must give time to check what the difference are and make the necessary adjustments and assess how we deal with this new situation. We need to learn from this situation and put in place guidelines or protocols for the future.
CB1	If it's one thing that in the last two and a half years have taught us, is that our world is changing and that then we have to adjust. Universities have always had online resources, put it took Covid-19 Pandemic for universities to optimally use their online resources for teaching and learning capacity. Every hamlet or village or town or city on the planet was affected by something which came out of the market in China, and if you told me four years ago this is going to happen, I think it would have been a shock to the system. Furthermore, a singular event has shown us that our world is changing and that our world is interconnected and that interconnections via policymakers requires our leaders to make the kind of decisions which are not necessarily geared towards protecting your people in your country but protecting all of us are in global village.

CC1	<p>I don't think we were well prepared for a crisis. Although we(universities) do have risk management in place or risk plans to manage certain risk no one could have foreseen this crisis because this was of a different nature and nobody could see it coming. Despite the fact that it's something that we never thought of before does highlight some weaknesses in how we identify risk and how we think the risk must be managed. It could be that in our lifetime we did not see a pandemic but maybe in our seniors they have experienced something like this as there has been Spanish flu before. We cannot claim that there has never been a pandemic of this nature in terms of deaths. I think this COVID-19 emphasise that the nature of risks needs to be taken into account when risk is identified. The manner in which we dealt with Covid-19 pandemic indicates that we were not well prepared and not just institutions but our country and the whole world as well. This is something that we need to learn from for us to manage a crisis better.</p>
CD1	<p>The first thing is to stay calm and assess the situation. Assess your strategy for obtaining your business and personal goals and make the necessary adjusted due to the changes in the current situation. As a leader you need to be sensitive as well and help people manage both, their professional and personal affairs, during such a critical time.</p>
CE1	<p>What comes to the fore is the fact that some people in leadership positions, ability to handle situation like these were exposed. Their weaknesses were exposed since there is no manual to learn from. This speaks to the issue of leadership versus management. Very few people have the ability to show leadership during times of crisis especially when the rest of the flock needs leadership. Covid-19 pandemic was unprecedented so you didn't expect to have some sort of tool you can have lessons learned out of, Surely, mistakes were made in dealing with it, but to learn from these mistakes is vitally important. Thus, some sort of post mortem of how we dealt with the crisis must be done.</p>
CF1	<p>What I have learned is some of the issues that I picked up is that structurally from a governance point of view within the department there weren't enough policies where people were operating in. I have learned that you need to have your governance framework well in place talking to the policies, the committees, and to the procedures and then have a monitoring mechanism to see the implementation of those governance policies. That is what we were able to work through and we have developed quite a number of policies in the portfolio post crisis.</p>
CG1	<p>Admit the crisis, to be honest, where you don't know the answers, why I said you need to bring in experts, as its out of your scope or area of expertise, communications to all the stakeholders are important, all stakeholders, parents, alumni, want to know how we deal with crisis and look after students. We need to ensure that counselling takes place, as lot of the student lost parents, friends and family members. We need to ensure that the healing process takes place. The debriefing is important.</p>
CH1	<p>You need to take responsibility for what decisions you take, you need to consult and you need to know how to get people to do buy in. They need to have the same understanding as you have. As part of my leadership style I believe in consultation, I mean, I work in the education sector such it is all about consultation. I need to have good leadership skills, need to remain calm and you need to get my team support. Now that we've had this experience, now we can better prepare even for other formidable stations because what we've learned from this experience could help us even in another situation. We can be more prepared to start thinking and it's often will</p>

	actually improve our risk management plan because of the important lesson that we've learned.
CI1	I think one thing that I've learned is that it's very important that one should encourage teamwork. Teamwork is one key factor and its importance for meeting goals and achievements. I created a platform for constructive engagement especially with the student representative council. No, we have standing meetings with SRC and we proactively deal with issues long before they escalate into confrontations. Also try to have more empathy especially during this pandemic. In most cases, members of team would actually have infected family members. Must have more empathy in terms of how you deal with the situation but also the importance of ensuring that work is submitted in time. One more thing within the student services sector, we've tried to break silos and create cohesion so that we've got better understanding of what other departments are doing.
CJ1	Actually, see the whole picture before you go making decisions, whatever there is and understand impact of decisions. See the big pictures and keep things in perspective, as well understand the impact of the decision, how that impacts something else down the line so that you can start understanding which decisions the best to take. Also do not panic and then you can sit down and you can you can actually make notes and then plan how you going to tackle things that need to be done.
CK1	I really learned to be calm and also to engage, not avoid the crisis because crisis, by the way are different, it could be a local crisis at the university you are faced with as a leader but at times it's also be a national issue. When comes with student engagement, I try and be very conservative in this situation, but also make it clear to the students not to participate in destroying any of their own environment. But I do empathize with the students and try and teach them how the system can help them to engage in a constructive manner.
CL1	I have learned that it is important to have some evidence-based information to make decisions but I also learned about teamwork. You need to involve different stakeholders which is important for the team. Then the support you need also from the networks and our collaborators which also has played a big role for me. Furthermore, the ability to collaborate and work as a team in order to overcome the current situation as played a major role in overcoming this crisis.
CM1	I learned how important it is for a leader and a manager to manage anxiety of anyone who reports to them, this includes reassuring them and embracing the empathy for their individual situations. I would say that what I learned the most is how important clear communication and emotional intelligence, especially when supporting people during COVID is very important.

5.4 Conclusion

This chapter of the thesis introduced the biographical information captured from the executive management members who participated in this study, as well as their actual verbatim responses to the question posed during the interview. The data collected on the combined number of years' experience of the 13 executive management members constitutes more than 200 years of institutional knowledge. In some cases, participating members have been appointed to numerous positions within the executive management portfolio and have even served more than two terms (five years per term) in specific positions. Secondly, what the data reveals is how diversified the executive management members were for this study. The researcher in his steadfastness managed interviews with a VC, DVC: Teaching and Learning, DVC: Research and Engagement, DVC: TL& Student Affairs, DVC: Resources & Planning, Chief Financial Officer, Dean of Students, Operations Manager, Campus Manager, Executive Director: Office of the VC and Executive Dean.

Lastly, this chapter presented the responses by executive management members of universities of technology, who participated in the interviews. Their verbatim responses are presented in Tables 5.4 - 5.11. Chapter Six will present an in-depth analysis and discussion of the key findings.

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CHAPTER SIX: FINDINGS AND DISCUSSION

6.1 Introduction

The previous chapter presented data generated from the data collected for this empirical study. This chapter will present an in-depth discussion of the key findings that emerged from the 13 interviews with executive management members of universities of technology (UoTs). Furthermore, the researcher will discuss the key findings of responses to the additional questions raised during the interview, and will provide these discussions within this section.

6.2 Findings and discussion

This part consists of the results of the analysis of the in-depth interviews with the executive management members of selected universities of technology in relation to the objectives of the study. Furthermore, this section will comprise a critical discourse of the research findings, and the linkage of each question posed to the executive management members during the in-depth interviews and the attainment of the research objectives.

6.2.1 Objective One - To identify the management competencies needed to manage a university of technology within South Africa.

6.2.1.1 Discussion of the findings on Objective One

To satisfy Objective One of this study, the researcher asked the executive management members the following questions.

“As an executive management member, what skills are important or needed on a day-to-day basis to manage a UoT in South Africa?”

The responses from the executive management members identified 42 competencies, which is presented in Table 6.1.

Table 6.1: Management competencies needed to manage a UoT, as identified by executive management members of UoT

Leadership	Risk management	Familiarity with the institutional/sector legislative instruments
Communication	Policy management	Ability to analyse and synthesize those legislative instruments
Decision-making	Financial management and budgeting	Strategic thinking, Strategic management
Emotional intelligence	Facility management skills	Strategic leadership
People management	Policy implementation	Strategic view, Strategic thinking
Planning	Monetary monitoring	Future-looking/strategic
Adaptive	Report writing	
Agile	Project and portfolio management	
Motivating	Administrative managerial skills	
Negotiation skills	Aware and identify your cutting-edge	
Management skills	Aware of your competition.	
Reporting	Implementation of plans	
Organising	Coaching	
Monitoring	Technology savviness	
Problem-solving	System thinking,	
Ability to consult	Strategy formulation and implementation	
Building trust		
Stakeholder management		
Source: Own processing from interviews		

Additionally, numerous competencies were duplicated by other executive management members. These competencies are presented in Table 6.2.

Table 6.2: Multiple identified competencies

Competency	Number of Members
Leadership	9 out of 13 members identified
Communication	7 out of 13 members identified
Decision-making	3 out of 13 members identified
Emotional Intelligence	3 out of 13 members identified
People management	2 out of 13 members identified
Planning	2 out of 13 members identified
Adaptive and agile	2 out of 13 members identified
Motivating	2 out of 13 members identified
Source: Own processing from interviews	

From the analysis of the responses from the executive management members, the researcher identified three main themes. These themes are: Core management competencies, Portfolio-specific competencies and soft skills competencies. Yang (2015) identifies core competencies as the proficient combination of knowledge,

technology, resources, techniques, employee skills, and management skills. Seetha (2014) indicates that soft skills are intangible, nontechnical, personality-specific skills that help ascertain one strength in leadership, facilitating, mediating and negotiating. For this study, the researcher identified portfolio-specific competencies, due to the competencies which were identified for specific positions within the executive management portfolios. These are very technical skills, for example, familiarity with the institutional/sector legislative instruments, the ability to analyse and synthesize those legislative instruments, as well as risk management, financial management and budgeting.

Table 6.3: Grouping of main/sub-themes and competencies

Main theme	Sub-theme	Competencies
Core management competencies	Strategic management	Strategic thinking, Strategic management, Strategic leadership, Strategic view, Strategic thinking, Strategic/future-looking, Strategy formulation and implementation.
	Management	Planning, Organising, Implementing (of plans) Reporting, and Monitoring.
	Communication	Negotiation

Source: Own processing from interviews

Table 6.3 illustrates the various sub-themes identified under the core management competency main theme. The sub-themes are strategic management, management and communication. The numerous strategic competencies have been clustered together as *Strategic management* competencies. A second sub-theme that was identified was the *Management* sub-theme. Within this mini-theme, competencies like planning, organising, implementing, reporting and monitoring are grouped together under the management sub-theme. An additional sub-theme, identified by the analysis of the data, is the communication mini-theme. Negotiation has been identified by Hellriegel, *et al.*, (2012) as a subcategory of communication.

Table 6.4 – Management competency themes

Theme 1: Core management competencies	Theme 2: Portfolio-specific management competencies	Theme 3 – Soft skills competencies
Leadership Communication Decision-making Adaptive and Agile Management Problem-solving System thinking, Strategic management, Technology savviness, Administrative management,	Project and portfolio management Stakeholder management Risk management Financial management and budgeting, Facility management skills Policy implementation Monetary monitoring Familiarity with the institutional/sector legislative instruments Ability to analyse, and synthesize those legislative instruments. Aware and identify your cutting-edge, Aware of your competition.	Emotional intelligence People management Social interpersonal skills Ability to consult, Building trust, Motivating, Coaching
Source: Own processing		

Table 6.4 illustrates the final list of competencies and the three main themes. The following section provides a critical discussion of the three themes identified as well as the numerous competencies grouped within the named themes.

Theme 1 – Core management competencies

The management competencies identified under this theme are commonly known management competencies which were discussed earlier (refer Chapter Two) by authors like, Lakshminarayanan, *et al.*, (2016), Hellriegel, *et al.*, (2012), Oleksyn (2006) and Abrahams, *et al.*, (2001). Abrahams *et al.*, (2001) identify leadership, communication, adaptability, agility, and problem-solving as critical management competencies. These competencies were identified in the study by Abrahams, *et al.*, (2001) by students who were all employed at the management level in international organisations.

Furthermore, competencies like strategic management, which includes, inter alia, strategic thinking, strategic management, strategic leadership, strategic view, strategic/future-looking, strategy formulation and implementation are identified by

Hellriegel, *et al.*, (2012) as one of their five effective managerial competency categories. A second category identified by the executive management members is the communication competency category, within the five effective managerial competency categories, which consists of negotiation competency.

Oleksyn (2006) identifies three subcategories of high-level management competencies. Within the knowledge and skills category, decision-making was identified by the executive management members. They also identified management, which for this study, consists of the following competencies: planning, motivating, organising, implementing (of plans), reporting, and monitoring, which according to Oleksyn (2006) are lower order competencies.

Lakshminarayanan, *et al.*, (2016) identify systems thinking, communication and the use of advanced technology (technology savviness) as one of the analytical skills needed by management members. Lakshminarayanan, *et al.*, (2016) also identify adaptability as one of the key competencies under the self-management grouping within their study. The authors also identify the ability to be flexible in the areas of process and solutions within their study as an integral part of the goal and action management grouping.

Theme 2 - Portfolio-specific/Technical management competencies

The researcher deduced that the competencies identified by the executive management members were focused on their specific executive management portfolio. Competencies, for example financial reporting, financial aid management, stakeholder management, investment management, risk management, budget reporting, monetary monitoring, financial management and budgeting are key performance areas for executive management members with portfolios such as a Chief Financial Officer, or Executive Director: Finance.

Furthermore, competencies which were also categorised under this theme were facility management, project and portfolio management, quality control and the above-mentioned competencies such as financial management and budgeting are key performance areas for executive management portfolios like Deputy Vice Chancellor (DVC): Operations, DVC: Resources and Operations, Executive Director: Operations and Logistics as well Campus Directors or Managers. The researcher obtained official

job descriptions from UoTs as well as published advertisements for the above positions.

Finally, competencies such as: familiarity with the institutional/sector legislative instruments, ability to analyse and synthesize those legislative instruments, policy implementation, stakeholder management, awareness and identification of your cutting-edge (skills) and awareness of your competition are relevant to the sector in which these executive management members work. The importance of understanding these institutional/sector legislations as well as the ability to analyse and synthesize those legislative instruments, plus the ability to implement new policy and manage the various stakeholders of the higher education sector, were highlighted by the responses of the executive management members.

Smith and Wolverton (2010) express how university leadership often has to balance various competing interest from stakeholders like students, trustees, donors, government and the community, as well as the fact that higher education institutions are difficult to manage as the institutions are diverse and leaders need to be knowledgeable about various organisational essentials. This statement further highlights the importance of stakeholder management as a competency for executive management members, and the familiarity with institutional/sector legislative instruments, ability to analyse and synthesize those legislative instruments, as well as policy implementation.

Theme 3 – Soft skills competencies

Seetha (2014) indicates that in the twenty-first-century workforce, soft skills are critical in the business sector. She also defined soft skills as being intangible, nontechnical, personality-specific skills that help ascertain one's strength in leadership, facilitating, mediating and negotiating. Deepa and Seth (2013) state that these skills refer to personality traits, attributes, and high levels of commitment to the job that would make the applicant stand out from his peers.

Hellriegel, *et al.*, (2012) identify emotional intelligence under his global awareness competency category. Furthermore, Hellriegel, *et al.*, (2012) classify the importance of social skills and relationship management as key drivers of the emotional intelligence grouping. The importance of the emotional intelligence competency was also highlighted by the fact that Lakshminarayan, *et al.*, (2016), and Oleksyn (2006)

identify empathy and emotional intelligence as vital components within their management competency groupings.

Abrahams, *et al.*, (2001) indicate that being trustworthy is a critical management competency. The executive management members also placed trust as one of their most important management competencies. Trust is essential in networking, connecting, communicating across all levels and dealing with conflict in a constructive way. According to Bligh (2017), trust plays a critical part in leadership. She added that trust is at the origin of all “great leadership,” in that one means little without the other. Furthermore, Bligh (2017) states that trustworthy leaders validate their ability to lead by setting a captivating course, providing a framework, and representing task-relevant knowledge.

Lakshminarayan, *et al.*, (2016) suggest that effective management of conflict is an important competency and this competency was grouped within their relationship management competency grouping. Imm (2022) states that conflict resolution can help bring people together once an issue has been resolved. Imm (2022) further indicates that in conflict resolution, one of the most significant components is selecting to solve problem as a team, rather than attacking each other.

Abrahams, *et al.*, (2001) ascertain that teamwork as one of the critical management competencies needed by management members. When analysing the team worker competency, the ability to consult with others, as well as showing empathy are crucial aspects of this competency. According to a report from the Ombudsman for Fair Work from the Australian Government (Australian Government, 2022), the benefits of consultation are:

- Better decision making when employees have input,
- Easier change implementation, as employees have been involved in the planning process,
- Better business performance during change, as less time is spent on responding to misunderstandings, rumours or disputes, and
- Improved employee engagement and performance.

According to Mihiotis and Argirou (2016), coaching is among the most broadly used growth methods used within a business environment on an international level. It has an extensive range of applications, not only for the business environment and corporations but also for individuals who want to improve relationships, make career and or lifestyle changes, and/or empower themselves. Thus, the value of this competency has far-reaching possibilities.

The analysis of data for objective one revealed that executive management members need a blend of different management competencies. These are identified under themes entitled core management, portfolio-specific and soft skills competencies. Taking into consideration the environment the executive management members operate in, previously identified as diverse and difficult to manage, some executive management positions require a combination of management competencies to manage a UoT on a day-to-day basis.

6.2.2 Objective Two: To determine why the management competencies identified above are important to manage a university of technology within South Africa.

6.2.2.1 Discussion of the findings on Objective Two

In attempting to attain Objective Two, the researcher asked all the executive management members who were interviewed the following question:

“You have identified several skills/characteristics in the previous question. Can you provide me with a reason why these skills/characteristics mentioned in the previous question, are important in assisting your daily tasks as an executive management member?”

The interviewees provided detailed responses in respect of management competencies, which they identified as important in the day-to-day operation of a UoT. The following section is the analysis of the responses in relation to the above question posed to fulfil objective two of this study. The answers have been organised within the three themes identified in the first objective.

Theme 1 – Core management competencies

Based on responses from the executive management members, it was clear that they valued the importance of leadership as a management or managerial competency.

The responses from the executive management members indicated that leadership is an important management competency during normal operating times; furthermore, the members indicated that they understand that as leaders they have a responsibility to the university, their portfolio, and their departments. An executive management member commented that:

”Your leadership skills in terms of leading your portfolio and your team need to come to the fore.”

Their role as leaders translates to strategically leading the university in obtaining their institutional goals, the moral obligation of upholding the vision and mission of the institutions, as well as educating, motivating, and guiding these subordinates in achieving those goals. This was evident by the response by one of the executive management members who stated that:

“Abilities like leadership especially, because I operate on the strategic level, it will be strategic leadership to all the directories. I would say leadership is very important, as you were appointed to lead the institution and to lead your executive team in reaching the institutional goals.”

Furthermore, they acknowledge their responsibility in regard to good governance and ethical funds management. Numerous executive management members commented and stated the following:

“I would say leadership is very important, as you were appointed to lead the institution and to lead your executive team in reaching the institutional goals.”

“From a leadership view, I needed to steer my team, our understanding of the vision and also the strategic objectives of the university from the strategic plan.”

“My leadership role, ensuring good governance, as we deal with money, budget that comes from the department of higher education.”

“I need to ensure that I bring in some ethical leadership to make sure that money is used for what it was meant for. “

The executive management members indicated that communication is a valuable managerial competency to have to manage an UoT during normal operating times. An

analysis of the reasons why they believe it is an important managerial competency follows below.

The member indicated that leaders should be able to engage with people from different levels and communicate appropriately at any level. This would ensure that people could understand what was being communicated, and sense where people were in terms of comprehension. Communication also consists of negotiating skills, which are crucial on executive management level, as executive management members will negotiate with unions, students, and even other executives. The members indicated that clear and concise communication on this level was a necessity, to ensure no miscommunication occurred. Furthermore, members indicated that communication also consists of writing skills, as members would be asked to write reports to serve on the various governance committees.

Furthermore, the ability to make the right judgment/decision is an important managerial competency during normal operating times. Members agreed that being able to analyse information and make the best decision with the minimum consequences for all stakeholders, is crucial in the decision-making process. Additionally, members indicated that when making any decisions, executive management members should make use of emotional intelligence to understand all stakeholder's positions within that decision. Decisive decision-making is key in identifying which task needs to be prioritised, as well as the urgency associated with the tasks to avoid delaying the functioning of the institutions. Lastly, members indicated that they needed to weigh in on all options before tough decisions could be made.

Executive management members indicated that the ability to be adaptive or flexible was a key core management competency. They indicated that due to the fact that the higher education sector was volatile and forever changing, the ability to adjust timeously to a changing environment, and also to foresee it, were key management competencies needed during times of normality. Members also stated that they needed to adapt to any situation that arose, for example the #FEMF, the push for decolonisation, and free education.

Management, as a competency, consists of sub-competencies like planning, organising, implementing, reporting, and monitoring. Members agreed that these basic

managerial functions are important managerial competencies. The management of capital program maintenance and individual portfolios, ensures that members have the right resources for each of the prioritised projects within their portfolios. Furthermore, being able to report on what has been done, to be accountable is an important responsibility because whoever is involved in this portfolio must be accountable for all directorates belonging to their portfolio.

Executive management members indicated that the ability to solve problems on an executive management level was an important day-to-day management competency. Members also maintained that when an issue arose within a department or portfolio, they tried to assist staff in solving problems by coming up with viable solutions.

The ability to be able to apply systems thinking was identified by the executive management members as a key managerial competency. They stated that if one could not see or understand the system, one could not do anything else. Members added that one should have a strategic day-to-day view. The importance of the previous statement is that as an executive management member one needed to know where one was going (whether institutionally or from a portfolio view) and how to get there. Management members needed to keep developing and have an idea of what was next and what their position was, what was being done and how much time was needed to make decisions.

As indicated earlier in this chapter, strategic management consists of the following: strategic thinking, strategic management, strategic leadership, strategic view, strategic thinking, strategic/future-looking, and strategy formulation and implementation. A member gave an example as follows:

“The first one is how to formulate a strategy. At my organisation, we are going through change by implementing a new strategy which is very new so that strategy needs to be formulated.”

“My opinion and my approach in terms of strategy conversation ... you have to understand the context in which you operate you have to understand the players which are there.”

“You have to understand how things are changing.”

Members indicated that on an executive management level, you needed to be a strategic thinker, and as an executive management member should be reading, observing, and knowing what's out in the world out there, especially in higher education. A second member indicated that:

“Strategic leadership, not on day-to-day basis because there's some operational aspects that have specific timelines that come into play but my task is to provide direction to my subordinates.”

“Provide and explain the directions of the unit, what is the vision of the university and of this particular portfolio. Then to guide those reporting to me and how to achieve their responsibility.”

Members understood that they had a strategic responsibility towards their universities, to provide strategic direction for the university they served as well as to staff.

The final core management competency identified by the executive management members was the ability to be technologically savvy and able to use advanced software or technology, to assist in making decisions, and for planning strategic directions of the university.

Theme 2 – Portfolio-specific/Technical management competencies

Theme 2 was identified by the researcher as management competencies that were very specific to the portfolio of the executive management member, or very technical competencies that the executive management members highlighted as being very important in the daily running of an UoT. Below follows a discussion about the reasons why the executive management members felt the portfolio-specific/technical management competencies were important.

The executive management member identified stakeholders' management as a very important competency in the daily running of a UoT. They stated that as an executive management member one needed to understand the client one served, whether internal or external, and their relation to the institution's vision and mission. The members also indicated that stakeholder management was very important in achieving organisational goals, staying relevant, as well as to ensure quality of service to your stakeholders. Executive management members indicated that:

“Stakeholder management, as an executive member you need to understand the client you serve, internal and external, and understand how important the stakeholders are in relation to your vision as an institution. If you don’t, you won’t achieve the target that you set. As well as to stay relevant, and remember this is why you exist, service delivery issues.”

“To inform all stakeholders of the situation and that you are working on fixing what is wrong.”

The following competencies have been grouped as competencies aligned within the financial function of the executive management portfolios, which are: risk management, financial management and budgeting, and monetary monitoring. The member stated that the reason why these competencies were important was because risk management is a crucial part of the financial portfolio, as any financial risks to the institutions which may be internal, or external, must be assessed. Without this competency, an organisation would have chaos and financial instability. Executive management members employed to manage the financial portfolios, must have an adequate background and skills, especially when they have to make hard financial decisions, which would lead to the institutions meeting its financial goals. A member’s response was:

“Risk management is a crucial part of my portfolio, as I need to assess any financial risks to the institutions which may be internal, or it might be external.”

Furthermore, these executive management members should also be able to lead the institution in making the correct financial decisions, when it comes to investment or financial improvement of the institutions they serve. The members also stated that financial management is a crucial competency, as the universities are funded by institutions like the Department of Higher Education and Training, and effective monetary governance is vital when reporting on the use of the funds received. This is also applicable when proving financial reports within the governance structures of the universities, in relation to the spending of various portfolios on executive management level. This ensures no misadministration of the project funds occurs. The importance of this competency was highlighted by the following responses from the executive management members:

“Financial management because you are dealing with a lot of funding, coming through from operational and from the funders like DHET.”

“Secondly, financial management and reporting as well as budget reporting; without this function, you would have chaos, as with financial sustainability. You need that background and skills, and you need to be like a chief financial evaluator, giving that value in terms of the financial implications, for the client to make the decision based on that. That is when we talk about financial positions which can be an investment or improvement, or expansion of the financial skills we have.”

“Financial management, budgeting and financial forecasting is important, especially for each of the maintenance projects. This ensures that you stay on the project and any amendments to the budget or financial spending is captured and recorded and reported. This ensures no misadministration of the project funds. “

Financial management and budgeting also add value to project and portfolio management competency, as it provides accurate feedback on the spending of funds within the various projects running within the executive management portfolios. It also provides accurate records of any amendments to the budget, or details of financial spending. In addition, it provides quality control on the spending of funds within the universities. The member stated that another reason why project and portfolio management competencies were important, was because for each of the various executive management portfolios, various projects which required constant monitoring and feedback were initiated. Thus, as an executive management member, one should be equipped with project and portfolio management competencies to ensure the successful completion of these projects.

Administrative management competency was also associated with the project and portfolio management competency, because, as an executive management member, one needed to be more than competent in administration of your portfolio, and because of the various projects running under your portfolios. Members indicated that one needed to manage your line, and follow up regularly to ensure execution and implementation of duties or tasks within your portfolio. Executive management members indicated that the following was needed:

“Excellent administrative managerial skills, because if you don’t manage your line, and follow up regularly. What I sometimes find lacking, is the act of execution and implementation.”

“Ordinary skills, like planning, organising duties, monitoring, monitoring the implementation of plans and of course reporting.”

The following competencies are very important management competencies, specifically taking into consideration the environment in which the executive management members are competing. These competencies are policy implementation, familiarity with the institutional/sector legislative instruments, and the ability to analyse and synthesize those legislative instruments. The management of UoT is governed by legislation, statutes and regulations; these oversee the governance of the Higher Education Sector. As an executive management member, you must familiarise yourself with the legislative instruments, and have in-depth knowledge and understanding of the role these legislative instruments play within the Higher Education Sector. Secondly, as an executive management member, you should be able to scrutinise these legislative instruments, manufacture amendments, or make additions to those instruments in the form of new policy. As time changes, new updated policies are needed to address issues like the use of new technology, the adoption of blended learning formats, and even the decolonisation of curricula. The importance of the above competency is reflected in the responses of the executive management members, which are:

“Analytical skills and the knowledge of procedures and processes. Remember we are governed largely by statutes and policy etc. and when decisions need to be taken, it's taken in conjunction with what the statutes/legislative documents allow.”

“Policy implementation and management as well because whatever you drive mostly at executive levels, some policy will govern the management of that tasks and you need to understand and be able to implement those policies holistically throughout your portfolio. Some policies are also there to guide our decision-making at the executive management level, and we even have legislation that guides our decisions. A good understanding of policies and even legislation that governs the higher education sector are key skills.”

“Another skill executive member should be familiarity with is the institution sectors legislative instruments and be able to analyse and synthesize whatever is required because generally recommendations which are asked of you as executive member, you would know if it deviated from a particular policy, or it’s not contained in a particular policy. how do we apply our client consider that favourably or not and you would, and you would probably know that that you during the pandemic because we would not have had policies and other guiding use and our decision-making?”

Another competency which can be associated with a specific portfolio is the facility management competency. These competencies can be associated with Director: Operations, Campus Managers, and even DVC: Operations portfolios. The members state that this is a vital competency, especially within those portfolios. The members within these portfolios need to deal with the management of numerous facilities and venues within the campus environment. This competency is important as the members within these portfolios would need to be familiar, understand and implement the various policies that govern the management of facilities on campus. They deal with particulars like health and safety concerns, contract negotiations, appointment of contract staff, and the hiring of the venues. The responses below are in support of the importance of the facility management competency. One member indicated that:

“Must have a very good grip on facilities management. As part of my portfolio, I manage various facilities within the university. I need to be able to understand and implement the various policies that govern those facilities, the appointment of contract workers, the hiring of those venues as well as the health and safety requirements associated.”

The final combination of competency relates to the strategic view of the executive management member in relation to the industry they are employed in. The ability to be aware and identify your competitive advantage, plus the ability to be aware of your competition are important management competencies for executive management members, because they need to be constantly aware of the key factors that will ensure their competitive advantage over other UoTs, as well as what other UoTs are doing or developing to ensure their competitive advantage. As within any industry, the need to stay competitive drives the financial goals of any organisation, and it is not different for UoTs, as they compete against other UoTs as well as with traditional and

comprehensive universities within South Africa. Executive management members who were interviewed were aware of the importance of this strategic competency as they commented that:

“One must always read and be aware of your competition, the need to always be aware and identify your cutting edge, that thing that makes you different from others, and not try and imitate others.”

“The ability to think strategically and have some sort of foresight for the institution is very important.”

Theme 3 – Soft skills management competencies

Earlier in the chapter, we established that soft skills are critical in the business sector (Seetha, 2014). The executive management members provided their own reasons why this statement by Seetha (2014) is true. The members identified emotional intelligence (EQ) as a very important management competency because, and as an executive management member, one needs to be able to motivate people to follow you, establish trust and respect you. A member indicated that:

“Because if you can’t, people won’t respect you, based on consistent, ethical, fair, just, and caring, that is the human element is all about.”

Emotional intelligences are also associated with competencies like building trust, ability to consult, ability to coach and managing people. Emotional intelligence or the ability to use EQ comes to play when making difficult decisions, which will have consequences, and in turn will affect various stakeholders. Executive management members need to take these consequences into consideration when making difficult decisions. One member expressed that:

“Once you have their trust they will contact you with new ideas, as they have a safe space even knowing that you might disagree with them but you’re not going to shut them down. When you need to make decisions, you need to be able to consult whom you can trust.”

People management competency refers to the ability to manage your staff within your specific portfolio. A member indicated that:

“People relationship is critical, you as a manager won’t get anywhere in life if people don’t trust you. Once you have their trust they will contact you with new ideas, as they have a safe space even knowing that you might disagree with them but you’re not going to shut them down. When you need to make decisions, you need to be able to consult whom you can trust.”

This ability is important as managers need to be able to establish trust within their portfolio and staff, to be able to communicate the vision and mission of the university and how they have certain accountabilities that ensure that the portfolio reaches its university’s goals. One member stated that:

“As I need to assess performance, deal with people discipline, and deal with people’s commitment to ensure that they understand their responsibilities as well as hold people accountable.”

Coaching as a management competency is directly linked to people management. One executive management member indicated that:

“Coaching of staff, which takes up extensive time, as you need to sit down with them and make sure that the staff members understand their responsibilities and are on board in relation to their performance targets and what is expected of them.”

Coaching also involves developmental coaching, and career path guidance.

The last competency, identified by the executive management members, is the ability to motivate others. Members indicated that the reason why this competency is important is because as the face of the institution, an executive management member needs to be able to motivate those in his or her direct line or portfolio in terms of following the vision and mission of the university, especially to meet the organisation’s goals, as well as your executive management team.

The executive management gave their personal perspective on the importance of the management competencies that they identified in the previous questions. These verbatim responses provide a sense of understanding from the executive management members perspective.

6.2.3 Objective Three: To identify the management competencies needed by executive university management to manage a UoT within South Africa during a time of crisis.

6.2.3.1 Discussion of the findings on Objective Three

In the researcher's attempt to achieve Objective Three, the executive management members were asked the following question:

What skills are important or needed by an executive management member in times of crises?

The analysis of the responses to the above question from the executive management members revealed 26 management competencies which will be referred to as crisis management competencies from this point. In some cases, numerous members have identified the same competencies, and these are illustrated in Table 6.5.

Table 6.5: Multiple identified crisis management competencies	
Crisis management competency	Number of Members
Judgment/Decision-making	5 out of 13 members identified
Communication	4 out of 13 members identified
Emotional intelligence	4 out of 13 members identified
Problem-solving	4 out of 13 members identified
Leadership	3 out of 13 members identified
Resilience	3 out of 13 members identified
Risk management	2 out of 13 members identified
Adaptability/flexibility	2 out of 13 members identified
Source: Own processing	

Table 6.6 illustrates the findings of the crisis management competencies identified by the interviewed executive management members of UoT. The following section provides a critical look at each of the crisis management competencies identified, their importance, as well as their connection to current literature on crisis management competencies.

The ability to make decisive decisions is one of the key competencies to have during crisis periods. This fact is supported by Mikusova and Copikova (2016), who indicate that crisis managers cannot be afraid to take responsibility for independent decisions,

as well as making short-term decisions promptly. Furthermore, decision-making has been identified by Kapucu (2006) and Kiel (1994) as one of the most vital competencies under rapid change conditions.

Table 6.6: Crisis management competencies

Judgement/decision making, Communication, Problem-solving, Emotional intelligence, Leadership, Resilience, Risk management, Adaptability/flexibility, Change Management, Innovative,	Capacity to confront the crisis, Articulate the crisis, Moral character to address the crisis, Learn from experience Business continuity, Pre-crisis planning, Separate the short term from the long term, Prioritise,	Analytical ability, Thinking on your feet, Self-confident, Ability to consult and involve others, Influence others Remain calm, Hope and faith, Motivating teams
Source: Own processing		

Another aspect of decision making is the separation of short and long term, especially during a time of crisis. Most decisions will be focused on solving the crisis situation and will be short term driven. Crisis leaders should take into consideration the consequences of their decision, for both short and long term.

The importance of communication skills during a crisis has been well documented by authors like Coombs (2018), Mikusova and Copikova (2016) Van Wart and Kapucu (2011), Wooten and James (2008) and Caponigro (2000). Four of the thirteen executive management members indicated that they see communication as an important competency to have during a crisis. It is of note that Mikusova and Copikova (2016) stated that communication is part of the reactive crisis strategy. Van Wart and Kapucu (2011) further highlighted that communication is one of the most viable competencies under rapid change conditions and is an important crisis management competency for crisis managers.

Van Wart and Kapucu (2011) maintained that problem-solving is one of the most viable competencies under rapid change conditions, and is an important crisis management competency for crisis managers. This notion is supported by the fact that four of the 13 executive management members indicate the importance of problem solving as a crisis management competency to have during a time of crisis. Coombs (2014) stated

that effective crisis management involves a variety of skills, which include problem-solving.

The importance of leadership during a crisis is another well documented topic by authors such as Mikusova and Copikova (2016) Van Wart and Kapucu (2011), Wooten and James (2008). Burnett (2002) and Bolman and Deal (1997) indicated that one of the competencies needed by management is to lead the organisation through the numerous crisis stages, and into an effective recovery. Brockner and James (2008) and Wooten and James (2004) further added that crisis leadership is also about managing the crisis in such a manner that the organisation is in a better position after the crisis. Three of the executive management members acknowledged the importance of leadership during crisis times.

Emotional intelligence was highlighted by three executive management members as an important crisis management competency to have. Fatt (2002) referred to emotional intelligence as the informed use of feelings and emotions. Moslehi, *et al.*, (2013) stated that individuals with high emotional intelligence have superior problem-solving skills, are more adaptable, and respond better than others in a case of crisis. Soltani, *et al.*, (2014) concluded that emotional intelligence impacts crisis management capabilities and recommended that crisis managers improve their emotional intelligence in order to make effective decisions during a crisis.

Wooten and James (2008) indicated that crisis leaders or management should demonstrate resilience and promote a resilient mind-set within their employees, Van Mart and Kapucu (2011) stated that leaders involved with crisis management must have a strong resilience to recover the change. They further added that effective crisis managers should have the tenacity to overcome extreme tragedy and trauma. In response to the question posed to the executive management members, three of the thirteen agreed that resilience was an important crisis management competency.

Flexibility and/or adaptability are crucial crisis management competencies for crisis managers to have, according to Mikusova and Copikova (2016), who also identified flexibility/adaptability as one of their top ten crisis management competencies. Van Mart and Kapucu (2011) indicated that senior emergency managers adapt their practices due to the nature of a crisis. They also added that crisis managers need flexibility to solve fast emerging problems. Van Mart and Kapucu (2011) pointed out

that flexibility remained a critical competency during a rapid change event such as a crisis.

Risk management is a very important crisis management competency. According to Dobrowolski (2020), the most vital trial for an organisation's operations in times of uncertainty (crisis) is the ability to actively answer to irregular situations. Dobrowolski (2020) further stated that an important part of crisis prevention is risk management. Similarly, Bugarova and Simickova (2019) stated that the issues of risk and crisis management are becoming increasingly recognised in various spheres of social activity. Two members indicated that risk management is a must have competency during a time of crisis.

The following competencies were singularly identified. Change management was identified in chapter three by Van Mart and Kapucu (2011) as being related to crisis management. It is noteworthy that it has been identified as being a must have competency by an executive management member. By definition, (Van Mart and Kapucu, 2011), it is a general term for systems design that has both engineering/structural and human aspects. It is basic management competency, even in stable times, because of the importance of successful change to all organisations.

During times of crisis, crisis managers need to solve various problems. They need to come up with innovative ideas to solve these problems which is why innovation is an important crisis management competency. This notion is supported by Van Wart and Kapucu (2011), who identified innovation as an important crisis management competency.

During a time of crisis, the crisis will take priority over normal day-to-day operational issues, hence executive management members should stay focussed on solving the crisis, and prioritise the solving of the crisis. Being able to prioritise during a crisis event, is an important crisis management competency. Mikusova and Copikova (2016) indicated that prioritising was a key component of their time management crisis management competency. Furthermore, they identified the ability to focus on crisis specific issues as an important crisis management competency.

The following three competencies were identified by the executive management members, namely: the capacity to confront the crisis, articulate the crisis, and the moral character to address the crisis. These serve as acknowledgement that the crisis

exists, that the institution is in a crisis situation or event, and that the institution is actively pursuing all possible avenues to solve the crisis and establish normal operating times. As an example, in modern times former United States of America President Donald Trump, lied continuously in relation to the Covid-19 pandemic (Paz, 2022). The above three crisis management competencies are crucial in response to the crisis situation.

Interpersonal skills, the ability to consult and involve others, influence others and motivate teams, are competencies that remain crucial during a time of crisis. These types of competencies have been identified by Seetha (2014) as soft skills. She also defined soft skills as being intangible, nontechnical, personality-specific skills that help ascertain one's strength in leadership, facilitating, mediating and negotiating.

The ability to stay calm has been identified by Van Wart and Kapucu (2011) as crucial for crisis leaders. The need to have a cool head and stay calm when making decisions during a crisis situation, includes thinking on their feet, as normally during crisis times, decisions have to be made quickly (Van Mart and Kapucu, 2011). In addition, the decision-making process during a crisis event is normally characterised by rapid change. This necessitates thinking on their feet to respond to the rapid change.

A further competency which has been identified by the executive management members is the fact that during a crisis, the leader, or leadership, must be self-confident, as maintained by Mikusova and Copikova (2016) indicating that during a crisis, the leader must be self-confident. The leader should be able to make decisions during such a period. This view is supported by Van Mart and Kapucu (2011) who stated that:

'Leaders who don't trust themselves will fold in a catastrophe and end up trying to run everything themselves. Total disaster!'

An integral part of being self-confident is to hope and have faith that things will get better. Nichols, *et al.*, (2020) stated that during a crisis, leaders should collect and amplify positive messages. The projection of being positive will establish positive connection with the staff, and also give them hope that everything will be ok.

The ability to prioritise has been identified by the executive management members as an important competency during a time of crisis. Mikusova and Copikova (2016)

established that the ability to prioritise and delegate activities is an important part of the time management competency. A competency identified by the executive management members, linked to prioritising, is the ability to follow up on these priorities. It would be worthless to prioritise certain actions and then forget to follow up on those actions and to obtain feedback, especially in a time of crisis, when time is of the essence.

Pre-crisis planning was identified as an important crisis management competency. Ericksson and McConnel, (2011) suggested that planning in advance for extraordinary scenarios, allows organisational responders to shift gear and implement procedures and guidelines of crisis management. They also proposed that the lack of a planning process or contingency plan is normally considered to be a recipe for disorder, misunderstanding and crisis mismanagement. Business continuity was another competency identified by the executive management members. According to Smith (2003) business continuity management (BCM) is defined by the Business Continuity Institute (BCI) as a:

“Holistic management process that identifies potential impacts that threaten an organisation and provides a framework for building resilience and the capability for an effective response that safeguards the interests of its key stakeholders, reputation, brand and value-creating activities”.

Business continuity management goes hand-in-hand with pre-planning for crisis as both are linked to similar goals, which are to maximise the defence of the organisation and minimise the impact of the crisis/business continuity event.

6.2.4 Objective Four: To ascertain why the above-identified management competencies are important during a time of crisis.

6.2.4.1 Discussion of the findings on Objective Four

The executive management members each provided detailed responses to why the crisis management competencies which they identified as important in times of crises, are in Table 6.6. The following section outlines items that are deemed important by the executive management members by including an analysis of verbatim responses provided by the executive management members.

The analysis of the responses includes 26 important crisis management competencies, and a discussion about these follows.

Great emphasis was placed on the judgement/decision-making as a crisis management competency. This crisis management competency was identified by five of the thirteen executive management members as an important crisis management competency. One member's response was:

"Decision-making, as a leader you are under pressure within a crisis situation. You need to analyze the situation, you kept your focus make decisions because if you lose, you are making decisions then you certainly not going to be able to turn the ship."

The members highlighted that fair judgment, and the guiding policies and procedures that govern their decision making, are very important. A member stated that: "*Executive management is led by numerous policies and even legislation to help with the decision-making process*" An example given by one of the executive management members was when:

"there was a case of the students wanting cash in their pockets in regards to a certain bursary, but the bursary is governed by a policy that dictates how the bursary must be applied, and this policy was approved by the council at the highest decision-making structure."

Furthermore, the executive management members expressed that they needed to get as much information on the crisis as possible, as fast as possible, but also from sources that they trust. This helped them with the decision-making process, especially when hard decisions need to be made, but the members also indicated that emotional intelligence plays an important role during the decision-making process as the consequences of their decisions need to be recognised. A member indicated that:

"Then get as much information about what's actually going on, as fast as possible from the same people you trust. Once you have gathered the necessary information, the next skill is to be able to make decisive decisions to confront the pending crisis."

Furthermore, once you have all the information at hand, a decision needs to be made. An executive management member indicated that: "Get all viable options or solutions on the table, understand the impact of each solution and make a decision to avert the crisis as fast as possible."

Taking into consideration that the executive management serves a wide range of stakeholders, the consequences and its effects to stakeholders need to be viewed from all their perspectives. Based on the previous statement, it is very important that decisions made within a crisis situation have short and long-term consequences. One member indicated that:

“Another skill is to be able to separate the short term from the long term because in the short term during a crisis some of the deliverables and targets will be affected. Also, when you see your finances going down, you know that in the long-term things will turn around. So, to put things into perspective, changes will occur and then you need to adapt your strategy which is the third skill.”

Another crisis management competency that was identified by the executive management members, which is a link to decision-making, is the fact that executive management members need to think on their feet. Normally, during a crisis, time is of the essence, and executive management does not have the luxury of having much time to make a decision; some decisions and responses to a crisis must be quick and decisive.

Another crisis management competency linked to decision-making is the ability to consult with, and involve, others. This competency is very important during a crisis as executive management will need as much information as possible about the crisis. The involvement of others assists with problem solving and resolution of the cause of the crisis. One member stated:

“But this could also depend on your ability to consult and to involve others because you would unilateral try and solve the problem well it might involve others”.

Analytical ability has also been identified as a crisis management competency by one of the executive management members. The member stated that:

“Analytical ability comes out quite prominent and maybe the other one is more related to emotions which is emotional intelligence. With analytical ability or skill in case of crisis, you need to be able to identify the problem that you are facing and even identify possible solutions or interventions that can be implemented to deal with that problem whether they are short, medium, and long term. Identify these and be able to select the appropriate measure intervention at the stand it's not always easy to identify the

appropriate measure because you may think that there is a correct one to only find that it's not. We need to learn from this experience and gather as much information.”

Analytical ability is directly linked to the decision-making and problem-solving learning process during the crisis.

During the crisis, communication is a vital crisis management competency. The responses from the interviewed executive management members indicated that four of the thirteen members agreed. During a crisis event, communication must be sent to all stakeholders, internal and external. The communication must be made as fast as possible, and the message must be clear and concise so that all stakeholders understand the message. A member indicated that:

“Within a crisis situation, you need to communicate internally, with my team, within the university, as fast as possible and communicate whatever decisions were made. Make sure that the message is clear and that everyone understands and that they do not panic. You must communicate with stakeholders, council, chancellor and parents to ensure them that you are aware of the situation and that you are actively busy trying.”

Another member stated in support of the above statement that: “It is key to make sure that people understand why this is happening, why we going in this direction and what the management is planning on doing to resolve the issues around the crisis.”

This also points to the fact that executive management is aware of the crisis, are busy attending to the crisis and will keep stakeholders abreast of any further developments during the crisis. Communication provides calmness amongst the stakeholders.

Problem-solving has been identified as a key crisis management competency. A member's response to this question on this topic is:

“Problem-solving is one of the skills that you need to have as well as the ability to analyse and assess things.”

In support of the above, another member added that:” “Problem-solving, pull in resources during a crisis, can't manage the crisis alone, must be open-minded, bring in experts. Find the solutions.” A member identified that during a crisis, one needs to utilise all resources as one cannot manage or solve a crisis alone. Management must be open minded and consider using external help to find the solution as it could depend on the ability to consult and to involve others to unilaterally try and solve the problem.

Emotional Intelligence (EQ), as identified by four out of the thirteen executive management members, is an important crisis management competency. As an executive management member, one needs to make empathetic decisions. One participant gave an example, which links to above:

“We recently had a water crisis at our campus and students were without water for five days. You need to be empathic to the student’s needs in this situation. You need to appreciate how another person who might not have access to your amenities will deal with that situation in the student context and therefore your decisions need to be very appreciative of different contexts. It’s that empathetic, sort of broad-view lens which you would need as an executive manager to appreciate all the different circumstances that might occur within a crisis situation. Secondly, you as a manager with a portfolio and staff within that portfolio, will need to monitor your staffs physical and mental conditions as a crisis situation will take its toll on all who are affected by it. This is also where our emotional intelligence plays a very active role during this process. Emotional intelligence will also have an influence on your decision making, as stated above when the researcher addressed decision-making, but very importantly, EQ will also assist in stay calm and not to panic when the crisis hits the university.”

A response from a member, in support of the previous statement, is indicated below:

“Now in terms of a crisis, you as an executive member, the most important competency to have when that crisis hits the university, is be emotionally intelligent. Being emotionally intelligent will allow you to address the crisis in a calm and thought-out manner and not on a crisis level.”

Times of crises calls for strong leadership. One of the executive members indicated that he was not just appointed for the normal operating times and stated that: “***I was appointed to lead the university, especially in times of crisis.***”

Firstly, strong leadership during a crisis period depicts that the leadership of the university is in control of the situation, and secondly, that they are trying to solve the relevant problems. Strong leadership during a crisis period also puts the stakeholders at ease as a calm and collected front is presented and supports whatever is needed to solve the problems. Furthermore, leadership provides regular updates of the progress made to all stakeholders.

Leadership crisis management competency was identified by three of the thirteen members as an important crisis management competency. Another crisis competency linked to leadership identified, was the ability to be self-confident. Van Mart and Kapucu (2011) stated that: *‘Leaders who don’t trust themselves will fold in a catastrophe and end up trying to run everything themselves. Total disaster!’* In addition, the ability for leadership to remain calm during crisis is important. As a leader, you should remain calm and address the crisis, as it ensures that the staff do not panic; it also presents a calm front. Yet another crisis management competency which is linked to leadership, is the ability to hope and have faith. According to Nichols, *et al.*, (2020), during a crisis, leaders should amplify positive messages. The projection of being positive establishes a positive connection with staff and gives them hope that everything will be ok.

Executive management members indicated that resilience as a crisis management competency is very important. Members indicated that being able to address the crisis and be resilient in trying to solve the problems is vital during a crisis, even if the institution is hit by setbacks., executive management members must represent a resilient front from an institutional, portfolio or departmental stance, in times of crisis. Wooten and James (2008) indicated that crisis leaders or management must demonstrate resilience and promote a resilient mind-set within their employees.

Dobrowolski (2020) indicated that an important part of crisis prevention is risk management. Two members of the thirteen interviewees indicated that risk management is an important crisis management competency. They believed that pre-crisis risk assessment and contingency plans should be in place. One member indicated that:

“on the executive level, have all your pre-crisis work in place, must know, have, for instance, a set of media releases, teak here and there, so no is running around, any kind of event, scenario planning, with that outline the reactive plan/ media release, evacuation plans, etc., MOUs with vendors/residences, pre-work must be done”.

Adaptability during a crisis event is an important crisis management competency to have, especially as there is a shift from a normal day-to-day operational schedule to one that is focused and prioritises the solving of the crisis. As executive management members, there is a need to be able to adapt, and this links with the change

management crisis management competency; during a crisis, normality is replaced with a crisis mode, as the crisis is prioritised. A member noted that:

“Another vital skill is change management, you see that you might have a problem with the start of change management and also the adjustment to the change. We have to change and adapt immediately, especially in a crisis period.”

The ability to be innovative during a crisis event has been identified as an important crisis management competency. An example, by one of the executive management members, is that during the #FeesMustFall student protest crisis, government income decreased, and it was then up to the individual universities to increase the innovation and entrepreneurial angle to produce more income for the university.

Earlier on in this chapter, the following three crisis management competencies were grouped together: the ability or capacity to confront and articulate the crisis, and the ability and character to address the crisis was discussed. The example of the previous president of the United States of America and the list of lies he uttered during his reign in relation to the Covid-19 Pandemic, was a perfect example of why the three mentioned crisis management competencies are important in terms of the negative information, lies and distrust which was spread due to the previous president's prejudice towards the Covid-19 pandemic. The following is a quote by Parker and Stern (2022): “*Trump's own experts, who predicted, based on a 2019 influenza simulation, that the US would be underprepared, underfunded, and would be unable to respond effectively to a pandemic*”. According to Woolhandler, *et al.*, (2021) 40 % of the COVID -19 fatalities could have averted furthermore, Redlener, *et al.*, (2020) indicated that between 130 000 and 210 00 deaths were attributed to the failures of the US government.

The importance of pre-crisis planning, and business continuity is directly linked to each other Earlier in this chapter, business continuity was defined as: “*holistic management process that identifies potential impacts that threaten an organisation and provides a framework for building resilience and the capability for an effective response that safeguards the interests of its key stakeholders, reputation, brand and value creating activities.*” This goes hand in hand with pre-crisis planning as follows:

“On the executive level, have all your pre-crisis work in place, must know, have, for instance, a set of media releases, teak here and there, so no is running around, any

kind of event, scenario planning, with that outline the reactive plan/ media release, evacuation plans, etc, MOUs with vendors/residences, pre-work must be done”.

The importance of having the pre-planning work done and producing guidelines to assist during a crisis time assists role-players, and may provide lessons about the consequences of a crisis where there is lack of planning. A very important crisis management competency is the ability to learn from the current crisis event. These assist in ensuring that the university is prepared for future crises. The data collected and the critical review of things that were done correctly and incorrectly, provide crucial information for contingency, pre-crisis and even business continuity plans.

The last crisis management competency identified by the interviewed executive management members, is prioritising. The ability to prioritise is linked to numerous other crisis competencies, for example problem-solving, decision-making, communication, pre-planning and business continuity. All the mentioned crisis competencies have certain prioritised duties that take precedent over other tasks, as each one of these is important in solving the crisis.

6.2.5 Objective Five: To ascertain how executive management members will have to adapt managerially from a time of non-crisis to a time of crisis.

6.2.5.1 Discussion of the findings on Objective Five

The executive management members were asked the following question in relation to this objective.

“In times of crises, do you change your pattern/manner of management to adapt to the crisis”.

The analysis of the responses from the participants identified the following themes:

- Time/urgency/priority,
- Adapt/agile/flexible, and
- Leadership.

Theme 1 – Time/priority/urgency was the most popular answer given by the executive management members in response to the question. One of the

characteristics of an organisational crisis, as identified by Billings, *et al.*, (1980) is that crisis resolution is urgently necessary regardless of the type of crisis. Furthermore, in our analysis of the definitions of organisational crisis, the researcher highlighted the fact that organisational crises are a “surprise”, and “unpredictable specific events” and must be “swiftly” dealt with as it “further curbs the amount of time for response”. It is clear from the responses that the interviewees understood the importance of time, urgency and even prioritising actions in resolving the crisis. The mere volume of the responses provides evidence of their understanding. Table 6.7 Provides the verbatim responses of the executive management members on this theme.

Table 6.7: Verbatim responses to Theme 1

<p>Theme 1: Time/ priority/ urgency</p>	<p>“During times of crises, you need to get things done quicker than before”.</p> <p>“Your style adapts to the priorities that the crisis”.</p> <p>“More micromanager due to this crisis as you understand the importance and the urgency of each task during the crisis time”.</p> <p>“There is a sense of urgency in certain things that you do or even in some cases, you prefer not to delegate certain work.”</p> <p>“You need to do it yourself cause of the crisis, there is impending risk and urgency to all your duties”.</p> <p>“When a crisis arises, all actions are focused on the crisis and trying to the resolve crisis”.</p> <p>“Under normal circumstances management would meet on a regular basis as outlined in the university calendar of the university. That goes out the window when you’re dealing with a crisis. The crisis takes precedent within that normal meeting. this now becomes item number one as we need to make a decision. Yeah, timing is critical”.</p> <p>“You cannot be keeping the same pace if we are in a crisis. Normal leadership, under normal circumstances you try not to interfere in terms of the operational functioning of the departments and portfolio manager or as a leader you normally deal with strategic issues and then all operational stuff you push to the relevant managers or heads of your sections. When you are in a crisis, you have a blended or hybrid management style between your macro and micro-management but somewhere micro does come in more because you want to see the results at that level which means you even increase the number of contact sessions with your management”.</p> <p>“During normal operating time, I’m very much a person who tries to encourage people to let people take their own decisions and I delegate and listen to my staff</p>
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	<p>but it's a time-consuming process. But during a crisis, time and speed are of the essence.”</p> <p>“I am not going to be sitting around waiting for decisions to be made or standing around wait for someone to get back to me two days later. I will speed up the process up.”</p> <p>“Your time of reaction is very important and crucial. Your management style has to change as time is a key factor in your reactions, your decision making and your response to the crisis. More urgency in regard to deadlines, and timeframes. So yes, more urgency is emphasized due to the crisis.”</p>
Source: Own processing	

Theme 2 – Adapt/Agile/Flexible. This was the second most popular response to the question and is consistent with the literature of Van Wart and Kapucu (2011) who maintained that when crisis situations evolve, the leader must be flexible and willing to adapt their own directives. They suggested that the interferences and confusion a crisis may cause, necessitates abrupt operations planning so that teams know what to do and where to must adapt. Furthermore, the above scholars connect with theme 1 and theme 2 by stating that, crisis managers may need more analytic skills to unravel emerging problems and flexibility in implementing them. Scholars also identified flexibility as a must-have competency during rapidly changing conditions (Van Wart and Kapucu 2011, Kapucu 2006 and Kiel 1994). According to Roche, *et al.*, (2013) adaptability is a need in crisis management. In this vein, Jobidon, *et al.*, (2013) proposed that adaptability and associated concepts such as agility, swiftness, and rapidity are more and more evident in public safety and military organisations.

Theme 2: Adapt/ Agile/ Flexible	<p>“must be flexible to handle the change from the normal to crisis times”.</p> <p>“I can adapt and engage to find new solutions”.</p> <p>“Definite yes, your management style will need to change because each situation needs to be done on its own merits so one must be agile”</p> <p>“You cannot use the same techniques and strategies in a crisis situation which you used in a normal situation”</p> <p>How to adapt to the crisis is by realising you don't just need your experiences but you have to bring in as much experience as you can.</p> <p>I believe that you need to be more flexible in your management style because a lot of things are changing due to the crisis.</p>
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	I think what's important is that my team can deliver by adapting to the crisis situation, and by setting hybrid meetings, either virtually or physically. This way we still ae able to meet our goals and be up to date with the crisis situation.
Source: Own processing	

Theme 3 – Leadership. The third and final theme identified in the analysis of this question emphasises the executive management members' acknowledgement of the importance of leadership in a time of crisis. How they take on the responsibility of the situation and try and lead from the front. Van Wart and Kapucu (2011) stated that strong leadership is needed in times of crises. This notion was supported by Mikusova and Copikova (2016) and Herrera (2011), who identified leadership skills as the most important crisis management competency to possess.

Table 6.9: Verbatim responses to Theme 3	
Theme 3: Leadership	<p>“Leadership skills evolve with time but actually, I found that leadership actually comes to the fore when you need it the most in terms of crisis”</p> <p>“It seems the notion that true leaders come to the fore exactly in times of crisis”.</p> <p>“Me, as a leader you need to lead from the front”.</p>
Source: Own processing	

The executive management members were asked the question, *“In times of crisis, do you change your pattern/manner of management to adapt to the crisis”.*

This question was asked to fulfil Objective Five of this study. Taking into consideration the responses from the executive management members, the researcher can clearly indicate that this objective was fulfilled, as three clear themes were identified. The executive management members indicated that due to the crisis event, their management style needed to adapt due to the urgency of the crisis situation, and that during a time of crisis, time is of the essence and the crisis takes priority over day-to-day operational tasks. Their responses further indicated that they also believed that their leadership ability needed to be accessed to enable them to lead from the front.

6.2.6 Analysis of the additional questions asked during the interview.

The following section addresses the responses of the executive management members of UoTs on three additional questions asked during the interview.

6.2.6.1 Discussion on the findings of additional Question 1:

The researcher asked the following question to the executive management members:

“In your view/related experience, how do the management competencies identified as important during times of crises, differ from the management competencies identified during times of standard procedures?”

The breakdown of the responses from the executive management members revealed two themes in relation to the differences between management and crisis management competencies. The following section provides a critical review of the themes, and highlights the differences, as identified by the executive management members.

Theme 1 – Time Pressure

The responses from the executive management members indicated that pressure reveals a major difference between management and crisis management competencies. According to Sorger, *et al.*, 2020, conditions can change with a crisis event and decisions have to be made quickly to take action and avoid additional damage. Sorger, *et al.*, (2020), were of the opinion that crisis events lead to intense time pressure on all involved. Executive management members were in agreement with Sorger, *et al.*, (2020) as they indicated that...

“Very much more under pressure when it is a crisis situation”

You are more under pressure and things need to be done quickly”.

“More pressure from your superiors to get things done”.

“Secondly you are relaxed, there’s no pressure and no stress in normal times”.

“Only difference again is the urgency with which I need to respond to things there’s not really any other difference than that”.

“In crisis times you don’t have that luxury of time, you have to think on your feet”.

“The difference is the urgency to resolve the crisis”.

Theme 2 – Priority

Executive management members indicated that priority is the second difference between management competencies and crisis management competencies. Their verbatim response to the question follows:

“No, I don’t think the competency in my view differs significantly. What I do think though is the issue of creating some sort of order in your mind.”

“It takes priority over the day-to-day tasks.”

“During a crisis, one would particularly be focused on dealing with a crisis and problem-solving skills. These skills would take priority.”

“When a crisis hits your organisation, your priorities change and your decision-making must be quick and efficient in dealing with the consequences of the crisis”.

“During crisis, your priorities change, during the crisis, students must feel that they come first, in terms of its stakeholders of the university”

The analysis of the responses indicated that members felt that the main differences between management competencies and crisis management competencies were time pressure and the emphasis on priorities which would shift due crisis. The following are four primary characteristics identified by Bundy, *et al.*, (2017), which are:

- crises are sources of uncertainty, disruption and change;
- crises are harmful or threatening for organisations and their stakeholders, many of whom may have conflicting needs and demands;
- crises are behavioural phenomena, meaning that the literature has recognized that crises are socially constructed by the actors involved rather than a function of the depersonalized factors of an objective environment; and
- crises are parts of larger processes, rather than discrete events.

One can understand why executive management members stated that time pressure and changing priorities were the main differences, as with the uncertainty, disruption and change which accompany a crisis, day-to-day priorities change to adapt to the crisis. As a crisis is harmful or threatening, one needs to change priorities and make quick decisions to address the crisis. Furthermore, decision-making needs to be quick

and take precedence over other actions as the crisis may be part of a larger and more serious crisis.

6.2.6.2 Discussion of the findings of additional Question 2:

The researchers asked the following additional question to all the executive management members in the interview:

“In hindsight, is there anything you would have done differently in terms of how you managed #FMF or the COVID-19 Pandemic?”

The review of the responses from the executive management in relation to the above question reflected three main themes: planning/preparedness, student engagement and digitisation. Below follows a discourse on the findings of this question in relation to the three themes.

Theme 1 – Preparation/Planning

Staude (2014) indicated that planning is the process of defining organisational objectives and recommending a way to reach it. Straude (2014) further elaborated that the importance of planning is to identify future opportunities as well as anticipate and avoid future problems by developing the most suitable strategies. Aljuhmani and Emeagwali (2017) stated that it is vital to have a comprehensive plan of action, when a crisis hits. They added that the crisis plan can make or break the organisation in times of crises. Their verbatim responses reflect their unhappiness with the lack of planning/preparedness for the crisis, as well as associated duties and tasks which resulted from the lack of planning for the pandemic. Table 6.10 presents their responses, which support the planning/preparedness theme as identified by the analysis of the responses.

Table 6.10 Verbatim responses in support of Planning/preparedness theme	
Planning/preparedness theme	<p>“If we knew all these steps in preventing the pandemic, we would have introduced those type of types from the beginning and educate our staff and those affected well in advance.”</p> <p>“I would have suggested that better planning around this decision and the various consequences that this decision had.”</p> <p>“Covid-19 caught as all off-guard and we should be learning from this experience and prepare much better for future risks.”</p>

	<p>“We’re actually putting plans in place for unforeseen crisis or pandemics, or a protest should happen and then we will have practical alternatives to manage the situation.”</p> <p>“The next time we get closed down we will be better prepared.”</p> <p>“My only issue is the manner in which the university, implemented the idea of working remotely.”</p> <p>“I think the first one is planning in advance is key.”</p> <p>“I think we missed an opportunity to manage the working terms more efficiently than we did.”</p> <p>“We also could have completed outstanding maintenance during the lockdown period.”</p> <p>“I wouldn’t have panicked to close down the university, but I think we could have managed it better.”</p> <p>“I would have been a bit more hands-on, as it seems it was being managed quite high up with decisions being made. I would have handled for instance our free choice vaccination policy and monitored people and students much closer.”</p> <p>“In hindsight, we need to actively look at our risks assessments as well what we perceive as risks.”</p> <p>“Then we need to plan for each possible risks scenario and have guidelines how to manage the perceived risks.”</p>
<p>Source: Own processing</p>	

The verbatim responses from the executive management members indicate the lack of planning or preparedness for the pandemic, as well as for the associated consequences, and the responses of the universities in trying to manage these consequences. The responses from the executive members indicate a lack of proper planning, not just in relation to the pandemic, but also the associated consequences during and after the crisis. Many members highlighted the fact that the universities needed to address risk assessment and how they perceive risks, as the Covid-19 pandemic was not even identified as a risk. This indicates that pre-crisis planning was also not a high priority, as the Covid-19 Pandemic was not even registered or identified as a risk by the universities. The above highlights the importance of crisis management, proposed by Coombs and Laufer (2017) as the fact that crisis management incorporates three phases, which are the pre-crisis phase, which focusses on prevention and preparation, the crisis phase, which deals with the

response of the crisis and the post-crisis phase, which is the learning and revision phase.

Theme 2 – Student engagement

The analysis of the responses from the executive management identified a second theme, i.e., student engagement. The members indicated that they could have planned better in relation to student engagement, especially in relation to engagement with postgraduate students. Executive management members suggested the following:

“More proactive in terms of keeping postgraduate students engaged online.”

“The use of seminars, online workshops and so that even during lockdown there was progress.”

“There could have been more focused on self-study, make use this opportunity to optimize your literature.”

Student engagement was also identified as a category which could have been better dealt with. This factor links with the first factor above, where better planning could have assisted with the engagement of students, especially post graduate students. The use of digitalisation, which is the third factor identified by members, could have assisted with the planning of online teaching and learning, seminars and online workshops.

Theme 3 – Digitisation

The final theme identified by the analysis of the responses to the second additional question was digitisation. Members felt that the conversion to the digitisation of teaching and learning should have been more actively pursued than it was during the Covid-19 Pandemic. An executive management member stated that: “*we should have invested more into digitalization and even have done it long before the pandemic*” and was supported by another member who felt that: “*We should have switched over to online teaching and learning format, but we were not ready and that’s what COVID-19 found us out on.*” One member even indicated that the focus should not just be on teaching and learning but also on staff engagement and said: “*We should have been getting things like our MS Teams and our things on board and used those opportunities to engage with staff.*”

In summary, the executive management members identified that they would have planned more effectively for the crisis, as well as ensured that guidelines or protocols were in place to assist during a crisis. They also mentioned that they would readdress risk assessments as well as risk identification. Lastly, the executive management members proposed that they would have planned for better student engagement during the crisis period and for an optimal use of digitalisation. A clear common thread in all three themes was planning, and the lack thereof.

6.2.6.3 Discussion on the findings of additional Question 3:

The final additional question which was posed to the executive management members in the interview was: ...

“In your opinion, what have you learned with regard to managing in times of crises?”

In assessing the responses from the executive management member, the following themes presented, itself during the analysis. Table 6.11 illustrates the themes identified ring the analysis of the responses to this question.

Table 6.11: Verbatim responses in support of the themes identified	
Theme	Verbatim response
The need to adapt to the change.	“If it’s one thing that in the last two and a half years have taught us, is that our world is changing and that then we have to adjust”. “We need to adapt to the change and adjust to the current situation”.
The need to learn from the crisis.	“Surely, mistakes were made in dealing with it, but to learn from these mistakes is vitally important”. “Thus, some sort of post mortem of how we dealt with the crisis must be done”. “This is something that we need to learn from for us to manage a crisis better”. “We need to learn from this situation and put in place guidelines or protocols for the future”.
How unprepared the higher education sector was for the crisis.	“What I have learned is some of the issues that I picked up is that structurally from a governance point of view within the department there weren’t enough policies where people were operating in.” “Covid-19 pandemic was unprecedented so you didn’t expect to have some sort of tool you can have lessons learned out of.” “I don’t think we were well prepared for a crisis. Although we(universities), do have risk management in place or risk plans to manage certain risk no one could have foreseen this crisis because this was of a different nature and nobody could see it coming. Despite the fact that it’s something that we never thought of before does highlight some weaknesses in how we identify risk and how we think the risk must be managed.” “The manner in which we dealt with Covid-19 pandemic indicates that we were not well prepared and not just institutions but our country and the whole world as well.”
The need to stay calm.	“I really learned to be calm and also to engage, not avoid the crisis.”

	<p>“Also do not panic and then you can sit down and you can you can actually make notes and then plan how you going to tackle things that need to be done. Need to remain calm.”</p> <p>“The first thing is to stay calm and assess the situation.”</p>
The importance of decision making.	<p>“I have learned that it is important to have some evidence-based information to make decisions.”</p> <p>“Actually, see the whole picture before you go making decisions, whatever there is and understand impact of decisions.”</p> <p>“You need to take responsibility for what decisions you take.”</p>
Leadership in crisis.	<p>“What comes to the fore is the fact that some people in leadership positions, ability to handle situations like these were exposed.”</p> <p>“Their weaknesses were exposed since there is no manual to learn from.”</p> <p>“This speaks to the issue of leadership versus management.”</p> <p>“Very few people have the ability to show leadership during times of crisis especially when the rest of the flock needs leadership.”</p>
Importance of teamwork.	<p>“I also learned about teamwork.”</p> <p>“Furthermore, the ability to collaborate and work as a team in order to overcome the current situation has played a major role in overcoming this crisis.”</p> <p>“I think one thing that I’ve learned is that it’s very important that one should encourage teamwork.”</p> <p>“Teamwork is one key factor and its importance for meeting goals and achievements.”</p>
Importance of emotional intelligence.	<p>“I learned how important it is for a leader and a manager to manage the anxiety of anyone who reports to them, this includes reassuring them and embracing empathy for their individual situations.”</p> <p>“I would say that what I learned the most is how important clear communication and emotional intelligence, especially when supporting people during COVID is very important.”</p> <p>“Must have more empathy in terms of how you deal with the situation.”</p> <p>“We need to ensure that the healing process takes place.”</p> <p>“As a leader you need to be sensitive as well and help people manage both, their professional and personal affairs, during such a critical time”</p>

The analysis of the responses to the final additional question identified eight (8) lessons learned by the executive management members during a time of crisis.

The members suggested that during the crisis they appreciated the importance of teamwork. According to McNeese, *et al.*, (2014) “*success in managing emergency situations is highly dependent on teams working together to accomplish prioritized goals*”. Tannenbaum, *et al.*, (2021) stated that a crisis event can encourage some people’s eagerness to cooperate, for example, to disregard prior disputes to tackle a shared dilemma. This is evident as one of the interviews was of the opinion that: “*Furthermore, the ability to collaborate and work as a team in order to overcome the current situation has played a major role in overcoming this crisis.*”

The need to learn from the crisis is closely linked to the above theme and was identified by members as an important lesson learned. Paraskevas (2006) and Wang (2008) indicated that learning from the crisis event is an important part. The learning stage focusses on critical reflection, and the improvement of crisis management practices to prepare for future crises (Lauge, *et al.*, (2009). Executive management members must use the information gained from the current crisis to ensure better planning and preparedness for future crises.

Another valuable lesson learned by the executive management members was the fact that the whole higher education sector, and not just their respective universities, had been unprepared for the crisis. This is evident by the verbatim responses of members in tables above. Fischer, *et al.*, (2016) highlighted that limiting the rising costs and effects of disasters pivots on the development of a better understanding, and implementation, of disaster prevention and preparedness measures. Wisittigars and Siengthai (2019) propose that when leaders have emergency preparedness skills, they are equipped for any crisis that may arise, whether anticipated or not; these skills can decrease the impact of a crisis and guarantee business continuity.

As stated earlier in this section, the importance of being adaptable or flexible during a crisis situation was identified by members as an important lesson that they have learned. The unpredictability of a crisis event requires management to be adaptable to the change, and make quick decisions (Van Wart and Kapucu, 2011). This is echoed by a member who stated that: *"If it's one thing that in the last two and a half years have taught us, is that our world is changing and that then we have to adjust"*.

Van Mart and Kapucu (2011) indicated that a need for calm but strong leadership is vital during a crisis. This statement is supported by members' responses, namely that being calm during the crisis has been a valuable lesson learnt. Van Mart and Kapucu (2011) also suggested that being calm in the face of adversity as well as the ability to make authoritative decisions are important for any leader. The executive management members indicated that decision-making during a crisis situation was another key lesson learned. One member stated that: *"Actually see the whole picture before you go making decisions, whatever there is and understand impact of decisions"*, and another executive member responded: *"I have learned that it is important to have some evidence-based information to make decisions"*. According to Bundy, *et al.*,

(2017) crisis leaders who are better able to make fast decisions, avoid the probability of failure.

The executive management members indicated that the use of emotional intelligence was an important lesson they learned through the crisis period. Taking into consideration the nature of the crisis, the pandemic killed millions of people world-wide and disrupted the whole world. The executive management members had to make decisions not only applying to the students enrolled at their respective universities, but also applicable to staff and their immediate families. Furthermore, these decisions also affected their own personal lives and that of their families. Soltani, *et al.*, (2014) concluded that emotional intelligence impacts crisis management capabilities and recommended that crisis managers improve their emotional intelligence in order to make effective decisions during a crisis.

The last lesson learned based on the above evaluation is the fact that not all UoTs' leadership could manage to take the lead during a time of crisis. As stated previously, Van Mart and Kapucu (2011) indicated that strong leadership is needed during a crisis and that leaders needed to be resilient to overcome extreme tragedy and trauma. Lawton-Misra (2019) indicated that leadership in times of crisis, is simply good leadership put under pressure. Not all who manage can lead, especially in a time of crisis. Furthermore, the crisis was unpredictable and no university was prepared or had any sort of guidelines, to assist leadership during this time of crisis. Hopefully, the lessons learned, and the experience gained during the crisis, would improve the leadership of the UoTs into better crisis leaders.

In summary, the executive management members indicated eight very important lessons learned from the crisis:

- The need to adapt to the change,
- The need to learn from the crisis,
- How unprepared the higher education sector was for the crisis,
- The need to stay calm,
- The importance of decision-making,
- Leadership in crisis,

- Importance of teamwork, and
- Importance of emotional intelligence.

6.3 Conclusion

This chapter introduced the findings and discussion of the analysis of the authentic responses by the executive management members interviewed. These responses assisted in the achievement of the five (5) research objectives of this study, which were:

- To identify the management competencies needed to manage a UoT within South Africa;
- To determine why the management competencies identified above are important to manage a UoT within South Africa;
- To identify the management competencies needed by executive university management, to manage a UoT within South Africa during a time of crisis;
- To ascertain why the above-identified management competencies are important during a time of crisis;
- To ascertain how executive management members will have to adapt managerially from a time of non-crisis to a time of crisis.

Each one of the five (5) main objectives was achieved through this study. Both management and crisis management competencies were identified by the executive members of UoTs and in-depth reasons were provided for their importance. Furthermore, the executive management members indicated how executive management members needed to adapt from a non-crisis time to a time of crisis.

Additionally, the researcher posed three additional questions within the interview and the exploration of the responses from the interviewed executive management members produced vital findings, which have a significant impact on future research within this field. These questions were:

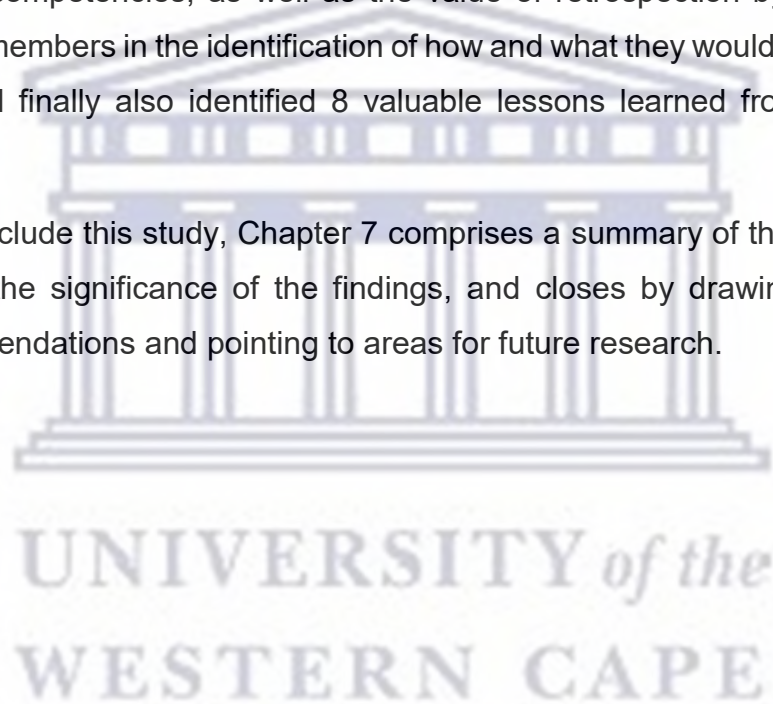
“In your view/related experience, how do the management competencies identified as important during times of crises, differ from the management competencies identified during times of standard procedures?”

“In hindsight, is there anything you would have done differently in terms of how you managed #FMF or the COVID-19 Pandemic?”

In your opinion, what have you learned with regard to managing in times of crises?”

The additional questions and responses provided critical information and evidence for the researcher in relation to the differences between management and crisis management competencies, as well as the value of retrospection by the executive management members in the identification of how and what they would have managed differently, and finally also identified 8 valuable lessons learned from managing a crisis.

In order to conclude this study, Chapter 7 comprises a summary of the chapters, key findings, and the significance of the findings, and closes by drawing conclusions, giving recommendations and pointing to areas for future research.



CHAPTER SEVEN: SUMMARY, CONCLUSION AND RECOMMENDATIONS

7.1 Introduction

The preceding chapter presented a comprehensive discussion of the key findings from the analysis from the data collected, and this concluding chapter completes the study by providing conclusive commentary of the significant discoveries, closing remarks and recommendations for future studies.

7.2. Synopsis of Chapters

In the first chapter of this study, the problem area and rationale were identified and explained. The main objectives were identified. The reasoning behind the research was established, and the research questions that would guide the study, were presented. A preliminary literature review was included and outlined the main concepts of the research study; this gave the reader a brief summary of the competency debate, as well as a view into the intricate world of crisis and crisis management. An outline of the research methodology in the context of the main theories in the study was presented, as well as a framework of the various chapters.

Chapter Two presented a comprehensive literature review that focused on all the concepts of the study. The chapter started with a discourse on the crisis, organisational crises, and crisis management, followed by the origin, growth, and consequences of the #FMF movement, which included a section on the history of the student movement in South Africa. The literature reviews finally defined management competencies and tackled the debate around competence, competency, and competencies. Within this section, the gap in modern literature was linked to management competencies within Higher Education. The chapter wrapped up by highlighting the importance of stakeholders.

Chapter Three continued the theoretical discourse on institutions of higher education, with specific reference to the concept “crisis”, its various definitions, antecedents and characteristics, as identified by researchers and scholars over the years. In addition, it covered clarification on “organisational crisis”, its definition and the importance of crisis management and crisis management competencies.

The research methodology was presented in Chapter Four. This section highlighted the various research philosophies, theory development, research design, population, sampling, instrument design, validity and reliability, data collection process, data analysis and presented details of the ethical standards that were complied with throughout the research study.

Chapter Five presented the verbatim results of the data collected during the data collection process. Each of the verbatim responses was categorised under the specific questions posed to the interviewees.

The analysis of the data collected during the interviews was presented in Chapter Six, as well as a discussion of the responses of the executive management members in relation to the objectives of this research study.

In addition to a summary of the chapters, Chapter Seven presented a summary of the results and recommendations for further studies, as well as propositions to the Executive Management of the UoTs, as well as other higher educational institutions in general.

7.3 Conclusion to the study on management and crisis management competencies.

This study set out to establish what management competencies were required by executive management members at UoTs to manage a UoT on a day-to-day basis, and what these constituted for executive management members of UoTs during a time of crisis. Digging deeper into the research question, the researcher identified five research objectives:

- To identify the management competencies needed to manage a UoT within South Africa;
- To determine why management competencies identified above are important to manage a UoT within South Africa;
- To identify the management competencies needed by executive university management to manage a UoT within South Africa during a time of crisis;

- To ascertain why the above-identified management competencies are important during a time of crisis; and
- To ascertain how executive management members will have to adapt managerially from a time of non-crisis to a time of crisis.

The researcher achieved all of the research objectives as set out by this study, and even managed to answer three additional questions posed to the executive management members. The study identified a gap in current literature concerning management competencies at UoTs at executive management level, but also highlighted the important competencies perceived by executive management members of UoTs during a crisis.

Below follows a summary of each of the results of the five objectives, as well as the additional questions:

7.3.1 Objective One

To identify the management competencies needed to manage a UoT within South Africa;

The executive management members were asked the following question. *As an executive management member, what skills are important or needed on a day-to-day basis?*

The analysis of the responses from the executive management members outlined 27 management competencies needed on a day-to-day basis to manage a UoT. Furthermore, the 26 competencies, were categorised into the following three themes: Theme 1 – Core management competencies, Theme 2 – Portfolio-specific/Technical management competencies and Theme 3 – Soft skills management competencies. Objective One was fulfilled by the study.

Table 7.1 – Management competency themes		
Theme 1: Core management competencies	Theme 2: Portfolio-specific management competencies	Theme 3 – Soft skills management competencies
Leadership Communication Decision-making Adaptive and Agile Management Problem-solving System thinking, Strategic management, Technology savviness,	Project and portfolio management Stakeholder management Risk management Financial management and budgeting, Administrative management, Facility management skills Policy implementation Monetary monitoring Familiarity with the institutional/sector legislative instruments Ability to analyse, and synthesize those legislative instruments. Aware and identify your cutting-edge, Aware of your competition.	Emotional intelligence People management Ability to consult, Building trust, Managing stress and conflict, Coaching Motivation
Source: Own processing		

7.3.2 Objective Two

To determine why the management competencies identified above are important to manage a UoT within South Africa;

The executive management members were asked the following question: *“You have identified several skills/characteristics in the previous question. Can you provide me with a reason why these skills/characteristics mentioned in the previous question, are important and provide me with examples of how these skills assisted your daily tasks as an executive management member?”*

The detailed responses in relation to this question provided in-depth understanding of their importance to the executive management members of the UoTs. In regard to objective two of this study, the objective was fulfilled.

7.3.3 Objective Three

To identify the management competencies needed by executive university management to manage a UoT within South Africa during a time of crisis, members

were asked the following question. *What skills are important or needed by an executive management member in times of crises?*

Table 7.2: Crisis management competencies as identified by executive management members of UoTs

Judgement/decision making Communication Problem-solving Emotional intelligence Leadership Resilience Risk management Adaptability Change Management, Innovative Focus,	Capacity to confront the crisis, Articulate the crisis, Moral character to address the crisis, Ability to follow up, Learn from experience Business continuity, Pre-crisis planning, Separate the short term from the long term, Prioritise,	Analytical ability, Thinking on your feet, Self-confident, Ability to consult and involve others, Influence others Interpersonal skills, Remain calm, Hope and faith, Motivating teams
Source: Own processing		

From the analysis of the responses to this question from the executive management members' interviews, 29 crisis management competencies were identified and is presented in Table 7.2.

In regard to objective three of this research study, the objective was fulfilled.

7.3.4 Objective Four

To ascertain why the above-identified management competencies are important during a time of crisis;

The executive management members where asked the following questions: *“You have identified several skills/characteristics in the previous question. Can you provide me with a reason why the skills (mentioned in the previous question) are important or needed in times of crises and provide me with an example of how these skills assisted you during a time of crisis, as an executive management member?”*

The detailed responses in relation to this question provided in-depth understanding of their importance to the executive management members of the UoTs. In relation to objective four of this study, the objective was fulfilled.

7.3.5 Objective Five

To ascertain how executive management members will have to adapt managerially

from a time of non-crisis to a time of crisis.

In relation to the objective above, the executive management members were asked the following question. *In times of crises, do you change your pattern/manner of management to adapt to the crisis?*

The analysis of the responses from the executive management members indicated that their management style had to change due to the urgency of the crisis situation. Furthermore, their responses indicated that the crisis takes priority over day-to-day operational tasks, and they also believe that their leadership ability needed to come to the fore and that they must lead from the front. Emanating from the above responses, objective five was fulfilled.

7.4.1 Additional Question 1

Executive management members were asked the following additional question: In your view/related experience, how do the management competencies identified as important during times of crises, differ from the management competencies identified during times of standard procedures?

The executive management members indicated that due to the added pressure, the emphasis on time pressure, as well as the fact that their priorities shifted due to the crisis, there is a shift from management competencies in normal operating times and management competencies during times of crises.

7.4.2 Additional Question 2

Executive management members were asked the following additional question: In hindsight, is there anything you would have done differently in terms of how you managed the #FMF crisis or the COVID-19 crisis.

Executive management members indicated that they would have planned better in relation to the crisis and ensured guidelines and protocols were in place to handle crisis situations. They would have liked to readdress risk management, the identification of risks and how risk is perceived. Another factor they would have changed was the planning around student engagement, and the optimal use of digitalisation in addressing student engagement, especially postgraduate students.

7.4.3 Additional Question 3

Executive management members were asked the following additional question: In your opinion, what have you learned with regards to managing in times of crises?

The executive management members' responses identified eight very important lessons learned from the crisis. These lessons were:

- The need to adapt to the change,
- The need to learn from the crisis,
- How unprepared the higher education sector was for the crisis,
- The need to stay calm,
- The importance of decision making,
- Leadership in crisis,
- Importance of teamwork, and
- Importance of emotional intelligence.

7.5 Recommendations

The researcher made use of this section to make recommendations for future research and provided recommendations to the executive management of the affected universities. Taking into consideration the sample size and that the response rate was very low, the recommendations and findings could not be generalised and focus was solely on the universities the research study was conducted at.

7.5.1 Recommendations for future research

Recommendation One:

Taking into consideration that the COVID-19 pandemic affected the entire higher education sector in South Africa, the researcher would recommend comparative studies at other universities within South Africa.

Recommendation Two:

The COVID-19 Pandemic affected the entire world; thus, the researcher would recommend comparing the findings of similar studies at higher education institutions in a South African context; for example, traditional universities and comprehensive universities.

Recommendation Three:

The research established a gap in the current literature within the management competencies of university management. Further research into establishing a Higher Education Management Competency model will contribute to the debate.

Recommendation Four:

The research established a gap in the current literature within the crisis management competencies of university management. Further research into establishing a Higher Education Crisis Management Competency model will contribute to the debate.

Recommendation Five:

The researcher recommends that the affected UoTs should reassess their crisis management contingency plans, as well as how they identify risk, to establish and implement broader scenario planning within their risk management planning.

Recommendation Six:

The researcher recommends that Human Resource Management departments apply the management and crisis management competencies as guidelines when developing competencies for executive management positions at Universities of Technology.

Specific and practical recommendations

The overall findings of this study lead to recommendations pertaining to the institutions where the study was conducted, and was not meant for the Higher Education Institutions in general.

7.5.2 Internal Recommendations

- As much as the COVID-19 pandemic caught all UoTs off-guard, scenario planning, contingency planning, and crisis management teams should be established to manage future crises in a proactive manner.
- The study revealed that change management is an important factor, and that executive management members should enrol for future training.
- One of the lessons learnt from the study was the fact that the executive management members of UoTs were very inexperienced when it came to crisis management. Although this has been the second crisis the Higher Education sector has dealt with in the last 10 years, it is still crucial that executive management members of UoTs must enrol for crisis management training to ensure that any mistakes that were made during the crisis are learned from and that corrective measures are put in place.
- The study revealed that teamwork, emotional intelligence and decision making were key factors that contributed to the successful management of the pandemic.

7.5.3 External Recommendations

- The Covid-19 crisis was not bound by geographical boundaries and affected all the HEI within South Africa. Setting up contingency plans, scenario-planning and making use of crisis management teams to plan for all crises would be beneficial to comprehensive and traditional universities within South Africa.
- The identification of risk and risk assessment should be reassessed.
- Crisis management training should be implemented at the executive management level throughout the higher education sector.

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Annexure A: Registrars of UoT

Good day

My name is Courtley Pharaoh and I am a PhD candidate at the University of the Western Cape. The purpose of this email is to request permission to use your University as a site to conduct research towards my doctoral studies.

Student name: Courtley Pharaoh

Student Number: 3318099

Study Supervisor: Dr C Steyn

Study Co-Supervisor: Prof K Visser

Title of the Research Study: Crisis management competencies: Perspectives from executive management from selected universities of technology

Brief introduction and purpose of the study:

The research problem my study intends to investigate is informed by the challenges executive management faced during the #feesmustfall student movement. Currently, South Africa and the rest of the world is facing an even bigger crisis in the Covid-19 pandemic. The researcher would like to establish which management competencies are important during a time of crisis. From the perspective of executive management members.

Outline of the procedures

Members of the Executive Management will be invited to participate in semi-structured online interview scheduled for one hour to ascertain their perception and views on management competencies, especially management competencies during a time of crisis. Participation will be completely voluntary and confidentiality of the responses as well as the UoTs participating will be strictly maintained. The data collection process will be according to the guidelines prescribed by the University of the Western Cape's Ethics Committee.

Persons to contact in the event of queries:

Should you have any questions, please feel free to contact the researcher, Courtley Pharaoh, by email at 3318099@myuwc.ac.za or by telephone at 083 388 0943. Alternatively, you can contact my supervisors by email on csteyn@uwc.ac.za, or kvisser@uwc.ac.za as well as the UWC Humanities & Social Sciences Research & Ethics Committee (HSSREC) by email on research-ethics@uwc.ac.za or via telephone +27-21-959-2988

Attached, please find my official request letter, interview candidate list as well as the Certificate of Ethical Clearance issued by the University of the Western Cape.

Kind regards

Courtley Pharaoh
PhD Student
University of the Western Cape
Faculty of Economic and Management Science
School of Business and Finance
Email: 3318099@myuwc.ac.za
Tel: 083 388 0943

Annexure B: Executive Management Members

Good day (Executive Management Member – Name)

My name is Courtley Pharaoh and I am a PhD candidate at the University of the Western Cape. The purpose of this email is to invite selected members from the executive management at your University to take part in a research study. Before you decide, I would like you to understand why the research is conducted and what it would involve for you. I, therefore, provide you with the following information. Please take time to read it carefully and if you have any questions or queries, you are free to contact me, or my supervisors with the contact details listed below.

Student name: Courtley Pharaoh

Student Number: 3318099

Study Supervisor: Dr C Steyn

Study Co-Supervisor: Prof K Visser

Title of the Research Study: Crisis management competencies: Perspectives from executive management from selected universities of technology

Brief introduction and purpose of the study:

The research problem my study intends to investigate is informed by the challenges executive management faced during, for example, the #feesmustfall student movement. Currently, South Africa and the rest of the world is facing an even bigger crisis in the Covid-19 pandemic. The researcher would like to establish which management competencies are from the perspective of executive management members important during a times of crisis.

Outline of the data collection procedures

Members of the Executive Management will be invited to participate in semi-structured online interviews scheduled for one hour to ascertain their perception and views on management competencies, especially management competencies during a time of crisis. Participation will be completely voluntary and confidentiality of the responses as well as the UoTs participating will be strictly maintained. The data collection process will be according to the guidelines prescribed by Ethics Committee of the University of the Western Cape.

Persons to contact in the event of queries:

Should you have any questions, please feel free to contact the researcher, Courtley Pharaoh, by email at 3318099@myuwc.ac.za or by telephone at 083 388 0943. Alternatively, you can contact my supervisors by email at csteyn@uwc.ac.za, or kvisser@uwc.ac.za as well the UWC Humanities & Social Sciences Research & Ethics Committee (HSSREC) by email at research-ethics@uwc.ac.za or via telephone +27-21-959-2988

If you decide to accept this invitation, then please respond via email (with a signed consent form) with a date and time that is convenient for you as well as the online conference software (Skype, Teams, Zoom etc) you prefer. Attached, please find the Permission Letter from your institution, Certificate of Ethical Clearance issued by the University of the Western Cape, an Information Sheet and Consent Form for you to complete.

Kind regards

Courtley Pharaoh
PhD Student
University of the Western Cape
Faculty of Economics and Management Science
School of Business and Finance
Email: 3318099@myuwc.ac.za
Tel: 083 388 0943

Annexure C: Information Sheet



**UNIVERSITY OF THE WESTERN CAPE (UWC)
FACULTY OF ECONOMIC AND MANAGEMENT SCIENCES
SCHOOL OF BUSINESS AND FINANCE**

INFORMATION SHEET FOR RESEARCH PARTICIPANTS

Dear participant

You are invited to participate in a PhD research study conducted by Mr. Courtley Pharaoh (Student number: 3318099) from the University of the Western Cape. Before you decide to participate, it is important for you to understand the purpose of the research and what it would entail. Please take your time and read the following information carefully.

The title of my thesis is:

Crisis Management Competencies: Perspectives from executive management of selected universities of technology

What is the purpose of the study?

This study, conducted as part of the requirements for a PhD degree at the University of the Western Cape, seeks to establish which management competencies are important to manage a UoT effectively during a time of crisis.

What will the study involve?

Executive Management members of Universities of Technology will be contacted via email to schedule a face-to-face (where geographically possible) or video conference/meetings to answer semi-structured questions on the research topic. The interview will be scheduled for an hour and the questions posed to respondents will be focused on their experience and perception of management competencies.

Do you have to take part?

Participation in this study is completely voluntary. However, if you decide to participate you will sign a consent form declaring your interest to participate in the study. You are entitled to withdraw from the study at any time and in case you decide to withdraw please inform the researcher of your decision. No foreseeable risks are associated with this study and the identity of the institutions will not be known.

Will your participation in the study be kept confidential?

Yes, the data will be collected via interview and the respondents must indicate if they give permission or not for the recording (video and audio) of the interview. None of the questions within the questionnaire require you to identify yourself and your identity will not, in any way appear in the thesis. The researcher will make use of pseudonyms to ensure the anonymity of all respondents is protected and will not divulge the affiliation of any respondent within the study. The data recorded will be saved on a password-protected hard drive only accessible to the researcher.

What will happen to the information which you give?

The data will only be used for the purpose of this PhD study and any academic publication. It will be safely stored in a password-protected system for the duration of the study. Upon completion of the study, the data will, in agreement with the supervisor, be destroyed after a period of five (5) years.

What will happen to the results?

The results will be presented in the thesis. The results will be seen by my supervisor, relevant department/faculty management, and examiners. Findings from the research may also be used in the publication of academic journal articles.

Should you have any questions regarding this study or wish to report any problems you have experienced related to the study, please contact me, my supervisor, the head of the department, or the Ethics Committee at the contact details listed below.

Thank you for your time.

Student:

Courtley Pharaoh

Mobile number: 083 388 0943

Email: 3318099@myuwc.ac.za

Supervisor:

Dr Carly Steyn

Tel: 021 959 3941

Email: csteyn@uwc.ac.za

Co-Supervisor:

Prof Kobus Visser

Tel: 082 202 3424

Email: kvisser@uwc.ac.za

HOD: School of Business and Finance

Prof R Shambare

University of the Western Cape

Bellville, 7535

Email: rshambare@uwc.ac.za

Tel: 021 959 3187

Humanities & Social Sciences Research & Ethics Committee (HSSREC)

UWC P O Box X17

Bellville

7535

South Africa

Email : research-ethics@uwc.ac.za

Tel: +27-21-959-2988



Annexure D: Consent Form



Consent Form for Executive Members

University of the Western Cape

Title: Crisis Management Competencies: Perspectives from executive management from selected universities of technology

Researcher: Courtley Pharaoh: 3318099

Please initial box

1. I confirm that I have read and understand the information sheet explaining the above research project and I have had the opportunity to ask questions about the project.
2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason and without there being any negative consequences. In addition, should I not wish to answer any particular question or questions, I am free to decline. (If I wish to withdraw I may contact the lead researcher at any time)
3. I understand my responses and personal data will be kept strictly confidential. I give permission for members of the research team to have access to my anonymised responses. I understand that my name will not be linked with the research materials, and I will not be identified or identifiable in the reports or publications that result for the research.
4. I agree for the data collected from me to be used in future research.
5. I agree for to take part in the above research project.
6. I agree that the interview may be recorded.

Name of Participant (or legal representative) Date Signature

Name of person taking consent (if different from lead researcher) Date Signature

Lead Researcher (To be signed and dated in presence of the participant) Date Signature

Copies: All participants will receive a copy of the signed and dated version of the consent form and information sheet for themselves. A copy of this will be filed and kept in a secure location for research purposes only.

Researcher:

Courtley Pharaoh
58 Orleans Avenue,
New Orleans,
Paarl,
7646

Email: 3318099@myuwc.ac.za
Tel: 083 388 0943

Supervisor:

Prof DJ Visser
Emeritus Prof: EMS Faculty
University of the Western
Cape
Bellville
7535

Email: kvisser@uwc.ac.za
Tel: 082 202 3424

HOD:

Prof R Shambare
HOD: School of Business and
Finance
University of the Western
Cape
Bellville, 7535

Email: rshambare@uwc.ac.za
Tel: 021 959 3187

Annexure E: UWC Ethical Approval form



UNIVERSITY of the
WESTERN CAPE



03 December 2021

Mr C Pharaoh
School of Business and Finance
Faculty of Economic and Management Sciences

HSSREC Reference Number: HS21/9/14

Project Title: Crisis management competencies: Perspectives from executive management of selected universities of technology

Approval Period: 30 November 2021 – 30 November 2024

I hereby certify that the Humanities and Social Science Research Ethics Committee of the University of the Western Cape approved the methodology, and amendments to the ethics of the above mentioned research project.

Any amendments, extension or other modifications to the protocol must be submitted to the Ethics Committee for approval.

Please remember to submit a progress report by 30 November each year for the duration of the project.

For permission to conduct research using student and/or staff data or to distribute research surveys/questionnaires please apply via:

<https://sites.google.com/uwc.ac.za/permissionresearch/home>

The permission letter must then be submitted to HSSREC for record keeping purposes.

The Committee must be informed of any serious adverse events and/or termination of the study.

A handwritten signature in black ink, appearing to read 'Patricia Josias'.

*Ms Patricia Josias
Research Ethics Committee Officer
University of the Western Cape*

NHREC Registration Number: HSSREC-130416-049

Director: Research Development
University of the Western Cape
Private Bag X 17
Bellville 7535
Republic of South Africa
Tel: +27 21 959 4111
Email: research-ethics@uwc.ac.za

Annexure F: Interview Protocol Document

Interview Protocol Document

Script before the interview:

I would like to thank you once again for being willing to participate in the interview aspect of my study. As I have mentioned to you before and informed you via my information sheet which I have emailed you, my study, conducted as part of the requirements for a PhD degree at the University of the Western Cape, seeks to establish which management competencies important to manage a University of Technology effectively during a time of crisis. Please note that the aim of the research is not to evaluate management competencies, but rather to understand which management competencies are regarded as important by managers during a time of crisis. The instrument has therefore been structured to elicit reflections from managers on the competencies that they employ to manage in times of crisis and to ascertain, from their perspectives, which competencies prove useful. The aim of the instrument is therefore not to evaluate managers' competencies but instead seek to gain their perspectives/reflections on what works and what does not work during a time of crisis. Our interview today is scheduled for one hour and I will be asking open-ended questions to ascertain your view and your related experiences on the research topic. I have emailed an information sheet as well as consent which I have received back with your signature and approval to record this interview.

Is it still in order for me to record our conversation today? ____Yes,____No

If yes: Thank you! Please let me know if at any point you want to turn off the recorder or keep something you said on the record. If no: Thank you for letting me know. I will only take notes of our conversation.

Before we begin the interview, do you have any questions?

(Discuss any questions raised by respondent)

If any questions (or other questions) arise at any point in this study, you can feel free to ask them at any time. I would be more than happy to answer questions. I would also like to bring to your attention that the interview is completely voluntary and if at any stage you would like to conclude the interview, you are free to do so.

<p>Questions 1 As an executive management member, what skills are important or needed on a day-to-day basis?</p>	<p>Follow-up question if needed? Please identify any other skills or characteristics you need on a day-to-day basis as an executive management member</p>
<p>Questions 2 You have identified several skills/characteristics in the previous question. Can you provide me with a reason why these skills/ characteristics mentioned in the previous question, are important and provide me with examples of how these skills assisted your daily tasks as an executive management member?</p>	
<p>Questions 3 What skills are important or needed by an executive management member in times of crisis?</p>	<p>Are there any additional skills/attributes/characteristics that you feel are needed by executive management members? (time of crisis)</p>
<p>Questions 4 You have identified several skills/characteristics in the previous question. Can you provide me with a reason why the skills (mentioned in the previous question) are important or needed in times of crisis and provide me with an example of how these skills assisted you during a time of crisis, as an executive management member?</p>	
<p>Question 5 In times of crisis, do you change your pattern/manner of management to adapt to the crisis?</p>	<p>Please expand on the change of pattern/manner of management. Give examples.</p>
<p>Question 6 In your view/related experience, how do the management competencies identified as important during times of crises, differ from the management competencies identified during times of standard procedures?</p>	
<p>Question 7 In hindsight, is there anything you would</p>	

<p>have done differently in terms of how you managed #FMF or the COVID-19 Pandemic?</p>	
<p>Question 8 In your opinion, what have you learned with regard to managing in times of crisis?</p>	
<p>Before we conclude this interview, is there any question or answer you would like me to read back to you, or is there any question that you would like to add any additional information?</p> <p>If possible, can you advise or perhaps advise on other executive management members that would be able to assist in this study and would you be able to facilitate arranging an introduction to this study?</p> <p>If no questions or answers need to be revisited, I would like to thank you again for availing yourself of participating in the interview aspect of my study.</p> <p>Thank you for your contribution.</p>	

