

Critical crisis management competencies: Perspectives from universities of technology leadership

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Abstract

The South African Higher Education sector has faced challenging times recently, notably the #FeesMustFall student protest crisis, which inflicted damages exceeding R1 billion, and the COVID-19 pandemic, claiming over 102,000 lives in the nation. Against this backdrop, a critical investigation has been initiated to discern the indispensable crisis management competencies required by executive management members of Universities of Technology (UoT) in South Africa. This exploratory study emphasises the higher education landscape, recognising its pivotal role in national development. Employing qualitative face-to-face interviews, the research aims to delve into the experiences of executive management members, providing insights into the nuanced demands of crisis management within the higher education context. In response to the challenges posed by the COVID-19 pandemic, the study adapted by utilising online face-to-face meetings, ensuring a thorough exploration of crisis management competencies. Beyond mere identification, the research attempts to elucidate the profound significance of these competencies within the unique context of higher education institutions during crises. The findings contribute not only to the broader understanding of crisis management but also underscore the particular relevance and implications for the resilience and adaptability of South African UoT in the face of multifaceted challenges.

KEYWORDS

crisis, crisis management competencies, executive management, University of Technology

1 | INTRODUCTION

In the dynamic landscape of higher education in South Africa, the significance of crisis management competencies has never been more pronounced. The South African Higher Education sector was still reeling from the consequences of the #FeesMustFall student protests and is still currently navigating through the intricate web of challenges ranging from social, political, and economic shifts from the COVID-19 pandemic. The capacity to maintain institutional resilience

while safeguarding the well-being of students, staff, and the academic mission is paramount. Against a backdrop of evolving expectations, heightened scrutiny, and the imperative to uphold academic excellence, fostering crisis management competencies is not merely a strategic choice, but an ethical obligation for South African higher education institutions. This article will highlight the important crisis management competencies identified by executive management members of Universities of Technology (UoT) within South Africa.

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2 | LITERATURE REVIEW

2.1 | What is a crisis?

To have a deeper understanding of crisis management, one needs to know what a crisis is and according to Paraskevas (2006) "crisis" is derived from the ancient Greek term "Krisis" meaning judgement, choice or decision Coombs (2014) defined a crisis as *"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) further added that a crisis has four primary characteristics:

- 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 recognised 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.

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 1 summarises the definitions forwarded by numerous scholars on the concept of an organisational crisis.

From 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

TABLE 1 Chronology of organisational crisis definitions.

Author	Year	Definition
Milburn et al.	1983	"Organizational crisis is an opportunity for the organisation to attain its current goals or demand or threat on the organization which either prevents the organization from attaining its goals or removes or reduces an organization's ability to attain its goals that the organization seeks to resolve because the outcome at stake is important and the resolution strategy uncertain"
Mitroff et al.	1987	"Corporate or organizational crises are disasters triggered by economies, organizational structures, people and/or technology that cause widespread damage to the natural and social environment"
Pearson and Clair	1998	"An organizational crisis is defined as "a low probability, high impact event that threatens the viability of the organization 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 organizational crisis also has been described as "a fluid, unstable, dynamic situation"
Lucero et al.	2009	"Crisis can be defined as unpredictable specific events and out of current procedures of organization which results in a high level of unreliability and threatens to achieve goals and the strategies of understanding and the detection of the organization"
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 et al.	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 et al.	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.

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, 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 et al. (1983) presents a holistic definition that this study will use as the definition of organisational crisis. Milburn et al. (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".

2.2 | Competency, competencies, and competence

Scholarly discourse has revealed significant convergence among various academics regarding the definition of competencies. The Concise Oxford Dictionary of Current English, as noted by Homes et al. (2021), asserts that the terms "competency" and "competence" are interchangeable nouns. The dictionary delineates these terms as encompassing attributes such as aptitude for a task, adequacy of means of living, favourable conditions, legal capacity, and the right to take cognisance. Chouhan and Srivastava (2014) expound that "competence" originates from the Latin word "competentia," translating to "the one who has the right to judge or the one who has the right to speak."

The exploration of competencies gained prominence in the 1970s, driven by a burgeoning interest in comprehending the aptitudes of effective individuals, as elucidated by Boyatzis (2011). This line of research builds upon foundational studies on skills, abilities, and cognitive intelligence by scholars such as McClelland, Baldwin, Bronfenbrenner, Strodbeck (1958), and Campbell, Dunnette, Lawler, Weick (1970).

Over the years, numerous scholars have contributed diverse definitions of competency or competencies. Table 2 presented below not only encapsulates these contributions but also chronicles the evolution of competency definitions over time.

The preceding table reveals a lack of consensus among scholars regarding a universally accepted definition of competencies. Nonetheless, an examination of their shared terminology identifies recurring words and phrases over the years of competency definition. These include terms such as "skill", "abilities", "characteristics", "knowledge", "capabilities", "qualities", "success factors", "motives" and "traits". These attributes are described as "underlying", "detectable and testable" and "observable", with the capacity to be "counted", "tested" or "measured" in relation to the "exemplary and successful completion of tasks, work, or jobs", "high performance", achievement of significant results in specific job or work",

"effective and superior work/job performance", or "differences between superior and average performance, or between effective and ineffective performers".

The shared use of these words and phrases by scholars suggests a collective belief that fundamental characteristics, quantifiable or measurable, contribute to the effective or superior completion of tasks. For this research project, the definition proposed by Wong 'as a set of observable and measurable 'attributes' or 'success factors' required for individuals for effective work performance' will be adopted.

Chouhan and Srivastava (2014) elaborate on these components, defining competencies as underlying attributes of individuals that manifest ways of thinking or behaving, persisting over extended periods, and simplifying across diverse circumstances. These attributes include:

- Knowledge, encompassing information and latent learning in a person.
- Skill, represented by an individual's capability to perform specific tasks.
- Traits, denoting physical features and consistent reactions to circumstances or information.
- Self-concepts and Values, reflecting an individual's attitudes, values, and self-esteem.
- Motives, manifestations of emotions, desires, physiological longings, or similar urges prompting action.

Competency development and assessment have been the subjects of numerous studies across different fields and vocations in various countries (Chung & Wu, 2011; Kang et al., 2015; Suleiman & Abahre, 2020). However, the term 'competency' has caused confusion and uncertainty in studies, particularly when 'competence' is used instead, without clear contextual explanations (Le Deist & Winterton, 2005; Van der Klink & Boon, 2003). Wong (2020) contends that studies by Moore (2006) and Vazirani (2010) demonstrate no substantive difference between these terms, allowing them to be used interchangeably.

Wong (2020) asserts that 'competency' and 'competence' represent distinct approaches to studies, particularly in human resource management. The former often uses 'competencies' to denote behaviours or personal attributes supporting an area of work, prevalent in the United States, characterised by a person-oriented focus. The latter, using 'competence,' is more common in the United Kingdom, characterised by a task-oriented approach focusing on defining job tasks or outputs. This linguistic debate has given rise to two distinct approaches, commonly referred to as the United States and United Kingdom approaches, respectively.

The United States approach frequently employs the term 'competencies' to describe behaviours or personal attributes supporting an area of work, emphasising a person-oriented perspective. Conversely, the United Kingdom approach, using the term 'competence', centres on the functional analysis method, seeking opinions from industry experts to determine job functions and the minimum performance level required. Unlike the United States approach, the

TABLE 2 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” (p. 4).
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” (p. 216).
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.” (p. 26)
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).

United Kingdom approach does not strive to identify what makes individuals excellent in their jobs but rather reflects the achievement of occupational standards (Jamil, 2015).

2.3 | Crisis management

In light of the prevailing industry dynamics, Vašíčková (2019) asserts that crisis management has evolved into a shared concern for

managers overseeing organisations affected by the impact of globalisation and intense market forces. Moreover, Moffa et al. (2017) contend that crisis management has become an integral aspect of contemporary commerce, emphasising the pivotal role played by a company's management knowledge and preparedness in averting and effectively managing crises.

Kuzmanova's (2016) earlier study posits that executive management should be strategically organised to confront any conceivable crisis, viewing such events as potential threats to the

achievement of organisational goals that necessitate prompt responses. Mitroff's (2001) research indicates that institutions can mitigate the duration and severity of crises through pre-emptive planning and preparation, thereby reducing loss of life and property damage.

Coombs (2015) defines crisis management as a composed set of elements designed to combat crises and minimise the actual damage incurred. Supporting this definition, Bundy et al. (2017) articulate that crisis management involves synchronising intricate technical and relational structures and designing organisational arrangements to prevent crises, mitigate their impact, and extract valuable lessons.

Vašíčková (2019) further emphasises that crisis management is a process comprising interconnected steps and procedures, leading to early crisis event forecasting, identification of crisis sources, timely resolution, and proactive crisis prevention. Building on this, Van Wart and Kapucu (2011a, p. 496) posit that crisis management represents a distinctive form of change management characterised by surprise, unexpected incident size, short time frames, and critical implications for life, death, or organisational threat.

Collectively, these scholars agree that crisis management involves a plan to reduce and recover from crisis situations. Additionally, Van Wart and Kapucu (2011a) underscore that while crisis management is related, it is not identical to change management, transformational leadership, or emergency management. To further elucidate these distinctions, Table 3 outlines the definitions of change management, transformational leadership, and emergency management, aiming to differentiate these terms from crisis management.

Yarmohammadian et al. (2013) highlight that crisis management encompasses strategic planning, organisation, and control of crises, comprising four fundamental components: readiness, damage reduction, emergent response, and rebuilding. Sahin et al. (2015) assert that the goals of crisis management involve informing about the crisis level, affording managers time to define and evaluate the crisis, providing alternative methods for escaping the crisis, fostering crisis management abilities, and maintaining readiness against potential crises. They emphasise that crisis management aims not to prevent crises entirely but to mitigate negative outcomes, ensure swift and high-quality responses, and plan against all types of crises whenever possible. Vašíčková (2019) further characterises crisis management as a set of approaches, measures, and procedures employed when managerial skills are no longer sufficient.

Kapucu and Ustun (2018) argue that due to the intricate environments created by crises, managers must make sudden and effective decisions with limited data. The impact of crises is measured in terms of the death toll and critical damages to infrastructure and public institutions. McConnell (2011) underscores the substantial burden and accountability placed on crisis managers, particularly in the face of high uncertainty.

Sherman and Roberto (2020) further note that crises generate high levels of uncertainty that can overwhelm responders until crisis managers provide a coherent account of the crisis and establish organised response frameworks within the organisation. It is evident from these scholars that the extensive damage or loss of life in certain crises underscores the necessity of dedicated, trained crisis managers possessing the appropriate competencies.

Vašíčková (2019) delineates two main domains of crisis management: one focusing on the process and the other highlighting reactive and proactive approaches.

Crisis management, as a process, involves steps and procedures leading to early crisis event forecasting, detection, timely resolution, and crisis prevention (Vašíčková, 2019). Several researchers, including Antušák (2009), Zuzák and Konigová (2009), Mitroff, Pauchant, and Shrivastava (1988), consider crisis management actions as a continuous process, beginning with crisis prevention and concluding with organisational learning from crisis events. Shrivastava and Mitroff (1987) advocate the integration of crisis management procedures and strategies into organisational strategy, emphasising the need for continual updates following each new crisis event.

A fundamental requirement for effective crisis management is the alignment of employees' and stakeholders' interests (Mikusova & Horvathova, 2019; Shrivastava & Mitroff, 1987; Valackiene, 2011). This alignment is crucial in defining crisis goals, which may be modified from strategic goals (Khodarahmi, 2009). Gundel (2005) and Khodarahmi (2009) assert that crisis management is a critical, if not significant, part of strategic management. Vašíčková (2019) adds that common features overlap between crisis management and strategic management, including top management activities, collaboration with stakeholders, and consistent environmental analysis.

Crisis management is also characterised by reactive and proactive approaches. Numerous authors, such as Mikusova and Horvathova (2019), Sahin et al. (2015), Valackeine (2011), Zuzak and Königova (2009), have commented on and developed these approaches. Sahin et al. (2015), Zuzak and Königova (2009), Zapletalova

TABLE 3 Definitions of aligned terms crisis management.

1	Emergency Management (Disaster Management)	Involves avoiding and dealing with risks. At its best, it prevents or minimises 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 (2011a, 2011b).

(2012), and Loosemore and Hughes (1998) delineate the reactive approach as a set of procedures and principles to extricate the affected business from the crisis and stabilise it. This approach involves crisis identification, management, assessment, decision-making, and learning for future crisis measures.

In contrast, the proactive approach centres on systematic exploration of warning indicators for early detection of potential crises (Mikusova & Horvathova, 2019; Mitroff, Pauchant, and Shrivastava, 1988; Sahin et al., 2015; Zuzak & König, 2009). Proactive crisis management involves anticipating and analysing crises during organisational stability.

Mitroff, Pauchant, and Shrivastava (1988) and Sahin et al. (2015) contend that while it may not always be possible to prevent crises, effective crisis management can minimise losses and enhance efficiency.

2.4 | Crisis management competencies

Mikušová and Copikova (2016) assert that managing a crisis efficiently necessitates a systematic methodology founded on intelligence, managing sensitivity, and a comprehensive understanding of the significance of a well-structured plan and organisational readiness. Consequently, effective crisis and emergency leadership demand skills, individual and collective abilities, high self-confidence, and specific competencies. According to Mikusova and Copikova, the competencies of a crisis manager are derived from those of a general manager, particularly crucial during times of crisis. The researchers contend that these competencies are honed through experiential learning during crisis situations, allowing managers to develop adept crisis-handling skills.

Holsti (2002) underscores the importance of crisis managers possessing competencies to navigate complex challenges, exercise judgement, and leverage collaboration. Shrivastava et al. (2013) emphasise the increasing significance of developing crisis management abilities and comprehending crises. Szczepanska-Woszczyna (2013) posits that managerial competencies profoundly influence the effectiveness of management during crises. Skorkova et al. (2021) concur, highlighting that the competencies of managers in self-government organisations play a pivotal role in ensuring steady performance, even in times of crisis. Szczepanska-Woszczyna (2013) further contends that as crises evolve, crisis management becomes a critical managerial skill, testing leadership capabilities, and underscores that competencies effective in daily managerial tasks may prove insufficient during a crisis. Wooten and James (2008) emphasise the necessity for organisations to develop human resources capacity for managing various crisis management activities.

Herbane (2013) posits that a crisis manager must possess knowledge of the company and its surroundings, understand available resources for company rescue, and be aware of threats and opportunities. Mikosova and Copikova support this view, emphasising that understanding the organisation's strengths and weaknesses, in addition to the aspects mentioned by Herbane, are fundamental prerequisites for the role of a crisis manager.

In summary, managers dealing with crises require specific management competencies, which must be tailored to the unique demands of crisis situations. Over the years, scholars and researchers have identified crisis management competencies essential for crisis managers. Some competencies overlap, while others are specific to crisis needs, encompassing fields such as organisational management, financial management, conflict management, judgement, problem-solving, and collaboration.

Mikušová and Copikova (2016) emphasise that crisis management competencies often draw from the competencies of general managers, particularly essential during crisis times. The literature underscores that during crises, management professionals rely on specific competencies, comprising skills, attributes, and knowledge unique to crisis management. Tomastik et al. (2015) note that managerial competencies contribute to the performance of a crisis manager, who differs from a typical manager by not only addressing potential technological malfunctions but also overseeing the saving of people and property while safeguarding the organisation's reputation in the market. Despite the diversity in identified competencies, crisis managers share a common goal—the swift and effective resolution of the crisis.

3 | METHODOLOGY

The study adopts an exploratory research design with a qualitative methodology, seeking to shed light on unexplored phenomena and enhance understanding of the problem at hand (Cavana et al., 2001; Marshall & Rossman, 2006; Saunders & Lewis, 2018). Exploratory research not only provides in-depth, rich data and descriptions but also addresses unknown problems to identify future research directions (Phillips & Pugh, 2000).

According to Saunders and Lewis (2018), exploratory studies are well-suited for qualitative methodologies, specifically semi- and unstructured interviews. Brown (2006) emphasises that exploratory research is applicable where little or no previous research has been published, making it suitable when researchers have partial knowledge about the phenomenon or research area. This aligns with the view of Saunders and Lewis (2018) that exploratory research involves gathering new data about an issue not clearly understood by the scholar.

In the context of management sciences, exploratory research is seen as an effort to discover something novel and produce information (Saunders & Lewis, 2018). This approach is valuable when conducting a study with insufficient data or no prior examination, which is often the case when exploring topics of interest to academics in management studies (Bass et al., 2018). Mouton (1996) outlines the purposes of exploratory studies, including establishing facts, gathering new data, and determining meaningful patterns or themes in a relatively unknown research area.

Qualitative research, as described by Malterud (2001), involves examining the significances of social occurrences as lived by individuals in their natural context. It delves into experiences, attitudes,

and emotions, aiming to understand the lived experiences of individuals who share commonalities in time, space, and culture (Devers et al., 2000; Ryan et al., 2007). The qualitative research methodology chosen for this study focuses on acquiring descriptive information, presenting respondents' own words, and exploring views and perspectives regarding management competencies during normal and crisis times for executive management members of UoT (Brynard & Hanekom, 1997; Wilmot, 2005).

Despite the advantages of flexibility, adaptability, and laying the groundwork for future studies, exploratory research design has limitations. Qualitative data and its interpretation are susceptible to bias due to a modest number of samples, and the results may not be generalisable to a broader population. Moreover, this type of study might not be directly useful for practical decision-making (Mohajan, 2018). 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".

The study population comprises all executive management members of South African UoT, excluding deans of faculties and business unit directors who are not officially mandated as executive management members. A purposive sampling method was employed, considering the limited number of executive management members in each university, and focusing on those capable and well-informed about the research phenomenon. 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, (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, (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 UoT 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.

Semi-structured online interviews were chosen as the primary data collection method due to their flexibility and effectiveness in exploring human and organisational behaviour. The online format was necessitated by the COVID-19 pandemic, ensuring safety while

allowing real-time, in-depth conversations. DeFranzo (2011) 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. According to Salmons (2012), video conferencing 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.

The study employs Qualitative Content Analysis (QCA) as its research method, drawing on the works of Bengtsson (2016), Hsieh and Shannon (2005), Krippendorff, (2004), White and Marsh (2006), Kondracki et al. (2002), Weber (1990), and Schreier (2012). QCA is a flexible technique that clusters categories in text, such as verbatim transcripts, to gain a comprehensive understanding. It enables replicable inferences, effective interpretation, and quantification of phenomena within a specific context, emphasising the subjective nature of meaning in language.

The choice of QCA for this study is justified by its capacity to describe the phenomenon under investigation, focusing on management and crisis management competencies. The method facilitates easy reporting of common threads in the data, aligning with the recommendations of Elo and Kyngäs (2008) and Vaismoradi et al. (2013). The researcher follows a three-phased process—preparation, organisation, and reporting—as outlined by Vaismoradi et al. (2013).

During the preparation phase, the researcher familiarises themselves with the transcripts through iterative reading, aiming to

uncover new insights with each review. The verification of transcripts against audio recordings contributes to this phase. Organising involves grouping codes under emerging categories and sub-categories, organising the data until saturation is reached. In the reporting phase, the researcher qualitatively describes categories and sub-categories, aligning with the study's research questions. This phase emphasises conceptual depth by arranging detailed observations to present a comprehensive and consistent depiction of the studied phenomena, following the recommendations of White and Marsh (2006).

This study demonstrates a commitment to the trustworthiness of qualitative research, addressing credibility, transferability, dependability, and confirmability through various strategies such as respondent validation, triangulation, and an audit trail.

4 | RESULTS AND DISCUSSION

The analysis of responses provided by executive management members in response to the aforementioned query yielded a total of 26 management competencies, henceforth designated as crisis management competencies. Notably, certain competencies were recurrently identified by multiple members, and these instances are graphically represented in Table 4 for clarity and reference.

Table 5 presents an overview of crisis management competencies identified through interviews with executive management members at UoT. The subsequent section conducts a critical analysis of each identified competency, delving into its significance and establishing connections with current literature on crisis management competencies.

An imperative competency during crisis periods is the capacity to make decisive decisions. This assertion finds support in the work of Hanusová et al. (2016), who assert that crisis managers must not shy away from assuming responsibility for independent decisions and must promptly make short-term decisions. Moreover, the importance of decision-making in crisis scenarios is underscored by Kapucu (2006) and Kiel (1994), who identify it as a paramount competency crucial under conditions of rapid change.

TABLE 4 Multiple identified crisis management competencies.

Crisis management competency	Number of members
Judgement/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.

In Table 5, we present an exhaustive compilation of crisis management competencies identified through interviews with executive management members at the UoT. The subsequent discourse critically examines each competency's significance and establishes connections with current literature on crisis management competencies. During crisis periods, the ability to make decisive decisions is pivotal. Hanusová et al. (2016) advocate that crisis managers must not shy away from taking responsibility for independent and prompt decision-making, a sentiment echoed by Kapucu (2006) and Kiel (1994) underlining decision-making's vital role amid rapid change conditions.

The separation of short and long-term considerations is emphasised in crisis decision-making, with an inherent focus on short-term solutions. Crisis leaders are urged to contemplate the consequences of their decisions across both temporal dimensions.

Communication emerges as a recurrently emphasised competency, supported by Coombs (2018), Mikušová and Copikova (2016), Van Wart and Kapucu (2011b), Wooten and James (2008), and Caponigro (2000). Four out of thirteen executive management members highlight communication's paramount role during crises. Mikušová and Copikova (2016) position communication within the reactive crisis strategy, while Van Wart and Kapucu (2011b) underscore it as a vital competency amid rapid change conditions.

Problem-solving is identified by four members as a critical crisis management competency, aligning with Coombs' (2014) assertion that effective crisis management necessitates diverse skills, including proficient problem-solving abilities.

Leadership, identified by three members, is underscored in literature by Mikušová and Copikova (2016), Van Wart and Kapucu (2011b), Wooten and James (2008), and others. Leadership is deemed essential for guiding organisations through crisis stages and achieving effective recovery.

Emotional intelligence, acknowledged by three members, aligns with Fatt's (2002) definition and the works of Moslehi et al. (2013) and Soltani et al. (2014), highlighting its impact on crisis management capabilities.

Resilience, recognised by three members, finds support in Wooten and James (2008) and Van Wart and Kapucu (2011b), emphasising the need for leaders to demonstrate resilience and instil a resilient mindset.

Flexibility/adaptability, identified as crucial by Mikušová and Copikova (2016), aligns with the assertions of Van Wart and Kapucu (2011b) regarding the adaptive practices of senior emergency managers during crises.

Two members underscore the significance of risk management during crises, consistent with Dobrowolski (2020) and Buganová and Šimičková (2019), emphasising its role in actively responding to irregular situations and preventing crises.

Singularly identified competencies include Change Management, associated with crisis management by Van Wart and Kapucu (2011b), and recognised as a fundamental competency.

Innovation is underscored as essential for crisis managers to devise creative solutions, aligning with Van Wart and Kapucu's (2011a) identification of innovation as a vital competency.

TABLE 5 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
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Source: Own processing.

Prioritisation emerges as a crucial competency, with Hanusová et al. (2016) emphasising its role in time management crisis management competency.

Three unique competencies are acknowledged: the capacity to confront the crisis, articulate the crisis, and the moral character to address the crisis. These competencies acknowledge the acknowledgement, communication, and ethical resolution of crises.

Interpersonal skills, ability to consult, involve others, influence others, and motivate teams are identified as soft skills crucial during crises, aligning with Seetha's (2014) characterisation of these skills.

Remaining calm, self-confidence, hope, and faith are recognised as imperative competencies during crises, supported by Van Wart and Kapucu (2011a) and Nichols et al. (2020).

The ability to prioritise, follow up on priorities, pre-crisis planning, and business continuity are highlighted as essential competencies for effective crisis management, resonating with existing literature on crisis preparedness and resilience.

In conclusion, the diverse array of competencies identified by executive management members at UoT aligns with and enriches the existing literature on crisis management, providing valuable insights for academic discourse and practical applications in organisational settings.

5 | CONCLUSIONS

This research endeavours to elucidate the essential skills, attributes, and competencies required by executive management members during times of crises. Through a survey conducted among 13 executive management members at six University of Technologies in South Africa, a total of 26 crisis management competencies were identified and analysed. The findings present a nuanced understanding of the competencies deemed crucial by executive leaders in navigating and mitigating crises.

The study, however, has numerous limitations for example the sample size of the study focused on executive management members from a limited number of Universities of Technologies in South Africa. This may limit the generalisability of the findings to other higher education institutions or countries facing different contexts and crises. Additionally, only UoT was targeted in this study. The study could not employ traditional and comprehensive universities due time

constraints, but their unique operational structures, resources, and organisational cultures may have resulted in different crisis management practices and is a topic for further studies. Additionally, the study was geographically confined to South Africa, which restricts the broader applicability of the findings to higher education institutions in other countries or regions. This is particularly relevant for institutions with differing educational systems, governance structures, and resource levels. Future research could expand the scope to include all types of universities across various countries, potentially leading to the development of more universal crisis management strategies or contributing to the creation of a global framework for crisis management in higher education.

This article provides significant value by addressing the critical need for crisis management competencies in South Africa's higher education institutions, particularly UoT. Given the impact of major crises like the #FeesMustFall protests and the COVID-19 pandemic, the study offers valuable insights into the specific skills and attributes required by executive management to handle such crises effectively. Additionally, the article provides significant value by offering practical insights for university leadership, identifying key crisis management competencies such as decision-making, communication, and emotional intelligence. These competencies equip leaders to handle complex, high-pressure environments. It also contributes to the academic field by addressing a gap in crisis management literature, particularly in the context of South African UoT. Additionally, the study establishes a foundation for future research by identifying core competencies and suggesting broader areas for exploration, such as global comparisons. By defining competencies that promote resilience, adaptability, and leadership, the article supports institutions in enhancing their crisis preparedness. Finally, the article offers important management implications for higher education, particularly in the development of crisis management competencies. University leaders can use these findings to create training programs for current and future executives, ensuring they are well-prepared for crisis situations. These competencies can also inform crisis planning, integrating decision-making, communication, and emotional intelligence into institutional strategies. Moreover, the study provides a framework for leadership selection and evaluation, helping refine recruitment and performance criteria based on essential crisis leadership traits. By emphasising resilience, adaptability, and problem-solving, institutions can enhance their organisational resilience and preparedness.

Lastly, the article supports policy formulation at both institutional and governmental levels, aligning crisis management strategies with the competencies needed for managing high-impact events.

In conclusion, the essential crisis management competencies identified through this research provide valuable insights for the leadership of UoT. These competencies—ranging from decision-making and communication to resilience and adaptability—are critical for navigating complex crises like the #FeesMustFall protests and the COVID-19 pandemic. As universities continue to face unpredictable challenges, the need for leaders to possess these competencies becomes increasingly important. This study not only contributes to academic discourse but also offers practical guidelines for enhancing crisis management strategies, ensuring that higher education institutions remain resilient and effective in the face of future crises.

CONFLICT OF INTEREST STATEMENT

The author declares no conflict of interest.

DATA AVAILABILITY STATEMENT

The author further declares that as per the written consent signed by the participants, the data may only be used for this study and may not be made available to any third party.

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