Analyzing leadership and management competencies required by management at the University of KwaZulu-Natal

By

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DECLARATION

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DEDICATION

This research paper is dedicated to my God Almighty for grace, wisdom, and strength.
It is also dedicated to my father and my maternal grandmother, who are no longer with us.
It is also dedicated to my mother, who was the first in the family to obtain a PhD, and my three siblings, who are my sources of inspiration and strength.
It is also dedicated to my husband and three children for their continuous support.

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AABBREVIATIONS AND ACRONYMS

CAES	College of Agriculture, Engineering and Science
CFO	Chief Financial Officer
CHS	College of Health Science
CHUM	College of Humanities
CLMS	College of Law and Management Sciences
CRD	Corporate Division
DHET	Department of Higher Education and Training
DHoS	Dean and Head of School
DPS	Director Professional Services
DVC	Deputy Vice-Chancellor
EDHR	Executive Director Human Resources
HEI	Higher Education Institution
HR	Human Resources
IPG	Institution Planning and Governance
PR	Public Relations
SOM	School Operation Management
T&L	Teaching and Learning
UKZN	University of KwaZulu-Natal
VC	Vice Chancellor

ABSTRACT

The institutions of Higher Learning find themselves battling several challenges, and the reduced funding from the government due to the global economic crisis has affected these institutions. Higher Learning institutions were also affected by the global pandemic, which meant that the institutions of higher learning had to transform their teaching methods from in-person teaching to online teaching, which has an impact way of teaching going forward. The institutions had to deal with constant student protests, which sometimes resulted in violence. Amongst all these challenges, the institution of learning, University of KwaZulu-Natal, has to find ways to deal with these challenges and remain relevant on the global stage and maintain its ranking status, and reputation. The University of KwaZulu-Natal has been through major changes in the past ten years and is undergoing yet another transformation. This study aims to explore the state of leadership and management competencies at the University of KwaZulu-Natal in the context of change and challenges that emerge in the Institute of Higher Learning. A quantitative study was conducted, and six objectives were employed to test whether the institution has suitable leaders and managers to lead the institution to meet its vision, mission, and goals. The study has a population size of 106, with an 84-sample size. The quantitative study was conducted using a descriptive and correlational design, and a random sampling technique was employed in this study. The questionnaire with 43 open-ended questions was posted on the UKZN notice to the University employees. 60 of the leadership and management employees, both academic and professional, participated in this study, resulting in a 71% response rate, with 20% academic management and the other 80% support staff management. The theoretical review was conducted in terms of theories, models, and frameworks to find new theories, gaps, and future studies. SPSS ANOVA statically instrument was used to analyze data, by analyzing the variables' means, standard deviation, regression, and graphs. The hypotheses were tested through testing t-values and confidence levels to test managers' competencies through managers' leadership style, training and development, management experience and educational background, management barriers, and technology leadership. There is a strong positive correlation between the institution leaders' and managers' skills, abilities, and competencies to lead the institution. The study has found that UKZN managers and leaders have the competencies required to manage the institution effectively. The study found gaps in whether leaders' and managers' team members found their respective leaders and managers to have competitive skills and the ability to manage the institution effectively. The future study recommendation is to test whether the leaders and managers team managers believe their team managers have the competencies, skills, and abilities to manage the teams.

Keywords: Leadership Theories, Leadership Styles, Change Theories, Competitive Theories, Training and Development, Technology Leadership

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1.1 Introduction

Higher education is currently navigating unprecedented challenges, largely driven by shifting community attitudes and a growing lack of institutional support. As public expectations evolve, there is an increasing demand for innovation in teaching and learning and the development of new educational technologies. According to Mews (2019), the landscape of higher education has become increasingly complex since the turn of the twenty-first century. This complexity underscores the urgent need for institutions to not only adapt to new technological advancements but also to cultivate leadership capable of driving change.

To remain relevant and effective, colleges and universities must prioritize the development of highly skilled individuals who can lead transformative initiatives. These leaders, whether they are faculty members, administrators, or students, must be equipped with the competence to navigate evolving challenges, manage change processes, and foster a culture of collaboration. Only through such leadership can institutions overcome the barriers to progress and meet the needs of an increasingly diverse and digitally connected student body.

Higher education institutions require leaders who possess a specific set of skills, abilities, and talents to effectively address the challenges they face. These institutions need resourceful leaders and change agents who can quickly adapt to a constantly evolving environment. Leadership in higher education must focus on meeting the needs of students and staff, enhancing their knowledge, and staying informed with up-to-date information to guide decision-making. Effective leaders should be flexible, self-aware of their strengths and weaknesses, and open to seeking guidance when needed.

As Dawson et al. (2020) explained, to understand the qualities and skills necessary for leaders and managers in higher education, it is essential to first establish a leadership and management framework. It is crucial to identify what defines a good leader or manager. Establishing clear criteria for evaluating leadership and management within higher education helps to differentiate between effective and ineffective leaders, offering a benchmark for comparison and assessment.

Although leadership and management are closely related, there is a clear distinction between the two, even though their roles often overlap. Leadership is focused on initiating or adapting to change, while management is concerned with maintaining and executing the processes that ensure the smooth functioning of an organization. Leaders are individuals who focus on doing the right thing, whereas managers are responsible for doing things the right way.

1.2 Background of the Study

Africa is portrayed by many authors as being underdeveloped, poverty-stricken, overtaken by corruption, characterised by unsuccessful corporate and government sectors, and ineffective political leadership.

African leadership claims that leadership plays a vital role in the transformation of countries. Africa's socio-economic, political, and governance challenges can be attributed to bad leadership (Kok and van den Heuvel, 2019)

The developing countries have put a high value on higher education, as they place a high value on higher education, which leads to high salaries, more career mobility, and a higher quality of life (Vrontis et al, 2006). (Kwiek, 2018) stated that over the last two decades, the major difference between higher education systems in developed and developing countries relates to higher education growth and access to public funding. However, in developed countries, higher education has grown at a much slower rate despite receiving much higher public funding.

There is a rapid expansion in higher education in developing countries, which has left leadership under enormous pressure, with the explosion in enrolments, with insufficient funding that does not match the expansion. Higher education in Kenya, for instance, has continued to change, moving from a collection of institutions catering for the selected elite to becoming a mass system. The next generation of leaders will have to have skills to deal with expectations and paradoxes that may accelerate in the future. These developments have given rise to the need for a multiplicity of new organizational structures and leadership (Odhiambo, 2014).

In South Africa, business leaders were traditionally required to lead Eurocentric, autocratic, and hierarchical conglomerates, which were based on Western values, but post-apartheid, they find themselves leading a multicultural workforce that is more communist and less competitive. Due to the diversity of cultures, South Africa finds effective leadership challenging (Kok and van den Heuvel, 2019).

Leadership at the University of KwaZulu is crucial for achieving the institution's vision and mission. The university follows a rigorous process to appoint qualified individuals to leadership positions, ensuring that only high-quality leaders are selected and retained who can effectively meet both operational and strategic goals (2023 Annual Report). The framework for higher education leadership, along with change management models, competency theories, and technology advantage, is are key element discussed in this context.

1.2.1 Higher Education Leadership Framework in South Africa

Since the 1980s, leadership in higher education has been under increased scrutiny due to factors such as student expansion, changing funding structures, heightened competition, and the effects of globalization (Black, 2015). In light of these challenges, there is a growing need to understand the qualities and skills required for effective leadership and management within higher education institutions. Establishing a comprehensive leadership framework is essential to evaluating the competencies and effectiveness of those in leadership positions. To do so, it is crucial to define what constitutes good leadership and

management, as these definitions serve as benchmarks by which leaders can be assessed and compared (Dawson et al., 2020).

Leadership concept is defined as the ability to address challenges and inspire and encourage others to reach their full potential in meeting the organization's intended goals (Salihu, 2019). The institution of higher learning is continuously changing, both globally and locally, which is not a new phenomenon. It is therefore crucial to hire leaders who have adequate skills and demonstrate competency in the crucial skills needed by higher education.

The leadership roles in higher education differ significantly from those in other types of organizations. While traditional roles such as Chief Financial Officers (CFOs), Executive Directors, and Managers are common in many sectors, the academic leadership structure in higher education involves unique positions such as Vice Chancellors, Deputy Vice Chancellors, and Deans or Heads of School. These roles often come with distinctive challenges, including the transitional and rotational nature of leadership positions, which typically change every five years, sometimes resembling secondment-style appointments. This frequent turnover can create difficulties in maintaining long-term strategic vision and stability.

Moreover, there are noticeable inadequacies in the traditional leadership models within higher education. Many senior leadership positions are filled by senior academics based on the principle of collegiality, a system designed to promote collaboration and shared decision-making. However, this model does not always align with the growing demand for efficiency, accountability, and effective resource management (Black, 2015). In such an environment, the balance between academic governance and the operational demands of running an institution becomes increasingly difficult to maintain.

The rise of managerialism in higher education has led to significant contestation and discomfort, primarily due to cultural clashes and differing working practices in areas such as policy implementation, audit procedures, transparency, and public accountability. The dichotomy between "good leadership" and "bad management" is often used by academics as a defensive mechanism. Moreover, the tendency to view management techniques as an end in themselves, separating leadership from management, is counterproductive, as both are inherently complementary rather than competitive. Effective leadership integrates both, linking the institution's strategic vision with its organizational culture (Black, 2015).

Appointing non-academic leaders to senior roles in academic institutions can create ambiguity and lead to misrepresentation within the academic environment. Effective leadership, in this context, requires individuals who command respect and foster a collegial atmosphere, rather than perpetuating power struggles between academic and non-academic factions. Both academic leaders and professional services leaders must coexist and collaborate effectively without competition or conflict, with each group playing a distinct and vital role in managing the institution (Ghasemy & Hussin, 2014).

The challenges faced by higher education institutions have led to the adoption of various leadership approaches, depending on whether the institution is research-led, teaching-led, or multi-faculty. This study explores several key leadership models commonly applied within the sector, including hierarchical models, individualistic models, collegial models, collaborative models, and transformational models.

1.2.1.1 Hierarchy Models

The hierarchical model employs a top-down, authoritative leadership style, functioning as a power-based model commonly used in higher education (Black, 2015). This model has been implemented at the University Of KwaZulu-Natal (UKZN) following the merger of the former University of Durban-Westville and the University of Natal, which was formally established in January 2004. As part of this restructuring, the College Model was adopted as the new organizational structure, illustrated in **Figure 1.1** as one of the College Structure

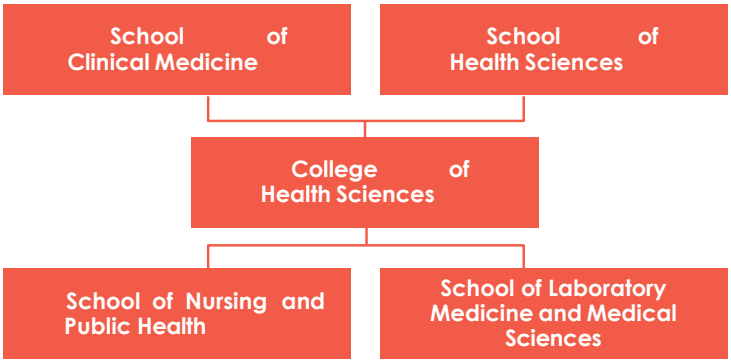


Figure 1:1 Health College Organizational Structure Post Merger Source: UKZN at a Glance 2012 (Division, 2012)

In 2012, the University of KwaZulu-Natal underwent another change in its organizational structure. Figure 1.4 illustrates the current UKZN Academic Organizational Structure, while Figure 1.3 depicts the current College Organizational Structure, which integrates both Academic and Professional Services management. Figure 1.2 illustrates the current UKZN Professional Services Organizational Structure.

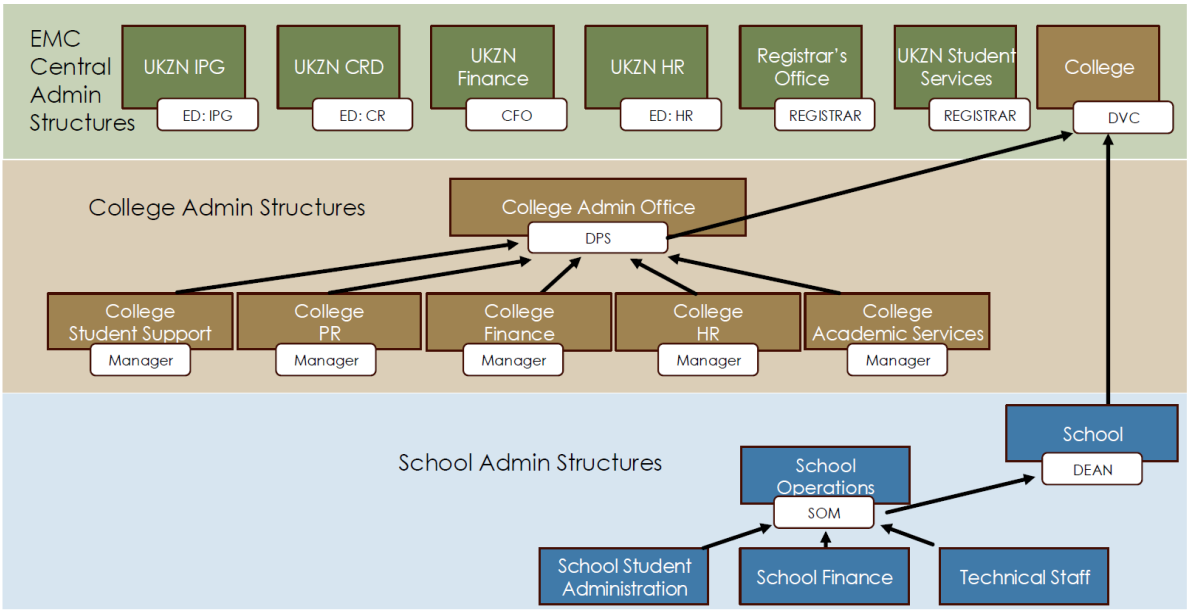


Figure 1:2 Professional Services Organizational Structure 2012-2024 Source: Presentation VC (Poku, 2024)

Figure 1: 2 illustrates the Professional Services structure. The institution has support services divisions that are headed by Executive directors, the CFO, and the Registry; these divisions have directors and managers who head different divisions and departments. Each College is headed by the director of professional services and managers who lead different divisions and departments. Different Schools that fall under Colleges are headed by the Dean and Head of School, and School Managers.

The institution is in the process of another transformation, with the new proposed organizational structure expected to be implemented by 2025**.** Figure 1.3 shows the proposed reorganizational structure. The new proposed administration structure will be headed by the Registrar, the Directors, and the Managers, working together with the School Deans.

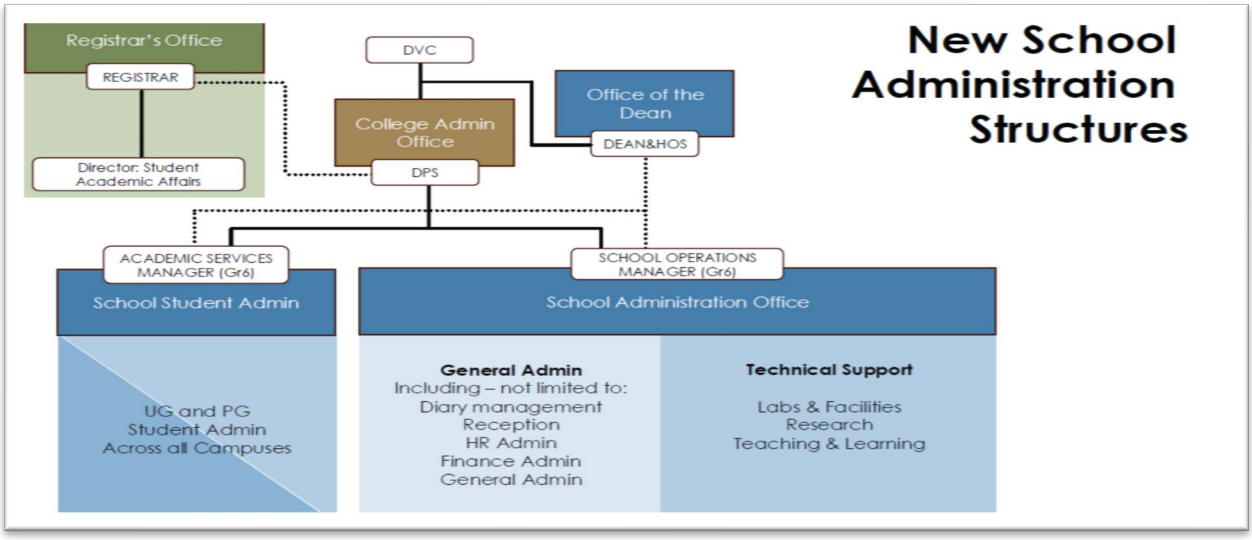


Figure 1:3 Proposed Professional Services Structure Source: (Poku, 2024)

1.2.1.2 Individualistic Models

The individualistic model is based on personal status and professional recognition, which are typically associated with academic faculty positions. This approach often discourages the balancing of teaching and research in higher education, as it prioritizes competition over collaboration, believing that competition is more rewarding (Black, 2015).

However, the UKZN does not promote individualism in its approach to teaching and research. Instead, the institution fosters a balanced approach, with equal emphasis on both teaching and learning as well as research. This is reflected in the presence of dedicated units for teaching and learning, and research, which coexist within the institution. Each unit is led by a head of department, and leadership responsibility for these units is distributed across colleges and schools. This organizational structure is clearly illustrated in Figure 1.4. The institution is headed by the Vice Chancellor, and the institution has four Colleges that are each headed by the Deputy Vice Chancellor. The institution has Teaching and Learning and Research divisions that are also headed by Deputy Vice-Chancellors.

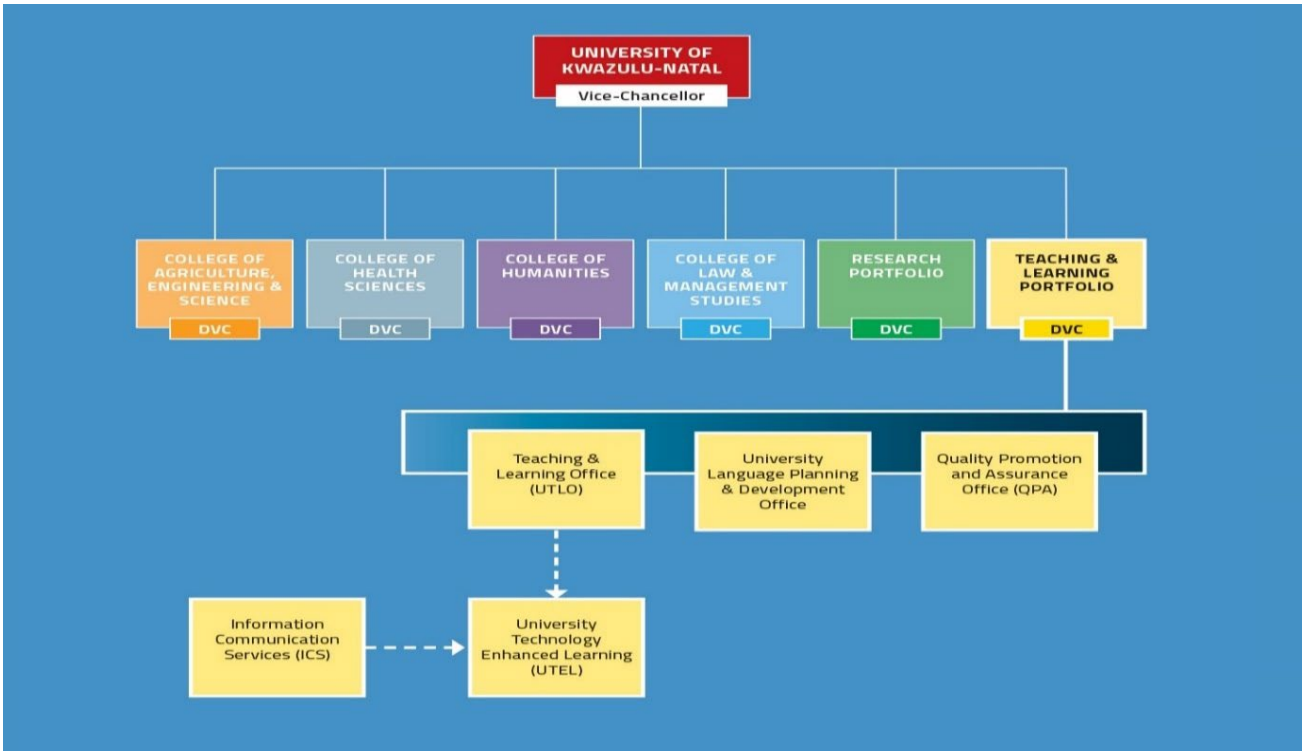


Figure1:4 UKZN Academic Organizational Structure 2012-2024 Source (Poku, 2024)

1.2.1.3 Collegial Models

Governance in this model is driven by consensus decision-making and mutual support among peers, which are highly valued within academic communities. It is characterized by a committee-based or bureaucratic approach, where academics collaborate while maintaining their individualism. This model avoids active management, allowing individuals the autonomy to pursue their work as long as they adhere to traditional practices and fulfil their duties (Black, 2015).

The UKZN adopts a similar approach, particularly among its academic staff. Academics are afforded flexibility in their working hours, provided they meet certain performance standards such as the number of research papers to submit, the number of students they supervise, and the number of teaching hours required. This model was particularly evident during the COVID-19 pandemic, where academic staff continued to meet these expectations under challenging circumstances. The experience of the pandemic has, in turn, shaped the way academics approach their work moving forward.

1.2.1.4 Collaboration Models

Higher education institutions have been slow to adapt to this approach, largely due to their traditional governance structures, which are typically organized around faculty hierarchies. This model is often imposed by funding bodies rather than being driven by the institutions themselves. Within the institution, success is measured by the ability of leaders to foster collaborative partnerships and build networks that are not hierarchical, yet capable of identifying what works and what does not. The traditional approach of appointing senior professors to leadership roles for short-term terms may no longer be practical, as today's leadership demands intricate management and organizational skills (Black, 2015). This model is most effective when it includes academic leaders, executives, and professional staff, as it promotes teamwork, networking, and collaboration.

At the UKZN, this issue is evident in the expectation that Deans, who are often experts in their academic disciplines but may lack experience in leadership or management, lead both academic and professional staff within their schools or colleges. This model has proven ineffective, which is why the new proposed structure aims to address this. Under the new structure, professional staff will no longer report to the Dean as in the previous structure but instead will report to the Director of Professional Services. This change is illustrated in Figure 1.2 (Current School Administration structure) and Figure 1.3 **(**Proposed School Administration structure).

1.2.1.5 Transformative Models

This model is dominant in the higher education sector as it aligns with the human interaction and leadership demands inherent in faculty-based roles. It is seen as particularly well-suited to the evolving needs of the sector, offering creative solutions to contemporary challenges (Black, 2015). The model encourages executives to take an active role in the organization, promoting creativity and innovation as

key drivers of strategic change. This involvement is essential to ensuring the long-term success and adaptability of the institution.

Rooted in ethical leadership principles, this model emphasizes commitment to values and outcomes, with a focus on the long-term interests of stakeholders and the broader community. It stresses the importance of honouring moral duties to the organization and its stakeholders, and it fosters a commitment to action. The model is designed to transform followers into leaders and leaders into change agents, guiding them to pursue virtuous outcomes while establishing systems that sustain organizational values (Waghid, 2023).

This approach is evident at the UKZN, where leaders continue to actively contribute to the institution's ongoing restructuring efforts. Since the inception of the reorganization discussions, the leadership of the colleges and schools has been tasked with developing a five-year strategic plan for their respective areas as part of the broader restructuring initiative, initially known as "Project Renewal." These leaders have worked collaboratively with academic staff to develop strategies tailored to each discipline, contributing to both the school-level reorganization and the broader university transformation.

1.2.2 Change Management Models

Vlachapoulos (2021) noted that while change can drive growth in both individuals and organizations, stakeholders often resist it. Factors such as funding challenges, competition, and growing globalization have compelled higher education institutions to reevaluate their governance and identify strategic approaches to adapt to rapidly evolving markets. For change to succeed, organizational leaders must implement effective change strategies. Additionally, to ensure successful change, members of the organization must be motivated by both internal and external forces, with change being aligned with order, consensus, and cohesion.

Higher education institutions are constantly evolving both globally and locally, which is not a new occurrence. The University of KwaZulu-Natal has experienced two mergers and is currently undergoing another transformation. In December 2002, the Minister of Education proposed a transformation and restructuring plan for South Africa's higher education system. This proposal led to the consolidation of institutions through mergers and incorporations, aimed at addressing historical inequalities within higher education (Chetty and Collins, 2007). The UKZN was officially established on January 1, 2004, following the merger of the former University of Durban-Westville and the University of Natal.

In 2012, the UKZN underwent another significant transformation. According to Mbadi et al. (2011), a new two-tier structure was introduced by an external panel of experts, with the primary goal of granting greater autonomy to the Colleges in decision-making and enhancing organizational structure and efficiency. To facilitate the transition to this new structure, the university enlisted the help of a Change Management Consultant. The institution adopted a college-based operating model, which allowed

academic departments to design their organizational structures, while the support division played a role in decentralizing Professional Services.

It was emphasized that management should keep employees informed about upcoming changes before their implementation, and maintain ongoing consultation with staff throughout the process from start to finish. This study discusses two change management models: the Lewis and Kotter models of change.

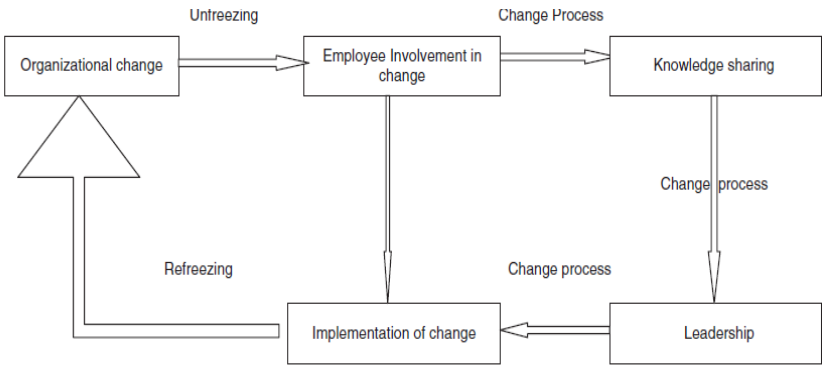
Lewis Change Management Model

This model, first introduced in 1947 by social psychologist Kurt Lewin, uses an analogy of three blocks of ice changing shape to describe a phase change process: freezing, transitioning, and refreezing. The first phase involves the organization recognizing that change is necessary and breaking away from the status quo before establishing a new way of operating. This initial stage is often the most challenging, as it causes significant stress among individuals. Preparing the organization for change is crucial, as it challenges its core beliefs, values, attitudes, and behaviors (Vlachapoulos, 2021).

Hussein et al. (2018) argued that employees' involvement is more effective when employees are empowered with both authority and responsibility. During the change process, resistance and openness to change are key factors. This model helps to motivate change, create a compelling vision, build political support, manage and sustain change, and guide the implementation process. Leadership plays a crucial role in initiating change within complex educational systems, and the model is widely accepted in psychology as an approach to implementing change.

The model is broken down into three stages:

- **Unfreezing**: This initial stage involves motivating the need for change and creating a vision for it.
- **Changing**: In this stage, political support is developed, and the process of managing the change is actively pursued.
- **Refreezing**: The final stage focuses on implementing and ensuring the sustainability of the change.



Organizational change process showing different stages

Figure 1.5 Lewin Model Source: (Hussein, 2019)

Kotter Change Model

Kang et al. (2022) noted that the Kotter change model has been successfully applied in higher education settings, including efforts to overhaul teaching evaluation systems. The model has also been used at the University of KwaZulu-Natal (UKZN) to guide change management processes. In the context of the university's proposed restructuring set to be implemented in 2025, the following steps from Kotter's change management model are being followed:

These steps are integral to managing the planned changes at UKZN as part of the university's ongoing transformation.

No	Step	Analysis
1	Create a sense of urgency	In 2020, the Vice Chancellor called a meeting for all the staff at the University to communicate the vision for change with the hard deadline of the 1st of January 2025 for consolidating the college models so they are easily manageable and to manage the academic-to-support staff ratio 27 to 73 consecutively (Ndaliso, 2023).
2	Building a guiding team	The UKZN council approved the reconstruction in 2020, formed an investigation team in 2021, and all the university stakeholders were involved in the 2nd phase (Annual Report 2021)
3	Forming strategic vision and strategies	The university management continues to craft and implement innovation strategies across the institution in 2021 (Annual Report 2021)
4	Communicating the vision for change	The first communication by the Vice Chancellor to all employees was in 2020, and the management continues to give updates at each stage of change through university notices and conduct meetings with employees as per the College and Division
5	Eliminates difficulties and barriers	The challenges of the change in terms of registration, and there is still a need for continuation, the institution cannot change the curriculum immediately, but the curriculum change will be introduced gradually, as there are students who are on the old curriculum, the leaders need to carefully phase out the old curriculum

6	Set short-term goals	A five-year plan was presented by each School on how to make teaching and learning better and what innovations each school introduced to improve teaching and learning. This plan will be reviewed after five years
7	Develop and analyze tactics based on successful outcomes	The institution learned from the changes in 2012, they are learning from their success and failure, in 2012 the institution adopted the college model which was a fundamental outcome of the 2007-2016 strategic plan, which was consolidated in 2017-2021 for the planning period, the new strategic plan was developed 2023-2024 strategic plan which includes the restructuring plans (Poku, 2024)
8	Apply and maintain changes	The Strategic plan for 2023 to 2032 is a guide for refining and implementing the College model and further improving the resource utilization, management, and professional support functions (Poku,2024)

Table 1.1 Kotter Change Model Source: Self (Sichela, 2024)

1.2.3 Leadership Competency Theory

Chongwony et al. (2020) pointed out that there is limited research on leadership and management competencies in higher education. Corbet (2021) explained that the competency theory model consists of three core clusters: human resources, leadership, and goals and actions, which are interconnected. A leader lacking these three core elements is considered incompetent. However, other studies challenge this view. Miller (2017) noted a conflict between traditional models and emerging descriptive models, with effective future models yet to be clearly defined.

Dawson et al. (2018) emphasized the need for competency frameworks and models to define leadership qualities and skills based on competency models. Roha et al. (2020) argued that there is a need for a new, refined competency framework to meet the evolving demands of leadership and management in higher education. Similarly, Black (2015) suggested that the higher education sector requires a competency framework to support leadership development and enhance leadership capabilities necessary for effective quality management within the field.

Many studies on leadership and management competencies have been conducted in various sectors, but there is limited research focusing on leadership competencies in higher education, as noted by (Chongwony et al, 2020). This study aims to fill that gap. Existing competency theories, frameworks, and models often contain inconsistencies. For example, the Corbet competency model's approach of defining a leader using a single criterion is inaccurate.

There is no universal method for evaluating a leader's competencies; rather, different approaches should be employed. A leader cannot rely on one model for every situation, which means effective managers must be highly perceptive, able to assess the context, and choose the most appropriate approach. They should possess strong emotional intelligence and be highly skilled. The study examines both hard and soft skills. Hard skills refer to technical knowledge and abilities necessary for performing the job, while soft skills are interpersonal skills required for communication. The competency framework must maintain a balance between these two types of skills.

Data analysis revealed that certain skills are more prominent in higher education leadership competencies, including communication, interpersonal skills, budget management, change management, technical expertise, and project management. However, some competencies were overlooked in previous studies, such as diversity, customer service skills, accreditation, decision-making, time management, and self-management. This study will place a greater emphasis on exploring neglected competencies. The theories outlined in earlier research will serve as a foundation for further investigation.

In higher education institutions, three key types of competencies are essential:

1. Individuals must have the necessary training and qualifications to effectively complete tasks and achieve performance outcomes.
2. Given the diversity of higher education institutions, leaders must possess a deep understanding of various organizational components.
3. Leadership qualities are crucial in shaping key functions that influence the institutional structure.

1.2.4 Leadership Technology Advantage

Millennials interact with technology like no other generation before them, and this affecting how they want to be taught in higher education and how they want to lead and expect to be led in organizations. In the new mobile and connected world, technology has dictated how we communicate, socialize, and learn. The workplace has become a psychological battlefield, and millennials have the upper hand because they are tech-savvy. Not much research has been performed about how to teach millennials, what they expect from higher education, and what they think of leadership and ingredients of success (Oliveira et al, 2018)

According to Murthy et al (2024), Today’s linked and technology-driven world requires competent global IT operations leadership for company success. IT leadership demands a thorough grasp of technology and business strategy; leaders should be able to convert complicated technology ideas into meaningful business plans and ensure they have the expertise and resources to execute them. IT operations are

complicated, and managing technology and staff requires strong leadership. The UKZN leadership needs to understand that good leadership boosts innovation, efficiency, and a dependable and secure IT system.

There is a strong relationship between technology and the leader's leadership style. For instance, the digital leadership leader has a fast, cross-hierarchical, and cooperative approach with a strong focus on innovation. This leader has a competent mindset with the ability to apply new methods and instruments, such as design thinking, that a required for competent leaders. The digital leadership style leans towards a democratic leadership style as it encourages participation in decision-making and actively works with employees. While Matrix leadership is most appropriate for leaders who are more inclined to innovation and technology-oriented, these leaders are people-oriented with a desire for interaction and communication, they lean toward a transformational leadership style (Oberer and Erkollar, 2018).

Aziz et al (2020) stated that the most common leadership styles studied for technology advantage leadership are transformational and transactional leadership styles. Employees find it more useful to use technology if a leader implicitly states the usefulness or the benefits of using technology. According to Omar and Noor (2020), technology leadership is a style of leadership that focuses on leaders' characteristics in uplifting the workforce through technology. Leaders who practice technology leadership should have high ICT competencies, smartly develop ICT potential in organizations, and influence employees to use ICT more effectively.

1.3 Research Problem Statement

The University of KwaZulu-Natal (UKZN), like many higher education institutions, faces a rapidly changing academic, administrative, and socio-economic environment that demands adaptive, forward-thinking leadership. However, there is currently a limited understanding of the specific leadership and management competencies required to effectively guide the university through these challenges. Without a systematic analysis of these competencies, UKZN risks strategic misalignment, ineffective decision-making, and diminished institutional performance. Therefore, there is a critical need to identify, assess, and develop the leadership and management competencies essential for current and future university leaders to ensure sustainable growth, academic excellence, and organizational resilience.

Higher education consists of institutions, academic staff, and students, and effective leadership within these institutions can drive transformation and improvement when supported by the right skills. By fostering a network of support, faculty leadership can enhance efforts to address gaps and eliminate obstacles faced by various stakeholders. Leaders in higher education also leverage information technology to support more effective learning goals. Their responsibilities include overseeing key services and initiatives related to student education, financial management, research advancement, technological

innovation, and global influence. These duties become increasingly challenging, especially in today's complex and rapidly changing global landscape. The invention has brought a change in society; people on different continents can communicate and share ideas instantly, and advancements in technology have revolutionized relationships (Oliveria et al, 2018).

Jais et al. (2020) stated that leadership in higher education must establish strong relationships with a wide range of key groups and stakeholders, including government agencies, businesses, alumni, community organizations, colleagues, the media, and others. To effectively navigate this highly politicized environment, sound strategic leadership is essential. This involves understanding and embracing cultural differences and diversity both within the university and among key external stakeholders, enabling leaders to act strategically in a global context.

Higher education faces complex educational, social, and economic challenges, requiring leadership that is competent in driving innovative solutions for institutional transformation. Effective leadership can bring about positive change by creating opportunities for leadership development and transformation (Jais et al, 2020). It is important to select faculty and staff who possess the broad perspective and expertise needed to address the challenges of an ever-evolving environment.

South African universities are part of a global ranking system, and university leadership is optimistic about improving their institutions' rankings. Although some argue that the ranking system is flawed and fails to account for South Africa's unique challenges, top leadership emphasizes the importance of rankings in enhancing the university's reputation (Swartz et al, 2019).

1.4 Research Aims and Objectives:

This study aims to explore the state of leadership and management competencies at the University of KwaZulu-Natal in the context of change that emerges in the Institute of Higher Learning.

The objectives of this study are:

1.4.1 To examine the extent to which leaders and managers hold the required skills and qualities to manage the UKZN institution

1.4.2. To identify the training and development required by leadership and management in this institution

1.4.3. To identify the main barriers to leaders and managers becoming better leaders

1.4.4. To examine whether those in leadership and management positions have a management or business background

1.4.5 To determine whether their competencies in leadership and management affect demographics (sex, age, race, nationality)

1.4.6 To investigate whether the leadership and management style have an impact on technology leadership

1.5 Research Questions

1.5.1 What skills and qualities do University of KwaZulu-Natal leaders and managers possess?

1.5.2 What training and development do University of KwaZulu-Natal leaders and managers require to manage and lead effectively?

1.5.3 What are the main barriers to leaders and managers at the University of KwaZulu-Natal that are stopping them from becoming better leaders and managers?

1.5.4 What business or management background do the leaders and managers at the University of KwaZulu-Natal possess?

1.5.5 How do perceived demographics affect the leader's and managers' competencies in leadership and management at the University of KwaZulu-Natal?

1.5.6 How does the leadership and management style have an impact on technology leadership at the University of KwaZulu-Natal?

1.6 Hypotheses

H_{01}: Leadership and management skills and abilities do not affect their competencies

H_1: There is a correlation between leadership and management abilities to manage the institution and management competencies

H_{02}: Training and development do not affect leaders' and managers' effectiveness

H_2: There is a positive correlation between leadership and management training and development concerning management competencies

H_{03}: There is no significance in leadership and management barriers related to management competencies

H_3: There is a positive correlation between leadership and management is a barrier to management capacity

H_{04}: There is no significance in management or business background concerning leaders' and managers 'competencies

H_4: There is a positive correlation between management and education background to management competencies

H_{05}: There is no significance in race, gender, age, work experience, or nationality to managers' and leaders' competencies

H_5 There is a positive correlation between demographics and management competencies

H_{06}: There is no significance in leaders' and managers' style and technology leadership

H_6: There is a positive correlation between technological leadership and leadership style

1.7 Rationale and Motivation

This study is driven by my personal experience of working at this institution for over eight years, during which the researcher has been exposed to different leadership styles. As an employee, the researcher has built valuable connections and networks, which provide the researcher with significant access to both quantitative and qualitative data within the institution.

In recent years, various manuals and frameworks have been developed to guide leadership competencies in specific areas to enhance effectiveness. However, these competency frameworks have been criticized by some leadership scholars, both within higher education and beyond. To genuinely evaluate the success of university governance structures, further research is needed to explore the relationship between leadership competencies and the effectiveness of higher education leaders, particularly during times of significant changes in governance and organizational structure.

1.8 Significance of the Study

This study aims to explore the state of leadership and management in the UKZN in the changing institute of higher education. This study will assist the UKZN leadership in looking for ways to drive this institution to the best in the country and globally. This study will assist leaders in examining which qualities and skills, development, and training are needed for their roles and how to breach the gaps in managing and leading this changing institute. It will assist leaders of the UKZN in coming up with strategies on how to meet the institution's challenges and have a competitive edge.

Practical significance

- **Improved Leadership Practices:** The study can identify strengths and weaknesses in current leadership styles and management strategies, offering actionable insights for improving institutional performance.
- **Enhanced Organizational Efficiency:** Practical recommendations can help streamline operations, reduce conflict, and promote a positive working and learning environment.
- **Professional Development:** Results may highlight the need for specific leadership training or mentorship programs.
- **Stakeholder Engagement:** It provides tools for better communication and engagement between management, staff, and students, potentially leading to improved morale and retention.

Theoretical Significance

- **Contribution to Academic Literature:** The study can add to the body of knowledge on higher education leadership in South Africa or similar contexts, especially in post-apartheid and transformation-driven environments.
- **Testing or Refining Leadership Theories:** By analysing real-world data from UKZN, the study can test existing leadership and management theories.
- **Contextualized Understanding:** It offers a case-specific lens that can inform how cultural, historical, and institutional contexts shape leadership dynamics in higher education institutions.

Policy Significance

- **Institutional Policy Reforms:** Findings can guide UKZN's leadership in revising governance frameworks, decision-making processes, and performance evaluation criteria.
- **National Higher Education Policy Input:** The study could influence broader policy debates on leadership and governance in South African universities, aligning with transformation and inclusivity goals.
- **Accountability and Transparency:** Results may highlight the need for clearer accountability structures or more transparent management practices, encouraging good governance.

1.9 Assumptions of the Study

There is an assumption that obtaining honest and objective responses from participants may be challenging, as the institution is currently undergoing restructuring, creating a climate of uncertainty. Many employees may be unsure about the security of their positions, which could impact their willingness to engage in the study. Additionally, participants hold senior roles within the institution and may not take the study seriously, may lack the time due to their demanding schedules, or may be unable to participate altogether. Furthermore, the institution’s policy prohibits direct contact with participants, so requests for involvement must be made through the institution’s internal communication channels. However, these notices are often overlooked, particularly by management who have very busy schedules, especially during peak periods.

1.10 Delimitation of the Study

The delimitations of this study, which analyzes the leadership and management competencies required by management at the University of KwaZulu-Natal (UKZN), are outlined as follows:

The study will focus on current management staff at UKZN, specifically targeting leadership and management in the institution. Participants will be selected based on their direct involvement in the

strategic and operational management of the university, excluding non-management staff and students. The research will be based on all five campuses at UKZN

The study will analyze leadership and management competencies within a specific time frame, typically the past three to five years, to ensure relevance to current institutional challenges and transformations. This period is selected to capture recent shifts in leadership, management, and institutional policy in the context of South Africa's evolving higher education landscape. The study will specifically focus on identifying the leadership and management competencies required for effective functioning, excluding broader issues such as teaching or research competencies, which are outside the primary scope.

The study will be grounded in established leadership and management theories, such as transformational leadership, strategic management, and competency-based leadership frameworks. These theoretical models will frame the analysis of the competencies needed by UKZN's management, which may limit exploration of alternative or non-traditional approaches.

The use of quantitative surveys may limit the depth of individual insights, as the data collection methods will aim for standardization rather than in-depth personal exploration of leadership and management issues. The study will rely on self-reported data from management participants, which may introduce biases such as social desirability or overestimation of personal competencies. This limitation will be acknowledged in the analysis.

The findings of this study will be specific to UKZN's organizational culture, strategic direction, and operational needs, and while some aspects may be applicable to other South African universities, the results will not necessarily be generalizable to all institutions of higher learning.

1.11 Definition of Terms

Key terms defined:

- **Leadership**: Leadership involves a combination of personal traits and competencies, including skills and knowledge such as empowerment and achievement. Key characteristics of a leader include emotional intelligence, vision, and intuition (Geoghegan and Dulewicz, 2008).
- **Management:** According to Pinto (2019), management is the responsibility of guiding a team through tasks like planning, organizing, directing, and controlling. Managers focus on daily operations, with a more administrative role that seeks to maintain control over activities.
- **Competencies**: Geoghegan and Dulewicz (2008) noted that while personality traits and competencies may appear similar, competencies are skills that can be learned and developed, whereas personality traits tend to be more stable over time.
- **Transformational Leadership**: As described by Amanchukwu et al. (2015), transformational leadership, or relationship theory, emphasizes the bond between leaders and followers.

Transformational leaders, often confident and extroverted, motivate and inspire their teams to reach their full potential. This leadership style is rooted in high ethical and moral standards and focuses on both individual and team growth.

- **Transactional Leadership:** Known as management theory, transactional leadership centers on managing group performance, organizing, and overseeing work. It operates on an exchange-based relationship between leader and followers, emphasizing reward and punishment to ensure that followers adhere to set structures and expectations (Amanchukwu et al., 2015).
- **Leadership Development:** According to Day and Dragoni (2015), leadership development is the process of enhancing an individual's capacity to excel in leadership roles. It involves the collective growth of skills, knowledge, and abilities that help individuals provide direction, alignment, and commitment within their teams or organizations.
- **Leadership Barriers:** Longenecker (2010) explained that in the face of a challenging global economy, business leaders are confronted with a range of difficulties, such as strategic and operational challenges that test their leadership abilities. These challenges demand that leaders learn and adapt more quickly than ever before.
- **Technology Leadership**: Technology leadership involves managing both technical and human resources to sustain and improve an organization's IT infrastructure. In today's digital world, technology leadership requires an understanding of diverse global cultures, regulations, and technologies. It combines knowledge of both technology and business strategy (Goel, 2024).

1.12 Research Design and Methodology

This study employs a quantitative research approach grounded in a positivist paradigm, which seeks to objectively measure and analyze the state of leadership and management at the University of KwaZulu-Natal (UKZN). Adopting a positive philosophy, the research is guided by the assumption that reality is objective, measurable, and can be quantified through statistical tools. This approach allows for identifying patterns, relationships, and correlations between leadership and management practices and institutional outcomes.

Using structured surveys and questionnaires distributed to a representative sample of leadership staff, the study will gather numerical data on various aspects of leadership and management, such as decision-making, communication effectiveness, and leadership styles. Statistical analysis will examine the data, testing hypotheses regarding factors that influence leadership effectiveness and management efficiency.

The aim is to generate general findings that can inform evidence-based improvements in leadership practices and management strategies at UKZN, while also contributing to broader discussions on leadership in higher education.

ORGANIZATION OF THE STUDY

1.12.1 Organization of the Study

This study is made up of six chapters with a brief description

1.12.2 Chapter 1: Introduction

Chapter One presents the background of the study as well as the research problem, research objectives, and research questions, highlighting the challenges the institution is currently facing and exploring how leadership can navigate and overcome these challenges. It also outlines the research problems and objectives, as well as the significance, motivation, and assumptions underlying the study. Additionally, this chapter introduces the research methodology employed in the study.

1.12.3 Chapter 2: Literature Review

This chapter provides a literature review on leadership, analyzing both theoretical and empirical research. It examines various leadership theories, models, and frameworks presented in previous studies. The review will also explore existing literature on leadership and competency studies, identifying key limitations and gaps in the research.

1.12.4 Chapter 3: Research Methodology

This chapter provides a detailed explanation of the research methodology employed in the study. It outlines the research design, the research process, and the specific research objectives. It also discusses the study's population and sampling methods, as well as the approaches for data collection and analysis. The chapter offers a clear framework for the structure and methods that guided the research process.

1.12.5 Chapter 4: Representation of Results

This chapter focuses on the analysis and presentation of the data collected during the research study. It examines the findings derived from the surveys, highlighting the responses of participants to questions related to the management and leadership competencies at UKZN. The chapter presents a detailed overview of the data, analyzing how the responses align with the study's focus on leadership and management competencies.

1.12.6 Chapter 5: Discussion of Results

This chapter presents the data and analyzes the results concerning the research objectives. It interprets the findings by addressing the research questions and testing the hypotheses, and providing results on whether to accept or reject the hypotheses.

1.12.7 Chapter 6: Conclusion and Recommendation

This chapter presents and discusses the findings of the research questions, using the research objectives as a framework. It considers the insights from the literature review to interpret the results and offers

recommendations based on the findings. Additionally, the chapter suggests directions for future research to further explore the topic.

1.13 Chapter Summary

The main purpose of this chapter was to introduce the study by providing an overview of the study background, exploring the University of KwaZulu-Natal (UKZN) as the institution of focus, and examining the broader higher education framework. It also delved into competency and change theories. The objective of this chapter was to investigate the state of leadership and management competencies at UKZN, particularly in the context of the changes taking place within the institution of higher learning. This was done by formulating research questions, research objectives, and hypotheses. The chapter defined key terms and provided a summary of the research methodology. Following this chapter, a literature review will offer a more in-depth analysis of relevant research theories, models, and frameworks.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This chapter focused on the theoretical, conceptual, and empirical aspects of leadership and management competencies in higher education, with a comparison to other industries. Various studies were reviewed to identify existing gaps, and this study aims to address those gaps in the literature on leadership and management competencies. The chapter examined different leadership theories and organizational management frameworks, combining theoretical, conceptual, and empirical reviews.

The theoretical review is based on the problem statement, with a primary focus on the challenges facing higher education. The research questions explored leadership and management competencies, demographic factors, management and business backgrounds, and technology leadership.

The conceptual review was used to interpret and analyse data through data literacy, critical thinking, and problem-solving from other papers. This study identified and evaluated the key concepts, theories, and models related to leadership competencies, challenges, and changes that are faced by higher education. The research gaps and opportunities were identified by analysing existing literature for further investigation related to this study.

The empirical review was analyzed using previous research methods and findings, assessing how other researchers have approached the study of leadership and management competencies. This section provides insights into the data collection methods, such as surveys, pilot studies, and expert feedback, which were used to evaluate leadership competencies. Through this review, the study assessed the effectiveness of leadership at the UKZN, utilizing different theories, models, and techniques to evaluate and inform best practices for leadership in the institution.

2.2 Leadership Versus Management

Leadership and management are distinct roles, each with its own set of responsibilities and characteristics. A manager is someone who holds a formal title and is entrusted with the responsibility to plan, organize, direct, and control team behavior within the organization. Management is primarily administrative, focusing on the processes and systems that maintain organizational stability and efficiency. In contrast, leadership is more relational and less focused on administration. Leadership involves inspiring, motivating, influencing, and changing the behavior of others to achieve a common goal. Leaders embrace change and focus on effectiveness, whereas managers tend to uphold the status quo and prioritize efficiency. While leaders need to understand the value of management tasks, managers often struggle to recognize the dynamic, interpersonal nature of leadership (Pinto, 2019).

Parthasarathy (2014) emphasized that effective leadership is crucial for maintaining high productivity and performance within an organization, while also focusing on developing skills across the team. According to Amanchukwu et al. (2015), effective leadership is driven by a visionary, passionate, creative, flexible, inspiring, and motivational leader. Olulube (2018) highlighted that principled leadership is built on core values such as conviction, accountability, humility, integrity, discipline, and sacrifice. Such leadership not only helps navigate the organization through challenging times but also inspires all members to share a common vision, cultivate a culture of innovation and continuous improvement, and take proactive steps to help everyone reach their full potential in achieving that vision (Anyamele, 2004).

In contrast, Gorchani et al. (2017) asserted that the primary responsibility of management is to align the organization and coordinate efforts toward achieving its objectives. Management involves following a process that helps the organization reach its goals, functioning as an information hub that enables effective organizational oversight. While management plays an essential role, Anyamele (2004) argued that it alone is insufficient to achieve the broader goals of the organization. Management must be adaptable, adjusting its strategies and behaviors to meet the evolving demands of leadership, which often require flexibility in choosing the right leadership styles for different situations .

The diagram Figure 3 depicts the traits of management and leadership, illustrating two distinct approaches to guiding and influencing others within an organization. Management tends to lead from the head, relying on rationality, logical decision-making, and a structured approach. Managers are typically more consultative and persuasive, often making decisions based on facts, rules, and procedures. They are usually more autocratic, maintaining control and ensuring that the organization runs smoothly and efficiently. Managers are associated with a transactional leadership style, which focuses on maintaining order, achieving specific tasks, and rewarding or punishing based on performance.

In contrast, leadership leads from the heart. Leaders are visionaries who inspire others through passion, creativity, and a strong sense of purpose. They tend to embrace a charismatic and transformational leadership style, which is focused on motivating and uplifting others to reach their full potential. Leaders are often seen as charismatic, with the ability to connect emotionally with their teams, and they encourage innovation, growth, and a shared vision. Their leadership style aims to create lasting change and foster a sense of commitment and enthusiasm in their followers.

The diagram illustrates the different characteristics between the manager and the leader. The illustration shows the manager leads from the head and shows positive power, by being rational, consultative, and persistent. Managers are good at problem solving, they are tough-minded, structured, deliberate, authoritative and stabilizing.

While leaders lead from the heart and show positive power as visionaries who are passionate, creative, flexible, inspiring, innovative, courageous, imaginative, experimental, and initiate change.

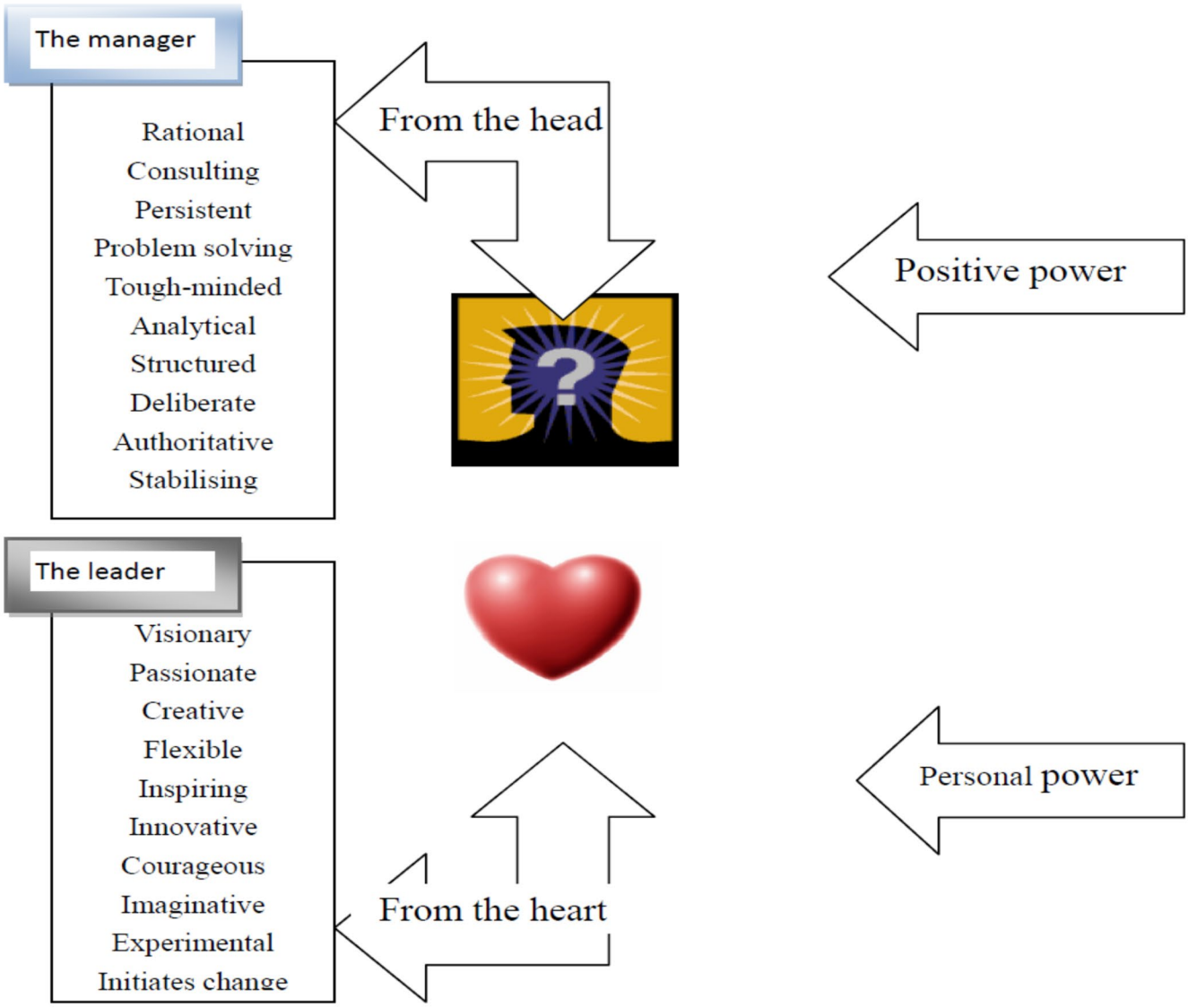


Figure 2.1: Qualities of leaders and managers. Source: (Amanchukwu et al. 2015)

2.3 Empirical framework

Empirical studies focusing on South African universities, and UKZN in particular, emphasize the complexity of leadership in a post-apartheid higher education context. Research by Ngcamu and Teferra (2015) and Pillay and Pillay (2016) explores transformational leadership and change management at UKZN, identifying a critical gap in competency-based leadership approaches. These studies provide contextual grounding for the phenomenon of interest in how leadership competencies influence institutional performance, transformation, and staff morale. The reviewed literature often draws on theoretical frameworks such as:

- Transformational Leadership Theory (Burns, 1978; Bass, 1985),
- Situational Leadership Theory (Hersey and Blanchard, 1969), and
- Competency-Based Leadership Models (Boyatzis, 1982; Spencer and Spencer, 1993).

These frameworks inform the selection of variables and instruments in empirical studies and align with UKZN's dynamic institutional environment. For example, transformational leadership is particularly relevant given the university's focus on equity, inclusivity, and innovation. Studies such as those by Govender and Bussin (2020), Zulu (2020), and Parumasur (2009) adopt mixed-methods and qualitative case study approaches, which are methodologically consistent with investigations into leadership behaviors and institutional culture at UKZN. These methods allow for in-depth exploration of leadership style, decision-making processes, conflict management, and communication competencies. These correlate strongly with your chosen methodology if it involves survey instruments grounded in validated leadership competency frameworks. Key findings from empirical studies at UKZN highlight:

- Lack of alignment between leadership competencies and strategic institutional goals,
- Gaps in emotional intelligence, particularly in managing diverse academic teams (Ngcamu and Teferra, 2015),
- Resistance to change in leadership development programmes, often tied to deeply rooted hierarchical structures.

These findings substantiate the need for leadership development initiatives and offer empirical evidence to benchmark the study's results. The literature contributes to a coherent narrative that leadership competency development at UKZN is both a strategic imperative and a cultural challenge. Empirical data reinforce the idea that effective leadership at UKZN requires not just technical expertise but also cultural intelligence, ethical sensitivity, and adaptive capacity. These competencies emerge repeatedly in both local (South African) and global literature, affirming their relevance.

The empirical literature reviewed provides a strong foundation for rigorous analysis. It connects directly with the study's methodology, findings, and theoretical orientation. In the UKZN context, the literature confirms that leadership competencies are not merely individual traits but are deeply embedded in institutional culture and transformation agendas. As such, they must be assessed and developed through both empirical inquiry and strategic policy alignment

2.4 Theoretical framework

According to Kotter's (1995) change management model, change is driven by new initiatives, technological advancements, and the need for a competitive edge. Change leads to significant shifts in vision, mission, culture, and goals within an organization. Kotte7890r highlights that to stay relevant, organizations must embrace technological improvements and innovation. Adaptive leadership theory, as outlined by Heifetz et al. (2009), suggests that no organization is truly dysfunctional but rather that organizations evolve and adapt to their environments, even if that adaptation is insufficient. This theory emphasizes the importance of recognizing when change is necessary and acting proactively to guide an organization through transformation.

Kotter's model, which has shaped much of the literature on change management, underscores the gap in organizations' ability to capitalize on technological initiatives and innovations. This study seeks to explore the role of technology leadership, particularly within the context of the Fourth Industrial Revolution (4IR) and the impact of artificial intelligence (AI) on higher education institutions.

Heifetz draws attention to organizational dysfunction, which is often a key reason why organizations fail. He emphasizes that instead of merely adapting to challenges, organizations need proactive leadership—leaders who can identify issues and implement strategies for improvement. This study focuses on leadership competencies, specifically at UKZN, to examine whether the institution has the right type of leadership to navigate current challenges and transform the organization.

Nugroho et al. (2021) asserted that academic leadership faces enormous challenges, particularly due to declining education standards, limited financial resources, changing student demographics, and increased government oversight. Similarly, Miller (2017) pointed out that higher education today is marked by disruptions and turbulent, uncertain conditions, making effective leadership more critical than ever.

Swartz (2018) observed that inequalities and poverty in South Africa pose significant challenges to higher education institutions, while leaders are under pressure to make universities financially sustainable by generating income through high student fees.

This study explores leadership theories such as trait theory, contingency theory, behavioral theory, and situational leadership theory. However, some scholars argue that these traditional theories may not be adaptable enough to address the specific challenges faced in higher education. For institutions to succeed, the leadership must possess unique competencies that enable them to make decisive decisions, delegate tasks effectively, and motivate staff, especially in the face of both internal and external changes (Tracker & Au, 2016). This study will also delve into competency theory to further explore the skills and attributes that define effective leadership in higher education

2.4.1 Trait Leadership Theory

Trait theory, which emerged in the early 20th century, initially focused on identifying certain physical, social, and psychological traits that were believed to be characteristic of effective leaders. Studies from the 1920s and 1930s highlighted traits such as physical appearance, social class, emotional stability, fluency in speech, and sociability (Bodla & Nawas, 2010).

According to trait theory, leadership is seen as a set of inherent qualities or characteristics. This theory posits that individuals who possess these traits—such as intelligence, extroversion, emotional intelligence, ambition, persistence, and courage—are naturally inclined to be leaders. It assumes that people with such characteristics will perform their leadership roles more effectively. However, this theory operates under the assumption that individuals with great leadership traits are automatically good leaders. It emphasizes the internal development of leadership qualities, suggesting that leadership is largely a product of an individual's inherent traits rather than external factors. This has led some scholars to critique leadership development programs, arguing that many fail to cultivate character (Mango, 2018).

Muftahu (2019) further elaborated that trait theory is based on the belief that individuals are born with specific leadership characteristics, similar to the inherited traits of kings or other historical leaders. However, this theory has limitations. It tends to focus on a narrow set of observables and inherited traits and often overlooks the broader range of personal attributes that may contribute to effective leadership. Additionally, trait theory does not account for the dynamic nature of leadership qualities or the diversity of traits that may be necessary for leadership in different contexts.

Amanchukwu et al. (2015) highlighted that trait theory assumes leadership qualities are innate and passed down through heredity or birthright. These traits are often identified by distinct personalities or behavioral characteristics that are shared by successful leaders. Yet, scholars have pointed out the inconsistency in this approach. For instance, individuals who may share similar traits to those of well-established leaders might not necessarily exhibit effective leadership, raising doubts about the theory's applicability in diverse or complex environments.

The pioneer of trait leadership theory, Galton (1869), argued that leadership is inherited, which was a proto-foundation for trait theory. Galton's work underscores the early belief in innate leadership capacity influencing 20th-century organization theory. According to Carlyle (1841), the Great Man theory believes that leadership is shaped by great men born with inherited traits suited for leadership. While Tucker (1947) finds no consistent traits to define a leader and therefore emphasizes the importance of situational factors, while challenges the rigidity of trait theory by integrating the context of trait theory.

Ghiselli (1971) contributed to the propagation of trait theory by identifying six traits essential for effective leadership are supervisory ability, intelligence, decisiveness, self-assurance, initiative, and achievement motivation. Edwin provided a practical framework for selecting and developing leaders both in industry and in education.

Cattell (1979) developed the 16-personality factor model based on the personality traits study that he conducted. Cattell offered psychometric tools applied to leadership selection and development in academic institutions. Zaccaro et al (2004) advocated for a more integrative model that combined traits with cognitive abilities, social intelligence, and problem solving. This dynamic model applies well to complex, adaptive environments like higher education administration.

Kirkpatrick and Locke(1991)identified traits that distinguish leaders' drive from those who are honest, have integrity, are motivated, have cognitive ability, and have knowledge of business. The researcher offers trait trait-based competency framework that is relevant to academic leadership. While Northouse (2022) synthesized trait theory for educational use in leadership courses and programs that helped design training and curricula for developing leadership competencies in the academic context

Higher education demands leaders who can navigate complex, bureaucratic, and collaborative environments. Trait theory remains relevant for identifying and developing such leaders in areas that include

- Recruitment and selection, where the institution can assess cognitive abilities, emotional intelligence, and personality traits for key leadership roles
- Leadership development, where programs can be designed to enhance traits like resilience, ethical judgment, and decisiveness.
- Performance evaluation**,** trait frameworks inform rubrics for evaluating leadership effectiveness based on observable characteristics.
- Succession planning is recognizing innate and developable traits that support long-term leadership pipeline strategies.

Though often debated and refined, trait leadership theory remains a foundational element in leadership studies. Its pioneers laid the groundwork, propagators offered empirical refinement, and extenders made it with modern organizational demands. In higher education, where leadership increasingly requires a blend of interpersonal and cognitive skills, trait theory continues to provide a valuable lens for analyzing and cultivating effective academic leaders.

2.4.2 Behavioral Leadership Theory

According to Salihi, (2019), behavioral theory was developed as a critique of trait theory, shifting the focus from inherent qualities to learned behaviors. Unlike trait theory, which assumes that leaders are born with specific traits, behavioral theory posits that leadership is a set of actions that can be learned and developed over time. This theory suggests that successful leadership is based on specific, teachable behaviors, providing a more accessible view of leadership. It emphasizes that anyone with the right training and development can become an effective leader, opening up possibilities for leadership within an organization.

While behavioral theory offers a more inclusive perspective on leadership development, it has been critiqued for neglecting the role of individual traits in determining leadership potential. Critics argue that there should be a balance between the influences of inherent traits, as suggested by trait theory, and learned behaviors, as suggested by behavioral theory. In other words, while behaviors can be learned, personal traits may still play an important role in how effectively those behaviors are applied in leadership roles.

Behavioral leadership theories focus on the idea that great leaders are made, not born. They emphasize that leadership is a learned behavior, not something dictated by innate qualities. Leaders who follow this approach focus on their actions, particularly in how they manage the group and work to fulfill the potential of their followers. These leaders are generally seen as having high ethical and moral standards, striving to improve the performance of the group while supporting individual growth. The belief is that leadership can be developed through training, practice, and observation, as noted by Amanchukwu et al. (2015). This makes behavioral theories of leadership more focused on observable actions and decisions rather than on internal, unchangeable traits.

Stogdil (1948) initiated empirical studies to identify key leadership behaviors by developing the leader behavior description questionnaire (LBDQ), which led to identifying two primary dimensions, initiating structure and consideration. Initiating structure is task-oriented and focuses on planning, organizing, and clarifying roles. While consideration is relationship-oriented leadership, which focuses on support, trust, and respect.

Halpin and Winer (1957**)** adapted the model for the educational and military context, and research further validated the LBDQ and extended the model's applicability to school principals and air force commanders. Schriesheim and Kerr (1974) reviewed and refined the LBDQ dimensions. While Yukl (2013) integrated the Ohio model into his multiple linkage model**,** connecting behaviors to outcomes like subordinate satisfaction and performance.

Judge et al (2004) meta-analysis confirmed that both dimensions correlate positively with leadership effectiveness and employee satisfaction. The foundation in transformational vs. transactional leadership models and emotional intelligence research**,** which echoes the structure consideration dichotomy.

Behavior leadership style studies identified two main behavior categories: employee-oriented leadership**,** focused on interpersonal relationships and employee needs. While production-oriented leadership emphasized technical aspects and task completion, which categorizes leadership style into four systems from exploitative authoritative to participative group (Likert 1961). Bowers and Seashore (1966) expanded the understanding of supportive and goal-facilitative leadership behaviors. Bass (1990) linked Likert's employee orientation to transformational leadership characteristics. Podsakoff et al. (1990) developed scales that were influenced by both the Ohio and Michigan models in measuring leadership behavior and outcomes.

2.4.3 Situational Leadership Theory

Situational leadership theory focuses on the idea that effective leadership is contingent on the specific conditions or circumstances of a given situation. According to this theory, leaders assess the task at hand and the maturity level of their followers to determine the most appropriate leadership style to apply, whether that be delegating, coaching, directing, or supporting. It emphasizes the dynamic relationship between the task requirements and the leader's relationship with followers, particularly in terms of their readiness and maturity to perform certain tasks. The leader adjusts their approach based on the situation, gradually giving more responsibility to followers as they demonstrate increasing competence and confidence in their tasks.

As followers mature in their ability to handle tasks, the leader reduces their level of control, trusting the followers to work more independently with less guidance (Nworie, 2012). This flexibility allows the leader to adapt their style to both the task complexity and the developmental stage of the followers, creating a more tailored and effective leadership approach.

The research conducted by Fiedler highlighted the importance of situational factors in determining leadership effectiveness. Fiedler's contingency model posits that leadership styles should vary depending on the specific needs and circumstances of the situation (Salihu, 2019). For example, in some situations, a more directive leadership style may be necessary, while in others, a more supportive or delegating

approach might be more effective. According to this theory, there is no one-size-fits-all leadership style. Success depends on the leader's ability to assess the situation and choose the most suitable leadership approach, considering both the quality of the leader and the situational context (Amanchukwu et al, 2015).

Situational leadership is particularly valuable in complex and changing environments, where leaders must constantly assess the needs of their followers and the demands of the task at hand to ensure continued effectiveness.

Hersey and Blanchard (l969) developed the original situational leadership theory. This model introduced management of organizational behavior, which proposed that effective leadership depends on the leader's ability to adjust their style based on the maturity (readiness) level of followers. With the core ideas of leadership styles that are telling, selling, participating, and delegating, and follower reader levels, which are based on ability and willingness

Blanchard et al (1993) later refined the model into situational leadership through their company, by updating terminology to directing, coaching, supporting, and delegating, which focused on the development level rather than just readiness. Hersey and Blanchard (l969) continued to develop and propagate the original model in organizational training contexts.

Vecchio (1987) tested SLT empirically and found mixed support, especially concerning follower maturity assessment. Graeff (1997) attempted to integrate SLT with path-goal theory, improving its theoretical rigor**.** Thompson and Glaso (2015) applied SLT to multicultural and virtual teams, addressing modern workplace changes. Northouse (2022) and Yukl (2013) discussed SLT's continuing influence and limitations in academic leadership texts.

SLT remains a popular leadership training framework, especially in education, healthcare**,** and business coaching. The model's adaptive leadership message resonates with transformational leadership, which is individualized consideration, agile leadership in tech, and dynamic environments. Critics point to the lack of strong empirical validation, but its intuitive appeal and flexibility maintain its relevance.

This leadership style contributes to this study in terms of flexibility by bringing emphasis to adaptability to the follower development level. It is also widely used in leadership development and coaching, and has influenced models like agile and coaching leadership

2.4.4 Contingency Leadership Theory

Contingency theory of leadership, like Situational leadership, argues that there is no single best way to lead; instead, the most effective leadership style depends on the specific situation at hand. This theory suggests that the leader's approach should be guided by a combination of the task at hand and the

motivations of the followers, with the context influencing the decision-making process. Contingency theory assumes that leadership styles must be adaptable to different situations to optimize performance. However, a potential drawback of this approach is that decision-making can be slow, as leaders may struggle to adapt to different styles or may appear ineffective if they shift styles too frequently (Tracker and Au, 2016).

Fiedler's Contingency Model emphasizes that leadership effectiveness depends on the "fit" between the leader's style and the specific situation. Fiedler argues that the best leader for a particular task is the one whose style aligns with the situation's demands. The model also posits that leaders can predict the success of their team by evaluating the quality of relationships with team members, as well as other situational factors, such as task structure and the leader's position of power (Mango, 2018). According to Bodla and Nawas (2010), Fiedler's model suggests that a good fit between leadership style and the environment increases the likelihood of success. In other words, there is a need for a balance between the leader's behavior and the contextual requirements of the task and team.

However, one of the criticisms of Contingency Theory is that it focuses on environmental and situational factors to the extent that it may overlook the leader's ability to change or adapt their style over time. Amanchukwu et al. (2015) argued that this theory acknowledges that no single leadership style is universally appropriate and that leadership should vary depending on contextual factors.

Contingency leadership theory also places significant importance on the followers' characteristics, asserting that leadership effectiveness is often determined by how well the leader aligns with the group's needs and the external environment. In this sense, the followers' readiness, the task at hand, and the leader's ability to adapt are all important factors that influence leadership success.

In the context of higher education, however, Fiedler's contingency model might face some challenges. Salihu (2019) pointed out that the theory's emphasis on leaders frequently changing their leadership style to suit different situations may not always be advantageous, especially in complex academic environments where consistency and stability in leadership are often crucial. Constantly shifting leadership styles might disrupt ongoing initiatives and affect institutional stability, making it difficult to implement long-term changes. Therefore, while contingency theory provides valuable insights into the role of situational factors in leadership, its applicability in higher education might require modification to ensure consistency in leadership.

The foundational figure in contingency leadership is Austrian psychologist Fred Fiedler. In 1967, he introduced the Fiedler Contingency Model, which emphasized that a leader's effectiveness is determined by the match between their leadership style and the situational context. Fiedler identified two primary

leadership styles, task-oriented and relationship-oriented. He proposed that situational favourableness, assessed through factors like leader-member relations, task structure, and position power, influences the success of a leadership style.

In the late 1960s, Hersey and Blanchard developed the situational leadership theory, which built upon contingency principles. Their model introduced a dynamic approach, suggesting that leaders should adjust their style based on the maturity level of their followers. This theory categorizes leadership styles into directing, coaching, supporting, and delegating, depending on the followers' readiness to perform a task.

Burns extended the contingency framework by integrating it with transformational leadership concepts. He emphasized the importance of leaders adapting their style to inspire and motivate followers, particularly in changing environments. His work highlighted the dynamic interplay between leaders and followers, influencing the development of adaptive leadership models. Building on Burns' work, Bass further developed the transformational leadership theory, incorporating elements of contingency theory. He proposed that effective leaders are those who can adapt their style to the needs of their followers and the demands of the situation. Bass's research underscored the significance of flexibility and situational awareness in leadership effectiveness.

Contingency Leadership Theory remains pertinent in contemporary leadership studies, particularly in dynamic and complex organizational environments. Modern applications emphasize the importance of adaptive leadership, where leaders assess and adjust their style based on situational factors such as team composition, task complexity, and organizational culture. This approach aligns with the increasing recognition of the need for flexible leadership in addressing diverse challenges. Furthermore, the integration of technology and globalization has introduced new variables into the leadership equation. Leaders are now required to navigate cross-cultural differences, manage virtual teams, and leverage digital tools, all of which necessitate a contingency-based approach to leadership.

The evolution of Contingency Leadership Theory, from its foundational concepts introduced by Fiedler to its expansion by scholars like Burns and Bass, reflects the growing understanding that effective leadership is context-dependent. In today's rapidly changing organizational landscapes, the principles of contingency theory provide valuable insights for leaders seeking to navigate complex and diverse challenges. By embracing a flexible and adaptive leadership style, leaders can enhance their effectiveness and contribute to organizational success

Bass (1975) later expanded on Burns’s theory and developed the Multi-Factor Leadership Questionnaire (MLQ), which measures leadership styles and behaviors. In his work, Bass (1985) refined and simplified Burns’s seven leadership factors into six key dimensions: charisma, intellectual stimulation, individual

consideration, performance rewards, monitoring, and laissez-faire leadership. According to Bass, these six elements help determine a leader's effectiveness and ability to inspire and manage their team.

2.5 Leadership Styles

Knowing one's leadership style is crucial for effective leadership, as it provides the foundation for a leader's behavior and decision-making. However, self-awareness alone is not enough for effective leadership. A successful leader must combine a well-understood leadership style with essential leadership skills (Lewi, 1993). Leadership skills are necessary to complement a leader's style, ensuring they can adapt to the demands of their role and effectively guide their team toward achieving goals.

Leadership theories have evolved, and one of the foundational contributions comes from Burns (1978), who introduced the distinction between transformational and transactional leadership. According to Burns, transformational leadership focuses on motivating and inspiring followers by appealing to their higher values, fostering commitment, and encouraging moral behavior. In contrast, transactional leadership revolves around exchanges or transactions between the leader and followers, where the leader emphasizes control, rewards, and punishments to achieve short-term goals.

In the context of higher education, transformational leadership is the preferred style, as it aligns with the need for motivation, vision, and innovation in academic settings (Mews 2019). Transformational leaders in Higher education are typically those who encourage creativity, foster collaboration, and inspire a shared vision, all of which are critical for navigating the complexities and challenges of academic institutions. On the other hand, transactional leadership, which focuses on maintaining order, managing day-to-day activities, and emphasizing performance goals, may not be as effective in fostering long-term innovation and institutional change in educational environments.

Munyeka and Ngirande (2014) highlighted that both transformational and transactional leadership styles play significant roles in commitment and performance outcomes within organizations, including higher education institutions. However, transformational leadership tends to produce more profound results, particularly when institutions are undergoing transformation or change. In this sense, transformational leaders are more likely to engage followers, encourage their growth, and lead them through challenges, whereas transactional leaders may excel in maintaining stability and meeting operational targets.

The leadership styles needed in higher education institutions are different from those required in business organizations, due to the unique goals, values, and structures inherent in academic settings. Higher education leadership often requires a deeper focus on collaboration, academic freedom, research innovation, and student development, which distinguishes it from more commercially driven leadership in business environments. While both transformational and transactional leadership can be effective in their respective contexts, the transformational style is generally seen as more appropriate in academic institutions due to the emphasis on long-term goals, innovation, and shared mission-driven values (Supaman et al, 2024).

Despite the preference for transformational leadership in higher education, it is worth noting that followers' preferences for leadership styles may differ. Some studies suggest that different follower groups may prefer a more transactional approach, especially in situations where clear expectations, structure, and performance metrics are needed. A future study might focus on examining followers' preferences for leadership styles in higher education to better understand the dynamics between leadership and follower expectations.

2.5.1 Autocratic Leadership Style

This leadership style is characterized by a concentration of authority, strict control over work methods, and unilateral decision-making (Bhodla & Nawaz, 2010). Leaders who adopt this style tend to be highly authoritative, with little trust in their subordinates. Communication follows a top-down, directive approach, where decisions are made by upper management without input or suggestions from lower levels. Performance is managed through fear and punishment, with rare rewards offered, while control remains the main focus of management. Emphasis is placed on outcomes rather than people. Research on this leadership style is limited, as it is not commonly used in higher education leadership.

In the early 1990s, autocratic leadership was the traditional approach in higher education institutions, but it was particularly uncomfortable for women, leading to fewer women seeking leadership roles Desjardins and Brown, 1991). This style is often employed during crises, where rapid decision-making is required without disagreement, and its main advantage is its high efficiency (Amanchukwe et al, 2015).

2.5.2 Democratic Leadership Style

This leadership style involves employees in the decision-making process, delegates authority, fosters participation in goal-setting and work methods, and uses feedback as an opportunity to mentor and guide employees (Bhodla and Nawaz, 2010). Research on this style in higher education is limited, possibly because it is assumed that such a leadership approach is not necessary given the nature of work in these institutions.

This style promotes creativity and collaboration, with team members playing an active role in decision-making. As a result, employees tend to experience high job satisfaction and productivity due to their involvement. It also supports the development of team members' skills. However, this approach is less effective during crises where quick decisions are needed, as it can lead to delays due to the need to gather input from all team members (Amanchukwe et al, 2015).

2.5.3 Laissez-Fare Leadership Style

This leadership style typically gives the group significant autonomy in decision-making and in how they carry out their tasks (Bhodla and Nawaz, 2010). According to Akinbode and Shuhun (2018), it is a hands-off approach where the leader delegates managerial responsibilities to subordinates, often avoiding change and shifting responsibility when it does occur. This style works best when all employees are professionals in their field (Jamali et al., 2022).

While this leadership style can be both highly effective and problematic, it allows the team to operate independently, with the leader refraining from making decisions and instead giving the team complete freedom to set their own goals and deadlines. It can be successful if the leader monitors performance and provides regular feedback. In this model, high productivity and job satisfaction are possible. However, it can lead to negative outcomes if the team lacks time-management skills, knowledge, or motivation to perform effectively (Amanchukwe et al., 2015).

2.5.4 Transactional Leadership Style

This leadership style is centered on setting clear goals and standards, rewarding performance that meets those standards, and punishing failure to meet expectations (Khan et al., 2023). According to Bhodla and Nawaz (2010), it is based on the fulfillment of contractual obligations, involving the setting of objectives, monitoring, and controlling outcomes. The leader clarifies roles and task requirements, ensures standards are met, and intervenes when there is noncompliance. Transactional leaders define tasks and monitor performance through a reward-based system.

Akinbode and Shuhun (2018) described this leadership style as "managerial leadership," with a focus on planning, supervision, and performance. These leaders concentrate on daily operations and seek compliance from their teams through a system of rewards and punishments. This approach is most effective in traditional organizations with a rigid structure and stable work environment (Jamali et al, 2022).

Under this leadership style, the organization compensates the team for their compliance. The leader has the authority to push team members if their work fails to meet standards, but rewards are given when success is achieved (Amanchukwe et al., 2015).

2.5.5 Transformational Leadership Style

Early research on leadership, as noted by Bhodla and Nawaz (2010), primarily focused on leaders' personalities, traits, and behavioral theories, with an emphasis on how leaders interact with others. However, it was Burns (1978) who introduced transformational leadership, a concept that captivated both researchers and practitioners. This leadership style is motivational, boosts morale, and fosters innovation. It focuses on guiding individuals toward achieving goals by leveraging their skills, efforts, and abilities (Khan et al., 2023). Bhodla and Nawaz (2010) described transformational leaders as charismatic, inspirational, intellectual, and considerate. These leaders are skilled at motivating and inspiring employees, valuing their contributions, and stimulating their intellectual growth.

According to Akinbode and Shuhun (2015), transformational leadership is oriented toward meeting both organizational goals and individual needs, encouraging relationship-based dynamics. This style empowers teams, instills confidence, and is particularly effective during periods of organizational change. In such times, transformational leaders create a sense of urgency, provide guidance, define a clear vision for change, communicate that vision to employees, and help embed new approaches within the organization. Scholars agree that transformational leadership results in committed subordinates, enhanced performance, greater innovation, and effective problem-solving. Additionally, these leaders are often recognized for their emotional intelligence, making them especially effective during times of transformation (Jamali et al., 2022)

2.6 Leadership Learning Framework

Holt et al. (2018) noted that while leadership training and development are recognized as key sources of competitive advantage, many organizations still struggle to develop employees who are fully prepared to step into leadership roles. Despite the growing emphasis on leadership training, it remains challenging to cultivate leaders with the right skills and abilities necessary for advancement. Effective organizations, however, offer tailored leadership training and development programs that help emerging leaders translate the organization’s vision, mission, and strategic goals into actionable plans.

Recent surveys show that organizations prioritize training and development at all levels. However, some surveys indicate that leadership development practices are faltering in certain organizations, suggesting that improving leadership development is essential to fostering effective leadership (Day & Dragoni, 2014).

Earlier research emphasizes that leadership training and development should involve understanding the individual's skill level, experience, personality, and the behavioral changes needed for success (Holt et

al., 2018). Clarke and Higgs (2014) argued that leadership development should adopt a systems approach, combining consistent training, skill-building, coaching, and mentoring. Research also shows that leadership training differs significantly from training in frontline management, with key components including coaching, mentoring, action learning, and feedback.

Thunnissen and Boselie (2024) highlighted that within the field of talent management, terms like "key," "star," or "high-potential" employees are often used. The recruitment and development of talent are seen as crucial investments for organizations, particularly as they prepare for an uncertain future. These investments aim to improve the cost-effectiveness of employee development while aligning individual goals with the organization's strategic objectives (Hashimi et al., 2021).

Despite advances in leadership training models, recent studies by Clarke and Higgs (2016) suggested that these models often fail to account for the need for differentiation in leadership training. Specifically, in higher education, leadership development has historically focused more on senior management rather than the academic aspects of leadership.

Thunnissen and Boselie (2024) argued that talent management remains an underexplored area in higher education, with few researchers examining it in depth. Hashimi et al. (2021) also found talent management to be limited in academia, although studies on the subject are seen as crucial for improving functional efficiency and enhancing competitive advantage. Ramaditya et al. (2022) pointed out that talent management is closely linked to an organization's ability to adapt to change, its competencies, and its technology-driven culture, which should support creativity, open communication, effective knowledge management, and core values like respect and integrity.

Figure 4 illustrates the leadership development process, emphasizing the importance of leaders understanding their own personality and behavioral traits. The diagram is divided into four components, illustrated by for different colour schemes separating eight tasks. The main foundation is three elements highlighted in light green in the upper part from the left. Knowing yourself is the first step used to identifying aspiring leaders. It helps them to understand themselves at a deeper level by understanding their aspirations, desires, strengths, and weaknesses. Without properly understanding themselves, it will be difficult to know and understand other people. The second step is to study leadership, it used to assist aspiring leaders in understanding leadership concepts and applications. aspiring leaders need to be up to date with new emerging theories, leadership standards, and principles. The third step is finding mentors and role models, which is crucial for aspiring leaders as they serve as real-life guides, motivators, advisors, and friends whom they can confide in for decision making

The fourth step in the light blue in the upper right, is on its own, is personal leadership development, which is ideal for aspiring leaders, for talent mapping and personal development, and gives them an idea of who they want to become. The three steps grouped have the same colour coding, which is darker blue in the lower right, used to assess the outcomes. The fifth step is the involvement of others used to reassess the aspiring leader, it is a critical stage as it involves implementation and evaluation. The sixth step involves others, used by the aspiring leaders to assess and analyze results by avoiding bias. The seven steps are objectively assessing outcomes, which involves critical final analyses of specific, objectively assessed outcomes. it is important for effective, specific personal development that will yield relevant and necessary results. The final step is reassuring yourself in dark green, at the bottom left, it serves as a model used for continuous reassessment, used to measure the personal development plan against outcomes that reflect key learning.

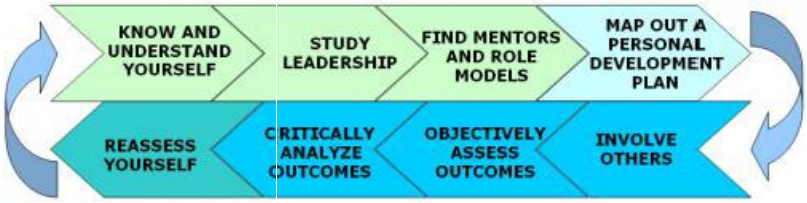


Figure 2.2: Leadership learnership framework. Source :(Salihu, 2019)

This self-awareness encourages continuous learning and development, supported by mentoring and coaching. It also highlights the need for leaders to regularly assess and reflect on their training and development, coaching, and mentoring outcomes. This self-reflection process enables leaders to pass on their knowledge and experiences to emerging leaders, contributing to a cycle of ongoing growth and development.

2.6.1 Leadership Training and Development

Leadership training is a structured learning process aimed at improving specific job-related knowledge, skills, and abilities to boost performance, providing a foundation for effective job execution. It is typically used to introduce leaders to new policies and technologies or to enhance overall performance. Such training encourages personal growth and helps unlock individual potential (Day et al, 2021).

On the other hand, leadership development focuses on handling challenging situations without prior knowledge of a solution. It involves managing complex changes linked to personal behavior and addressing problems that can't be resolved with technical expertise. The goal of leadership development is to cultivate the ability to adapt and respond to complex, unfamiliar situations without relying on specific technical skills (Day et al, 2021).

2.6.2 Leadership Coaching and Mentoring

In the evolving business environment, leaders can gain a competitive advantage by continuously improving their leadership skills. This progress relies heavily on leaders sharing and transferring their knowledge through leadership and coaching, particularly in mentoring both emerging and established leaders (Clarke and Higgs, 2014).

Coaching is a practical, goal-oriented approach that focuses on behavior change. It can be a short-term intervention aimed at developing specific leadership abilities or a more extended process involving multiple sessions over time. Effective mentoring, on the other hand, encourages collaboration to assess development tasks, challenge existing limitations, and explore new possibilities to support goals and ensure sustainable growth. Mentoring is typically a long-term commitment where senior leaders guide the personal and professional development of junior leaders. Organizations are increasingly formalizing these approaches as part of their leadership development strategies (Broome and Hughes, 2004).

Day (2015) emphasized that both coaching and mentoring are crucial at all leadership levels, especially in shared leadership contexts, where leaders collaborate and interact with subordinates. These practices are vital for improving team performance. Sidle et al. (2016) argued that the combination of coaching and mentoring significantly impacts both individual leadership performance and organizational effectiveness. Coaching, in particular, helps provide honest feedback that reinforces the knowledge and self-awareness acquired during the development process.

2.6.3 Leadership Talent Management

Talent management is a strategic process that focuses on attracting, developing, engaging, retaining, and deploying talent within an organization. The subjective approach centers on identifying and nurturing individuals with high potential, while the objective approach views talent as a set of characteristics such as skills and abilities (Thunnissen and Boselie, 2024). Successful talent management depends on creating a supportive environment, and its implementation is a key responsibility of organizational leadership (Ramaditya et al, 2022).

In the academic sector, the lack of a clear definition for talent management leads to challenges in identifying the importance of strategic positions for the institution’s success. There are critical questions about whether talented employees can be identified, motivated, and developed to possess the skills, knowledge, experience, and motivation needed for key roles. Additionally, there is uncertainty about how talent management can be integrated into the institution’s daily operations. Talent management should be applied at both executive and managerial levels to ensure the organization’s success (Hashimi et al, 2021).

Ford et al. (2010) differentiated between talent and talent management: talent refers to individuals who possess top-tier leadership and management skills, while talent management involves the processes of identifying, recruiting, developing, and retaining people to help them reach their full potential. Given the high demand and low supply of skilled managers and leaders, competition for recruiting and retaining the best talent is intense.

2.7 Demographics in Leadership

This study aims to explore whether individual demographic factors such as age, gender, race, culture, and nationality influence leadership competency in higher education. It will also examine the core values, assumptions, and beliefs that shape leadership perspectives. Additionally, the study will assess various leadership styles, development processes, and behaviors.

2.7.1 Personal Leadership Model

The leadership and management style within an institution is a key factor in addressing challenges in higher education. Gleason (2018) raised the question of whether higher education leadership has been transformed by the Fourth Industrial Revolution(4IR), and if this transformation is driven by issues such as social justice and educational inequality.

Antonopoulou et al. (2021) conducted a study examining the relationship between leadership styles and digital skills, specifically focusing on digital leadership. They found that transformational leadership is more common than transactional leadership. Additionally, gender does not appear to influence the leadership style, but male respondents were found to engage more with digital leadership compared to their female counterparts.

2.7.2 Professional Leadership Model

Core competencies are a combination of knowledge, skills, and abilities that, when integrated with technology, enable an organization to perform effectively and gain a competitive advantage. Successful leaders are those who are dedicated to developing practical skills and remain open to new opportunities. Competent leaders possess emerging leadership and management skills such as interprofessional diplomacy, agility, and emotional intelligence. Effective leaders also demonstrate a high level of integrity in their ethical and moral behavior. Self-assessment tools have become essential for leaders in higher education, allowing them to identify their strengths and weaknesses for continuous development (Wisniewski, 2018).

Dawson (2018) conducted a study highlighting the skills and qualities required by leaders and managers in higher education, emphasizing the need for skills development to enhance capacity. The study identified a particular need for improvement in financial, risk, project, and operational management skills.

Additionally, managers—whether in academic or operational roles—must improve their resource management abilities.

Bryman and Simon (2009) explored the experiences and perceptions of higher education leaders, suggesting that more research is needed on leadership ethics, specifically regarding integrity. They argue that leadership in higher education should not only focus on skills and abilities but also consider how leaders manage their subordinates. Leadership principles that work in other industries may not be applicable in higher education, as its leadership models are distinct and unique.

Mariah (2014) emphasized that certain competencies are critical for maintaining sustainable development in higher education institutions. Senior leaders play a key role in organizing and planning training programs to develop the necessary competencies in leaders and managers under their supervision.

2.8 Technology Leadership

Technological advancements have significantly transformed how we communicate and how newer generations enter the job market, creating excitement around new workplace innovations (Oliveira et al, 2018).

According to Oliveira et al. (2018), the modern work environment has become a psychological battleground. Younger generations, who are tech-savvy and capable of multitasking, have an advantage. However, while they are highly competent in technology, they often lack essential soft skills, emotional intelligence, and leadership abilities. Murthy et al. (2024) further suggested that factors such as education level and age impact IT competency and that generational differences, attitudes, and behaviors also play a role in shaping IT operations and leadership

Murthy et al. (2024) argued that the technology-driven world requires capable leadership in global IT operations for organizational success. Effective leadership is essential for shaping and implementing strategies that enable successful IT operations. Leadership styles also influence global technology management and human resources. Critical technological advancements, such as cloud computing, artificial intelligence, and digital transformation, are vital for global operations, and leadership plays a key role in leveraging these technologies to gain a competitive edge.

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In managing IT operations, robust technologies are necessary to handle the complexity of modern environments through strategies like cloud computing, AI, and digital transformation. Leaders must navigate challenges such as cultural differences, regulatory compliance, and technological complexities. To thrive in this environment, effective leaders must adopt new technologies, encourage innovation, provide clear strategic direction, and support change management processes (Murthy et al, 2024).

2.8.1 Cloud Computing

This technology enables organizations to expand their IT capabilities on a global scale. Leaders must understand how to effectively integrate and navigate this technology within their organization while managing potential risks, such as data security concerns, and ensuring compliance with local regulations (Raman, 2019).

2.8.2 Artificial Intelligence (AI) and Automation

This technology enhances efficiency and reduces manual tasks. Leaders play a critical role in guiding teams through their implementation by ensuring employees are properly trained and that the technologies align with the organization’s strategic goals (Raman, 2019).

2.8.3 Digital Transformation

This technology involves using digital tools to drive fundamental changes in company operations. Leaders must demonstrate decisive leadership by setting clear goals, securing stakeholder approval, and ensuring that the strategy aligns with the organization's overall objectives (Raman, 2019) .

2.8.4 Fourth Industrial Revolution (4IR)

The Fourth Industrial Revolution (4IR) is marked by the pervasive influence of the Internet in nearly every aspect of life. As a result, teaching and learning in education must evolve, with social media and technology becoming essential tools that are highly relevant in the 21st century. Leadership roles now require leaders to be technological visionaries who drive and embrace the ongoing digital transformation. In the 21st century, technology must be actively integrated and practiced (Raman, 2019).

2.9 Barriers to Leadership Learning

Leaders worldwide are facing significant challenges, including global economic struggles, rapid changes in operations, and shifting strategic realities, all of which are testing their existing skills and capabilities. These challenges demand that leaders at all levels learn and adapt at an accelerated pace. The need for continuous learning becomes even more crucial when organizations undergo major transformations such as restructuring, downsizing, improvement initiatives, or technological advancements. Scholars have identified skill gaps among managers and found that many leaders fail to meet the required results due to a lack of essential management skills (Longenecker, 2010).

Effective leaders must develop the ability to navigate through uncertain and volatile times by being proactive rather than reactive. The skills and agility to adapt quickly are vital for organizations to pivot effectively in response to change and remain vigilant in the face of ongoing challenges (Schoemaker and Krupp, 2014). Given the increasing complexity and challenges within organizations, there is a pressing need for adaptive leaders and critical thinkers (Oberg and Andonora, 2019). Various barriers to leadership learning are also explored and discussed in this context

2.9.1 Time Pressures

As leadership workloads increase, leaders often struggle to prioritize self-development. They find it challenging to find time for reading, attending workshops, or participating in seminars, as they are consumed by urgent and pressing work demands (Schoemaker and Krupp, 2014).

2.9.2 Self Awareness

Leaders often lack awareness of skill gaps, and the learning needs to be brought on by rapid organizational changes. This lack of awareness can lead to significant problems in leadership, as they remain unaware of their deficiencies in skills, which may result from shifts in responsibilities, reporting structures, new technologies, or changes in processes and procedures. Some leaders may also suffer from a "know-it-all" syndrome, which hinders their ability to grow and learn. This overconfidence can prevent them from engaging in self-reflection and self-assessment, further limiting their development (Oberg and Andonora, 2019).

2.9.3 Lack of Performance Feedback and Coaching

Leaders often lack consistent feedback and coaching from their superiors, as those in higher leadership positions struggle to find time in their busy schedules due to their increasing responsibilities. As a result, they are unable to provide the necessary guidance to emerging leaders. This lack of support leads to frustration among leaders who feel unsupported by their superiors, further contributing to feelings of ineffectiveness and disengagement (Longenecker, 2010).

2.9.4 Lack of Motivation, Accountability, and Development

Some leaders are aware of their skill gaps but lack the motivation or willingness to address these deficiencies. Despite recognizing the need for improvement, they fail to take proactive steps to acquire the necessary skills through learning and development. This lack of accountability for their growth results in stagnation, stifling their development. As a result, these leaders are neither motivated to improve nor held accountable for their progress, which limits their effectiveness and growth potential (Oberg and Andonora, 2019).

2.10 Conceptual Framework

Developing a conceptual framework for leadership and management competencies at the University of KwaZulu-Natal (UKZN) is essential for understanding and enhancing the effectiveness of its leaders and managers. This framework aims to identify the key factors influencing leadership and management competencies within the university context. This study tested six independent variables and one dependent variable to show the relationship between the variables.

1. Independent Variables:

- **Leadership and Management Skills and Abilities**
  H_{01}: Leadership and management skills and abilities do not affect their competencies
- **Training and Development**
  H_{02}: Training and development do not affect leaders' and managers' effectiveness
- **Leadership and Management Barriers**
  H_{03}: There is no significance in leadership and management barriers that relate to management competencies
- **Management or Business Background**
  H_{04}: There is no significance in management or business background to leaders' and managers' competencies
- **Demographic Factors (Race, Gender, Age, Work Experience, Management Background)**
  H_{05}: There is no significance in race, gender, age, work experience, and management background to managers' and leaders' competencies
- **Leadership Style and Technology Leadership**
  H_{06}: There is no significance in leaders' and managers' style and technology leadership

2. Dependent Variable:

- **Leadership and Management Competencies**

Figure 5: is the conceptual framework that illustrates the relationship between the variables, each independent variable is hypothesized to influence the dependent variable, and the arrows indicate the direction of the hypothesized relationship

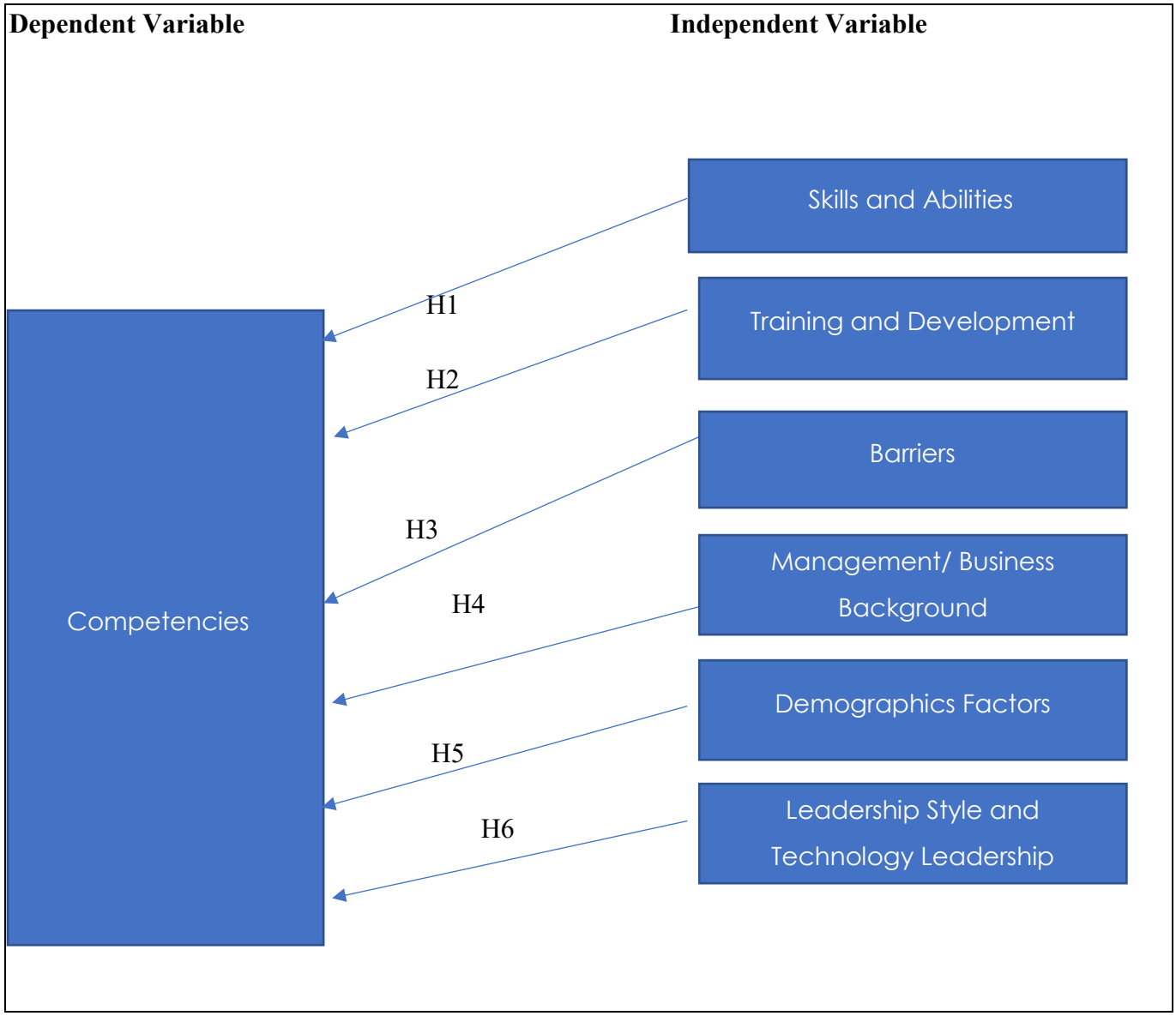

Figure 2.4: Leadership and Management Conceptual framework: Source (Sichela 2024)

2.11 Summary

This chapter presents the problem statement, with a primary focus on the challenges facing higher education. The research question centers on leadership and management theories, models, and frameworks. The chapter analyzes and reviews the observations and methodologies employed by other researchers in previous studies, highlighting common themes, limitations, and gaps in the existing literature. The theoretical, conceptual, and empirical reviews were analyzed through leadership theories, styles, learning frameworks, demographics, technology, and barriers.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

In the previous chapter, an empirical and theoretical review was conducted, examining various leadership theories, leadership styles, leadership learning, and the barriers to effective leadership. This chapter focused on the research methodology. It outlined and explained the methodology used in this study, aligning it with the research questions, objectives, and data collection methods. The chapter also detailed how sampling will be conducted and how the hypothesis will be tested. It concluded with an explanation of the research strategy employed in the study.

3.2 Research Aim and Objectives

The aim and objectives of this study are to explore the leadership and management competencies at the UKZN, particularly in the context of changes emerging within the institution of higher learning. Research can be categorized as either applied or fundamental. Applied research seeks to find solutions to specific challenges faced by communities or organizations, while fundamental research focuses on generalizing and formulating theories, often gathering knowledge for its own sake, referred to as pure or basic research (Kothari, 2004, p. 65).

For this study, applied research was the chosen methodology, as its objective is to identify lasting solutions to the challenges faced by leadership and management at the UKZN. This will help the institution align its leadership with its vision, mission, and goals (Kothari, 2004, p. 65). The purpose of this research is to answer the research questions using scientific procedures, uncovering truths that have yet to be discovered

3.3 Research Methodology

Research methodology refers to the systematic approach used to solve research problems. It provides the tools and techniques needed to examine a subject objectively. The research process consists of a series of actions or steps that are essential for conducting the research effectively and in the correct sequence. Saunders' Research method was used as a guide to discuss the research methodology for this study.

In this study, the five stages were explored and discussed, with research philosophy, this study used positivism, to explore research questions and test the hypotheses using statistical methods as a tool. SPPS and ANOVA were used to interpret data. The research approach used was deductive, as the study needed to develop hypotheses and test probabilities.

The mono method was used by conducting only a form of quantitative study by sending surveys to UKZN leaders and managers through primary data. Online questionnaires were sent through the UKZN Notice. The cross-sectional design was used to investigate whether the UKZN leaders and managers will be able to lead the institution during transformation.

Figure 6 illustrates the stages involved in the development of research work using onion layers, by giving a detailed description layer by layer. Research philosophy is the outermost layer; it sets the stage for the research process by defining the method adopted for the study. A research philosophy refers to the set of beliefs concerning the nature of the reality being investigated. It is different from the goals of research, but it is how to achieve the goals of the study by defining the knowledge that is investigated. In the study, the researcher seeks to define the competencies of UKZN managers and leaders by testing their skills and abilities(Saunders et al, 2007).

Three main philosophies signify the research process it is ontology, which is more or less the study of reality, and epistemology, which is scientific research. Epistemology helps find information that you can prove without a doubt, it proves facts (Bryman, 2012). It includes positivism, realism, and interpretivism. Positivism uses research questions that can be tested. While realism allows one to use new research methods, though realism is similar to positivism, but it does not support scientific methods. Interpretivism helps interpret how each person sees their actions, it helps to understand people's culture and their social life participation. Axiology helps you learn how values and opinions impact the collection and analysis of research (Goddard and Melville, 2004).

The research approach is the next step, which includes deductive and inductive. A deductive approach develops hypotheses from pre-existing theory and formulates a research approach for testing. The deductive approach is considered to be more suitable for the positivist approach since it allows for hypothesis formulation, and the statistical testing results accept a level of probability. It uses questionnaires to create an observational understanding, which allows comparison of different understandings through empirical data, and data gathering helps reject or accept questions. The Inductive approach allows research to create a theory rather than accepting a pre-existing approach, like in deductive approach. It is a move from specific to general; no framework informs data collection, nor research focus that can be formed after data collection. In this approach, new theories are generated, and data analysis can be used to find whether existing theories are supported. It is normally used in qualitative research (Kothari, 2004).

The third step is the research strategy adopted. This approach is used to carry out work, this approach could be experimental, action, case study, interviews, surveys, or systematic literature review. Experimental research creates research processes that examine experimental results against expected results. Survey research is linked to deductive research; they tend to be used in quantitative research, which involves sampling a representative proportion of the population, and it permits the collection of vast data that will be used to answer research questions. Case study research focuses on one or more

people or a single area, this strategy is more useful in financial research. Action research is common in teaching or nursing, this approach is normally used to find a solution to a problem (Saunders et al, 2007).

The fourth step identifies is research choice helps identify if both quantitative and qualitative methods can be used at the same time or only one methodology. On this stage, there are three methods: mono, mixed, and multi-method. The mono method only method used to gather information; it could either be quantitative or qualitative research. Mixed method permits the use of both quantitative and qualitative methods simultaneously. In a multi-method method the research is divided into segments with a specific data set; however, it does not combine methodologies (Kothari, 2004).

The fifth step represents the time horizon in terms described the required time for a specific project; the time horizon is made up of cross-sectional and longitudinal. A cross-sectional design is used when the investigation is concerned with the study of a particular phenomenon at a specific time. The longitudinal refers to the collection of data repeatedly over an extended period. It is used where important factors of the research change over time (Gooddard and Melville, 2004).

The final step is data collection, which contributes significantly to the study's overall reliability and validity. This layer explains how data is collected and analysed. It is where primary and secondary data are collected. Primary data is first-hand data that is collected through instruments like questionnaires, oral or written interviews. The secondary data is the work of other researchers(Bryman, 2012).

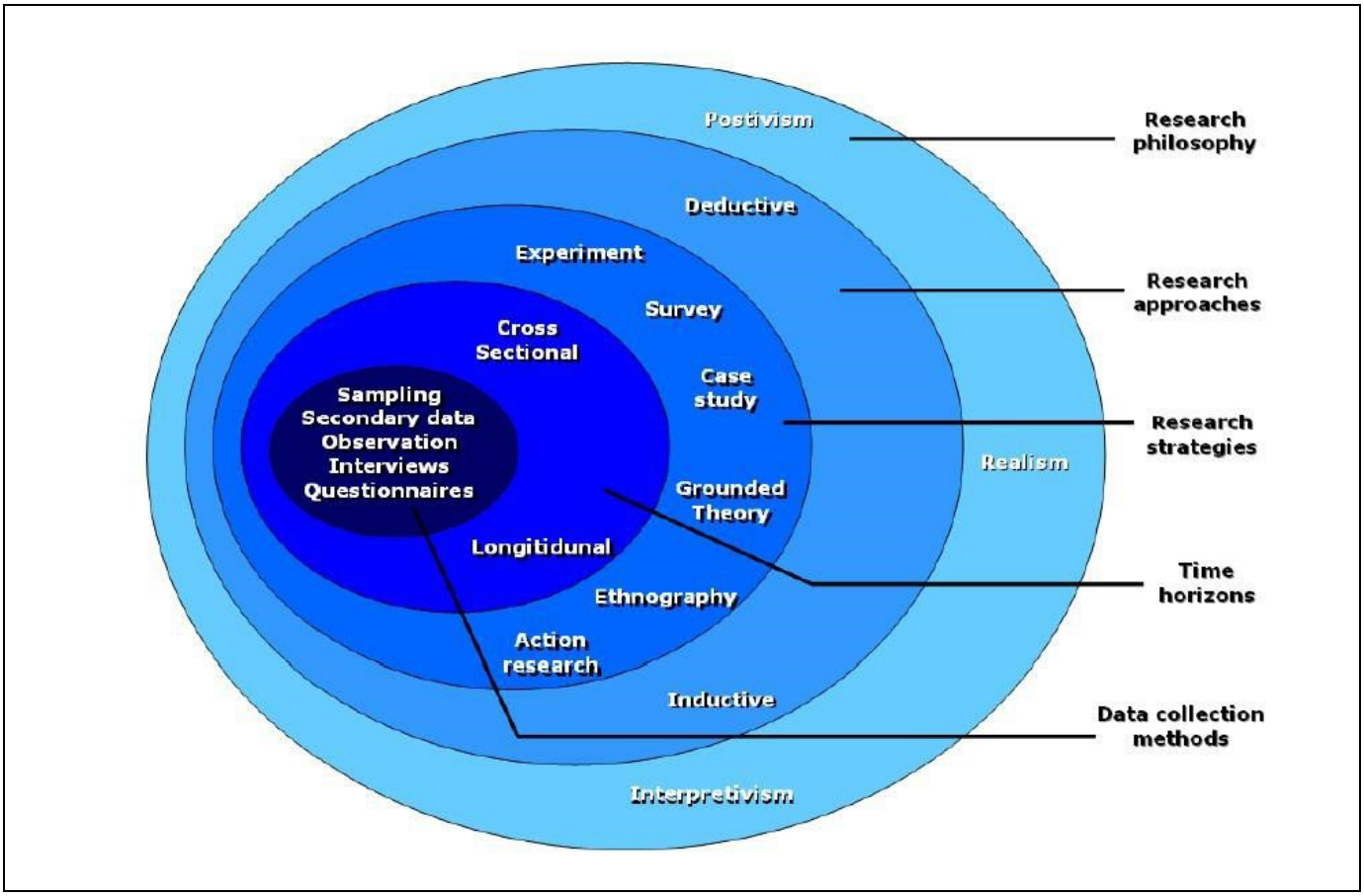

Figure 3.1 Onion Research Methodology Source : (Saunders et al, 2007)

3.4 Research Design

A research design is an arrangement of conditions for the arrangement and collection of data that aims to combine research purpose relevancy with the economic procedure, it is a conceptual structure used to conduct research, and it consists of a research blueprint for collection, measuring, and analysis of data, it includes the research outline writing, hypothesis, operational implication up to the final analysis of data (Kothari, 2004)

This study adopted a quantitative research approach using a descriptive and correlational design. This design allows for both the measurement of leadership competencies among managers at the UKZN and the analysis of relationships between competencies and factors such as leadership styles, training and development, experience, or management level.

3.5 Population and Sampling

A population refers to the total set of items or units within a field of inquiry. It can be either finite or infinite. A finite population consists of a fixed number of elements that can be measured and calculated, represented by the symbol *N*. In contrast, an infinite population theoretically cannot be fully observed. A parameter is a characteristic that describes the population (Kothari, 2004, pg. 80). In this study, a finite population was used to derive the sample.

A sample design is a plan outlining how to obtain a sample from a given population, detailing the number of items to be included in the sample. Sample error refers to the random variation between the sample estimate and the true population parameter, which can vary depending on the sample design and size. A statistic is a characteristic of a sample used to measure central tendencies, such as the mean, median, and mode. Statistical research results are instrumental in designing research, analyzing data, and drawing conclusions.

3.5.1 Target Population

The rational population refers to the logically defined group of individuals who hold leadership and managerial roles within the UKZN. This population is typically selected based on their strategic influence, decision-making responsibilities, and organizational leadership functions within the institution. Leaders and managers at UKZN are critical stakeholders as they are responsible for formulating and implementing university policies. They influence institutional culture, strategy, and operations. They act as change agents, particularly in response to evolving educational demands, technology, and national higher education policies

The leaders and managers at the UKZN have been selected as the target population for this research due to their central role in shaping and implementing institutional strategies, policies, and operations. These individuals hold key decision-making responsibilities and are directly involved in managing academic, administrative, and support functions within the university. Studying this group provides valuable insights into leadership practices, organizational effectiveness, and institutional change, making them highly relevant for research focused on governance, leadership development, and management processes in higher education.

The population includes executive management, the vice-chancellor, deputy vice-chancellors, registrar, and deans. College and School-level leadership and the heads of Schools, Administrative Management: the directors of units (HR, Finance, IT), Campus Managers. Middle Management, the department heads, program coordinators, and operations managers. The population focused only on those with designated leadership or managerial titles. Involved in strategic planning, resource allocation, or people management who are actively serving at UKZN during the research or evaluation period.

The population size was obtained from the institution's organizational structure on the UKZN website. Figure 1: 4 UKZN Academic Organizational Structure 2012-2024 and Figure 1:2 Professional Services Organizational Structure 2012-2024. The population size was obtained from the institution's organizational structure on the UKZN website. Figure 1: 4 UKZN Academic Organizational Structure 2012-2024 and Figure 1:2 Professional Services Organizational Structure 2012-2024

Academic Staff Leadership

1 Vice Chancellor, 4 College Deputy Vice Chancellors, 4 College Research Deputy Vice Chancellors and 4 College Teaching and Learning Deputy Vice Chancellors, and 19 Deans and Heads of Schools

Professional Staff Leadership

1 CFO, 1 Registrar, 3 Executive Directors, 10 Divisional Directors, 4 College Directors, 20 Divisional Managers, 18 College Managers, and 17 School Managers

Unit	Vice Chancellor	Colleges	Research	Teaching and Learning	Dean and Head of School	Total
Vice Chancellor	1					1
Deputy Vice-Chancellor		4	4	4		12

Dean and Head of School					19	19
Total						**32**

Table 3.1 Academic Leadership Source: (Sichela 2024)

Unit	Divisional Head	Divisional Director	College Divisional Directors	Divisional Manager	College Managers	School Managers	Total
CFO	1						1
Executive Directors	3						3
Registrar	1						1
Directors		10	4				14
Managers				20	18	17	55
Total							**74**

Table 3.2 Professional Leadership Source: (Sichela 2024)

3.5.2 Sampling Method

Since every individual in the population has an equal chance of being selected for this study, a simple random selection method was used. This approach is fair, straightforward, and easy to implement, as each person has an equal opportunity to be chosen. The selection process requires a clear and up-to-date list of all individuals in the population (Brendt, 2020).

The participants were selected based on their availability, ensuring that each unit comprising both academic and professional staff was represented in the sample. The simple random sampling method was used; every member of the population has an equal chance of being chosen. It is a quantitative study; therefore, the population representative is unbiased.

3.5.2.1 Sample Selection and Size

The sample size must be fixed to ensure that valid conclusions can be drawn from the study. It is important to have specific information about the issues being investigated within the population. Additionally, the sample size should allow for sub-classifications to be made for further analysis, ensuring accuracy and minimizing deviations. The size of the sample also has cost implications, which must be considered in the investigation (Singh & Masuku, 2014). A statistical formula was used to determine the sample size:

$$n = \frac{N}{1 + N(e)^2} \quad \frac{106}{1 + 106\ (0.05)^2}$$

=84

Where n=sample size, N = population size, and e =confidence interval

N=106

e=0.05 (margin of error)

Figure 3.2 Random Sample formula (Kothari, 2004)

In this study, 84 is 95% close to the overall population, and 95% confident that the results will accurately fall within the 0.05-confidence interval. The Academic staff have the skills and abilities, business and management educational background required to manage the University of KwaZulu-Natal compared to the Professional staff.

3.6 Data Collection

Data collection began once the research problem was clearly defined and the research design has been outlined. It involved both primary and secondary data. Primary data refers to new, original data that is collected for the specific study, while secondary data consists of data that has already been collected by others and processed through statistical methods. Primary data is typically used in experimental research and is obtained through observation or direct communication, whereas secondary data is typically used for compiling existing information and performing analyses (Kothari, 2004).

In this study, an inferential statistical technique was employed to analyze primary data. Surveys were conducted using questionnaires distributed to UKZN management participants. The design of the questionnaires was informed by a comprehensive literature review on leadership competencies in higher education, leadership theories, and research objectives. The survey assessed both personal demographic information and professional details related to education and experience.

The study included closed-ended questions to gather data on personal and professional experiences. For evaluating higher education competencies, a Likert-type scale was used, where participants are asked to rate the importance of each statement on a scale from one to five, with one being "least important" and five being "most important." Participants were also asked to indicate their level of agreement with each statement, ranging from "strongly disagree" to "strongly agree." The questionnaires were divided into two sections: one focused on demographic and professional information, and the other on leadership competencies and perceptions.

Section 1

Analyze the Demographic, Professional Experience, and Education Background variables using the characteristics of the participants in percentages and frequencies.

Section 2

The study analyzes the competencies of academic and professional management staff concerning various skills and abilities, using a 5-point Likert scale to assess the perceived importance of these competencies. Participants were asked to rate how important they believe different aspects of their roles are, with ratings ranging from "very important" to "low importance." They were also requested to indicate their level of agreement with given statements, using a scale from "strongly agree" to "strongly disagree."

The research objectives were addressed in both sections of the questionnaire (Appendix 5). Section One focused on demographic information, professional experience, and educational background of both academic and professional management staff.

Section two examined competencies related to leadership skills, technological proficiency, and training and development within the leadership and management team at the University of KwaZulu-Natal (UKZN). This section assessed the capabilities of UKZN's leaders and managers in terms of their skill sets, leadership effectiveness, and readiness to lead technological advancements and manage ongoing development within the institution.

3.7 Data Analysis

The term "analysis" refers to the process of computing specific measures and identifying patterns of relationships that exist among different data groups. During the analysis process, any relationships, differences, or conflicts with the original or newly proposed hypotheses should be subjected to statistical tests of significance. These tests help determine whether the data is valid enough to support any conclusions (Kothari, 2004).

3.7.1 Processing of data

No	Step	Process
1	Data Editing	The process of examining the collected raw data, especially in surveys, detects errors and corrects omissions where possible. Editing involves scrutiny of completed questionnaires, This is done to ensure the data is accurate, consistent, and uniformly entered and well-arranged to facilitate coding and tabulation

2	Data Coding	This step refers to the process of assigning numbers or symbols to put data into categories or classes, and such categories and classes should be according to the research problems
3	Data Classification	This process is used to arrange data into groups or classes based on common characteristics. It can be classified either according to attributes or into class intervals
4	Data Tabulation	This process is used when a massed data is assembled, the researcher needs to arrange the data into logical and concise order, it summarizes the raw data and displays it in a compact form in the form of statically tables

Table 3.3 Processing of Data Source: (Sichela 2024)

3.7.2 Types of Analysis

Analysis can be classified into different types based on the number of variables involved. Descriptive analysis focuses on the distribution of a single variable, while inferential analysis (also known as statistical analysis) is used to draw conclusions or make predictions about a population based on sample data. There are also different approaches to analyzing variables:

- Unidimensional analysis involves the study of one variable.
- Bivariate analysis involves the study of the relationship between two variables.
- Multivariate analysis involves examining more than two variables simultaneously.

In this study, multivariate analysis was used for data analysis, as it allows for the simultaneous analysis of multiple variables from the sample observations. Multivariate analysis is ideal for understanding the complex relationships and interactions between various factors that could affect the outcomes of the study. The following analyses are part of the multivariate approach used in this study: a list of specific analyses follows, if applicable.

Multivariate Analysis of Variance or (Multi-ANOVA)

This analysis is an extension of two-way ANOVA; the ratio of the group variable to within-group variance is worked out on a set of variables (Cohen, 1988). SPPS version 28 ANOVA is used for this statistical analysis of data

Canonical Analysis

This analysis is used for both measurable and non-measurable variables for the simultaneous prediction of a set of dependent variables from joint covariance with a set of independent variables (Kothari, 2004).

3.7.3 Statics in Research

The role of statistics in research is to function as a tool in designing research, analyzing data, and drawing conclusions. It is used to reduce the large volume of raw data so it can be read easily and used for further analysis. As mentioned earlier, statically research uses classifications and tabulations, and the two major areas of statistics are descriptive and inferential analysis (Kothari, 2004)

Important statically research measures are used to summarize data by measuring a central tendency or statically averages, measuring dispersion, measuring asymmetric (skewness), measuring relationships, and others. When measuring the central tendency, the arithmetic average of mean, mode, and median are the most important, while for comparison purposes coefficient of standard deviation or the coefficient of variance is mostly used. The measure of skewness and kurtosis is based on mean and mode or mean and median; other skewness measures are based on quartiles or method of moments, and kurtosis is also used to measure the peakedness of the distribution frequency (Kothari, 2004).

3.8 Location of the Study

The UKZN aims to be the Premier University of African scholarship with a global reputation. It aspires to be the institution of choice, guided by its core values, encapsulated in the REACH principles: Responsibility, Excellence, Accountability, Client Orientation, and Honesty. UKZN is internationally recognized for its excellence in research, learning, and innovation, which contribute to both local and global society and environmental well-being. The university has consistently ranked among the top five research-led universities in both Africa and South Africa, based on research outputs, quality, scientific impact, and international reputation (UKZN Strategic Plan, 2023).

In the 2022–2023 edition of the Global 2000 list, UKZN was ranked in the top 25% of universities worldwide, securing the 484th position out of 19,784 universities globally. Its rankings include 497th in education, 361st in employability, and 475th in research. These achievements place UKZN 4th in Africa and in South Africa. The rankings reflect the university's commitment to good governance, academic talent, research productivity, quality programs, and the contributions of its high-caliber staff and students

3.9 Ethical Clearance Consideration

In academic research, particularly when conducting studies involving human participants, ethical approval is essential. However, despite the increasing emphasis on research having ethical approval, many studies lack clear ethical declarations, and where they are provided, it is often left to the discretion of the author. There are no standardized guidelines for presenting ethical statements in research papers (Squires et al., 2021). This has led to variability in how ethics declarations are addressed, despite growing awareness of the importance of ensuring ethical standards in research.

For this study, ethical clearance approval was obtained from the UKZN Ethics Approval Committee before the commencement of data collection, following the university's ethical requirements. The process of obtaining ethical clearance involves a rigorous and thorough review of the research plan by an ethics committee to ensure that the study adheres to established ethical guidelines, especially regarding how research participants are treated.

In addition to ethical clearance, the researcher was required to obtain gatekeeper approval. The gatekeeper Appendix 2, is typically an authority within the institution, such as the UKZN Registrar, who grants permission for the study to be conducted within the university. In this case, the researcher received the necessary approval to conduct the study at UKZN, and permission was granted to distribute the questionnaires via the university notice system.

As part of the ethical process, participants were informed about the study and asked to sign a consent form Appendix 1 before completing the questionnaires Appendix 5. This ensures that participants are fully aware of the study's purpose, procedures, and their rights, including their right to confidentiality and voluntary participation.

This careful adherence to ethical guidelines not only ensures the integrity of the research process but also protects the rights and well-being of participants, contributing to the overall credibility and validity of the study.

3.10 Validity and Reliability

Validity is a critical measure that indicates the degree to which a research instrument accurately measures what it intends to measure. It refers to the extent to which the instrument reflects the true differences being tested, and the results are relevant to the research problem. The validity of a study depends not only on the appropriateness of the measuring instrument but also on the researcher's judgment and how closely the instrument aligns with the study's objectives and context (Cohen, 1988)
).

Reliability, on the other hand, refers to the consistency of results produced by a measuring instrument. An instrument is considered reliable if it produces consistent, stable, and repeatable results over time. However, it's important to note that while a reliable instrument does not necessarily guarantee validity, validity is a prerequisite for reliability. This means that an instrument can be reliable (producing consistent results), but it is not valid unless it measures what it is supposed to measure (Cohen, 1988)
).

To assess the reliability of the management competency skills survey used in this study, the alpha coefficient (also known as Cronbach's alpha) was calculated. This is a measure of internal consistency, which determines how closely related a set of items is as a group.

The alpha coefficient ranges from 0 to 1, with higher values indicating better reliability. The reliability coefficient can be interpreted as follows:

- If the alpha coefficient is less than 0.50, it indicates poor reliability, and the null hypothesis (H_0) will be rejected. This would suggest that the instrument is not consistent enough to measure the variables effectively.
- If the alpha coefficient is between 0.50 and 0.70, it suggests moderate reliability, and the null hypothesis (H_0) would be considered significant. This means that the instrument shows some degree of reliability, but it may still need further refinement.
- If the alpha coefficient is greater than 0.70, it indicates strong reliability, and the null hypothesis (H_0) will be accepted. This would suggest that the instrument is reliably measuring the intended competencies.

These reliability tests were crucial in determining whether the instrument (questionnaire) used in this study is a trustworthy tool for assessing the management competencies at the UKZN. If the results indicate acceptable reliability, the conclusions drawn from the data will be more robust and dependable.

Cronbach’s Alpha was used to test the consistency with 0.70 as the target, if the alpha coefficient is greater than 0.70, the test will indicate strong reliability. Cronbach’s Alpha measures the consistency among the items in a scale (Nunnally, 1978). Correlation coefficient was used to measure stability over time by repeating the test, the correlation coefficient is acceptable at 0.70 (Cohen, 1988)

3.11 Delimitation of the Study

This study was specific to the UKZN, which only looked at the institution management competencies and any other institutions. The study focused on the top leadership management, which is very busy and not easily accessible, posing a challenge in getting to the participants.

3.12 Summary

This chapter describes the research methodology that was used to collect and analyze data. The quantitative method was used, and through this sampling method, data were collected in the form of online questionnaires, and the statistical method was used to analyze data.

CHAPTER 4: REPRESENTATION OF RESULTS

4.1 Introduction

This study is based on the philosophy that the UKZN leaders have the competencies and skills to manage the institution. After collecting and analyzing the data, the study was able to draw findings and discussions that are based on the participants' responses. Several hypotheses were tested that were drawn from research questions.

The participants responded on their demographics as part of independent variables, the leadership competency skills and abilities were used as the dependent variable and the leaders' skills and abilities, leadership styles, leadership and management work experience, management education background, training, and skills development, leadership barriers and technology capabilities were also explored as independent variables.

There were 106 leaders and managers at UKZN with a sample of 84, of the 84 leaders and managers 60 participants responded (n=60) to the questionnaires that were administered, which means this study had a 71% participation rate, though there were challenges in getting the respondents to respond due to their busy schedules, especially during restructuring the leaders and managers are very busy. The study received assistance from the leaders' and managers' personal assistants, who were asked to encourage the leaders and management participants. The study intends to prove the hypotheses and answer research questions in Chapter One.

4.2 Demographics of Respondents

In Section One of the survey, the participants responded to their demographic background in terms of age, gender, and race. This was used to answer questions of representation and the relationships with other variables, in terms of leadership style, technology competencies, and skills and abilities, using their demography as the dependent variable. According to (Mushataq et al, 2019), various studies have investigated the various demographic influences on leadership styles and also state that it is common for age and experience to play an important role in leadership behaviors.

The demographics were tested using descriptive statistics, where the mean and standard deviation were used to test reliability and validity. The demographics were also tested and analyzed using frequency and percentages. The demographic represents gender, race, and age analysis.

Descriptive Statistics				
	N	Maximum	Mean	Std. Deviation
Gender	60	2	1,57	0,500
Age	60	5	3,37	0,843
Race Group	60	4	1,90	1,053
Valid N (listwise)	60			

Table 4.1 Demographics descriptive statistics: Source (Sichela, 2024)

Gender has a mean (M=1.57), there is a slightly higher number of males in leadership positions as compared to females, and the standard deviation (SD=0.50) indicates that there is fairly even distribution on these variables. The age, mean (M=3, 37) suggests that, on average, respondents fall between categories 3 and 4, those who are between 36 and 45 and 46 and 55. The age standard deviation (SD=0.843) shows moderate variability in age across the sample. Race Group mean (M=1, 90) indicates that the most frequent group may be around "2, which is the Black population as compared to other race groups, and standard deviation (SE=1,053) suggests a relatively diverse sample with responses spread out across multiple race groups.

Table 4.2 illustrates the leaders' and managers' demographics; the demographics tested on the survey were gender, race, and age of the participants.

Table: 4:2 Demographics Respondents

Characteristics	**Frequency**	**Percent**
Gender		
Female	27	45,0
Male	33	55,0
Total	**60**	**100,0**
Age		
26-35 years	10	16,7
36-45 years	23	38,3
46 -55 years	23	38,3
Above 56 years	4	6,7
Total	**60**	**100,0**
Race		

African	33	55,0
Coloured	4	6,7
Indian	17	28,3
White	6	10,0
Total	**60**	**100,0**

Source (Sichela 2024)

4.2.1 Gender Representation

45% of participants were female as compared to 55% male counterparts. There is a belief that there are fewer female leaders than compared to males, even though there are some improvements in the institutions employing women managers and leaders. However, there is still more to be done since women are the majority in terms of employment equity in the institution, with most women occupying the lower levels. Hickman (2010, p. 439) stated, despite the progress of women's employment, there are fewer women in management and leadership positions

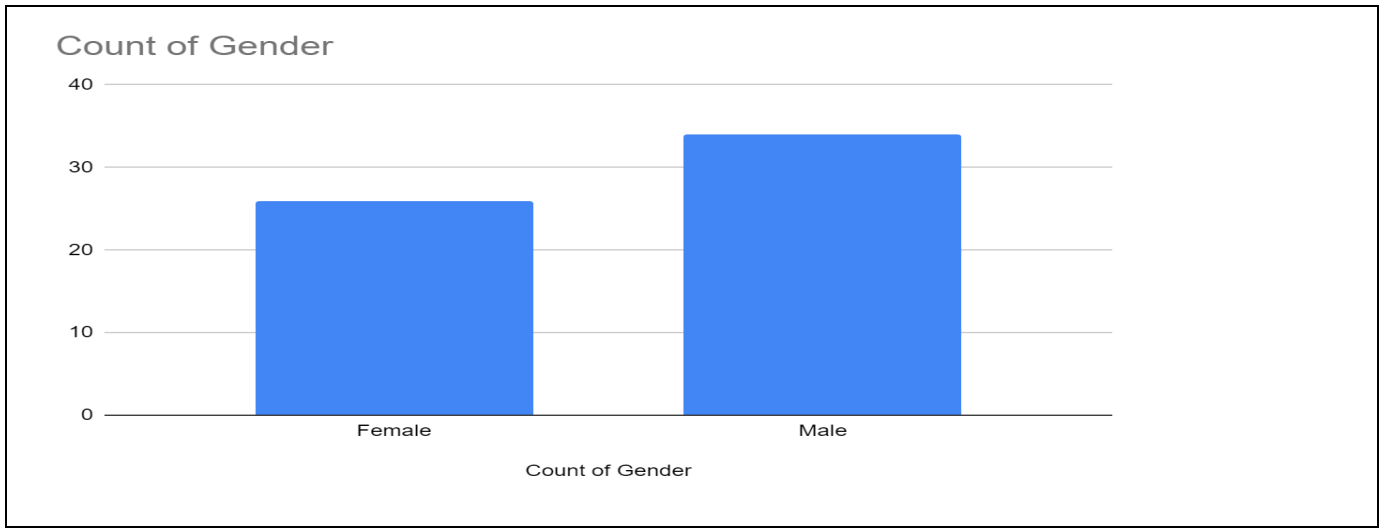

Figure 4.1 Gender Representative Source (Sichela, 2024)

4.2.2 Age Representation

There is a high representation of leaders and managers who are between the ages of 36-45 and the ages 45-55, both at 38% each, which means most people in management and leadership positions are those over 35 years but under 55 years. It is believed that it is a prime time for people's careers to thrive.

The leaders and managers that are below 35 are believed to be technologically savvy and those over 45 are not technological friendly, with participants over 55 not finding the technology skills relevant to their leadership roles while leaders under 55 find the technology skills highly irrelevant to their leadership roles. IT operation leadership is more important than ever as organizations go global, as modern organizations depend on technology systems for communication, collaboration, data management, and customer service (Murthy and Khan, 2024)

The common leadership style among leaders under the age of 45 tends to be democratic and transactional yet the most used leadership style among leaders that are over 45 years of age, is situational and transformational leadership styles. Leaders with less than 3 years of leadership have a transactional relationship as they focus on the day-to-day activities to flow smoothly and have a hand in approaching their team members. Leaders who have over 10 years of leadership experience, are transformational as they adopt a management style that is appropriate for each situation, and they encourage the team to think creatively when dealing with their team members.

This proves, as suggested by researchers, that the transactional leadership style is more appropriate for younger leaders, while transformational leadership is more suited for older leaders and experienced leaders. Researchers believe that experience may play a significant role in leadership behavior (Mushataq et al, 2019).

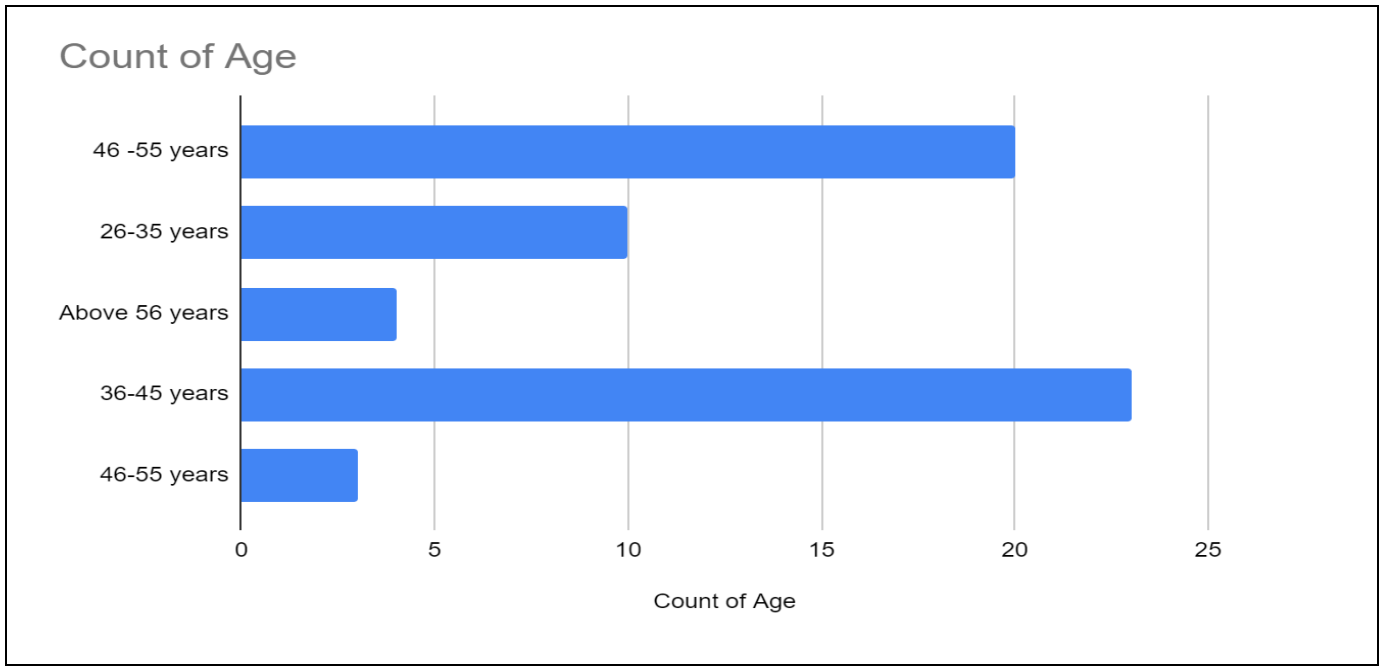

Figure 4.2 Age Representative Source: (Sichela, 2024)

4.2.3 Race Group Representation

African leaders are the most represented racial group with a percentage of 55%, followed by the Indian race group at 28%, with Whites and Colored race groups being the least represented at 6% and 4%, respectively. There is diversity and equity in UKZN, since there is more representation of Africans in leadership positions, as there are more Africans in the country as compared to other racial groups. Dabarant and Narayanan, (2024) stated, previous scholars have conflicting findings when it comes to demographic effect, ethnicity has no effect on leadership style while some scholars find, there is a relationship between ethnicity and leadership style, especially in workplaces or organizations where there is perceived inequality or injustice when it comes to race, gender, and ethnicity.

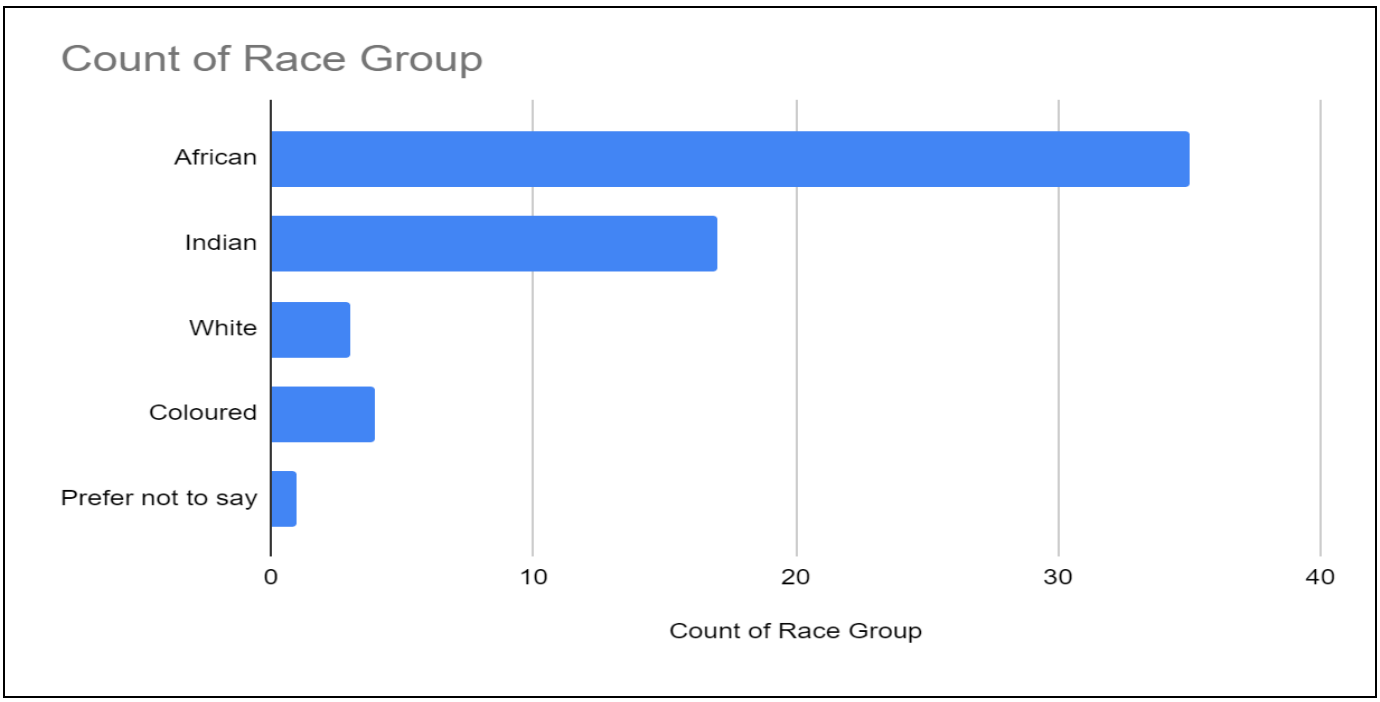

Figure 4.3 Race Group Representatives Source (Sichela, 2024)

4.3 Management Background

Amanchukwu et al. (2018) stated, scholars believe the quality educational leadership tradition offers great opportunities, to further refine educational leadership and management policies and practices, by accepting and utilizing the basic principles of the style of educational leadership.

Employee involvement seeks to increase the team's input into organizational performance and employee well-being, to overcome the employee's resistance to organizational change, and the employee's involvement in an effective strategy in formulating the planning and implementation of change (Hussain et al, 2018). Management experience, educational background, and highest qualification contribute to the leaders' and managers' capabilities, and there is a strong relationship between the management education, highest qualification, and management experience to their leadership style and to how they handle change and lead in general.

This study analysed management background by looking at management experience, educational background, and highest qualification using frequencies and percentages. a descriptive study was also employed to test the mean and standard deviation.

The highest qualification has a mean (M=4.03), which suggests that most respondents have around an Honours degree, and the standard deviation (SD=1,288) indicates moderate variability, meaning participants vary across multiple qualification levels. Management qualification means (M=3.60) implies

that on average the participants have some form of management qualification, and standard deviation (SD=1,532) is relatively high, showing a wider spread across the different types of management qualification. Management experience means (M=2.57) means respondents, on average, have between 5 and 10 years of management experience, and the standard deviation (SD=1.125) shows there's a broad range of experience among respondents.

Descriptive Statistics				
	N	Maximum	Mean	Std. Deviation
Highest Qualification	60	6	4,03	1,288
Management Qualification	60	6	3,60	1,532
Management Experience	60	4	2,57	1,125
Valid N (listwise)	60			

Table 4.2 Management Background Descriptive Statistics Source (Sichela, 2024)

4.3.1 Management Experience Representation

Over 58% of the participants have over five years of management experience, with 28% having over 10 years of management experience and 28% having less than five years of management experience. This means those who have over 10 years of experience have been involved in the two major transformations at UKZN and are also involved with the current transformation. Having been in the institution during two transformations will help these managers and leaders, as they will know how to handle the change. Employee involvement seeks to increase the team's input into organizational performance and employee well-being, to overcome the employee's resistance to organizational change, and the employee's involvement in an effective strategy in formulating the planning and implementation of change (Hussain et al, 2018).

Management Experience		
	Frequency	Percent
0-3 years	17	28,3
3-5 years	8	13,3
5-10 years	18	30,0
Over 10 years	17	28,3
Total	60	100,0

Table 4.4 Management Experience Descriptive Statistics Source (Sichela, 2024)

It has also been proven in this survey that leaders with over 5 years' experience use the transformational leadership style while for those will less than 5 years' experience transactional leadership style is their leadership style choice. Scholars suggest that both transformational and transactional leadership may influence leadership performance by creating team morale and motivation in the workplace, with transformational leadership style being a preferred leadership style in higher education (Khan et al, 2023).

Figure 4.4 illustrates a management experience representative, 17 managers and leaders have less than 3 years' experience in their management positions, with only 8 having between 3 to 5 years' experience. 18 managers and leaders have 5 to 10 years' experience, with 17 managers and leaders who have been in management for over 10 years.

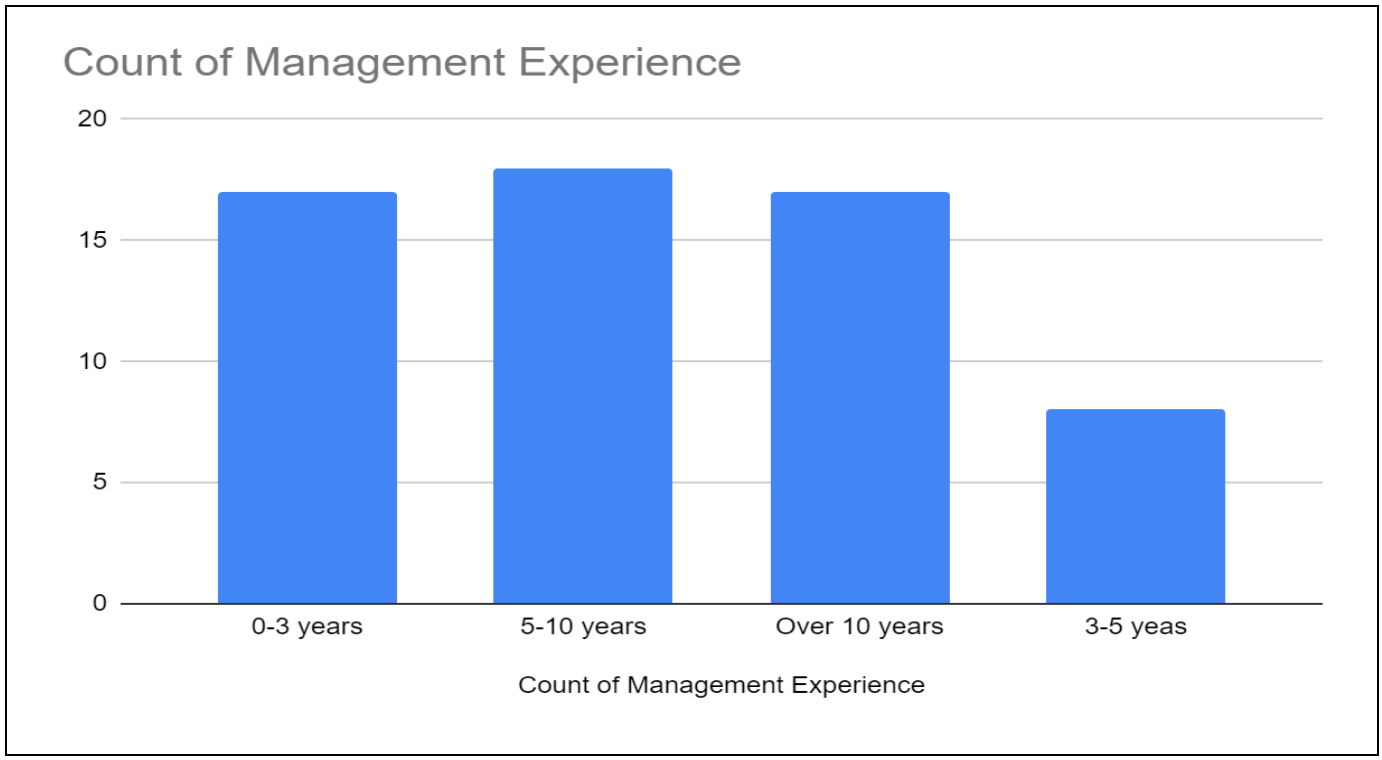

Figure 4.4 Management Experience Representative Source (Sichela, 2024)

It has also been proven in this survey that leaders with over 5 years' experience use the transformational leadership style while for those will less than 5 years' experience transactional leadership style is their leadership style choice. Scholars suggest that both transformational and transactional may influence leadership performance by creating team morale and motivation in the workplace, with transformational leadership style being a preferred leadership style in higher education (Khan et al, 2023).

4.3.2 Management Qualification Representation

According to Amanchukwu et al. (2018), scholars believe that the quality educational leadership tradition offers great opportunities to further refine educational leadership and management policies and practices by accepting and utilizing the basic principles of the style of educational leadership. It has been proven that leaders and managers with management qualifications make better leaders as compared to leaders without management qualifications

Management Qualification		
	Frequency	Percent
Finance	19	31,7
Human Resources	4	6,7
Leadership	3	5,0
Management	15	25,0
Marketing	6	10,0
Not applicable	10	16,7
Supply Chain	3	5,0
Total	60	100,0

Table 4.4 Management Qualification Descriptive Statistics Source (Sichela, 2024

In this study, more leaders have some form of management qualification, with finance and management qualifications being the highest represented at 35% for both qualifications. Human resources and marketing both have 10% representation, while leadership and supply chain both have only 5% representation.

Leaders must be able to manage finance and human resources, and the management qualifications. It is for this reason that academic leadership and management and professional service managers and leaders work closely together, as professional managers can manage both finance and human resources of the schools, colleges, and the entire university while most of the academics' highest qualification is a doctorate since that is the requirement for one to become an academic. Apart from development lecturers who cannot be in academic leadership and management as they do not meet the minimum qualification to be in academic leadership, they will not form part of this study.

Professional Services, on the other can have a minimum qualification of a diploma. However, managers with work experience of over ten years in management are an exception to the rule, as they can have a higher certification, as they have management experience based on their work experience, as compared to having a diploma as the highest qualification. In this study, the professional staff participants with honors/post-graduation diplomas.

Highest Qualification		
	Frequency	Percent
Degree	6	10,0
Diploma	12	20,0
Doctorate	10	16,7
Honours/PG Dip	23	38,3
Masters	9	15,0
Total	60	100,0

Table 4.5 Highest Qualification Descriptive Statistics Source (Sichela, 2024)

All managers and leaders who participated in this study have some form of qualification, the minimum qualification being a diploma, and the highest being a doctorate. 38% of representatives have Honours or post-graduation level, followed by diploma qualification at 20%, followed by doctorate qualification at 17%, master's degree qualification at 15%, and degrees at 10%

Figure 4.5 illustrates the management's highest qualification representative. Of the 60 participants, 10 of the participants do not have any form of management qualification, 19 have a finance qualification, 15 have a management qualification, and the rest of the participants have less than 10 in leadership, human resources, and supply chain.

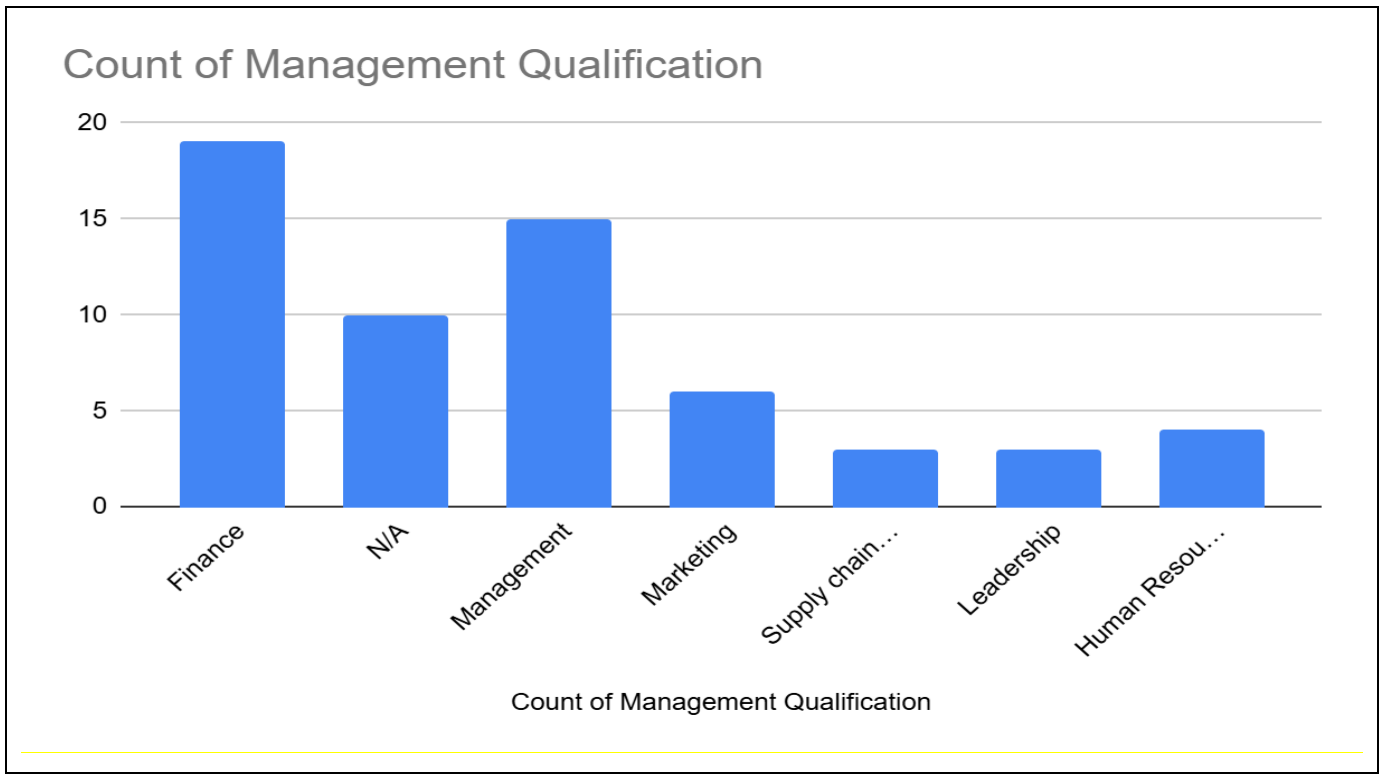

Figure 4.5: Management Qualification Source: Self (Sichela 2024)

4.4 Leadership and Management Skills and Abilities Effect

The leadership skills and talents were tested in this survey by analyzing the participation responses, the leadership styles, change management, skills associated with leadership, and work processes were used as independent variables, and competencies as a dependent variable.

Table 4.7 depicts leadership skills and talents that were tested in this survey by analyzing the participation responses, the leadership styles, change management, skills associated with leadership, and work processes were used as independent variables, and competencies as a dependent variable. The leadership skills and talents were tested in this survey by analyzing the participation responses, the leadership styles, change management, skills associated with leadership, and work processes were used as independent variables, and competencies as a dependent variable. Descriptive statistics were used to analyze data.to test the reliability and viability.

	Mean	Std. Deviation	N
Leadership style			
Leadership style type	3,23	0,8	60
Team management	2,57	1,029	60
Transactional/Transformational	1,25	0,434	60
Skills Management			
Skills Management 1	2,55	0,539	60
Skills Management 2	2,81	0,395	60
Skills Management 3	2,11	0,61	60
Skills Management 4	2,72	0,455	60
Skills Management 5	2,91	0,295	60
Training and Development			
Training and Development 1	4,09	0,986	60
Training and Development 2	3,83	1,069	60
Training and Development 3	3,55	0,932	60
Training and Development 4	3,64	1,145	60
Training and Development 5	3,32	1,189	60
Training and Development 6	3,32	1,397	60
Demographic effects			
Demographic effects 1	2,85	1,116	60
Demographic effects 2	3,51	1,085	60
Demographic effects 3	3,23	1,187	60

Demographic effects 4	3,28	1,183	60
Management background			
Management background 1	3,92	0,851	60
Management background 2	3,32	1,252	60
Management background 3	3,3	1,186	60
Management background 4	3,4	1,214	60
Management background 5	3,28	1,246	60
Management Barriers			
Barrier 1	3,62	0,965	60
Barrier 2	3,08	1,016	60
Barrier 3	3,51	0,953	60
Technology Leadership			
Technology 1	3,32	1,173	60
Technology 2	3	1,109	60
Technology 3	3,26	1,146	60
Technology 4	3,89	0,577	60
Technology 5	4,11	0,67	60
Technology 6	3,89	1,031	60

Table 4.6 Competency Testing Descriptive Statistics: Source (Sichela, 2024)

4.4.1 Skills and Abilities Associated with Leadership

The UKZN leadership and management skills and abilities were tested, human resources, finance, and emotional intelligence were the important skills to have, with management and business having moderate importance, while technical skills and legal expertise at low importance.

When the leaders and managers were asked which skills directly affect their role as managers and leaders, they were assessed on the five skills, Skill 1 Technical skills had an overall mean of (M= 2,62) was a Moderate rating with a standard deviation (SD= 0,377) relatively low variability**;** responses are somewhat consistent but lean toward neutral to slightly unfavorable. Skill 2 HR and Finance skills had a slightly high mean (M=2.81) and low standard deviation (SD=0.395), indicating more favorable and consistent perceptions. Skill 3 Legal expertise low for mean (M=2.11) and moderate standard deviation (SD=0.610), suggesting moderate variation in responses, and suggests significant improvement. Skill 4 Emotional intelligence with a moderate mean (M=2.72) with low standard deviation (SD=0.455), suggesting reasonably uniform perceptions. Skill 5 Management and business skills has a high mean (M=2.91)and the lowest standard deviation (SD=0.295), indicating this is the strongest and most consistently viewed item in skills management

The hypothesis test was conducted to test the relationship between leadership and management skills and abilities competencies

H_{01}: Leadership and management skills and abilities do not affect their competencies

H_1: There is a correlation between leadership and management abilities to manage the institution and management competencies

Relationship between leadership and management skills and abilities, and competencies

Leadership Skills are specific learned capacities that allow individuals to perform leadership tasks effectively, like communication, conflict resolution, and decision-making. Leadership Abilities More innate or developed capabilities that influence how well a person can acquire and apply leadership skills like emotional intelligence, cognitive ability, and adaptability (Boyatzis, 1992).

Broader combinations of skills, abilities, knowledge, and behaviours are required to perform leadership roles effectively in a specific context. Goleman's Emotional Intelligence Model links emotional abilities (like self-awareness) with leadership competencies such as empathy and conflict management (Goleman, 1998). Boyatzis's competency model proposes that effective leadership results from the interaction between competencies, which are derived from skills and abilities, job demands, and organizational environment (Boyatzis, 1992).

The correlation regression on Table 4:5,$R^2 = 0{,}219$, adjusted R^2=0,147 with the SE=1,099, there is 21% correlation between position level and skills and ability, there is no strong relationship between the two variables. ANOVA, F=3,036 with p=0, 17 and the regression coefficients depict a Constant term (B=0.334, SE=1.694, p=<0.17), the covariates have (B=<2, SE=<0.45, p=<0,889). This concludes that there is no significant relationship between position level and skills and abilities. A Cronbach's Alpha of 0.559 indicates poor internal consistency for the 4 items in your scale

Variable Outcome with Competencies as a dependent variable

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df 1	df2	Sig. F Change
1	0,468[a]	0,219	0,147	1,099	0,219	3,036	5	54	0,017

a. Predictors: (Constant), Skills 5, Skills 3, Skills 1, Skills 2, Skills 4

ANOVA[a]

Model	Sum of Squares	Df	Mean Square	F	Sig.

1	Regression	18,342	5	3,668	3,036	0,017[b]
	Residual	65,258	54	1,208		
	Total	83,600	59			
a. Dependent Variable: Competencies						
b. Predictors: (Constant), Skills 5, Skills 3, Skills 1, Skills 2, Skills 4						

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	0,334	1,694		0,197	0,844
	Skills 1	0,057	0,258	0,030	0,221	0,826
	Skills 2	0,529	0,308	0,243	1,717	0,092
	Skills 3	-0,665	0,306	-0,354	-2,170	0,034
	Skills 4	0,052	0,373	0,020	0,140	0,889
	Skills 5	1,226	0,450	0,353	2,723	0,009

a. Dependent Variable: Competencies

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,573	,559	4

Table 4.7 Skills and Abilities Analysis Source (Sichela, 2024)

4.4.2 Training and Development Effect

The institution's engagement in training and development intervention for UKZN management was tested. The participants were asked if this institution is committed to leadership training and development. Talent mapping and coaching, and mentoring were tested in order to improve leadership capabilities and competencies.

The managers and leaders were asked if they found the institution committed to the managers' and leaders' development, with a strong mean of (M=4.09) and moderate standard deviation of (SD=0.986), suggesting that while the respondents agreed, there is some variability in their response. When they were asked if they had been taken through leadership development, they responded with a mean of (M=3.83) and standard deviation (SD=1,069), suggesting that while the respondents slightly disagree, there is a variation

in their responses. The leaders were asked if the organization if there is continuous leadership development within the organization. There is a moderate mean of (M=3, 55) and a strong standard deviation (SD=0,932), which indicates that there is moderate agreement with a lower variability and the responses are more consistent.

The leaders and managers were asked if the institutions use career development as a tool to create a pool of skilled, leaders and managers to improve talent within the organization, a moderate mean of (M=3,64) and standard deviation (SD=1,145) reflects a moderate positive level of agreement and a moderate variation that if though the respondents agree there are some variations. When they were asked if the organization supports their employees by designing clear career paths with detailed career progression, with a moderate mean (M=3.32) and moderate standard deviation (SD=1,189), reflects a neutral, slight positive response with moderate to high variability, which indicates that even though some respondents agree, some disagree. The final question on development and training, when asked if the institution promotes mentoring and coaching for leadership development, they responded with a moderate mean (M=3.32) and a high standard deviation (SD=1,189), indicating less consensus.

The hypothesis test was conducted to test the relationship between leadership and training, and development

H_{02}: Training and development do not affect leaders' and managers' effectiveness

H_2: There is a positive correlation between leadership and management training and development concerning management competencies

Relationship between leadership and training, and development

Transformational leaders inspire a learning culture by encouraging employee development and aligning training with organizational goals (Bass, 1990). Day (2015) believes leadership development programs that incorporate formal training significantly enhance leadership competencies and employee performance. Leader support enhances the transfer of training, particularly when leaders provide feedback and recognition for learning behaviors. Yuki (2013) believes, training and leadership development, when strategically aligned, contribute significantly to innovation, productivity, and long-term success.

The correlation regression on Table R-squared,$R^2 = 0{,}206$, adjusted R^2=0,116 with the SE=1.211, there is a 21% relationship between the two variables, ANOVA, F=2,295 with p=0.048, there is no strong relationship between the highest qualification and training and development. The regression coefficients show a constant term (B=2,336, SE=0,742, p <0,02), there is a covariate that has (B=<0,452, SE=<0,504, p=<0,661, which concludes that there is no strong relationship between the leaders' and managers' highest qualification and training and development. A required qualification that the managers and leaders possess for management positions has no significant relationship to training and development, as they are required

to possess these qualifications before their appointments as leaders and managers. A Cronbach Alpha of 0,935 indicates an excellent internal consistency among the 6 items, the items are measuring the same underlying construct.

Variable Outcome with Highest Competencies as a dependent variable

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	0,454[a]	0,206	0,116	1,211	0,206	2,295	6	53	0,048

a. Predictors: (Constant), Training development 6, Training development 2, Training development 3, Training development 5, Training development 1, Training development 4

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	20,197	6	3,366	2,295	,048[b]
	Residual	77,736	53	1,467		
	Total	97,933	59			

a. Dependent Variable: Competencies

b. Predictors: (Constant), Training development 6, Training development 2, Training development 3, Training development 5, Training development 1, Training development 4

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2,366	0,742		3,187	0,002
	Training development 1	-0,444	0,426	-0,330	-1,044	0,301
	Training development 2	0,453	0,504	0,365	0,899	0,373
	Training development 3	0,324	0,317	0,229	1,020	0,313
	Training development 4	-0,180	0,408	-0,153	-0,441	0,661

	Training development 5	0,636	0,336	0,554	1,895	0,064
	Training development 6	-0,240	0,305	-0,247	-0,787	0,435
a. Dependent Variable: Competencies						

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,930	,935	6

Table 4.8 Training and Development Analysis Source (Sichela, 2024)

4.4.3 Leadership and Management Barriers Effect

Some barriers prevent leaders and managers from being competent in their leadership roles. The leadership and management barriers were tested to determine if they have any significance in the leadership roles, barriers like; time pressures and self-awareness, change management, and self-reflection. The leaders were asked if the lack of Diversity was a barrier to advancing to leadership positions in the education profession, a moderate mean of (M=2.85) and strong standard deviation (SD=0.965) reflects a moderately positive perception with a fairly consistent response.

They were asked whether cultural difference was a barrier to leadership positions in the education profession, the slightly poor mean (M=3.08) and moderate standard deviation (SD=1,102) suggest are somewhat neutral with the responses and have mixed views. They were also asked if discrimination was a barrier to advancement to leadership positions in the education profession, with a slightly stronger mean M=3, 51) and high standard deviation (SD=0.953), suggesting that respondents generally agree with the statement and have similar views

The hypothesis test was conducted to test the relationship between leadership and management and barriers to management capacity

H_{03}: There is no significance in leadership and management barriers related to management competencies

H_3: There is a positive correlation between leadership and management is a barrier to management capacity

Relationship between leadership and management, and barriers to management capacity

Management capacity refers to an organization's ability to plan, execute, and sustain operations effectively. Several barriers can undermine this capacity, such as a lack of formal training in core management functions. Rigid hierarchies and resistance to change hinder innovation and agility (Schein, 2010). Eagly and Carli (2007) highlighted that women face a "labyrinth" of barriers to leadership rather than a single "glass ceiling," including biased expectations, work-life balance challenges, and organizational structures. Koenig et al. (2011) conducted a meta-analysis showing that leadership is still viewed as a predominantly male role, creating implicit bias against female leaders. In many countries, racial and ethnic minority groups are underrepresented in senior and executive leadership roles, even when they are well represented in the general workforce. This disparity suggests that race significantly influences access to leadership positions.

The correlation regression on Table R-squared,$R^2 = 0{,}090$, adjusted R^2=0,41 with the SE=1.102, there is only a 9% relationship between the two variables, ANOVA, F=1.851 with p=0.148. There is a weak relationship between management experience and leadership and management barriers. The regression coefficients show a constant term (B=2,760, SE=0,631, p=<0,001), there is a covariant have (B=<0,514 SE=<0,631, p=<0,31) even though the constant variable has a positive p-value, the other variable show no relationship between the two variables, the management experience has no impact on leadership and management barriers. A Cronbach's Alpha of 0,828 indicated a good internal consistency, which suggests that these items are reliable in measuring the same underlying construct.

Variable Outcome with Leadership and Management position as a dependent variable

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	0,300[a]	0,090	0,041	1,102	0,090	1,851	3	56	0,148

a. Predictors: (Constant), Barrier 3, Barrier 2, Barrier 1

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	6,743	3	2,248	1,851	0,148[b]
	Residual	67,990	56	1,214		

	Total	74,733	59			

a. Dependent Variable: Management and Leadership Positions

b. Predictors: (Constant), Barrier 3, Barrier 2, Barrier 1

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	2,760	0,631		4,376	<0,001
	Barrier 1	-0,648	0,316	-0,531	-2,049	0,045
	Barrier 2	0,118	0,187	0,103	0,630	0,531
	Barrier 3	0,514	0,362	0,416	1,419	0,161

a. Dependent Variable: Management Positions

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,828	,832	3

Table 4.9 Barriers Analysis Source (Sichela, 2024)

4.4.4 Business and Management Background Effect

The study tested whether leadership and management without a business and management background affect their management competency, by testing the level of emotional intelligence, interpersonal communication skills, and making highly informed decisions and diplomacy.

The Leaders were asked how they manage their team members, and the average mean (M=3.92) and moderate standard deviation (SE=0.851) suggest respondents generally agree, and there is a moderate level of variability. When leaders and managers were asked the level of emotional intelligence, the moderate mean (M=3.32) and high standard deviation (SD=1.252) indicate a mixed level of agreement with diverse opinions. In terms of administration and interpersonal communication, the moderate mean (M=3.30) and moderate standard deviation (SD=1.186) suggest a moderate level of agreement and a high level of variability. Leaders' and managers' decision making, the moderate mean (M=3,40) and slightly high standard deviation (SD=1.214) indicate moderately positive responses with a high level of response variation. In terms of diplomacy and tactfulness, the moderate mean (M=3.28) and slightly high standard deviation (SD=1,246) suggest moderate favorable agreement with a wide spread-out response.

The hypothesis test was conducted to test the relationship between managers' and leaders' management or business background to leaders and managers.

H_{04}: There is no significance in management or business background concerning leaders' and managers 'competencies

H_4: There is a positive correlation between management and education background to management competencies

Relationship between management or business background and management competencies

An individual's level and field of education can influence their cognitive development, problem-solving skills, and communication style. Berson et al. (2001) found that higher educational levels are associated with transformational leadership behaviors, such as vision-setting, intellectual stimulation, and individualized consideration. Individuals with postgraduate or professional degrees are more likely to engage in strategic thinking and innovation, which aligns closely with transformational and participative leadership styles. Ng et al. (2008**)** reported that educational attainment positively correlates with leadership effectiveness, especially in roles that require adaptability, vision, and employee engagement.

Armenakis & Bedeian (1999) noted that prior experience helps individuals understand the dynamics of organizational change and develop strategies for implementation, resistance management, and stakeholder communication**.** Choi (2011) found that employees with longer tenure and broader work experience are more likely to perceive change positively and participate actively in change processes. Kotter (1996) emphasized that successful change efforts often depend on leaders who have deep organizational experience and understand how to build coalitions, overcome resistance, and sustain momentum.

The correlation regression on **Table R-squared,**$R^2 = 0{,}272$, adjusted R^2=0,200 with the SE=1.293, there is a 27% relationship between the two variables, ANOVA, F=3.806 with p=0.005. There is a strong relationship between the management qualification and management background based on ANOVA analysis however the regression coefficients show a constant term (B=5,443, SE=0,882, p=<0,001), an a covariant of (B=<0,631 SE=<0,631, p=<0,992), although the constant term has a positive p-value. There is a weak relationship with all management backgrounds except management background three, with a p-value of 0,003, as there is a positive relationship between management qualification and interpersonal communication skills. A Cronbach's Alpha of 0,924 indicates excellent internal consistency reliability, a value above 0,9 suggests the 5 items are highly correlated.

Variable Outcome with Management Qualifications is a dependent variable

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	0,521[a]	0,272	0,200	1,293	0,272	3,806	5	51	0,005

a. Predictors: (Constant), Management background 5, Management background 1, Management background 3, Management background 4, Management background 2

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	31,805	5	6,361	3,806	0,005[b]
	Residual	85,247	51	1,672		
	Total	117,053	56			

a. Dependent Variable: Management Qualification

b. Predictors: (Constant), Management background 5, Management background 1, Management background 3, Management background 4, Management background 2

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	5,433	0,882		6,159	<0,001
	Management background 1	0,002	0,224	0,001	0,010	0,992
	Management background 2	1,403	0,551	1,184	2,549	0,014
	Management background 3	-1,967	0,631	-1,574	-3,119	0,003
	Management background 4	0,321	0,434	0,262	0,741	0,462
	Management background 5	-0,288	0,396	-0,240	-0,727	0,471

a. Dependent Variable: Management Qualification

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,924	,914	5

Table 4.10 Management Background Analysis Source (Sichela, 2024)

4.4.5 Demographics Effects

In this study, the demographic significance of management and leadership competencies was tested in terms of diversity, cultural differences, and discrimination. The lack of diversity and advancement to leadership and management positions, the low mean (M=2.85) and moderate standard deviation (SD=1,116) suggest a slightly below neutral point with a moderately high level of variability. Opportunities to advancement to leadership and management positions, a moderately positive mean (M=3.51) and moderate standard deviation (SD=1.085), means the respondents leaned towards a favourable view with a moderate level of variability. It was also proven discrimination and a barrier to advancement to leadership positions, a mean (M=3.23) slightly above neutral and moderate standard deviation (SD=1,187) suggests mild agreement with moderate to high variability.

The hypothesis test was conducted to test the relationship between demographics and management

H_{05}: There is no significance in race, gender, age, work experience, or nationality to managers' and leaders' competencies

H_5 There is a positive correlation between demographics and management

Relationship between demographics and management positions

Underrepresentation of women remain underrepresented in senior management roles due to systemic barriers, gender bias, and lack of mentorship opportunities (Eagly & Carli, 2007). The glass ceiling effect concept explains how invisible barriers prevent women and minorities from advancing to top management (Cotter et al., 2001). Older individuals may be favored for management roles due to perceived experience and maturity. However, younger managers are often associated with adaptability and technological fluency. Researchers suggest a positive correlation between age and managerial level, although this relationship is often mediated by tenure and performance (Ng & Feldman, 2010). Ethnic minorities often

face systemic challenges in reaching leadership roles, including discrimination and exclusion from informal networks (Thomas & Gabarro, 2015).

The correlation regression on Table 4:10,$R^2 = 0{,}303$, adjusted R^2=0,253 with the SE=0,910, there is a 30% relationship between the two variables, ANOVA, F=5,984 with p=0,001, the ANOVA analysis depicts a strong relationship between race group and demographics while the regression coefficients show a Constant term (B=0,335, SE=0,578, p=0,565), a covariant of (B=<0,56 SE=<0,148, p=<0,565). While there is no significant relationship between the race groups and demographics, there is a significant relationship between demographics 3, discrimination affects race classification. A Cronbach's Alpha of 0,520 suggests inconsistency in measuring the 4 items

Variable Outcome with Management position a dependent variable

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	0,551[a]	0,303	0,253	0,910	0,303	5,984	4	55	<0,001

a. Predictors: (Constant), Demographic effects 4, Demographic effects 2, Demographic effects 1, Demographic effects 3

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	19,832	4	4,958	5,984	<0,001[b]
	Residual	45,568	55	0,829		
	Total	65,400	59			

a. Dependent Variable: Management position

b. Predictors: (Constant), Demographic effects 4, Demographic effects 2, Demographic effects 1, Demographic effects 3

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	0,335	0,578		0,579	0,565

	Demographic effects 1	0,313	0,117	0,314	2,663	0,010
	Demographic effects 2	-0,138	0,126	-0,137	-1,092	0,280
	Demographic effects 3	0,576	0,148	0,624	3,887	<0,001
	Demographic effects 4	-0,216	0,145	-0,231	-1,488	0,142
a. Dependent Variable: Management position						

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,527	,520	4

Table 4.11 Demographics Analysis Source (Sichela, 2024)

4.4.6 Leadership style and Technology effect

The leadership style indicates a moderate leaning toward a particular leadership style on a Likert scale (likely 1–5). A mean of (M=3.23) suggests respondents tend slightly toward a more transformational or participative leadership style. The relatively low standard deviation (SD=0.8) suggests moderate agreement among respondents. Team Management has a mean(M=2.57) which is closer to the lower-middle range, indicating that team management practices may be weak or underdeveloped in the group. A higher standard deviation (SD=1.029) indicates more divergent opinions or practices. When asked for a preference between Transactional and Transformational, the low mean (M=1.25) and low standard deviation (SD=0.434) suggest that most respondents identify with a transformational leadership style. The small deviation shows strong consensus.

The hypothesis test was conducted to test the relationship between managers' and leaders' leadership style and technology leadership

H_{06}: There is no significance in leaders' and managers' style and technology leadership

H_6: There is a positive correlation between technological leadership and leadership style

Relationship between leadership style and technology leadership

Transformational leaders, who are visionary, innovative, and supportive of change, are particularly effective in promoting technology leadership. They empower employees, encourage innovation, and create a culture that supports digital transformation. Avolio et al. (2001) found that transformational leadership positively affects employees' acceptance of new technologies by promoting a culture of trust and innovation. Zhu et al. (2013) reported that transformational leadership is a strong predictor of an organization's ability to implement IT strategies effectively and promote technological innovation.

Zhu et al. (2013) reported that transformational leadership is a strong predictor of an organization's ability to implement IT strategies effectively and promote technological innovation. El Sawy et al. (2016) emphasized that digital leadership (a form of strategic leadership aligned with digital capability) is closely related to transformational and participative leadership styles, which are critical for effective technology strategy implementation.

The multiple correlation and regression analysis was conducted to evaluate the relationship between the leadership styles and technology leadership as independent variables and participants' age, in Table 4:3= 0,347, Adjusted R^2=0,226 with the standard error of 0,744, there is only a 35% relationship between the two variables with means the is no strong significant relationship on how the leaders and managers lead their teams to age, and there is a no significant relationship on technology knowledge and participants age.

The analysis of variance (ANOVA) with F=2,887 with p<0,008 means that their age has a significant relationship with managers' and leaders' leadership styles and technology knowledge. The regression coefficients depict a constant term (B=6,633, SE=1,125, p=<0.008), the covariant have (B=<2, SE=<4, p=<0.826), the difference in transformational and transactional leadership test passed the coefficient test, by having a strong significant relationship with participants' age, while other variables show no significance

A Cronbach's Alpha of 0.672 is considered acceptable for exploratory research or early stages of scale development, 0.7 or above is the usual benchmark for good reliability and 0.6 to 0.7 is moderately acceptable, especially with few items. The standardized alpha (0.669**)** is nearly identical, which suggests the items are on a similar scale**,** scale is functionally acceptable.

Outcome variable with Competency the dependent variable and Technology and Leadership style independent variables

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	0,589[a]	0,347	0,226	0,744	0,347	2,887	9	49	0,008

a. Predictors: (Constant), Technology 6, Transformational/Transactional, Team management, Technology 1, Leadership style, Technology 4, Technology 3, Technology 5, Technology 2

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	14,390	9	1,599	2,887	0,008[b]
	Residual	27,136	49	0,554		
	Total	41,525	58			

a. Dependent Variable: Competencies

b. Predictors: (Constant), Technology 6, Transformational/Transactional, Team management, Technology 1, Leadership style, Technology 4, Technology 3, Technology 5, Technology 2

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	6,633	1,125		5,894	<,001
	Leadership style	-0,194	0,144	-0,184	-1,342	,186
	Team management	0,023	0,098	0,029	0,231	0,819
	Transformational/Transactional	-0,594	0,151	-0,520	-3,939	<0,001
	Technology 1	-0,091	0,115	-0,132	-0,791	0,433
	Technology 2	-0,106	0,196	-0,151	-0,538	0,593
	Technology 3	,036	0,162	0,049	0,221	0,826
	Technology 4	-0,377	0,347	-0,260	-1,086	0,283
	Technology 5	-0,121	0,216	-0,096	-0,561	0,577
	Technology 6	0,145	0,161	0,171	0,905	0,370

a. Dependent Variable: Competencies

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,672	,669	5

Table 4.12 Leadership Style and Technology Analysis Source (Sichela, 2024)

4.5 Hypothesis Testing

The descriptive test, t testing, which includes the df and p-value, and reliability test on the 95% confidence interval, were conducted on independent variables to test the institution's competencies as a dependent variable. If the significance p-value is less than 0.05, a low p-value indicates that there is a large enough variance between the groups that there is little or no overlap between the groups. If the reliability level measured by Cronbach's alpha is more than, 0.70 is considered reliable, but if it is less than 0.70, unreliable. Cronbach's alpha measures the degree to which the questions are aligned to measure the reliability of the tests. Therefore, if the scale is between 0 and 1 with a score above 0.70, it is considered reliable. The hypotheses testing, the results, and the findings are discussed in the next chapter.

Figure 4.13 depicts hypotheses tested, when the t- values, Confidence Interval test, and Cronbach's Alpha are used to analyse the hypotheses, whether to accept or reject the null hypothesis.

	Test Value = 0						
					95% Confidence Interval of the Difference		
	T	**Df**	**Two-Sided p**	**Mean Difference**	**Lower**	**Upper**	**Cronbach's Alpha**
Skills and Abilities							
Skills 1	30,495	59	0,001	2,450	2,29	2,61	0,546
Skills 2	38,619	59	0,001	2,733	2,59	2,87	
Skills 3	25,240	59	0,001	2,067	1,90	2,23	
Skills 4	45,256	59	0,001	2,700	2,58	2,82	
Skills 5	64,775	59	0,001	2,867	2,78	2,96	

Training and Development							
Training development 1	32,677	59	0,001	4,033	3,79	4,28	0,930
Training development 2	27,824	59	0,001	3,733	3,46	4,00	
Training development 3	29,486	59	0,001	3,467	3,23	3,70	
Training development 4	25,232	59	0,001	3,567	3,28	3,85	
Training development 5	22,681	59	0,001	3,283	2,99	3,57	
Training development 6	19,510	59	0,001	3,333	2,99	3,68	
Demographics Effect							
Demographic effects 1	21,087	59	0,001	2,883	2,61	3,16	0,527
Demographic effects 2	26,089	59	0,001	3,533	3,26	3,80	
Demographic effects 3	21,961	59	0,001	3,233	2,94	3,53	
Demographic effects 4	22,732	59	0,001	3,300	3,01	3,59	
Management Experience and Business Background							
Management background 1	35,054	59	0,001	3,833	3,61	4,05	0,924
Management background 2	20,856	56	0,001	3,368	3,04	3,69	
Management background 3	23,063	59	0,001	3,383	3,09	3,68	
Management background 4	22,932	59	0,001	3,417	3,12	3,71	
Management background 5	21,498	59	0,001	3,267	2,96	3,57	
Leadership Barriers							
Barrier 1	30,376	59	0,001	3,617	3,38	3,85	0,828
Barrier 2	24,707	59	0,001	3,133	2,88	3,39	
Barrier 4	29,486	59	0,001	3,467	3,23	3,70	
Technology Leadership							
Technology 1	20,493	58	0,001	3,288	2,97	3,61	0,732
Technology 2	18,929	58	0,001	2,983	2,67	3,30	
Technology 3	22,104	58	0,001	3,305	3,01	3,60	
Technology 4	51,788	58	0,001	3,932	3,78	4,08	
Technology 5	47,556	58	0,001	4,169	3,99	4,34	
Technology 6	30,275	58	0,001	3,932	3,67	4,19	

Table 4:13 Hypothesis Testing Source (Sichela, 2024)

4.6 Summary

This chapter presented the data that respondents provided as they responded to the questionnaires. The questionnaire was made up of section one, where the respondents responded to their demographics, and section two, which looked at all six study objectives. The responses were analyzed in the form of graphs and tables.

CHAPTER 5: DISCUSSION OF RESULTS

5.1 Introduction

In the previous chapter, Chapter Four, the data were presented and analyzed. This chapter aims and objectives are to discuss this study's summary findings and how the findings answer research questions, meet objectives, and prove the hypotheses. This chapter will interpret how the findings prove that the UKZN leadership and management competencies, or lack of competencies, affect the institution effectively. There has been equal representation in this study between academic and professional services management staff, and all colleges /divisions were equally represented.

Previous papers were consulted using the literature review, scholars' theories, frameworks, and models to find conclusive findings. The findings in the study will provide gaps that need to be addressed in future studies. The Leadership Manual is based on the literature review

5.2 Study Summary

A quantitative method was used in this study to test hypotheses to prove UKZN leadership and management competencies in leading the institution during transformation and challenging times, The hypotheses were tested to either accept or reject H_0 based on evidence received.

5.3 Leadership and Management Skills Effect on Leadership Competencies

H_{01}: Leadership and management skills and abilities do not affect their competencies

H_1: There is a correlation between leadership and management abilities to manage the institution and management competencies

A one-sample t-test was conducted to evaluate whether the mean ratings of skills were significantly greater than zero. The results indicated that all skill items were rated significantly above zero, suggesting strong agreement on their importance or presence

t-values are large and positive, indicating that the sample means are significantly greater than 0. The p-values for all items are 0.001 (< 0.05), meaning all differences are statistically significant. The confidence intervals do not include 0, further confirming significance. This shows that respondents strongly agreed that all five skill items are present or important.

H_1: There is a strong positive significant relationship between leadership and management abilities to manage the institution to management competencies, and this study fails to accept H_{01}.

5.4 Training and Development Effect on Leadership Competencies

H_{02}: Training and development do not affect leaders' and managers' effectiveness

H_2: There is a positive correlation between leadership and management training and development concerning management competencies

A one-sample t-test was conducted on responses to six different training and development items, testing whether the mean response significantly differs from a test value of 0.

The t-statistic was conducted, with a two-sided p-value of 0.001 for all items indicating that the means are significantly different from 0. The average difference between the sample means and the test value (0). 95% Confidence Interval (CI) **i**ndicates where the true mean difference likely falls.

All six training and development items show highly significant results ($p < 0.001$), meaning the means are statistically significantly greater than 0. Additionally, the confidence intervals for all items are entirely above 0, which supports this conclusion.

H_2: There is a strong positive significance between leadership and management training and development concerning management competencies; this study fails to accept H_{02}

5.5 Leadership and Management Barriers Effect on Leadership Competencies

H_{03}: There is no significance in leadership and management barriers related to management competencies

H_3: There is a positive correlation between leadership and management is a barrier to management capacity

The one-sample t-tests conducted on the perceived barriers revealed statistically significant results across all items, with mean differences ranging from 3.13 to 3.62. The confidence intervals for each item did not include zero, indicating a strong consensus among respondents regarding the presence of these barriers. These findings suggest that participants experienced or observed substantial barriers in the context being evaluated

All three barrier items have highly significant results ($p < 0.001$), meaning the participants perceived these barriers as significantly impactfu**l**. The mean differences indicate strong agreement with these barrier items. The 95% confidence intervals for each mean are entirely above 0, reinforcing the significance and suggesting that perceived barriers were present and notable.

Therefore, this study concludes H_3: there is a strong positive significance between leadership and management competencies and barriers to management capacity, therefore, this study fails to accept H_{03}

5.6 Leaders and Managers: Management Without Business Background Effect on Leadership Competencies

H_{04}: There is no significance in management or business background concerning leaders' and managers 'competencies

H_4: There is a positive correlation between management and education background to management competencies

All items show statistically significant results with p-values < 0.001, indicating that participants' ratings are significantly greater than 0. Mean differences range from 3.27 to 3.83, suggesting participants generally gave strongly positive responses on these items. 95% Confidence Intervals for all items lie entirely above zero, further supporting the conclusion of statistical significance and positive perception

Participants consistently reported positive views on the management background factors being measured. These strong t-values and tight confidence intervals suggest high agreement and low variability in responses.

Therefore, H_4: there is a strong positive significance between management and education background to management competencies; this study fails to accept H_{04}

5.7 Demographics Effect on Leadership Competencies

H_{05}: There is no significance in race, gender, age, work experience, or nationality to managers' and leaders' competencies

H_5 There is a positive correlation between demographics and management competencies

The results from one-sample t-tests on four demographic effects items show that all mean scores are significantly greater than zero ($p < .001$), with mean differences ranging from 2.88 to 3.53. The confidence intervals for each item confirm these findings, as none include zero. These results suggest that participants perceived demographic factors to have a meaningful impact.

All four items are highly significant (two-sided $p = .001$), indicating that participants' mean ratings are reliably above zero. 95% confidence intervals for each mean difference lie entirely above zero. This pattern confirms that every demographic effect statement was rated significantly positively

The study fails to accept H_{05}, H_5: there is a positive correlation between demographics and management competencies

5.8 Technology Leadership Effect on Leadership Competencies

H_{06}: There is no significance in leaders' and managers' style and technology leadership

H_6: There is a positive correlation between technological leadership and management competencies

The one-sample t-tests conducted on the six items related to technology leadership revealed that all mean scores were significantly greater than zero ($p < .001$). Mean differences ranged from 2.98 to 4.17, with the strongest agreement observed in Technology 5 ($M = 4.17$). The 95% confidence intervals for each item further support the significance of these results, as none included zero. These findings indicate that respondents perceived technology leadership to be highly present and influential in the context examined

All six items show statistically significant mean differences ($p < .001$), with means far above the test value of 0. Items 4, 5, and 6 have strong mean values (around or above 3.9), indicating very high agreement or strong perceptions of those aspects of technology leadership. Confidence intervals are entirely above zero, reinforcing the validity and strength of these findings.

Therefore, this study fails to accept H_{06}, H_6: there is a positive significance between Technological leadership and management competencies

5.9 Summary

This chapter discussed the results that were received from the data collected, it analyzes data in terms of research questions and hypotheses. This study tested the hypotheses and failed to accept all null hypotheses, therefore, there is a positive correlation between leadership and management and management competencies.

CHAPTER 6: CONCLUSION AND RECOMMENDATION

6.1 Introduction

In the previous chapter, Chapter Five, all six hypotheses were tested; all six hypotheses, null hypotheses failed the tests and found that there is a positive correlation between the independent variables and dependent variables. UKZN leadership and management require management competencies in order to manage the institution effectively; therefore, the study has proved to be conclusive due to the findings.

The following objectives were formulated to form a conclusion on the study:

1. To examine the extent to which leaders and managers hold the required skills and qualities to manage the UKZN institution.
2. To identify the training and development required by leadership and management in this institution.
3. To identify the main barriers to leaders and managers becoming better leaders.
4. To examine whether those in leadership and management positions have a management or business background.
5. To determine whether their competencies in leadership and management affect demographics (sex, age, race, nationality).
6. To investigate whether the leadership and management leadership style has an impact on technology leadership.

The main purpose of this study was to explore the state of leadership and management competencies at the University of KwaZulu-Natal in the context of change that emerges in the institute of higher learning.

6.2 Key Findings and Recommendations

The research findings are discussed about the study objectives based on the theoretical review.

Research Objective 1: To examine the extent to which leaders and managers hold the required skills and qualities to manage the UKZN institution

To examine the extent to which leaders and managers possess the necessary skills and qualities to effectively manage the UKZN. The literature review was consulted using leadership theories and leadership styles, and the quantitative study was conducted to test whether managers and leaders require certain skills and abilities to lead this institution. The Statistical test was conducted to reach the following findings

The study indicated that UKZN's leadership and management are generally perceived to have the required skills and qualities to manage the institution effectively. However, there is a recognized need for

continuous professional development in specific areas such as strategic planning, technological integration, and overcoming organizational barriers. While training programs are viewed as beneficial, targeted and tailored interventions are necessary to ensure leaders and managers remain adaptable, forward-thinking, and capable of addressing the dynamic challenges faced by the institution

To see the leaders and managers' improvement in their skills and abilities, the institution should implement institution-wide feedback from staff, students, and external partners to evaluate managerial competencies. Offer regular leadership training in areas such as introducing regular public reporting, clear accountability structures, and independent audits to build trust and ensure ethical practices, including change management, financial acumen, diversity and inclusion, and crisis leadership. Encourage diverse leadership representation and decision-making that includes voices across departments and demographics. Equip leaders with tools and training to leverage institutional data for planning and performance monitoring. Identify and develop future leaders within UKZN to ensure continuity and reduce dependence on external recruitment.

Future research should consider employing a mixed-methods approach to gain deeper insight into the extent to which leaders and managers in the institution possess the necessary skills and qualities for effective institutional management. While the current study offers strong quantitative evidence of positive perceptions, qualitative methods such as interviews or focus groups could help uncover nuanced views, specific leadership challenges, and context-specific needs. Additionally, expanding the study to include comparative analysis across faculties or other South African universities could provide broader perspectives and identify institution-specific or sector-wide leadership development needs. Longitudinal studies may also be valuable in assessing how leadership competencies evolve over time and in response to institutional change.

Research Objective 2: To identify the training and development required by leadership and management in this institution

This study sought to identify the training and development needs of leadership and management at the UKZN. Leadership learnership frameworks were discussed by looking at training and learning, mentoring, coaching, and talent mapping. The literature review from previous studies was used to identify gaps and limitations. The quantitative study was conducted, and various statistical tests were conducted to prove that training and development are needed and beneficial for this institution

The UKZN leaders and managers view training and development as both necessary and beneficial. The study confirms that while existing programs are generally effective, there is a clear opportunity to refine and expand training offerings to better meet emerging leadership challenges. Future training efforts

should be more targeted, role-specific, and dynamic, with an emphasis on building competencies in strategic management, digital leadership, people development, and change management.

Based on the findings of this study, it is recommended that this institution implement a more targeted and strategic training and development framework for its leadership and management teams. This institution should undertake a formal needs analysis to identify specific skill gaps among current leaders and managers. This would help in designing tailored training interventions that address the unique demands of each leadership role. They should develop training programs that align with the responsibilities of different leadership positions. Given the growing importance of digital transformation in higher education, training should include technology leadership, digital literacy, and data-informed decision-making to prepare leaders for managing modern, tech-integrated learning environments. they should promote continuous leadership development, and. they should implement mentorship programs, peer learning groups, and executive coaching to sustain leadership growth.

Future research should build upon the findings of this study by conducting in-depth and context-specific investigations into the training and development needs of leadership and management at the UKZN. While this study provides a quantitative overview of perceptions, future studies should consider conducting mixed-methods research**,** combining quantitative surveys with qualitative methods such as interviews, focus groups, or case studies will offer richer insights into why certain training needs exist, how they affect leadership performance, and what improvements can be made. Conducting a comparative study with other South African or international universities may reveal best practices and innovative training models that UKZN can adapt for its context

Research Objective 3: To identify the main barriers to leaders and managers becoming better leaders

Management and leadership barriers are discussed in terms of time pressures and self-reflection, lack of motivation, accountability, and development, and lack of coaching and mentoring. Self-assurance can be defined as someone who takes risks, can meet new challenges with ease, confident in their abilities and judgment. Self-awareness is enhanced through interpersonal leadership capacity; leaders must know how to communicate effectively and learn how to effectively work with one another (Oberg and Andenoro, 2019)

The findings of the study based on UKZN management and leadership respondents, the time pressures, self-awareness, lack of motivation, accountability and development, and lack of coaching and mentoring are management barriers for managers. Leaders have time barriers due to being overcommitted with their management and academic roles, and cannot find time to self-reflect and self-develop. There is a lack of self-development accountability, and there is no mentoring and coaching support from their superiors is a to managers and leaders to lead effectively.

It is recommended that the institution create a program for leaders and managers' training and development, and coaching and mentoring, that will help managers and leaders self-improve. Managers and leaders are required to account for any development that they have undertaken and should have a time frame and time aside to self-develop. The institution should have initiative for mentoring and coaching. It is also recommended that the academic workloads be reduced in terms of teaching and learning so that they can concentrate on their leadership roles. There is no development and training for followers, it is recommended to have a study, training, and development for followers

The future studies at UKZN should at the factors that hinder leadership and development, they should conduct a study that compares the leadership barriers between academic and administrative leaders. They should investigate the role the institutional culture plays in effective leadership. Investigation into what extent the gender, race, and generational dynamics influence leadership growth and opportunities. Analyse the best practice that the institution can adopt from other institutions.

Research Objective 4: To examine whether those in leadership and management positions have a management or business background

The management and leadership management and business background were discussed in terms of leaders' and managers' relationship with their team members, the level of emotional intelligence, interpersonal skills, and making highly informed decisions.

The findings based on the UKZN management and leadership respondents are that an education business background assists the leaders and managers on how to manage their team members effectively. Academic leaders do not believe that they need an education in a business management background as they already have Doctorate degrees, and are professors in their field of study. Though they may have the highest qualification, they need a business qualification as it assists them on how to lead their teams when it comes to human resource and finance management skills, as they end up dependent on professional staff for those skills. Professional service managers and leaders already possess a business education background since it is a requirement for them to assume their management roles

It is recommended that the institution provide the managers and leaders with a business educational background, and that academic leaders do short courses on business so that they know the business side of things. It should also be mandatory that they have some sort of business background to assume leadership roles.

There is no study on the importance of professionals having a business education background; therefore, a study on the importance of professionals having a business education background is recommended.

There should be a study that compares leadership effectiveness for those with management qualifications and those with no management qualifications. Study whether management qualification influences leadership appointments and promotions. Look at the barriers that prevent current leaders from obtaining business qualifications

Research objective 5: To determine whether their competencies in leadership and management affect demographics (sex, age, race, nationality)

Leadership and Management demographics were discussed based on diversity, cultural differences, and discrimination. Previous studies have reported conflicting findings when it comes to demographics and leadership, with some studies observing a significant difference when it comes to age, gender, and ethnicity.

While others reported that age, gender, and ethnicity do not affect leadership, some studies have found that the is a correlation between demographics and leadership. There is a perceived inequality and injustice when it comes to demographics and leadership. The studies acknowledge the effect of ethnicity and leadership related to discrimination and inequality (Darabant,2024).

The findings based on UKZN management and leadership respondents, female leaders often score higher on competencies like emotional intelligence, collaboration, and communication, while their male counterparts rated themselves higher on strategic thinking or assertiveness. African and Indian race groups are aware and sensitive to diversity, cultural differences, and discrimination, while the other race groups seem to be neutral on the matter. It could be because they are not affected by discrimination, cultural differences, and diversity, which affect the way they deal with their team member as they lack empathy. Younger leaders seem to be more adept at technological adaptation and innovation but may lack experience in strategic decision-making. Older leaders demonstrated stronger competencies in institutional knowledge, policy navigation, and mentorship. Leaders with management or business qualifications generally report stronger skills in financial management, strategic planning, and organizational leadership. Academics without such training may excel in subject-matter expertise but feel underprepared for administrative leadership.

It is recommended that the institution have programs to sensitize the UKZN communities on discrimination issues, so they know how to have empathy and be sensitive to discrimination. Create specific leadership pipelines that look to give leadership positions to people of colour, females, and the disabled. Include diversity benchmarks in leadership positions.

There have been a lot of studies on discrimination, but the issues of ethnicity are ignored. They are a lot of discrimination when it comes to immigrants getting management and leadership positions. This study

did not cover the issue of immigrants in leadership positions; a study on discrimination in leadership is recommended. Foster intergenerational leadership teams

Future studies to investigate how leadership and management vary across demographic groups. Investigate if certain demographic groups are underrepresented in leadership and management positions.

Research Objective 6: To investigate the leadership and management competency of technology leadership

The issue of the institution being technologically competitive was discussed, looking the modern technologies like AI, 4IR, cloud computing, and digital computing. Leadership demands a thorough grasp of technology; leaders should be able to convert complicated technology into meaningful business ideas and ensure their team members have the expertise and resources to execute them. Current leadership and technology trends in technology operations are difficult due to fast technology development. AI, 4IR, cloud computing, and digital computing are changing organizational processes, and managers and leaders must integrate these skills into their day-to-day operations (Murthy,2024).

There is a meaningful change in leadership style under millennial management since they interact more with technology and use democratic and transformational leadership styles, as this leadership style adapts to change and encourages innovation. Millennials interact with technology like no other generation, which contributes to the way they lead their team members. In Africa, technology is advancing, which allows them to be exposed to the latest technology and new applications to revolutionize global relationships (Au, 2018).

The UKZN management and leadership findings about technological leadership based on respondents' responses. UKZN management and leadership are lagging when it comes to the knowledge of new technologies, however, younger leaders are technologically savvy. It is recommended that the institution come up with interventions to assist the older generation in learning these new technologies. The institution needs to conduct workshops and training to put the leadership and management on par with the global standards when it comes to technology leadership. It is recommended that the institution invest in ongoing training for technology, use agile frameworks, and lean leadership models that allow quick adaptation to changes in technology

Even though there are a lot of studies on technology leadership, there is less said about the older generation and technology leadership, it is recommended that a study be conducted on the older generation's relationship to technology leadership.

Recommended future study to analyse the most critical leadership and management competencies for technology leadership. Look at the gaps that exist between current technology competency levels with emerging technologies, and study whether demographics affect technology leadership competencies.

6.3 Limitations of the Study

The focus was only on the UKZN management and leadership; online surveys were posted on the University notice.

- The study only focused on the UKZN leadership and managers, who are difficult to reach because of their busy schedules
- The study was an online study posted on the UKZN notice; not all staff pay attention to university notices, even worse, with the management, as they have very busy schedules.
- The University is going through is transformation, which needs a lot of managers' and leaders' time, which makes it difficult to participate in the study
- The study was conducted in UKZN, therefore, it does not fully represent the broader higher education
- The sample size might be relatively small or demographically imbalanced, limiting the ability to draw broad conclusions across different population segments.
- Most people dislike filling out questionnaires, even more so when it is not beneficial to them, as there are no incentives for being a participant

6.4 Summary

This is the final chapter, which concludes the study in terms of what has been found and how it can be used to better the UKZN leadership and management. It tells us what is working and what is not, and how to fix and improve what is not working. it also looks at the future studies that were not covered by this study and previous studies.

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APPENDIX 1 CONSENT

I……. (Name) have been informed about the study entitled Analysing Leadership and Management Competencies Required by Management at the University of KwaZulu-Natal by Thobile Sichela

I understand the purpose and procedures of the study.

I have been allowed to ask questions about the study and have had answers to my satisfaction.

I declare that my participation in this study is entirely voluntary and that I may withdraw at any time without affecting any of the benefits to which I usually am entitled.

If I have any further questions/concerns or queries related to the study, I understand that I may contact the researcher at 072 2896470 or 213560178@stu.ukzn.ac.za

If I have any questions or concerns about my rights as a study participant, or if I am concerned about an aspect of the study or the researchers then I may contact:

HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION
Research Office, Westville Campus
Govan Mbeki Building
Private Bag X 54001 Durban 4000
KwaZulu-Natal, SOUTH AFRICA
Tel: 27 31 2604557- Fax: 27 31 2604609
Email: HSSREC@ukzn.ac.za

I hereby provide consent to:
be part of this study YES / NO

_____ _____

Signature of Participant Date

APPENDIX2 GATEKEEPER

Ms Thobile Penelope Sichela (SN 213560178)

Graduate School of Business and Leadership

College of Law and Management Studies

Westville Campus UKZN

Email: 213560178@stu.ukzn.ac.za Chummunb@ukzn.ac.za Sichela@ukzn.ac.za

Dear Ms Sichela

RE: PERMISSION TO CONDUCT RESEARCH

Gatekeeper's permission is hereby granted for you to conduct research at the University of KwaZulu-Natal (UKZN), towards your postgraduate degree, provided Ethical clearance has been obtained. We note the title of your research project is:

"Analysing Leadership and Management Competencies Required by Management at the University of KwaZulu-Natal."

It is noted that you will be constituting your sample as follows:

- With a request for responses on the website. The questionnaire and/or request for responses to "interview questions" must be placed on the notice system http://notices.ukzn.ac.za. A copy of this letter (Gatekeeper's approval) must be simultaneously sent to (govenderlog@ukzn.ac.za) or (ramkissoonb@ukzn.ac.za).

Please ensure that the following appears on your notice/questionnaire:

• Ethical clearance number;

• Research title and details of the research, the researcher, and the supervisor;

• Consent form is attached to the notice/questionnaire and to be signed by the user before he/she fills in the questionnaire;

• Gatekeeper approval by the Registrar.

You are not authorized to contact staff and students using the 'Microsoft Outlook' address book. Identity numbers and email addresses of individuals are not a matter of public record and are protected according to Section 14 of the South African Constitution, as well as the Protection of Public Information Act. For the release of such information over to yourself for research purposes, the University of KwaZulu-Natal will need express consent from the relevant data subjects. Data collected must be treated with due confidentiality and anonymity.

Yours sincerely

Mr MA TUFTS

Director Governance & Administration

APPENDIX 3

ETHICAL CLEARANCE

UNIVERSITY OF KWAZULU-NATAL
INYUVESI YAKWAZULU-NATALI

13 September 2024

Thobile Penelope Sichela (213560178)
Grad School of Bus & Leadership
Westville Campus

Dear TP Sichela,

Protocol reference number: HSSREC/00007450/2024
Project title: Analyzing leadership and management competencies required by management at the University of KwaZulu-Natal
Degree: Masters

Approval Notification – Expedited Application

This letter serves to notify you that your application received on 30 July 2024 in connection with the above, was reviewed by the Humanities and Social Sciences Research Ethics Committee (HSSREC) and the protocol has been granted **FULL APPROVAL**.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number.

PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

Incidents of adverse events and serious adverse events (AEs and SAEs) should be reported in writing to HSSREC, the study sponsors, and any regulatory authority (where appropriate), within 7 working days of the occurrence for local sites and 14 days for all other South African sites.

This approval is valid until 13 September 2025.
To ensure uninterrupted approval of this study beyond the approval expiry date, a progress report must be submitted to the Research Office on the appropriate form 2 - 3 months before the expiry date. A close-out report to be submitted when study is finished.

HSSREC is registered with the South African National Health Research Ethics Council (REC-040414-040).

Yours sincerely,

Professor Dipane Hlalele (Chair)
/nng

APPENDIX 4 EDITOR'S LETTER

RS WEB SOLUTIONS
MEDIA & EDITING SERVICES

071 366 1103

CERTIFICATE OF EDITING

This document certifies that a copy of the thesis whose title appears below was edited for proper English language usage, grammar, punctuation, spelling, and overall style by Shamiel Johnson whose academic qualifications appear in the footer of this document. The research content and the author's intentions were not altered during the editing process.

TITLE:

Analyzing leadership and management competencies required by management at the University of KwaZulu-Natal

STUDENT:

Thobile Penelope Sichela

213560178

Yours faithfully

Shamiel Johnson

28 November 2024

BSc Mech Eng (Hons) UCT

Master of Business Administration (M.B.A.) NMMU Business School

1. I consent to form part of this study *

Mark only one oval.

- ◯ Yes

Demographic Information

Section A

2. Gender

Mark only one oval.

- ◯ Female
- ◯ Male
- ◯ Prefer not to say

3. Age

Mark only one oval.

- ◯ Below 25 years
- ◯ 26-35 years
- ◯ 36-45 years
- ◯ 46 -55 years
- ◯ Above 56 years

4. Race Group

Mark only one oval.

- ◯ African
- ◯ White
- ◯ Indian
- ◯ Coloured

Prefer not to say

5. Country of Birth

Mark only one oval.

- South
- Africa
- USA
- Europe
- Other: _____

6. College/Division

Mark only one oval.

- Humanities
- Agriculture , Engineering and
- Science Health Science
- Law and Management Studies
- Other: _____

7. Employment type

Mark only one oval.

- Academic Staff
- Support Staff

8. Position Level

Mark only one oval.

- Deputy Vice Chancellor Dean and
- Head of School
- Executive Diector
- Director
- Manager
- Other: _____

9. Highest Qualification

Mark only one oval.

- Certificat
- e
- Diploma
- Degree

  Honours/PG Dip
- Masters
- Doctorate
- Prefer not to say
- Other: _____

10. Management Experience

Mark only one oval.

- 0-3 years
- 3-5 yeas
- 5-10 years
- Over 10 years

Section B

Objective 1: To examine the extent to which leaders and managers hold the required skills and qualities to manage the UKZN institution

11. Which of following best describes your leadership style

Mark only one oval.

Autocratic (Dictator, single minded, authoritarian) Democratic (Gives employees an equal say) Participative (Has a hands on approach)

Situational(Adopts a management style that is most relevant to the situation)

12. As a leader my main focus is on

Mark only one oval.

personal and professional growth

encouraging employees to think creatively in developing solutions performance and employee supervision

making the day-to-day business operation flow smoothly.

13. As a leader , I

Mark only one oval.

encourage my team morale and self confidence identify my team strengths and weaknesses

reward self-motivation and reprimands underperformance rely on attaining goals through structure

14. During the changes that the institution is currently undergoing , I openly communicated with my team and gave regular feedback

Mark only one oval.

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

15. During the changes that the institution is currently undergoing , I had no interaction with my team as I did not have adequate information

Mark only one oval.

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

16. I have found changes to be necessary and beneficial for the institution of Higher Education growth

Mark only one oval.

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

17. Which skills directly affects my job as a leader *

Check all that apply.

	s s k iil s	Low importanc e	Moderate importance
Techniic all skiillls			
HR and Fiinan ce			
Skiillll s			
Legall experttiis e			
Emottiion all IInttellllligen ce			
Managerri iall and Busiines			

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18. Which process and activities are important in my leadership duties *

Check all that apply.

	Low importance	Moderate importance	High Importance
Orrganiize and Superrviise			
IInnovattiive and Perrforrmance			
Complliiance and Trransparrency			
Devellopmentt and Coachiing			

Section C

Objective 2:

To identify the training and development required by leadership and management in this institution

19. This institution is committed to leadership development and interested in improving leadership capabilities and competencies

Mark only one oval.

- Strongly Disagree
- Disagree
-
- Neutral
- Agree
- Strongly Agree

20. Leaders are taken through leadership development in order to acquire knowledge and deliver as their role requires

Mark only one oval.

- Strongly Disagree
- Disagree
-
- Neutral
- Agree
- Strongly Agree

21. There is continuous leadership development within the organization

Mark only one oval.

- Strongly Disagree
- Disagree
-
- Neutral
- Agree
- Strongly Agree

22. The organization uses career development as a tool to create a pool of skilled leaders to improve talent within the organization

Mark only one oval.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

23. This organization supports their employees by designing clear career paths with detailed career progression

Mark only one oval.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

24. This organization promotes mentoring and coaching for leadership development

Mark only one oval.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

Section D

Objective 3: To identify the main barriers to leaders and managers in becoming better leaders

25. The institution undergoing major changes such as restructuring, downsizing, rapid improvement initiatives and technology are primary causes management failure

Mark only one oval.

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

26. As workloads increases due to changes and work pressure , I am unable to find time to read, attend workshop and seminars to improve my leadership skills

Mark only one oval.

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

27. I found myself constantly busy and especially in periods of rapid change, I'm unable to find time for self-reflection

Mark only one oval.

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

28. There is no adequate coaching and mentoring plans that support the leaders during the rapid changes that the institution is undergoing

Mark only one oval.

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

Section E

Objective 4: To examine whether those in leadership and management positions have management or business background

29. Management and business background possessed by leaders strongly affect the way leaders lead their team

Mark only one oval.

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

30.Leaders with management and business education background have high emotional intelligence

Mark only one oval.

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

31. Leaders with management and business background possess high administrative and interpersonal communication skills

Mark only one oval.

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

32. Leaders with management and business background make well informed decisions

Mark only one oval.

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

33. Leaders with management and business background tend to be more diplomatic and tactful

Mark only one oval.

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

Section F

Objective 5 : To determine whether the competencies in leadership and management are affected by demographics

34. Lack of Diversity is a barrier to advance to leadership positions in the education profession

Mark only one oval.

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

35. Culture difference is a barrier to leadership positions in the education profession

Mark only one oval.

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

36. Discrimination is a barrier to advancement to leadership positions in the education profession

Mark only one oval.

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

Section G

Objective 6: To investigate whether the leadership and management styles have impact on technology leadership

37. In a scale of 1to 5 with 5 being the highest , please state your knowledge and use of 4IR and AI

Mark only one oval.

	1	2	3	4	5	
1	◯	◯	◯	◯	◯	2

38. In a scale of 1to 5 with 5 being the highest , please state your knowledge and use of Cloud Computing

Mark only one oval.

	1	2	3	4	5	
1	◯	◯	◯	◯	◯	2

39. In a scale of 1to 5 with 5 being the highest , please state your knowledge and use of Digital Transformation

Mark only one oval.

	1	2	3	4	5	
1	◯	◯	◯	◯	◯	2

40. Leadership drives digital transformation as leaders integrate new technologies

Mark only one oval.

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Neutral
- ◯ Agree
- ◯ Strongly Agree

41. IT leadership has become more important in operations

Mark only one oval.

Strongly disagree
Disagree
Neutral
Agree
Strongly Agree

42. Good leadership boost innovation, efficiency, and IT system security and dependability

Mark only one oval.

Strongly disagree
Disagree
Neutral
Agree

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Strongly Agree